



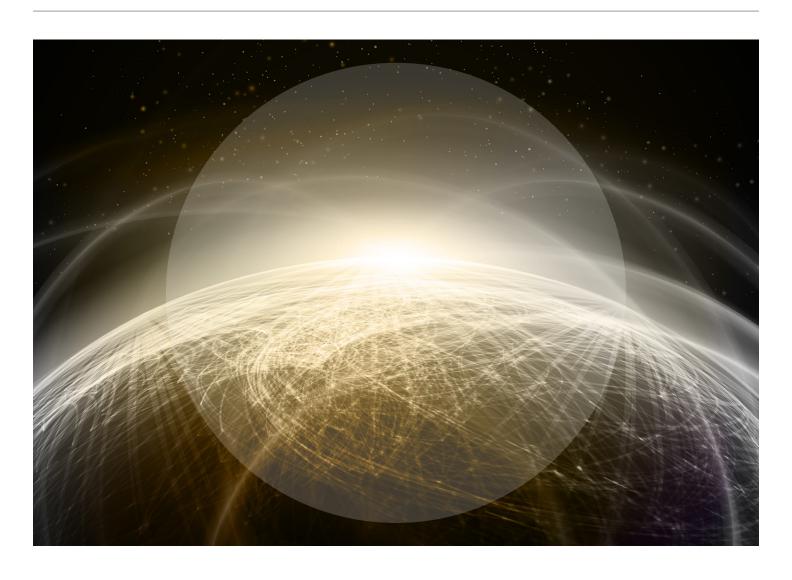


**Insight Report** 

# The Global Information Technology Report 2016

Innovating in the Digital Economy

Silja Baller, Soumitra Dutta, and Bruno Lanvin, editors









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Innovating in the Digital Economy

Silja Baller, World Economic Forum Soumitra Dutta, Cornell University Bruno Lanvin, INSEAD Editors The Global Information Technology Report 2016 is a special project within the framework of the World Economic Forum's Global Competitiveness and Risks Team and the Industry Partnership Programme for Information and Communication Technologies. It is the result of collaboration between the World Economic Forum and INSEAD.

Visit *The Global Information Technology Report* page at www.weforum.org/gitr.

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Geneva
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ISBN: 978-1-944835-03-3

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# **Preface**

RICHARD SAMANS, Member of the Managing Board, World Economic Forum MARGARETA DRZENIEK HANOUZ, World Economic Forum

As the 2016 edition of The Global Information Technology Report is released, the world is entering the Fourth Industrial Revolution. Processing and storage capacities are rising exponentially, and knowledge is becoming accessible to more people than ever before in human history. The future holds an even higher potential for human development as the full effects of new technologies such as the Internet of Things, artificial intelligence, 3-D Printing, energy storage, and quantum computing unfold.

The exponential speed of developments; disruption across all major industries; and the impact on entire systems of production, management, and governance are what differentiates these developments from previous "industrial revolutions." However, while all these developments will bring many benefits, they also carry risks. If managed well, they have the potential to give rise to innovation that will drive growth and social impact. If not handled appropriately, challenges such as the rising threat of cyberattacks that expand into the physical world, privacy issues, and the polarizing effects of technologies on labor markets could derail these benefits. Countries and businesses that embrace these developments, anticipate challenges, and deal with them in a strategic way are more likely to prosper, while those that do not will more likely fall behind.

Information and communication technologies (ICTs) are the backbone of this revolution. The future of countries, businesses, and individuals will depend more than ever on whether they embrace digital technologies. And many of those who stand to gain the most are not yet connected.

Since 2001, The Global Information Technology Report series published by the World Economic Forum in partnership with INSEAD and Cornell University has measured the drivers of the ICT revolution globally, using the Networked Readiness Index (NRI). The Index has evolved over time and currently assesses the state of networked readiness using 53 individual indicators. For each of the 139 economies covered, it allows the identification of areas of priority to more fully leverage ICTs for socioeconomic development.

Four important messages emerge from the Report this year. First, innovation is increasingly based on digital technologies and business models, which can drive economic and social gains from ICTs if channelled in a smart way. Second, the way businesses adopt ICTs is key for leveraging them for development, so encouraging businesses to fully embrace the powers of digital technologies should be a priority of governments. Third, both the private sector and governments need to step up efforts to invest in innovative digital solutions to drive social impact. Last but not least, a sustainable digital economy will depend on quickly evolving governance frameworks that allow societies to anticipate and shape the impact of emerging technologies and react quickly to changing circumstances.

Against this background, the Report is meant to be a call for action. Policymakers must work with other stakeholders to swiftly adopt holistic long-term strategies for ICT development and lead in adapting governance and leadership behaviors to ensure that ICTs deliver maximum benefits. Under the theme "Innovating in the Digital Economy," The Global Information Technology Report 2016 highlights striking innovation patterns in the NRI data that can help point the way for policy and investment priorities.

As the digital economy is developing exponentially, its measurement must evolve as well. Chapter 1.1 therefore includes an outlook for potential next steps for the NRI that can serve as a starting point for discussing the evolving concepts and measurements of networked readiness. In the course of the coming year, we plan to identify key questions concerning the drivers and implications of the emerging Fourth Industrial Revolution and develop relevant concepts and measures with experts, policymakers, and businesses to be included in the updated next edition of the NRI.

The Report is part of the World Economic Forum's wider efforts to address digital technology questions through its System Initiative on the Digital Economy and Society. The aim of this initiative is to help shape the Internet as a true and open platform and as a driver of economic development and social progress. We hope that through this Report and its system initiatives the World Economic Forum can contribute to making the ICT revolution truly global, growth-supportive, and inclusive.

# **Acknowledgments**

**ALAN MARCUS** World Economic Forum

Over the past 16 years, the World Economic Forum, INSEAD, and, more recently, Cornell University have partnered on publishing The Global Information Technology Report (GITR), which examines the increasing proliferation of technology and its effects on advancing global prosperity. Today we have come to a critical tipping point, where the ICT-fueled digital economy is taking off in an exponential way. We have also come to recognize the beginning of a Fourth Industrial Revolution, which will fundamentally change the way we live, work, and relate to one another. This transformation is not defined by any particular set of technologies, but rather by a transition to new ecosystems built on the infrastructure of the digital revolution. The World Economic Forum is seeking to shape and design these new systems by emphasizing and scaling cross-sector and cross-geographic collaborations. The key findings of this Report over the years led to and informed a broad range of discussions around the Forum's Future of Digital Economy and Society system, such as digital inclusion and access, cybercrime and cybersecurity, data privacy and usage, digital transformation of business, digital governance, and trade across borders.

Under the theme "Innovating in the Digital Economy," this year's Report looks into how digital technologies are changing the nature of innovation in various ways. The Report examines the exponential shift brought about by digital technologies, the way we measure the impact of innovation, the continuous pressure for both tech and non-tech sectors to boost innovation through digital means, and the need for agile governance and regulation systems to adapt to the speed and scale of changes while mitigating ethical, legal, and regulatory risks.

Each year, the ICT Industries and the Global Competitiveness and Risks Teams at the World Economic Forum collaborate on the annual production of the GITR; the Report has evolved to become one of the most respected publications of its kind. As we shift toward a systems approach to solve the most challenging issues stemming from the Fourth Industrial Revolution, this Report will continue its evolution to capture milestones in unleashing the full potential of the digital economy led by ICTs, and to inform decisionmaking processes for policymakers and organizations across sectors and regions.

We would like to acknowledge the editors of the Report, Silja Baller at the World Economic Forum; Professor Soumitra Dutta, Dean of the College of Business at Cornell University; and Bruno Lanvin at INSEAD. The World Economic Forum and INSEAD and, more recently, Cornell University have been publishing the GITR since 2001; through this longstanding partnership, the three institutions have developed and evolved the Networked Readiness Index (NRI) to reflect the growing importance of technology and innovation across the world.

A special thanks also goes out to our Report partner, Cisco, for its continuous support and engagement in this year's edition. We also wish to convey our gratitude to Robert Pepper, John Garrity, and Connie LaSalle at Cisco Systems for their unique contributions, built upon the insights generated by the NRI; their enhancement of its thematic elements; and their contributions to the overall distinctiveness of the Report.

We would like to extend our sincere thanks to Professor Klaus Schwab, Chairman of the World Economic Forum for his leadership. Appreciation goes to the core project team: Silja Baller, Oliver Cann, Attilio Di Battista, Danil Kerimi, and Roger Yong Zhang. We also wish to acknowledge the leadership of Richard Samans, Member of the Managing Board, as well as Jennifer Blanke, Chief Economist, and the contributions of members of the Global Competitiveness and Risks Team: Ciara Browne, Roberto Crotti, Gaëlle Marti, Margareta Drzeniek Hanouz, Caroline Galvan, Daniel Gomez Gaviria, Thierry Geiger, and Stéphanie Verin. Appreciation also goes to the members of the Information and Communication Technology Industries Team, under the leadership of Cheryl Martin, Head of Centre for Global Industries, and Murat Sönmez, Chief Business Officer: David Connolly, Aurelie Corre, Daniel Dobrygowski, Mara Kelly, Peter Lyons, Isabelle Mauro, Derek O'Halloran, and Adam Sherman.

Last but not least, we would like to express our gratitude to our 160 Partner Institutes around the world and to all the business executives who completed our Executive Opinion Survey.

# **Foreword**

# **CHUCK ROBBINS**

Chief Executive Officer, Cisco Systems

In my 18 years at Cisco, I have seen first-hand how technology can transform industries and lives. As the role of hardware, software, and services becomes even more important for governments, businesses, and individuals, the high-speed broadband Internet Protocol (IP) networks that enable them have become integral to daily life. In fact, by 2020, there will be over 26 billion Internet-connected devices and over 4 billion global Internet users. Broadband Internet has been categorized as one of the world's most important general-purpose technologies, with the capability to dramatically impact social structures and entire economies.

Underpinning this development is data's role as the new currency. Every day, exabytes of new data are created and transported over IP networks. In 2016 the world has entered the "zettabyte era": global IP traffic will reach 1.1 zettabytes, or over 1 trillion gigabytes. By 2020 global IP traffic will reach 2.3 zettabytes. This data growth is fueling economies, sparking innovation, and unleashing waves of creativity. This year's Global Information Technology Report highlights the role of technology, and broadband in particular, in driving global innovation.

But no innovation can occur without the network. IP networks have the capacity to connect every person, every country, and every IP-enabled device. Global

networks allow data to flow unimpeded, driving growth and enabling collaborative innovation in many areas, from production to processes. Those countries that are adept at fostering digital activity will continue to see new industries emerge, as well as experience the accelerated development of traditional sectors.

The global Internet must therefore be allowed to further develop without obstacles—this is essential in order for everyone to benefit. Increasingly, barriers to digital flows threaten to diminish the Internet's potential to drive positive social and economic impact. The open exchange of information is a hallmark of the growing knowledge economy. All stakeholders—including governments, businesses, the technical community, citizens, and consumers-play a role in building trust and confidence in global networks. Privacy and security should be integrated into technological design from the outset; strategies to protect and maintain the integrity of data must account for an array of diverse and emerging risks; and policy should enable innovation and global data flows while safeguarding against those who seek to cause damage.

Getting the balance right requires active, collaborative participation from everyone. At Cisco, we are committed to helping drive the next wave of global growth, productivity, and innovation.

# **Executive Summary**

SILJA BALLER, World Economic Forum SOUMITRA DUTTA, Cornell University BRUNO LANVIN, INSEAD

Part 1 of the 2016 edition of *The Global Information Technology Report* assesses the state of networked readiness of 139 economies using the Networked Readiness Index (NRI) (Chapter 1.1) and, under the theme "Innovating in the Digital Economy," examines the role of information and communication technologies (ICTs) in driving innovation (Chapters 1.1 and 1.2). Part 2 consists of an extensive data compendium with the detailed performance of each economy in the NRI (Section 2.1) and rankings for each of the 53 individual indicators included in the NRI (Section 2.2).

# PART 1: INNOVATING IN THE DIGITAL ECONOMY

We are at the dawn of the Fourth Industrial Revolution, which represents a transition to a new set of systems, bringing together digital, biological, and physical technologies in new and powerful combinations. These new systems are being built on the infrastructure of the digital revolution. *The Global Information Technology Report 2016* features the latest iteration of the NRI, which assesses countries' preparedness to reap the benefits of emerging technologies and to capitalize on the opportunities presented by the digital revolution and beyond.

# The Networked Readiness Index 2016

Chapter 1.1 presents the results of the NRI 2016, which measures the capacity of countries to leverage ICTs for increased competitiveness and well-being. It also considers innovation trends of recent years through the lens of the NRI.

# The networked readiness framework

The networked readiness framework rests on six principles: (1) a high-quality regulatory and business environment is critical in order to fully leverage ICTs and generate impact; (2) ICT readiness—as measured by ICT affordability, skills, and infrastructure—is a pre-condition to generating impact; (3) fully leveraging ICTs requires a society-wide effort: the government, the business sector, and the population at large each have a critical role to play; (4) ICT use should not be an end in itself. The impact that ICTs actually have on the economy and society is what ultimately matters; (5) the set of drivers—the environment, readiness, and usage—interact, coevolve, and reinforce each other to form a virtuous cycle;

and (6) the networked readiness framework should provide clear policy guidance.

The framework translates into the NRI, a composite indicator made up of four main categories (subindexes), 10 subcategories (pillars), and 53 individual indicators distributed across the different pillars:

### A. Environment subindex

- 1. Political and regulatory environment (9 indicators)
- 2. Business and innovation environment (9 indicators)

### B. Readiness subindex

- 3. Infrastructure (4 indicators)
- 4. Affordability (3 indicators)
- 5. Skills (4 indicators)

# C. Usage subindex

- 6. Individual usage (7 indicators)
- 7. Business usage (6 indicators)
- 8. Government usage (3 indicators)

# D. Impact subindex

- 9. Economic impacts (4 indicators)
- 10. Social impacts (4 indicators)

The computation of the overall NRI score is based on successive aggregations of scores: individual indicators are aggregated to obtain pillar scores, which are then combined to obtain subindex scores. Subindex scores are in turn combined to produce a country's overall NRI score. The appendix of Chapter 1.1 presents the detailed methodology and composition of the NRI.

About half of the individual indicators used in the NRI are sourced from international organizations. The main providers are the International Telecommunication Union, UNESCO and other UN agencies, and the World Bank. The other half of the NRI indicators are derived from the World Economic Forum's Executive Opinion Survey (the Survey). The Survey is used to measure concepts that are qualitative in nature or for which internationally comparable statistics are not available for enough countries. The 2015 edition of the Survey was completed by over 14,000 business executives in more than 140 countries.

# **Key Findings**

Under the theme "Innovating in the Digital Economy," The Global Information Technology Report 2016 highlights the ways in which the digital revolution is changing both the nature of innovation and the rising pressure for firms to innovate continuously. The analysis yields four key findings:

Key Finding 1: The digital revolution changes the nature of innovation. One of the key characteristics of the digital revolution is that it is nurtured by a different type of innovation, increasingly based on digital technologies and on the new business models it allows. In addition to making traditional research tools more powerful, it allows for new and near-costless types of innovation that require little or no R&D effort. Examples include the digitization of existing products and processes, distributed manufacturing, blockchains, and advertising-based "free services" as well as the prospect of more "uberized" activities in multiple sectors, including transport, banking, entertainment, and education.

The NRI data show that the minds of business executives around the world are increasingly focused on innovation, as reflected by the steady upward trend in firms' perceived capacity to innovate. Traditional measures for innovation, such as the number of patents registered, are picking up only part of the story. Instead, new types of innovation, such as business-model innovation, look set to become an important part of the innovation story: executives in almost 100 countries report increases in the perceived impact of ICTs on business-model innovation compared with last year.

Key Finding 2: Firms will face increasing pressure to innovate continuously. Seven countries stand out in terms of economic and digital innovation impact: Finland, Switzerland, Sweden, Israel, Singapore, the Netherlands, and the United States. Considering the different elements of networked readiness for these seven countries, it is noticeable that all seven are characterized by very high levels of business ICT adoption. This technology-enabled innovation in turn unleashes new competitive pressures that call for yet more innovation by tech and non-tech firms alike.

Because digital technologies are driving winnertake-all dynamics for an increasing number of industries, getting there first matters. However, although firms feel that overall capacity to innovate has increased, a stagnating rate of ICT adoption and usage by existing firms across all regions suggests that a large number of firms are not getting into the game fast enough.

# Key Finding 3: Businesses and governments are missing out on a rapidly growing digital population. In recent years, digital innovation has been primarily driven by consumer demand. Yet this increasing

demand for digital products and services by a global

consumer base is largely being met by a relatively small number of companies. Businesses need to act now and adopt digital technologies to capture their part of this growing market. A widening and worrying gap is also emerging between growth in individual ICT usage and public-sector engagement in the digital economy, as government usage is increasingly falling short of expectations. Governments can do more to invest in innovative digital solutions to drive social impact.

# Key Finding 4: A new economy is shaping, requiring urgent innovations in governance and regulation.

As the new digital economy is taking shape, offering it the right framework conditions will be crucial to ensuring its sustainability. Digital technologies are unleashing new economic and social dynamics that will need to be managed if the digital transformation of industries and societies are to deliver long-term and broad-based gains. A resilient digital economy also calls for new types of leadership, governance, and behaviors. A critical ingredient for the success and sustainability of the emerging system will be agile governance frameworks that allow societies to anticipate and shape the impact of emerging technologies and react quickly to changing circumstances.

# Networked Readiness Index 2016: Results overview Chapter 1.1 then reports the rankings of the overall NRI

2016, its four subindexes, and their respective pillars.

The composition of the group of top 10 performers is unchanged from last year. The group consists of a mix of high-income Southeast Asian (Singapore and Japan) and European countries (Finland, Sweden, Norway, the Netherlands, Switzerland, the United Kingdom, and Luxembourg) as well as the United States. Networked readiness therefore remains highly correlated with per capita income.

Europe remains at the technology frontier with seven out of the top 10 NRI countries being European. Yet the performance range is wide, with Greece dropping four places to 70th position and Bosnia and Herzegovina closing the group at 97. Several Eastern European countries—notably the Slovak Republic, Poland, and the Czech Republic-are making big strides, landing spots in the top 50 of the NRI; better affordability and large improvements in economic and social impacts are contributing to this success in these three countries in a major way. Italy is another notable mover this year, improving 10 places to reach 45th position as economic and social impacts of ICTs are starting to be realized (up 18 in the global impact rankings).

The Eurasia region continues its upward trajectory, with the average NRI score for the region increasing significantly since 2012. In particular, it is notable that the improvement is observed across all four elements that make up the Index: Environment, Readiness, Usage, and Impact. The region is led by Kazakhstan, which

continues on its positive trajectory of recent years to land in 39th position this year.

Leading the Emerging and Developing Asian economies in 2016 is Malaysia, which continues to perform strongly and moves up one spot to 31st position overall; this performance is supported by a government that is fully committed to the digital agenda. The top five in the region in terms of overall ICT readiness remain China, Malaysia, Mongolia, Sri Lanka, and Thailand, as in 2015. The group of Emerging and Developing Asian countries has been both moving up and converging since 2012. Individual usage in the region is still one of the lowest in the world, but has been growing strongly in recent years.

The performance range of countries in the Latin America and Caribbean region remains widely dispersed with almost 100 places between Chile (38th) and Haiti (137th). There was no clear trend from 2015 to 2016 in terms of relative performance, with Chile and Haiti staying put; of the remaining group, half of the countries improve their ranking and the other half drop. Considering the absolute NRI score, however, the region has been moving up and converging since 2012. In order to foster the innovation forces that are key for thriving in the digitized world and the emerging Fourth Industrial Revolution, many governments in the region will urgently need to reinforce efforts to improve the regulatory and innovation environment in their countries.

The UAE (26th) and Qatar (27th) continue to lead the Arab world when it comes to networked readiness. The **MENAP region** (Middle East, North Africa, and Pakistan) is home to two of the biggest movers in this year's rankings: Kuwait (61st, up 11) and Lebanon (88th, also up 11). In both cases, individuals are leading the charge with the business sector catching up and strongly contributing to the successful performance. Although governments are lagging behind in terms of digital adoption (81st in Kuwait, 124th in Lebanon), the business community in both countries is registering an increased weight on ICTs in government vision and efforts to improve the regulatory environment.

This year's NRI also sees several sub-Saharan African countries among the top upward movers, including South Africa (65th, up 10), Ethiopia (120th, up 10), and Côte d'Ivoire (106th, up 9). Leadership in terms of digital adoption is coming from different groups of stakeholders. Although efforts are very much government-driven in Ethiopia and Côte d'Ivoire, the business sector is providing the most momentum in South Africa. Going forward, the largest barriers to tackle for Côte d'Ivoire will be infrastructure and affordability; reversing the trend of a deteriorating business and innovation environment for South Africa; and individual usage and skills for Ethiopia.

Chapter 1.1 provides an overview of the performance of the 10 best-performing countries in the NRI 2016, a selection of economies that were among

the top movers as well as other selected economies, including members of the G20 outside the top 10.

The Index maps a quickly evolving space and has been adapted since its inception in 2001. Since the digital economy is developing exponentially, its measurement must be adapted to reflect the new realities on the ground. A multi-stakeholder process will be put in place to identify key questions concerning the drivers and implications of the emerging Fourth Industrial Revolution and to develop relevant concepts and measures with a view to incorporating these findings into the next edition of the NRI.

# Cross-border data flows, digital innovation, and economic growth

In Chapter 1.2, Robert Pepper, John Garrity, and Connie LaSalle explore the impact of the free flow of data across national borders on innovation and growth. The authors highlight the development of cross-border data traffic over Internet protocol, starting with the first email messages in the early days of the Internet to today, where over 3.2 billion people across the world have access to and use the Internet.

The flow of digital communication between countries, companies, and citizens has been recognized for years as a critical driver of economic growth and productivity. Countries adept at fostering digital activity have witnessed the emergence of new industries as well as the accelerated development of traditional sectors. However, despite the intensive and extensive growth of the global Internet, concerns over growing barriers to digital flows are mounting.

The authors first review the literature on the impact of cross-border data flows on countries, companies, and individuals. The chapter then presents an original analysis of the growth of new services built on the free flow of trade through global digitization, and concludes by discussing policy guidelines that mitigate concerns over national data transmission while simultaneously maximizing the benefits of cross-border data flows.

# PART 2: DATA PRESENTATION

Part 2 of the Report contains individual scorecards detailing the performance in the Networked Readiness Index of each of the 139 economies (Section 2.1) and tables reporting the global rankings for each of the 53 individual indicators composing the NRI (Section 2.2).

# Part 1

# Innovating in the Digital Economy

# **CHAPTER 1.1**

# The Networked Readiness Index 2016

SILJA BALLER, World Economic Forum ATTILIO DI BATTISTA, World Economic Forum SOUMITRA DUTTA, Cornell University **BRUNO LANVIN, INSEAD** 

We are at the dawn of the Fourth Industrial Revolution. The Fourth Industrial Revolution represents a transition to a new set of systems that bring together digital, biological, and physical technologies in new and powerful combinations (Box 1). Just as the digital revolution was built on the heart of the second industrial revolution-electricity, mass communication systems, and modern manufacturing—the new systems that mark the Fourth Industrial Revolution are being built on the infrastructure of the third, digital revolution—the availability of global, digital communications; low-cost processing and high-density data storage; and an increasingly connected population of active users of digital technologies.

The Global Information Technology Report 2016 features the latest iteration of the Networked Readiness Index (NRI), which represents a key tool in assessing countries' preparedness to reap the benefits of emerging technologies and capitalize on the opportunities presented by the digital transformation and beyond. More particularly, the Report assesses the factors, policies, and institutions that enable a country to fully leverage information and communication technologies (ICTs) for increased prosperity and crystallizes them into a global ranking of networked readiness at the country level in the form of the NRI.

Countries are assessed over four categories of indicators: (1) the overall environment for technology use and creation (political, regulatory, business, and innovation); (2) networked readiness in terms of ICT infrastructure, affordability, and skills; (3) technology adoption/usage by the three groups of stakeholders (government, the private sector, and private individuals); and (4) the economic and social impact of the new technologies. Whenever relevant, the Index looks at what the different actors in society, both private and public, can do to contribute to the country's networked readiness.

An important channel by which digital technologies can contribute to increased prosperity is via their impact on innovation. As the digital transformation is gathering speed and looks ready to substantially change the global industrial landscape, staying ahead of the curve is becoming more and more important for business survival. Under the theme "Innovating in the Digital Economy" this chapter shines a spotlight on recent innovation trends. It develops a taxonomy of mechanisms for the innovation impact of digital

Acknowledgments: The authors are grateful to David Aikman, Marisol Argueta, Jennifer Blanke, Oliver Cann, Sangeet Choudary, Nicholas Davis, Miroslav Dusek, Mehran Gul, Sriram Gutta, Anastasia Kalinina. Elsie Kanza, Danil Kerimi, Martina Larkin, Alan Marcus, Patrick McGee, Viraj Mehta, Fulvia Montresor, Vanessa Moungar, Bernhard Petermeier, Mel Rogers, Mark Spelman, Christoph Sprung, Lisa Ventura, Bruce Weinelt, Eric White, Justin Wood, and Alex Wong as well as to the Global Competitiveness and Risks Team—Ciara Browne, Roberto Crotti, Margareta Drzeniek Hanouz, Caroline Galvan, Thierry Geiger, Daniel Gomez Gaviria, Gaëlle Marti, and Stéphanie Verin-for valuable feedback and discussions.

# Box 1: The Fourth Industrial Revolution

We are at the beginning of a global transformation that is characterized by the convergence of digital, physical, and biological technologies in ways that are changing both the world around us and our very idea of what it means to be human. The changes are historic in terms of their size, speed, and scope. This transformation—the Fourth Industrial Revolution—is not defined by any particular set of emerging technologies themselves, but rather by the transition to new systems that are being built on the infrastructure of the digital revolution. As these individual technologies become ubiquitous, they will fundamentally alter the way we produce, consume, communicate, move, generate energy, and interact with one another. And given the new powers in genetic engineering and neurotechnologies, they may directly impact who we are and how we think and behave. The fundamental and global nature of this revolution also poses new threats related to the disruptions it may cause—affecting labor markets and the future of work, income inequality, and geopolitical security as well as social value systems and ethical frameworks.

Adapted from Klaus Schwab, The Fourth Industrial Revolution, 2016.

technologies and draws on NRI data to characterize current innovation dynamics.

One of the key characteristics of the digital era is that it is nurtured by a new type of innovation. In addition to making traditional research tools more powerful, digital technology allows for near-costless types of digital innovation by recombination that requires little or no research and development (R&D) effort.1 Examples of this type of innovation include the digitization of existing products and processes; new business models, including platform businesses, distributed manufacturing, blockchains, and advertising-based "free services"; and innovation processes such as crowd-sourcing. A key challenge associated with analyzing this new characteristic of innovation is the insufficiency of traditional measures for innovation outcomes, such as patenting activity. Indeed, the NRI data show diverging trends between patenting activity and firms' perceived capacity to innovate, with the latter rising rapidly across all regions.

A second observation regarding innovation in the digital era is that technology unleashes new competitive pressures—for example, by integrating markets—that call for yet more innovation by tech and non-tech firms alike. In addition, because new technologies are driving winner-take-all dynamics for an increasing number of industries, getting there first matters. Firms thus face growing pressure to innovate continuously and scale fast so as not to be displaced. Out of the 10 pillars that constitute the NRI, a high rate of ICT adoption among

firms is the most common characteristic of countries that obtain the greatest economic and innovation impact from ICTs. The NRI data suggest that these conditions are in place for only a handful of countries: a perceived stagnating rate of ICT usage by existing firms across all regions indicates that a large number of firms are not getting in the game fast enough.

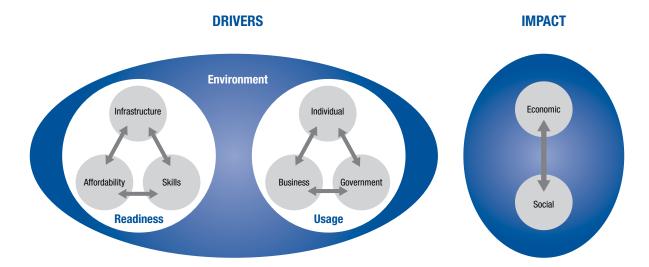
The forces and systems of the emerging Fourth Industrial Revolution will need to be channeled and designed in order to achieve broad-based gains. Finding the right framework conditions in the form of competition and employment policies will be vital. Because the importance of network dynamics has grown significantly with the platform economy, the emergence of lock-in effects needs to be addressed in order to ensure a level playing field. When it comes to the job market, digital technologies are already disrupting existing career paths, ousting entire sets of skills, and creating the need for new ones. At the same time, platform technologies are increasingly used to match workers with jobs, leading to more and more freelance activity. Policy will need to ensure that these developments are not accompanied by a loss of social protection for workers. Education and life-long learning will have key roles to play in the years to come as even more fundamental changes are to be expected in the Fourth Industrial Revolution.

The innovation spotlight concludes by pointing out that the digital economy raises new challenges in multiple arenas, not only in terms of economic imperatives. It also calls for new types of leadership and behaviors, as well as more flexible approaches to governance. New innovation governance approaches, such as the framework for Responsible Research and Innovation (RRI),<sup>2</sup> are highly relevant in this context and are used to anticipate the long-term impacts of emerging technologies.

The second section of this chapter turns to overall global trends in networked readiness as well as regional assessments. The chapter then presents this year's rankings and country-level highlights, including profiles of the top 10 performers and the top countries moving up in the Index.

The Index maps a quickly evolving space and has been adapted since its inception in 2001. Since the digital economy is developing exponentially, its measurement must be modified to reflect the new realities on the ground. This chapter therefore also includes an outlook for potential next steps for the NRI as a starting point for discussing the evolving concepts and measurements of networked readiness. A multistakeholder process will be put in place over the course of next year to identify key questions concerning the drivers and implications of the emerging Fourth Industrial Revolution and to develop relevant concepts and measures with a view to incorporating these findings into the next edition of the NRI (see Box 2).

Figure 1: Networked readiness framework



# INNOVATION IN THE DIGITAL ECONOMY THROUGH THE LENS OF THE NRI

This section begins with an overview of the networked readiness framework and then considers two key mechanisms by which digital technologies are affecting innovation: the first mechanism is changing the nature of innovation, whereas the second is driving a new urgency to innovate. Next, four key findings that emerge from the analysis of historical and this year's NRI data are presented.

# The networked readiness framework

Launched by the World Economic Forum in 2001 and significantly extended in 2012, the NRI can help to assess countries' ability to capitalize on the digital revolution and their preparedness to benefit from the emerging Fourth Industrial Revolution. This chapter uses the NRI to point out some striking patterns in countries' innovation performance. The Index aggregates data from 53 indicators, organized on the basis of the networked readiness framework (Figure 1). Networked readiness rests on whether a country possesses the drivers necessary for digital technologies to unleash their potential, and on whether these technologies are actually impacting the economy and society.

The drivers are grouped within four subindexes as follows:

# A. Environment subindex

- 1. Political and regulatory environment (9 indicators)
- 2. Business and innovation environment (9 indicators)

# B. Readiness subindex

- 3. Infrastructure (4 indicators)
- 4. Affordability (3 indicators)
- 5. Skills (4 indicators)

# C. Usage subindex

- 6. Individual usage (7 indicators)
- 7. Business usage (6 indicators)
- 8. Government usage (3 indicators)

Impact is measured as a separate subindex:

# D. Impact subindex

- 9. Economic impacts (4 indicators)
- 10. Social impacts (4 indicators)

About half of the 53 individual indicators used in the NRI are sourced from international organizations. The main providers are the International Telecommunication Union (ITU); the World Bank; the United Nations Educational, Scientific and Cultural Organization (UNESCO); and other UN agencies. Carefully chosen alternative data sources, including national sources, are used to fill data gaps in certain cases. The other half of the NRI indicators are derived from the World Economic Forum's annual Executive Opinion Survey (the Survey). The Survey is used to measure concepts that are qualitative in nature or for which internationally comparable statistics are not available for enough countries.3

The 2016 iteration of the Index covers 139 economies, accounting for 98.1 percent of world GDP. Angola, Barbados, Burkina Faso, Libya, Suriname, Timor-Leste, and Yemen—all covered in the 2015 edition—have been excluded, in line with the country coverage of The Global Competitiveness Report 2015-2016. Sierra Leone was also excluded, even though Survey data do exist for that country, because too many data points were missing for other indicators. Benin, Bosnia and Herzegovina, Ecuador, and Liberia have been reinstated this year. The appendix provides a detailed description of the networked readiness framework and its rationale, together with a complete methodological note on the computation of the NRI.

# Box 2: Possible next steps for the Networked Readiness Index

The NRI, a critical tool for tracking access and impact Since its inception in 2001, the NRI has proven critical as a tool to identify gaps, to catalyze action, to structure policy dialogue, and to track progress in ICT readiness over time. The indicators that make up the NRI shine a light on two major questions: (1) What level of ICT access and use is reached within a country? (2) What is the impact of digital technologies once there is access?

In order to ensure that the NRI remains relevant in the fast-changing field of ICTs, adjustments to the Index in the next edition are envisaged. To this end, the Forum will convene relevant experts and put in place a rigorous multistakeholder consultation to ensure that the Index continues to build on the latest developments in terms of both data and methodology.

# Key questions going forward

In a next step, two sets of questions will require attention if the digital revolution is to be shaped in a way that can bring broad-based improvements in living standards, making our societies more prosperous and inclusive.

First, there is a need to measure the impact of technologies beyond productivity and innovation, ensuring that the digital revolution is also socially beneficial and sustainable. In assessing the impact of the unfolding digital revolution, parts of the picture are currently missing. Ideally more mechanisms would be captured by which new technologies enable and empower people and to more systematically keep track of distributional impact. What is measured matters for the way trust in new technologies is built and the way the emerging Fourth Industrial Revolution can be shaped.

Second, new indicators could usefully be introduced to better map various micro-factors of ICT readiness. For example, although the supply side regarding the access question can be measured (see infrastructure and coverage data in the NRI), there are gaps in understanding of the demand side. In particular, a good understanding of the offline population in environments where digital infrastructure is available is absent. Lack of relevant content, missing platforms, and affordability or privacy concerns are potential explanations for why individuals and businesses do not join the online world even though the infrastructure is in place. When it comes to measuring the availability of local content,

the World Economic Forum's Global Agenda Council on Media, Entertainment and Information (June 2016) has recently provided suggestions for new indicators in this respect. In a next step, systematic data sources for these indicators will need to be identified. It may be possible to capture some of these demand-side factors using either survey data or possibly commercially collected data. In order get a more accurate picture of the offline population, household surveys will be a critical complement.

Ideally, and conditional on the availability of systematic data, new indicators would also be introduced to anticipate key aspects of the Fourth Industrial Revolution infrastructure and systems.

Country-level measures of ICT readiness will need to be complemented with contextualizing data at the local level. The World Economic Forum is catalyzing data collection at this level in regional partnerships under the umbrella of the Internet for All initiative. Public-private partnerships are vital in this context because data that are critical for public policy are currently collected by private entities.

# Unlocking new data sources

Digital technologies have opened the way to new types of data. Given the high frequency, larger coverage, and greater accuracy of such data, it will be important to integrate these into the NRI to the largest extent possible. In order to do so, progress will be essential on several fronts with regard to data access and sharing: much of the new, critical data are being collected by private entities and the location of these data is not necessarily known. Once located, several questions will still need to be solved with regard to data management and sharing. Although data gathering is becoming ever cheaper, data management and storage are not. Considerable legal uncertainties still exist, in particular with regard to privacy considerations and data ownership. Furthermore, the business rationale for data sharing is not necessarily clear in all cases. Finally, big data by itself is missing the local context; thus localized data-gathering efforts continue to remain important. It is worth noting that well-designed surveys are currently still considered best practice for data gathering. Yet as these bottlenecks are being resolved, it will be important to include new data sources that are updated at higher than annual frequency into the NRI data effort.

# How digital technology affects the nature and urgency of innovation: Two mechanisms

This section shines a spotlight on the innovation mechanisms brought into play by digital technologies and subsequently shows consistent emerging patterns in the NRI data.

The joint EU/OECD Oslo Manual defines innovation as follows: 4

An innovation is the implementation of a new or significantly improved product (good or service), a new process, a new marketing method, or a new organizational method in business practices, workplace organization, or external relations.

Digital technologies are changing innovation itself in a qualitative way as well as amplifying the urgency to innovate. Identified below are a direct mechanism, which is changing the nature of innovation, and an indirect effect, which drives a new urgency to innovate; the latter applies to tech and non-tech firms alike.

The direct way in which digital technology affects innovation is via an augmentation of existing tools, products, processes, and business models by embedding new technologies. This mechanism applies along the entire value chain from design to marketing. In addition to allowing firms to achieve marginal productivity improvements (e.g., by digitizing existing products

or providing new ways of organizing the production system), digital technologies are importantly changing the nature of innovation itself. The large wave of rapid and accelerating web-driven innovation can be explained by a type of almost costless combinatorial innovation. It relies on the fact that parts that are being combined into new products are bits (protocols and languages) rather than physical parts and components and thus have no time-to-manufacture, no inventory issues, no delivery problems, and can be shipped around the world instantaneously.<sup>5</sup>

In particular, digital technologies are affecting innovation directly in the following ways:

- R&D and basic research: New technologies
  augment tools used in research and decrease costs
  of previously unaffordable research activities. They
  allow more accurate inference based on larger
  amounts of data and enable more extensive longdistance research collaboration, including crowdsourcing.
- Product and process innovation: Digital technology makes possible new products and services, and re-engineering production systems give cost and quality advantages. Chapter 1.2 in this Report provides extensive case study evidence for a wide range of industries to illustrate this point.<sup>6</sup>
- Business model innovation: Digital technologies are allowing firms to entirely reimagine current business models within the emerging network of people and machines, giving price and qualityof-service advantages over incumbents. Key for businesses are the new opportunities this brings for ways of matching people to needs and of leveraging the network for decentralized information gathering to create systems that are constantly re-optimizing themselves. Thus, in addition to allowing for more efficient directed/explicit learning systems in the form of crowd-sourcing models for innovation, the new level of connectivity that characterizes the emerging industrial landscape is also creating increasingly self-learning systems. Some of the biggest success stories of the digital era have been companies that have moved into the business of market-making. The gains to be had from this approach to leveraging technology are currently looking bigger than the gains to be had from incremental product and process improvements for existing products.

In an indirect way, digital technology is leading to more innovation by changing the incentives of incumbents to innovate. This is competition-driven innovation, where innovation itself does not necessarily involve new technologies. In particular, this includes technology having the effect of:

- Increasing market size: Technology acts to integrate markets by reducing communication costs and increasing matching efficiency, which in turn increases competitive pressures. For example, online platforms through which firms can connect almost without cost to a global consumer base are creating a tougher competitive environment.
- Reducing barriers to entry: New online services, such as globally accessible cloud computing and online marketing platforms, are saving start-ups and small- and medium-sized enterprises (SMEs) a significant share of the fixed costs of running a business. This facilitates entry and scaling, and thereby contributes to a leveling of the playing field vis-à-vis large incumbents. Mettler and Williams (2011) identify six such types of business platforms: crowd-financing, digital utilities, professional services marketplaces, micro-manufacturing, innovation marketplaces, and e-commerce platforms.<sup>7</sup>
- Acquiring and leveraging knowledge of consumer preferences: Big data is giving firms the opportunity to target products so they more closely align with consumer preferences based on more accurate information about the latter. This can act like a quality upgrade from the point of view of the consumer, and therefore increases pressure on other firms to innovate themselves.

In addition to increasing competitive pressures from new forms of innovation, the central position of networks in this emerging industrial landscape is dramatically changing the rules of the game for companies across sectors: a key implication for businesses is that the ability to scale fast is starting to become a precondition for innovation success.

Why is innovation alone no longer enough? Across industries, achieving scale quickly (in terms of customer base) is crucial because of the self-reinforcing nature of network effects and the implied winner-take-all outcome for the player that achieves a large enough network the fastest.8 Scale is also important for self-optimization of systems: the more participants, the faster the system updates priors about the behavior of market participants, allowing for ever closer matches of preferences and creating yet more value. Quick scaling is also allowing companies to set industry standards, which can act as a competitive advantage because the company that scales quickly sets the precedent and thus can define that precedent. Businesses therefore need to substantially accelerate all processes across the firm in order to win the race for the market.

The ability to scale cannot be taken for granted in the digital economy. An ecosystem that systematically allows top innovations to be scaled globally remains a key feature of only a handful of places, including Silicon Valley.<sup>9</sup>

Advanced Emerging and Emerging and **Economies** Eurasia Developing Asia **Developing Europe** 6 5 4 2012 2013 2014 2015 2016 2012 2013 2014 2015 2016 2012 2013 2014 2015 2016 2013 2014 2015 2016

Figure 2: Trends for perceived capacity to innovate and PCT patents per million population, 2012-16

Sources: NRI, 2012-2016 editions. Based on Executive Opinion Survey data and World Intellectual Property Organization (WIPO) PCT data, sourced from the Organisation for Economic Co-operation and Development (OECD) Patent Database

Technology-enabled innovation is thus creating significant competitive pressures for tech and non-tech firms alike. In competitive economies, the only way to escape is yet more innovation. These mechanisms look set to be reinforced as the Fourth Industrial Revolution is starting to gain a foothold.

# **Key findings**

This section presents the four key findings that emerge from an analysis of the last five years of NRI data.

1. The changing nature of innovation: The minds of business executives around the world are increasingly focused on innovation as reflected by the steady upward trend in firms' perceived capacity to innovate. Traditional measures for innovation, such as the number of patents registered, are telling only part of the story. This is related to the fact that the current transformation is nurtured by a different type of innovation, increasingly based on digital technologies and on the new business models it allows: executives in almost 100 countries report increases in the perceived impact of ICTs on businessmodel innovation compared with last year.

The World Economic Forum's Executive Opinion Survey annually asks more than 14,000 business executives in more than 140 economies about their perception of the capacity to innovate by firms in their country. The data of the last five years show some striking global patterns. Business executives across all regions of the world state that the capacity to innovate of firms in their countries has increased steadily (Figure 2). With this clear global shift in focus toward innovation by the business sector, three questions arise: Is the increased innovation capacity being realized and reflected in terms of innovation output? If it is, what kinds of innovation are firms engaging in? What is driving this favorable shift in innovation capacity?

Consider the most traditional of innovation output measures: the number of patents normalized by population size. Patenting activity continues on an upward trend in advanced economies and is starting to pick up across most regions of the world. It has been growing in particular in Emerging Europe as well as in the Middle East and North Africa. Figure 2 illustrates these positive trends (with a change in patenting compared to the 2012 base on the right-hand scale). Nevertheless, much of the increased innovation capacity remains unaccounted for once innovation output in the form of patents is taken into account. Several explanations are possible for this observation.

For technologically advanced countries, patent trends are more closely matched to perceived innovation trends, yet in some sectors there is a divergence between the two. Patenting is slowing, particularly in industries with high digital content, at the same time that innovation is accelerating (see Box 3). Several reasons for this slowdown are put forward in Box 3: one driver is the shortening of product cycles, which is especially evident in industries, such as audio-visual technologies and telecommunications, that are most affected by digital disruption. In addition, patent pendency times have been rising. These two developments combined often make it unprofitable for firms to patent their innovations. In addition, the pressure to innovate has increased to such an extent that many firms are focusing their resources entirely on cost-saving/efficiency innovation rather than attempting moonshots, or what Clayton Christensen calls "empowering innovation." Thus, although digital innovation is accelerating, the expectation is that these

Latin America Middle East, and the Caribbean North Africa, and Pakistan Sub-Saharan Africa PCT patents per million pop. Capacity for innovation (indicator 7.02) PCT patents per million pop. change relative to 2012, right axis 2012 2013 2014 2015 2016 2013 2014 2015 2016 2012 2013 2014 2015 2016

Figure 2: Trends for perceived capacity to innovate and PCT patents per million population, 2012-16 (cont'd.)

Notes: The number of PCT patents per million population is shown on a normalized scale of 1 to 7. Based on a constant sample of 127 economies. Groupings follow the IMF classification; IMF "CIS" = "Eurasia."

trends will be captured less and less well by traditional innovation measures in the future.

A broader measure of innovation outcomes—the Economic impacts pillar of the NRI, which comprises both patents and survey-based measures of the impact of ICTs on business model and on organizational model innovation—can give some additional insights: the 2016 iteration of the NRI sees a positive change compared to 2015 in the perceived impact of ICTs on business model innovation in almost 100 countries. Importantly, as Figure 3 demonstrates, the increased power of ICTs to enable new business models is being felt across the entire networked readiness spectrum. 11 ICT-driven business model innovation thus is a candidate to be watched as an important source of digital innovation impact.

2. The increasing urgency to adopt and innovate continuously: Although innovation is clearly on executives' minds, seven countries truly stand out in terms of their digital innovation performance. A closer look at their characteristics reveals very high rates of business ICT adoption and a top innovation environment.

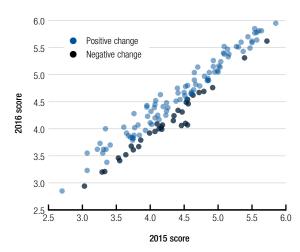
Although perceived capacity to innovate is going up across the world, certain countries are far ahead of the rest in terms of innovation impact as captured by the NRI (Figure 4): when looking at the score distribution for the Economic impacts pillar of the NRI, seven countries stand out in terms of their performance: Finland, Switzerland, Sweden, Israel, Singapore, the Netherlands, and the United States. A closer examination of these top seven innovative countries gives important clues about potential drivers for innovation success in the digital era.

In order to establish how the top seven are different from other countries, Figure 5 shows the distribution

of ranks for these countries across all other individual pillars of the NRI. The data reveal some striking patterns: top innovation impact performers are all characterized by top ranks in business usage of digital technologies. More particularly, this means these countries perform especially well on the combination of firm technology absorption, innovation capacity, patenting, and businessto-business (B2B) and business-to-consumer (B2C) Internet use as well as ICT staff training. In addition to having very high levels of business ICT use, the top seven all rank highly in terms of their business and innovation environment as well as in individual technology usage.

At the country level, high levels of business adoption of digital technologies and a strong business and innovation environment thus stand out as a key

Figure 3: Perceived impact of technology on business model innovation: 2015 vs 2016



Source: NRI, 2015 and 2016 editions. Note: Numbers are based on a constant sample of a 135 economies

# Box 3: The decline of patents in ICT-driven industries

The World Intellectual Property Organization (WIPO) (2015) shows a global rise of patent applications to a total of 2.7 million, an increase of 4.5 percent over 2014. Yet two patent fields-audio-visual technologies and telecommunicationsshow a constant decline in their number of patent applications over the last 10 years, of 13 percent and 20 percent, respectively. Moreover, since peaking in 2005, the total number of patent filings of the top 100 global patent applicants has followed a downward trend of more than 20 percent in the last decade. This has resulted in part from a sharp decline in filings by three large companies, which have reduced their patent activities by more than twothirds. Those three and the remaining companies in the top 100 are predominantly in the computer, semiconductor, telecommunications, and consumer electronic business. Three potential drivers of this trend are shortening product life cycles, longer patent pendency times, and a shift in innovation types:

# Product life cycles are getting shorter

Various studies have shown that the duration of product life cycles is steadily decreasing across all industries. Between 1997 and 2012 the average life cycle length across industries fell by 24 percent.<sup>2</sup> The digitalization of almost every business aspect and the resulting efficiency boosts have contributed a big part of this development.

Besides a general shortening of product life cycles, the existence of differences across various industry sectors are especially important with respect to their development cycle times and useful product life spans.3 For fast, risky industries even small delays in time-to-market can have extensive effects on the expected return. Being late to market yields a significant loss of revenue; this can quickly exceed the costs incurred during the development and manufacturing phase.

Imagine a semiconductor company that produces a chip with two years of product life on the market. Releasing a new chip only one quarter (three months) too late means the company loses more than one-third of the expected return of releasing on time. This could potentially exceed the development costs of the product and be a very sensitive profit killer. Compare this to the world's largest passenger airplane, the Airbus A380, which has a useful product life of around 20 years. Delays in the delivery of commercial airplanes are rather the rule than the exception, and the incurred cost of mistakes are easier to amortize.

# Patent pendency time is getting longer

The average patent pendency time has increased in many patent offices around the world to four years and more. This trend, together with the simultaneous shortening of product life cycles across all industries, could have led to a situation

where filing patents increasingly become an unpractical and tardy means for technological innovations with short-term applicability. If this was true, we would see the affected industries rather shifting to more time-strategic, broad patenting of features for the sole purpose of delaying the development cycle for competitors.

# A shift in the type of innovation toward efficiency

Clayton Christensen (2012) distinguishes three major forms of innovation: "empowering," "sustaining," and "efficiency" innovations. While the first and the second type create and sustain jobs, the third is describing innovations that streamline processes and tend to reduce the number of available jobs.<sup>4</sup>

Fast-paced industries in the sustaining category will feel a continuous pressure to increase productivity, and will incentivize to invest and operate in the efficiency innovation scheme. The 2015 industry employment and output projections to 2024 by the US Bureau of Labor Statistics, for example, find that the US computer and peripheral equipment manufacturing industry is among those with the highest projected changes both in terms of increases in output and declines in employment.<sup>5</sup> This is an indication that the industry is running in full efficiency innovation mode.

How can such an industry then be open to taking more risks by working on completely new approaches and potential moonshots if most resources are spent to increase efficiency to stay in business? One way could be through new partnership models with, and investment in, start-ups. If a business is running like clockwork and trimmed toward optimized outcomes, it might not be the right environment to follow out-of-the-box ideas. A positive development is that an increasing number of agile entrepreneurs with bold ideas are starting to shake up industries that are fully engaged with themselves. In addition, corporate investment arms that strategically back young companies are on the rise. A diversification of corporate culture might be essential for survival in the long run.

# Notes

- WIPO 2015.
- Roland Berger Strategy Consultants 2012.
- Prasad 1997.
- Christensen 2012.
- United States Department of Labor, Bureau of Labor Statistics 2015.

Contributed by Bernhard Petermeier, Technology Pioneers, World Economic Forum.

characteristic of highly innovative countries. To the extent that digitization allows for faster processes, this finding resonates with both survey-based and anecdotal evidence at the firm level, which shows that speed in bringing new inventions to market is the most crucial factor in becoming and staying a top innovative firm in the Digital Age. 12 Because digital technologies are driving winner-take-all dynamics for an increasing number of industries, getting there first matters.

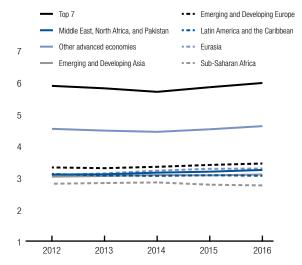
Note that a crucial ingredient for innovation success will continue to be talent competitiveness. Although the NRI contains a broad measure of skills, it currently does not map the availability of the very specialized talent needed to drive digital innovation.<sup>13</sup> Yet this type of talent will be at the core of any success story in the unfolding Fourth Industrial Revolution: it will limit or enhance the ability of individual countries to fuel their development, growth, and employment strategies through digital

innovation. When it comes to succeeding at innovation, countries critically need to think not only about educating future innovators but also about how to retain talent once educated, as the pull of Silicon Valley remains strong.<sup>14</sup>

3. Missed opportunities: In recent years, digital innovation has been primarily driven by consumer demand. Yet this increasing demand for digital products and services by a global consumer base is being met by a relatively small number of companies. Businesses need to act now and adopt digital technologies to capture their part of this growing market. A widening and worrying gap is also emerging between growth in individual ICT usage and public-sector engagement in the digital economy, as government usage is increasingly falling short of expectations. Governments can do more to invest in innovative digital solutions to drive social impact.

The NRI data suggest that business usage and adoption is stagnating or moving only slowly across regions (Figure 6). This suggests that a large number of existing firms are not getting in the game fast enough. The data also imply that it is not a lack of technology take-up by individuals that is holding back business adoption: companies that do adopt digital technologies will find themselves with a fast-growing connected consumer base. As Figure 6 shows, this trend of rising individual adoption is remarkably uniform across all regions of the world. The number of Internet users grew in all but nine countries since the 2015 iteration of the Index. Household ownership of personal computers and

Figure 4: Economic impact of ICTs in the Top 7 economies vs other country groups and regions, 2012-16 Score



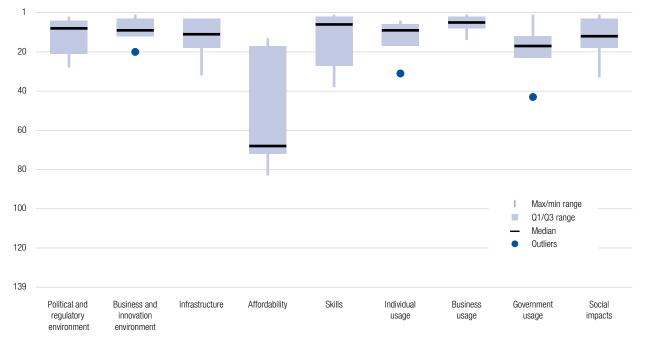
Source: NRI, 2012-2016 editions.

Notes: Top 7 identifies the seven best performers in terms of economic impact: Finland, Switzerland, Sweden, Israel, Singapore, the Netherlands, and the United States. Numbers are based on a constant sample of a 127 economies. Groupings follow the IMF classification: IMF "CIS" = "Eurasia."

the number of households with an Internet connection is also increasing in all but a handful of countries. In particular, the quality of Internet service is improving, with fixed and mobile broadband subscriptions increasing across the board.

Furthermore, an expectations gap has opened up with respect to public-sector performance in using

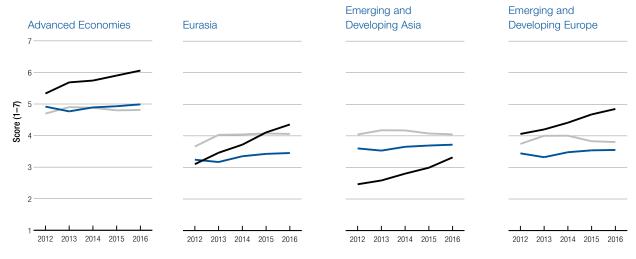
Figure 5: Distribution of ranks for Top 7 performers on the economic impacts pillar across the remaining 9 pillars Rank (1 to 139)



Source: NRL 2016 edition.

Note: The light blue boxes identify the interquartile range—from the 75th to the 25th percentile—for each distribution.

Figure 6: Time trends for individual, business, and government usage, 2012-16



Source: NRI, 2012-2016 editions

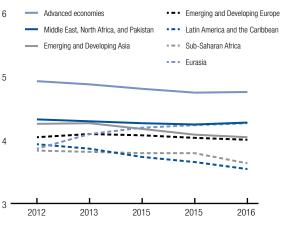
and promoting digital technologies. The upward trend in government usage (NRI pillar 8) observed up to 2013 is slowly being reversed in all regions of the world (Figure 6). Governments are also seen to be falling behind in terms of using digital technologies efficiently for social impact (NRI indicator 10.03, Figure 7). Using ICTs to more efficiently provide services to citizens is an important area where digital technologies can make a difference in generating broad-based gains.

Yet it does not have to be the government alone that is driving social outcomes. Indeed, overall social impact scores (NRI pillar 10) are up in a group of countries, in particular the advanced economies (Figure 8). ICTs can be used in many innovative ways to achieve social impact—for example, in facilitating access to basic services such as healthcare, finance, and insurance (Figure 9). Even in cases where the government remains

firmly in charge of the system, access to the system can be facilitated by digital technologies and private initiative. A pioneering example of such a public-private digital collaboration for social impact is a Dutch service provider that has partnered with the government to facilitate access to the justice system (Box 4).

4. Building a resilient digital economy: As the new digital economy is taking shape, offering it the right framework conditions will be crucial to ensuring its sustainability. Digital technologies are unleashing new economic and social dynamics that will need to be managed if the digital transformation of industries and societies are to deliver long-term and broad-based gains. A resilient digital economy also calls for new types of leadership, governance, and behaviors. A critical ingredient for the success and sustainability of the

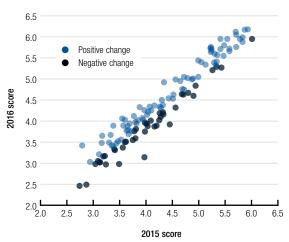
Figure 7: Impacts of ICTs on government efficiency, 2012–16 Score (1-7)



Source: NRI, 2012-2016 editions.

Note: Regional groupings follow the IMF classification; IMF "CIS" = "Eurasia."

Figure 8: Social impacts score (pillar 10): 2015 vs 2016



Source: NRI, 2015-2016 editions.

Latin America Middle East, North Africa, and the Caribbean and Pakistan Sub-Saharan Africa Individual usage Business usage Government usage

2012

2013 2014 2015 2016

2014 2015 2016

Figure 6: Time trends for individual, business, and government usage, 2012-16 (cont'd.)

Notes: Based on a constant sample of 127 economies. Groupings follow the IMF classification: IMF "CIS" = "Eurasia."

2012 2013

emerging system will be agile governance frameworks that allow societies to anticipate and shape the impact of emerging technologies and react quickly to changing circumstances.

2012

2013 2014 2015 2016

From an economic standpoint, two developments that come in the wake of the unfolding digital revolution carry direct implications for future competitiveness and inclusive growth and will require a careful policy response: the impact of digital technologies and new networks on (1) competition dynamics in product markets and (2) labor market dynamics.

As network dynamics are becoming a key feature of competition in the emerging platform economy, being able to bring products to market fast and scale rapidly is increasingly important for companies. At the same time, the risk of lock-in needs to be managed. Governments can play a supportive role in creating a level playing field by ensuring a business environment that allows firms to quickly react to new developments; this includes speedy procedures for opening a new business and bringing products to market, providing a supportive innovation ecosystem, ensuring that barriers to entry stay low by enforcing a competition regime that counteracts potential network lock-in, and promoting and facilitating ICT adoption by building out infrastructure and having a clear ICT strategy.

Similar to trade liberalization, the spread of digital technologies is creating winners and losers within the labor force. Two key ways in which digital technologies are affecting outcomes can be identified.

First, as digital technologies are increasingly allowing for the automation of routine jobs, they are currently accelerating the polarization of the income distribution because middle-skilled workers are most affected up to this point. In the United States, total employment grew significantly in the lower end of the skill spectrum, where

wages were generally stagnating or grew slightly, and at the higher end of the spectrum, where wages grew significantly. Many middle-skilled workers have been seeing their earnings decline or their jobs evaporate.<sup>15</sup>

Economies need to face the double challenge of further upgrading the skills of workers at the upper end of the spectrum while ensuring that the rest, the majority, of the population also receive the necessary training to prosper in the digital world. The World Economic Forum Future of Jobs report examines future skills needs via a survey of Chief Human Resource Officers from 366 companies worldwide. The responses indicate that complex problem-solving skills comprise the set of skills that will be considered a core requirement by the largest share of jobs across industries (36 percent). Skills that are not considered crucial today will account for about a third of the most-needed skills by 2020.

Figure 9: Impact of ICTs on access to basic services (indicator 10.01), 2012-16 6.5 — Advanced economies - - Emerging and Developing Europe Middle East, North Africa, and Pakistan - Latin America and the Caribbean Emerging and Developing Asia = = Sub-Saharan Africa -- Furasia 5.5 Score (1-7) 4.5 3.5 2012 2013 2015 2015 2016 Source: NRI, 2012-2016 editions

# Box 4: Public-private collaboration in digital social innovation: Rechtwijzer, the Dutch digital platform for dispute resolution

Rechtwijzer 2.0 is a collaborative effort between HiiL Innovating Justice, the Dutch Legal Aid Board, Modria, and the Dutch Ministry of Justice and Security. The online-based dispute resolution (ODR) platform aims to inform people about their legal options as well as to support legal professionals so they can intervene more effectively. The initiative allows citizens to find sustainable solutions to their legal issues, such as divorce, separation, landlord-tenant disputes, and employment disputes. The ODR platform empowers citizens to access justice by providing simple models that have worked for others as well as tailored support by legal professionals. The platform is a major innovation that helps citizens get access to justice and could offer a sustainable solution to many judicial systems.

Rechtwijzer 2.0 is a great example of a wider movement and need: justice innovation. Justice innovation is a form of

social innovation that is key to reforming judicial systems. It uses market-based approaches that benefit society. It will help close the gap on the estimated 4 billion people who do not have adequate access to justice. Social innovation is described by the Global Agenda Council on Social Innovation as "the application of innovative, practical, sustainable, market-based approaches to benefit society in general, and low-income or underserved populations in particular." This approach is more collaborative and will empower low-income people to participate in the global economy with dignity.

### Note

1 World Economic Forum 2016e.

Contributed by Lisa Ventura, Society and Innovation, World Economic

Demand for narrow technical skills such as programming or equipment operation and control will be rather stable, while demand will grow for cognitive abilities, content, process, and social skills.16 Policy must play an important role in terms of supporting the transition of workers into new jobs and ensuring that workers' skills match market demand.

In addition to automation, a second mechanism by which digital technologies are affecting the labor market is through the effects of the platform economy.<sup>17</sup> Digital platforms are used not only to match consumers with goods but also increasingly to match workers with jobs. This is leading to more freelance activity and fewer workers being employed by firms in full-time jobs with correspondingly more uncertainty over income flows and less social protection (e.g., insurance, pension). Despite these developments, continued social protection for workers needs to be ensured.

# Anticipatory governance of innovation

Given the likelihood that extremely powerful and multi-use technologies will be developed, tested, and commercialized in coming years, it will be important to guide innovation and commercialization processes with the wider social, economic, and environmental context in mind. Importantly, new technologies should not be thought of as panaceas or simple tools but rather as entities that exert power over users and that will have different impacts in different social contexts. It is therefore critical to keep in mind the social reality in which emerging technologies will be used and to appreciate the economic and social dynamics they may exacerbate, such as inequality.

Ideally the governance of innovation processes would start before economic policies become a relevant instrument, anticipating some of the important societal challenges as applications are developed. Recognizing these challenges, the European Union has recently adopted guidelines on Responsible Research and Innovation (RRI) that reflect these considerations. 18 RRI is currently applied mainly with regard to emerging technologies-notably nanotechnologies, genomics, synthetic biology, and geo-engineering. It has been defined as "a transparent, interactive process by which societal actors and innovators become mutually responsive to each other with a view to the (ethical) acceptability, sustainability and societal desirability of the innovation process and its marketable products in order to allow a proper embedding of scientific and technological advances in our society."19

In terms of evaluating the social desirability of research undertakings, several sets of principles have been suggested: (1) orienting research so as to address major existing or emerging global risks—tightening supplies of energy, water, and food; pandemics; aging societies; global warming; public health and security;<sup>20</sup> (2) constitutional values<sup>21</sup>—for example, in the case of the European Union, "respect for human dignity, liberty, democracy, equality, the rule of law and respect for human rights, including the rights of persons belonging to minorities. [...] Moreover [...] pluralism, nondiscrimination, tolerance, justice, solidarity and equality between women and men";22 and (3) general principles of human and labor rights as enshrined in the UN Global Compact's 10 principles.<sup>23</sup>

One key challenge to more appropriate forms of innovation governance is the fact that technologies change far faster than regulatory regimes do. As the World Economic Forum's Global Agenda Council on the Future of Software and Society has pointed out,

7 Singapore 6 United Arab **Emirates** Malaysia 5 Chile Kazakhstan Poland Chile Mauritius Hungary Mauritius 4 3 Max Mean 2 0 Min Max/min range 1 2012 2016 2012 2016 2012 2016 2012 2016 2012 2016 2012 2016 2012 2016 Advanced Eurasia Emerging and Emerging and Latin America Middle East, Sub-Saharan economies Developing Asia Developing Europe and the Caribbean North Africa, Africa and Pakistan

Figure 10: The Networked Readiness Index by regional group, 2012 vs 2016 Score (1-7)

Source: NRI, 2012-2016 editions.

Note: Numbers are based on a constant sample of 132 economies. Groupings follow the IMF classification; IMF "CIS" = "Eurasia."

technology has so fundamentally changed many behaviors and processes being governed that current regulations are not fully relevant (see A Call for Agile Governance Principles). In an attempt to close this "agility gap," the Council took inspiration from agile approaches used in software development to create four "agile governance" principles. The work proposes that policymakers could create governance systems that are more robust, adaptable, and responsive to changing technologies if their decision-making frameworks valued outcomes over rules; if they valued responding to change over following a plan; participation over control; and self-organization over centralization. In addition to suggesting these new heuristics, the Council looks at specific areas where new policy options need to be generated in order to ensure that emerging technologies deliver inclusive benefits to society, including the "gig economy," the use of decentralized payment systems, peer-to-peer transactions, and autonomous devices.

Building on this work, as well as work by the Global Agenda Council on Justice and others, in July 2016 the World Economic Forum launched a new set of Global Future Councils that includes a number of councils specifically focused on the governance of emerging technologies and the potential for new forms of agile governance to guide innovation and the Fourth Industrial Revolution toward positive outcomes for society.

# COUNTRY AND REGIONAL TRENDS FROM THE NRI

This section of the chapter turns to the general global and regional trends emerging from this year's results of the NRI (see Tables 1 through 5), as well as to a detailed analysis of the performance of selected economies.

Networked readiness continues to improve almost everywhere in the world, with a clear upward trend in mean country performance across all regions; however, convergence within regions is far from being the norm (Figure 10). Clearly divergent regional performances are observed for the group of countries within Eurasia; Emerging and Developing Europe; the Middle East, North Africa, and Pakistan (MENAP); and sub-Saharan Africa. In the case of MENAP and sub-Saharan Africa, this is driven by the fact that top countries improve their performance at the same time that the performance of the worst-scoring countries is deteriorating. There is a clear upward trend for the entire range of countries for the group of Advanced Economies, Emerging and Developing Asia, Eurasia, and Latin America and the Caribbean. Notably, the group of Emerging and Developing Asian countries is both moving up and converging in terms of overall NRI scores. Average performance on the NRI in 2016 is highest for the group of Advanced Economies, followed by Emerging and Developing Europe, the Eurasian countries and MENAP (the two are approximately even), Emerging and Developing Asia, Latin America and the Caribbean, and Sub-Saharan Africa.

Table 1: The Networked Readiness Index 2016

Rank	Country/Economy	Value	2015 rank (out of 143)	Income level*	Group†	Rank	Country/Economy	Value	2015 rank (out of 143)	Income level*	Group†
1	Singapore	6.0	1	HI	ADV	71	Moldova	4.0	68	LM	EURAS
2	Finland	6.0	2	HI-OECD	ADV	72	Brazil	4.0	84	UM	LATAM
3	Sweden	5.8	3	HI-OECD	ADV	73	Indonesia	4.0	79	LM	EDA
4	Norway	5.8	5	HI-OECD	ADV	74	Seychelles	4.0	74	HI	SSA
5	United States	5.8	7	HI-OECD	ADV	75	Serbia	4.0	77	UM	EDE
6	Netherlands	5.8	4	HI-OECD	ADV	76	Mexico	4.0	69	UM	LATAM
7	Switzerland	5.8	6	HI-OECD	ADV	77	Philippines	4.0	76	LM	EDA
8	United Kingdom	5.7	8	HI-OECD	ADV	78	Morocco	3.9	78	LM	MENAP
9	Luxembourg Japan	5.7 5.6	9	HI-OECD HI-OECD	ADV ADV	79 80	Vietnam Rwanda	3.9	85 83	LM LI	EDA SSA
11	Denmark	5.6	15	HI-OECD	ADV	81	Tunisia	3.9	81	UM	MENAP
12	Hong Kong SAR	5.6	14	HI	ADV	82	Ecuador	3.9	n/a	UM	LATAM
13	Korea, Rep.	5.6	12	HI-OECD	ADV	83	Jamaica	3.9	82	UM	LATAM
14	Canada	5.6	11	HI-OECD	ADV	84	Albania	3.9	92	UM	EDE
15	Germany	5.6	13	HI-OECD	ADV	85	Cape Verde	3.8	87	LM	SSA
16	Iceland	5.5	19	HI-OECD	ADV	86	Kenya	3.8	86	LM	SSA
17	New Zealand	5.5	17	HI-OECD	ADV	87	Bhutan	3.8	88	LM	EDA
18	Australia	5.5	16	HI-OECD	ADV	88	Lebanon	3.8	99	UM	MENAP
19	Chinese Taipei	5.5	18	HI	ADV	89	Argentina	3.8	91	HI	LATAM
20	Austria	5.4	20	HI-OECD	ADV	90	Peru	3.8	90	UM	LATAM
21	Israel	5.4	21	HI-OECD	ADV	91	India	3.8	89	LM	EDA
22	Estonia	5.4	22	HI-OECD	ADV	92	Iran, Islamic Rep.	3.7	96	UM	MENAP
23	Belgium	5.4	24	HI-OECD	ADV	93	El Salvador	3.7	80	LM	LATAM
24	France	5.3	26	HI-OECD	ADV	94	Honduras	3.7	100	LM	LATAM
25	Ireland	5.3	25	HI-OECD	ADV	95	Kyrgyz Republic	3.7	98	LM	EURAS
26	United Arab Emirates	5.3	23	HI	MENAP	96	Egypt	3.7	94	LM	MENAP
27	Qatar	5.2	27	HI	MENAP	97	Bosnia and Herzegovina		n/a	UM	EDE
28	Bahrain	5.1	30	HI	MENAP	98	Dominican Republic	3.6	95	UM	LATAM
29	Lithuania	4.9	31	HI	ADV	99	Namibia	3.6	102	UM	SSA
30	Portugal	4.9	28	HI-OECD	ADV	100	Guyana	3.6	93	LM	LATAM
31	Malaysia	4.9	32	UM	EDA	101	Botswana	3.5	104	UM	SSA
32	Latvia	4.8	33 35	HI	ADV	102	Ghana	3.5	101	LM	SSA
33 34	Saudi Arabia	4.8	29	HI HI	MENAP ADV	103	Guatemala Lao PDR	3.5	107 97	LM LM	LATAM EDA
35	Malta Spain	4.8 4.8	34	HI-OECD	ADV	104 105	Paraguay	3.4	105	UM	LATAM
36	Czech Republic	4.7	43	HI-OECD	ADV	106	Côte d'Ivoire	3.4	115	LM	SSA
37	Slovenia	4.7	37	HI-OECD	ADV	107	Senegal	3.4	106	LM	SSA
38	Chile	4.6	38	HI-OECD	LATAM	108	Venezuela	3.4	103	HI	LATAM
39	Kazakhstan	4.6	40	UM	EURAS	109	Cambodia	3.4	110	LI	EDA
40	Cyprus	4.6	36	HI	ADV	110	Pakistan	3.4	112	LM	MENAP
41	Russian Federation	4.5	41	HI	EURAS	111	Bolivia	3.3	111	LM	LATAM
42	Poland	4.5	50	HI-OECD	EDE	112	Bangladesh	3.3	109	LM	EDA
43	Uruguay	4.5	46	HI	LATAM	113	Gambia, The	3.3	108	LI	SSA
44	Costa Rica	4.5	49	UM	LATAM	114	Tajikistan	3.3	117	LM	EURAS
45	Italy	4.4	55	HI-OECD	ADV	115	Lesotho	3.3	124	LM	SSA
46	Macedonia, FYR	4.4	47	UM	EDE	116	Zambia	3.2	114	LM	SSA
47	Slovak Republic	4.4	59	HI-OECD	ADV	117	Algeria	3.2	120	UM	MENAP
48	Turkey	4.4	48	UM	EDE	118	Nepal	3.2	118	LI	EDA
49	Mauritius	4.4	45	UM	SSA	119	Nigeria	3.2	119	LM	SSA
50	Hungary	4.4	53	HI-OECD	EDE	120	Ethiopia	3.1	130	LI	SSA
51	Montenegro	4.3	56	UM	EDE	121	Uganda	3.1	116	LI	SSA
52	Oman	4.3	42	HI	MENAP	122	Zimbabwe	3.0	121	LI	SSA
53	Azerbaijan	4.3	57	UM	EURAS	123	Mozambique	3.0	129	LI	SSA
54	Croatia	4.3	54	HI	EDE	124	Cameroon	3.0	126	LM	SSA
55	Panama	4.3	51	UM	LATAM	125	Gabon	2.9	122	UM	SSA
56	Armenia	4.3	58	LM	EURAS	126	Tanzania	2.9	123	LI	SSA
57 58	Mongolia	4.3 4.3	61 60	UM LM	EDA EURAS	127 128	Mali Benin	2.9	127 n/a	LI LI	SSA SSA
59	Georgia China	4.2	62	UM	EDA	129	Swaziland	2.9	125	LM	SSA
60	Jordan	4.2	52	UM	MENAP	130	Liberia	2.8	n/a	LI	SSA
61	Kuwait	4.2	72	HI	MENAP	131	Nicaragua	2.8	128	LM	LATAM
62	Thailand	4.2	67	UM	EDA	132	Malawi	2.7	133	LIVI	SSA
63	Sri Lanka	4.2	65	LM	EDA	133	Myanmar	2.7	139	LM	EDA
64	Ukraine	4.2	71	LM	EURAS	134	Guinea	2.6	142	LI	SSA
65	South Africa	4.2	75	UM	SSA	135	Madagascar	2.6	135	LI	SSA
66	Romania	4.1	63	UM	EDE	136	Mauritania	2.5	138	LM	MENAP
67	Trinidad and Tobago	4.1	70	HI	LATAM	137	Haiti	2.5	137	LI	LATAM
68	Colombia	4.1	64	UM	LATAM	138	Burundi	2.4	141	LI	SSA
69	Bulgaria	4.1	73	UM	EDE	139	Chad	2.2	143	LI	SSA
	Greece	4.1	66	HI-OECD	ADV						

Note: Income level classification follows the World Bank classification by income (situation as of July 2015). Group classification follows the International Monetary Fund's classification (situation as of April 2016). IMF "CIS" = "Eurasia."

\* Income groups: HI = high-income economies that are not members of the OECD; HI-OECD = high-income OECD members; UM = upper-middle-income economies; LM = lower-middle-income

economies; LI = low-income economies.

<sup>†</sup> Groups: ADV = Advanced economies; EDA = Emerging and Developing Asia; EDE = Emerging and Developing Europe; EURAS = Eurasia; LATAM = Latin America and the Caribbean; MENAP = Middle East, North Africa, and Pakistan; SSA = Sub-Saharan Africa.

Table 2: Environment subindex and pillars

ENVIRO	NMENT SUBINDEX		regu	cal and latory onment	inno	ess and vation onment	ENVIRO	NMENT SUBINDEX		regu	al and atory nment	inno	ess and vation onment
Rank	Country/Economy	Value	Rank	Value	Rank	Value	Rank	Country/Economy	Value	Rank	Value	Rank	Value
1	Singapore	6.0	2	5.9	1	6.0	71	Ghana	4.0	54	4.0	92	4.0
2	New Zealand	5.6	3	5.9	6	5.4	72	Côte d'Ivoire	4.0	51	4.0	96	3.9
3	United Kingdom	5.6	5	5.7	5	5.5	73	Sri Lanka	3.9	64	3.8	81	4.1
4	Hong Kong SAR	5.6	14	5.4	2	5.8	74	Azerbaijan	3.9	79	3.7	74	4.2
5	Finland	5.6	4	5.8	9	5.4	75	Lesotho	3.9	52	4.0	100	3.9
6	Norway	5.5	6	5.7	7	5.4	76	Seychelles	3.9	59	3.9	97	3.9
7	Switzerland	5.5	7	5.6	8	5.4	77	Morocco	3.9	70	3.8	87	4.1
8	Netherlands	5.5 5.5	8	5.6 5.9	10 27	5.4 5.0	78 79	Armenia Mexico	3.9 3.9	116 77	3.2 3.7	50 83	4.6 4.1
10	Luxembourg Canada	5.4	15	5.4	4	5.5	80	Senegal	3.9	76	3.7	88	4.1
11	Ireland	5.4	11	5.5	11	5.4	81	Kenya	3.9	75	3.7	93	4.0
12	Sweden	5.3	10	5.5	20	5.2	82	Iran, Islamic Rep.	3.9	91	3.5	76	4.2
13	United States	5.3	21	5.2	3	5.5	83	China	3.9	58	3.9	104	3.8
14	Denmark	5.3	17	5.3	16	5.3	84	Guyana	3.9	86	3.6	79	4.1
15	Qatar	5.3	18	5.3	15	5.3	85	Italy	3.8	96	3.4	68	4.3
16	Australia	5.2	13	5.4	23	5.1	86	Vietnam	3.8	82	3.6	91	4.0
17	Japan	5.2	9	5.5	33	4.9	87	Dominican Republic	3.8	100	3.4	69	4.3
18	Iceland	5.2	22	5.1	17	5.3	88	Albania	3.8	109	3.2	61	4.4
19	United Arab Emirates	5.2	25	5.1	13	5.4	89	Philippines	3.8	87	3.6	85	4.1
20	Germany	5.2	16	5.4	28	5.0	90	Gambia, The	3.8	43	4.2	123	3.4
21 22	Malaysia Belgium	5.1 5.1	24	5.1 5.2	18 22	5.2 5.1	91	Lebanon Greece	3.8	126 108	3.0	49 66	4.6 4.3
23	Estonia Estonia	5.0	27	5.2	26	5.1	92	Lao PDR	3.8	68	3.8	106	3.8
24	Israel	5.0	28	4.7	12	5.4	94	Ukraine	3.8	113	3.2	67	4.3
25	Austria	5.0	19	5.2	40	4.7	95	Kyrgyz Republic	3.7	103	3.3	75	4.2
26	France	5.0	23	5.1	35	4.8	96	Trinidad and Tobago	3.7	104	3.3	77	4.1
27	Rwanda	4.9	12	5.4	63	4.4	97	Peru	3.7	118	3.1	70	4.3
28	Saudi Arabia	4.9	29	4.6	25	5.1	98	Honduras	3.7	95	3.4	95	3.9
29	Chinese Taipei	4.8	40	4.2	14	5.3	99	India	3.7	78	3.7	110	3.7
30	Portugal	4.7	33	4.4	24	5.1	100	Mali	3.7	71	3.7	116	3.6
31	Korea, Rep.	4.7	34	4.3	21	5.1	101	Uganda	3.7	72	3.7	118	3.6
32	Chile	4.7	38	4.3	19	5.2	102	Colombia	3.7	97	3.4	94	4.0
33	South Africa	4.7	26	5.0	65	4.3	103	Serbia	3.7	110	3.2	82	4.1
34 35	Mauritius	4.7	30	4.6	41 29	4.7 5.0	104	El Salvador	3.6	106	3.3	90 86	4.0
36	Bahrain Lithuania	4.6 4.6	36 41	4.3 4.2	31	5.0	105 106	Ecuador Ethiopia	3.6 3.6	111 89	3.2	109	4.1 3.7
37	Latvia	4.6	45	4.2	30	5.0	107	Guatemala	3.6	122	3.0	73	4.2
38	Jordan	4.5	39	4.2	38	4.8	108	Liberia	3.6	84	3.6	117	3.6
39	Malta	4.5	32	4.5	56	4.5	109	Tunisia	3.6	90	3.5	112	3.7
40	Czech Republic	4.5	35	4.3	47	4.6	110	Nepal	3.5	114	3.2	99	3.9
41	Spain	4.4	47	4.0	37	4.8	111	Moldova	3.5	125	3.0	89	4.0
42	Macedonia, FYR	4.4	62	3.9	32	5.0	112	Tanzania	3.5	83	3.6	125	3.4
43	Cyprus	4.4	56	3.9	36	4.8	113	Egypt	3.5	102	3.3	113	3.7
44	Uruguay	4.4	44	4.2	51	4.6	114	Cameroon	3.5	105	3.3	114	3.7
45	Slovenia	4.4	67	3.8	34	4.9	115	Pakistan	3.4	128	3.0	98	3.9
46	Zambia	4.3	61	3.9	39	4.8	116	Nigeria	3.4	117	3.2	111	3.7
47	Kazakhstan	4.3	48	4.0	54	4.5	117	Malawi	3.4	93	3.5	126	3.4
48 49	Poland	4.2 4.2	57 69	3.9	53 43	4.6 4.7	118 119	Brazil Cambodia	3.4 3.4	98 124	3.4	124 108	3.4
49 50	Turkey Jamaica	4.2	49	3.8 4.0	62	4.7	119	Mozambique	3.4	112	3.0	108	3.7
51	Hungary	4.2	50	4.0	59	4.4	121	Bosnia and Herzegovina	3.3	120	3.1	120	3.6
52	Oman	4.2	53	4.0	58	4.4	122	Swaziland	3.3	115	3.2	122	3.4
53	Namibia	4.2	31	4.5	103	3.9	123	Benin	3.3	99	3.4	130	3.3
54	Thailand	4.2	80	3.7	48	4.6	124	Argentina	3.3	127	3.0	115	3.6
55	Panama	4.1	85	3.6	45	4.7	125	Paraguay	3.3	133	2.7	101	3.9
56	Georgia	4.1	73	3.7	55	4.5	126	Gabon	3.3	107	3.3	131	3.3
57	Croatia	4.1	92	3.5	44	4.7	127	Madagascar	3.2	129	2.8	119	3.6
58	Mongolia	4.1	81	3.6	52	4.6	128	Zimbabwe	3.1	121	3.0	132	3.2
59	Botswana	4.1	46	4.1	84	4.1	129	Bolivia	3.1	119	3.1	134	3.2
60	Montenegro	4.1	94	3.5	46	4.7	130	Bangladesh	3.1	137	2.5	107	3.7
61	Slovak Republic	4.1	74	3.7	60	4.4	131	Algeria	3.1	123	3.0	133	3.2
62	Indonesia	4.1	65	3.8	64	4.4	132	Nicaragua	3.0	130	2.7	128	3.3
63	Bhutan Cana Varda	4.1	37	4.3	102	3.9	133	Myanmar	3.0	134	2.7	127	3.3
64	Cape Verde	4.0 4.0	55 66	4.0	80 71	4.1	134	Burundi	2.9	136	2.5	129	3.3
65 66	Romania Bulgaria	4.0	101	3.8	42	4.2 4.7	135 136	Mauritania Haiti	2.8	135 131	2.6	135 138	3.0
67	Russian Federation	4.0	88	3.6	57	4.7	135	Guinea	2.8	138	2.7	138	2.8
68	Kuwait	4.0	63	3.8	72	4.2	138	Chad	2.7	132	2.7	139	2.6
69	Costa Rica	4.0	60	3.9	78	4.1	139	Venezuela	2.6	139	2.2	136	3.0
70	Tajikistan	4.0	42	4.2	105	3.8	.55			.00		.00	2.0

Table 3: Readiness subindex and pillars

	NESS SUBINDEX	Mat		tructure		lability		kills
Rank	Country/Economy	Value	Rank		Rank		Rank	
1	Finland	6.6	3	7.0	13	6.4	2	6.5
2	Chinese Taipei	6.4 6.4	1	7.0 7.0	12 19	6.5	23 15	5.8
4	Norway	6.4	7	7.0	28	6.1	12	6.0
5	United States	6.4	5	7.0	17	6.4	27	5.8
6	Austria	6.3	13	6.6	5	6.7	28	5.7
7	Sweden	6.3	3	7.0	25	6.2	25	5.8
8	Canada	6.2	7	7.0	61	5.6	11	6.1
9	Switzerland	6.2	11	6.8	70	5.4	3	6.4
10	Australia	6.2	7	7.0	57	5.6	13	6.0
11	Hong Kong SAR	6.2	25	6.0	16	6.4	10	6.1
12	Denmark	6.1	17	6.4	31	6.1	17	5.9
13	Germany	6.1	12	6.6	55	5.6	8	6.1
14	Korea, Rep.	6.1	5 14	7.0 6.6	48 49	5.8 5.8	35 14	5.6
15 16	Japan Singapore	6.1 6.1	15	6.6	72	5.8	14	6.5
17	Belgium	6.1	19	6.4	62	5.5	4	6.4
18	Estonia	6.0	16	6.5	59	5.6	19	5.9
19	Luxembourg	5.9	26	6.0	36	6.0	20	5.9
20	United Kingdom	5.9	20	6.3	53	5.7	24	5.8
21	Cyprus	5.9	33	5.5	22	6.3	16	6.0
22	Czech Republic	5.9	23	6.3	46	5.8	39	5.5
23	Netherlands	5.9	18	6.4	83	5.0	6	6.2
24	New Zealand	5.9	10	6.8	97	4.6	7	6.2
25	Slovenia	5.8	24	6.1	60	5.6	21	5.8
26	Bahrain	5.8	31	5.8	40	5.9	31	5.7
27	France	5.8	22	6.3	76	5.2	18	5.9
28	Poland	5.8	35	5.3	11	6.6	40	5.5
29	Ireland	5.7	27	6.0	77	5.2	9	6.1
30	Ukraine	5.7	51	4.7	6	6.6	33	5.6
31	Latvia	5.6	43	5.0	23	6.3	36	5.6
32	Russian Federation	5.5	52	4.7	10	6.6	48	5.4
33	Portugal	5.5	40	5.1	41 42	5.9	34	5.6
34 35	Spain Trinidad and Tobago	5.5 5.5	34 37	5.4 5.2	42	5.9 5.9	57 43	5.3 5.5
36	Malta	5.5	21	6.3	88	4.8	43	5.5
37	Israel	5.5	32	5.5	68	5.5	38	5.5
38	Costa Rica	5.5	60	4.5	21	6.3	30	5.7
39	Kazakhstan	5.5	64	4.4	7	6.6	45	5.4
40	Turkey	5.5	59	4.5	2	6.9	69	5.0
41	Italy	5.5	39	5.1	52	5.7	37	5.6
42	Lithuania	5.4	57	4.5	34	6.0	26	5.8
43	Armenia	5.4	61	4.4	18	6.3	51	5.4
44	Mongolia	5.3	79	4.0	4	6.7	62	5.2
45	Montenegro	5.3	41	5.0	67	5.5	50	5.4
46	Georgia	5.3	65	4.4	15	6.4	64	5.1
47	Croatia	5.3	47	4.8	66	5.5	42	5.5
48	Serbia	5.2	45	4.9	56	5.6	61	5.2
49	Macedonia, FYR	5.2	56	4.6	39	5.9	66	5.1
50	Bosnia and Herzegovina	5.2	50	4.7	32	6.1	84	4.7
51	Kuwait	5.2	30	5.8	89	4.8	77	4.9
52	Moldova	5.1	69	4.2	29	6.1	70	5.0
53	Romania	5.1 5.1	55 29	4.6	73	5.2	41 5	5.5
54 55	Qatar Brazil	5.1 5.1	58	5.8 4.5	120 26	3.1 6.2	91	6.4 4.5
56	United Arab Emirates	5.0	28	5.9	116	3.4	22	5.8
57	Mauritius	5.0	68	4.3	65	5.5	53	5.3
58	Hungary	5.0	48	4.8	80	5.0	56	5.3
59	Slovak Republic	5.0	70	4.2	51	5.8	72	5.0
60	Saudi Arabia	5.0	36	5.2	101	4.3	49	5.4
61	Panama	5.0	63	4.4	33	6.1	93	4.5
62	Thailand	4.9	67	4.3	64	5.5	73	5.0
63	Sri Lanka	4.9	103	3.0	35	6.0	32	5.7
64	Tunisia	4.9	82	3.7	24	6.3	85	4.7
65	Chile	4.9	54	4.6	84	4.9	67	5.1
66	Colombia	4.9	76	4.1	58	5.6	79	4.9
67	Azerbaijan	4.8	74	4.1	71	5.3	68	5.1
68	Albania	4.8	75	4.1	92	4.7	29	5.7
69	South Africa	4.8	44	4.9	74	5.2	95	4.4
70	Oman	4.8	46	4.9	96	4.6	76	5.0

READI	NESS SUBINDEX		Infrastructure	e Affordability	Skills
Rank	Country/Economy	Value	Rank Value	Rank Value	Rank Value
71	Ecuador	4.8	78 4.0	78 5.1	63 5.2
72	Bulgaria	4.8	38 5.2	111 3.8	52 5.4
73 74	Malaysia Sevchelles	4.8	71 4.2 49 4.7	91 4.7	46 5.4 74 5.0
75	China	4.8 4.7	49 4.7 90 3.3	98 4.5 63 5.5	74 5.0 47 5.4
76	Uruguay	4.7	53 4.7	87 4.8	83 4.8
77	Greece	4.7	42 5.0	110 3.9	58 5.3
78	Argentina	4.7	66 4.3	n/a n/a	71 5.0
79 80	Kyrgyz Republic Bhutan	4.7 4.7	97 3.1 73 4.1	27 6.1 45 5.9	81 4.8 103 4.1
81	Indonesia	4.6	105 2.9	38 5.9	65 5.1
82	Vietnam	4.6	121 2.4	3 6.8	82 4.8
83	Iran, Islamic Rep.	4.6	101 3.0	37 6.0	80 4.8
84	Mexico	4.6	84 3.7	54 5.7	92 4.5
85 86	Venezuela Paraguay	4.6 4.5	89 3.3 62 4.4	50 5.8 79 5.1	88 4.6 105 3.9
87	Lebanon	4.5	77 4.0	109 4.0	55 5.3
88	India	4.4	114 2.6	8 6.6	101 4.1
89	Peru	4.4	72 4.1	95 4.6	94 4.5
90	Jamaica Fl Salvador	4.4	93 3.2	69 5.4	86 4.6
91 92	Philippines	4.4 4.4	83 3.7 87 3.6	75 5.2 107 4.1	98 4.2 54 5.3
93	Jordan	4.3	92 3.2	94 4.6	59 5.3
94	Morocco	4.3	102 3.0	20 6.3	110 3.7
95	Algeria	4.3	80 3.9	99 4.4	89 4.6
96	Cape Verde	4.3	100 3.1	86 4.8	75 5.0
97 98	Egypt Bangladesh	4.2 4.1	94 3.1 107 2.8	47 5.8 14 6.4	111 3.7 122 3.1
99	Honduras	4.1	96 3.1	85 4.9	97 4.2
100	Cambodia	4.1	98 3.1	43 5.9	120 3.3
101	Guyana	4.0	104 2.9	104 4.2	78 4.9
102	Bolivia	4.0	91 3.2	103 4.3	90 4.6
103	Dominican Republic	4.0	85 3.7	106 4.2	104 4.0
104 105	Pakistan Kenya	4.0 3.9	126 2.1 99 3.1	1 6.9 102 4.3	127 2.8 96 4.2
106	Nepal	3.9	130 1.9	30 6.1	115 3.6
107	Lao PDR	3.9	108 2.7	82 5.0	106 3.9
108	Lesotho	3.7	120 2.4	81 5.0	108 3.8
109	Guatemala	3.7	86 3.6	108 4.0	118 3.4
110	Namibia Botswana	3.6 3.5	81 3.9 95 3.1	119 3.2 125 2.9	109 3.8 87 4.6
112	Guinea	3.5	132 1.8	9 6.6	137 2.1
113	Ghana	3.5	125 2.2	105 4.2	102 4.1
114	Zimbabwe	3.4	123 2.3	112 3.8	100 4.1
115	Rwanda	3.3	106 2.8	114 3.6	117 3.5
116 117	Ethiopia Nigeria	3.1 3.1	122 2.3 113 2.6	93 4.6 100 4.3	131 2.5 134 2.4
118	Myanmar	3.1	115 2.6	122 3.0	113 3.6
119	Gabon	3.0	128 2.0	113 3.6	116 3.5
120	Nicaragua	3.0	88 3.5	136 1.9	112 3.6
121	Tajikistan	3.0	133 1.6	134 2.2	60 5.2
122 123	Gambia, The Swaziland	3.0	109 2.7 119 2.5	123 3.0 133 2.2	121 3.2 99 4.2
123	Uganda	3.0	119 2.5	117 3.3	126 2.9
125	Mozambique	2.9	131 1.9	90 4.8	136 2.1
126	Côte d'Ivoire	2.9	110 2.7	127 2.9	123 3.1
127	Zambia	2.7	129 2.0	129 2.5	114 3.6
128 129	Benin	2.6 2.6	116 2.6 118 2.5	126 2.9	133 2.4 128 2.8
130	Senegal Tanzania	2.6	118 2.5 117 2.6	130 2.5 131 2.3	128 2.8 125 2.9
131	Cameroon	2.6	138 1.1	128 2.8	107 3.8
132	Haiti	2.5	137 1.1	115 3.5	124 3.0
133	Burundi	2.5	134 1.3	124 2.9	119 3.3
134	Malawi	2.4	111 2.7	135 2.0	130 2.7
135 136	Liberia Mauritania	2.2	135 1.2 136 1.2	121 3.1 118 3.3	132 2.4 138 1.9
137	Madagascar	2.0	124 2.2	138 1.0	129 2.8
138	Chad	1.9	127 2.0	137 1.9	139 1.9
139	Mali	1.9	139 1.1	132 2.3	135 2.4

Table 4: Usage subindex and pillars

USAGI	E SUBINDEX			vidual age		ness age		ernent age
Rank	Country/Economy	Value	Rank	Value	Rank	Value	Rank	Value
1	Singapore	6.0	12	6.4	14	5.4	1	6.3
2	Japan	5.9	11	6.4	3	5.9	7	5.4
3	Netherlands	5.9	8	6.6	7	5.8	14	5.4
4	Sweden	5.9	4	6.7	2	6.0	23	5.0
5	Luxembourg	5.9	2	6.8	15	5.4	9	5.4
6	Korea, Rep.	5.8	10	6.5	13	5.4	4	5.6
7	Finland	5.8	6	6.6	5	5.8	21	5.0
8	United States	5.8	17	6.2	4	5.9	12	5.4
9	Norway Denmark	5.8 5.8	3	6.7	11 9	5.5 5.7	18 38	5.2 4.7
11	United Kingdom	5.7	5	6.6	16	5.2	10	5.4
12	Switzerland	5.7	9	6.6	1	6.1	43	4.5
13	United Arab Emirates	5.6	19	6.2	27	4.6	2	6.2
14	Germany	5.6	18	6.2	6	5.8	30	4.8
15	Israel	5.5	31	5.6	8	5.8	17	5.3
16	Chinese Taipei	5.5	24	6.0	12	5.5	24	5.0
17	New Zealand	5.5	20	6.1	20	5.0	13	5.4
18	Iceland	5.5	7	6.6	18	5.1	36	4.7
19	Qatar	5.4	23	6.0	25	4.8	5	5.5
20	France	5.4	25	6.0	19	5.0	15	5.3
21	Australia	5.4	27	5.9	10	5.6	28	4.8
22	Australia Estonia	5.4 5.4	13 15	6.3	24 28	4.8	22	5.0 5.4
23	Estonia Bahrain	5.4	15 14	6.3	28 37	4.4	8	5.4
25	Hong Kong SAR	5.3	16	6.3	21	4.0	37	4.7
26	Canada	5.2	30	5.7	22	4.9	19	5.1
27	Belgium	5.2	22	6.0	17	5.2	42	4.6
28	Ireland	5.2	28	5.9	23	4.9	25	4.9
29	Saudi Arabia	5.1	21	6.0	42	3.9	11	5.4
30	Malaysia	5.1	47	5.1	26	4.7	6	5.5
31	Lithuania	4.9	35	5.5	29	4.3	33	4.7
32	Spain	4.8	33	5.6	43	3.9	32	4.7
33	Malta	4.7	26	5.9	40	4.0	49	4.3
34	Portugal	4.7	45	5.1	33	4.2	29	4.8
35	Latvia	4.6	36	5.5	35	4.1	50	4.3
36	Oman	4.5	39	5.3	94	3.4	34	4.7
37 38	Czech Republic Uruguay	4.5 4.5	29 44	5.8 5.2	31 90	4.3 3.4	101 27	3.4 4.8
39	Chile	4.5	52	4.9	47	3.9	39	4.6
40	Russian Federation	4.5	40	5.3	67	3.6	44	4.4
41	Azerbaijan	4.4	56	4.8	58	3.7	35	4.7
42	Slovenia	4.4	38	5.4	30	4.3	86	3.6
43	Italy	4.4	37	5.5	52	3.8	62	4.0
44	Kazakhstan	4.4	58	4.8	69	3.6	26	4.8
45	Slovak Republic	4.4	34	5.6	48	3.9	73	3.7
46	Costa Rica	4.3	55	4.8	38	4.0	56	
47	Kuwait	4.3	32	5.6	72	3.6	81	3.7
48	Hungary	4.2	41	5.3	73 64	3.6	70	3.8
49 50	Poland Macedonia, FYR	4.2 4.2	42 49	5.3	64 92	3.6	82 58	3.6 4.1
51	China	4.2	75	3.9	92 44	3.4	40	4.1
52	Cyprus	4.1	51	4.9	54	3.8	75	3.7
53	Jordan	4.1	70	4.1	41	3.9	47	4.4
54	Colombia	4.1	71	4.1	82	3.5	31	4.8
55	Mauritius	4.1	66	4.3	55	3.8	48	4.3
56	Montenegro	4.1	61	4.6	99	3.4	53	4.2
57	Brazil	4.0	57	4.8	59	3.7	84	3.6
58	Croatia	4.0	43	5.2	98	3.4	90	3.5
59	Turkey	4.0	65	4.3	56	3.8	57	4.1
60	Morocco	4.0	67	4.2	105	3.3	41	4.6
61	Panama	4.0	72	4.0	39	4.0	60	4.1
62	Greece	4.0	50	4.9	87	3.5	91	3.5
63	Thailand	4.0	64	4.3	51	3.9	69	3.8
64	Bulgaria	4.0	48	5.0	77	3.5	102	3.3
65 66	Armenia Philippines	4.0 3.9	69 79	4.1 3.8	101 36	3.4 4.0	46 63	4.4
	Sri Lanka	3.9	102	2.8	49	3.9	63	5.0
67	on Luna	J.J	102				_	
67 68	Romania	39	60	47	68	3.6	96	35
67 68 69	Romania Trinidad and Tobago	3.9 3.9	60 59	4.7 4.7	68 79	3.6	96 94	3.5

USAGI	E SUBINDEX		vidual sage	Business usage		Governent usage		
Rank	Country/Economy	Value	Rank	Value	Rank	Value	Rank	Value
71	Mongolia	3.9	82	3.7	61	3.7	51	4.2
72	Georgia	3.8	68	4.1	108	3.2	54	4.1
73	Argentina	3.8	53	4.9	103	3.4	111	3.3
74 75	Mexico South Africa	3.8	84 77	3.6	66 32	3.6 4.2	52 105	4.2 3.3
76	Moldova	3.8	63	4.3	112	3.2	66	3.9
77	Lebanon	3.8	46	5.1	97	3.4	124	2.9
78	Indonesia	3.8	92	3.3	34	4.1	65	3.9
79	Serbia	3.7	54	4.9	125	3.1	106	3.3
80 81	Tunisia Vietnam	3.7 3.7	78 85	3.9	107 81	3.3	55 61	4.1
82	Ecuador	3.7	87	3.5	83	3.5	64	3.9
83	Rwanda	3.6	127	1.9	60	3.7	16	5.3
84	Kenya	3.6	107	2.6	50	3.9	45	4.4
85	Jamaica	3.6	86	3.5	62	3.7	87	3.6
86 87	Albania Cape Verde	3.6 3.6	83 81	3.6	93 95	3.4	76 88	3.7
88	Ukraine	3.6	76	3.9	63	3.6	114	3.1
89	Egypt	3.5	80	3.8	129	3.0	67	3.8
90	El Salvador	3.5	91	3.3	78	3.5	85	3.6
91	Ghana	3.5	89	3.5	80	3.5	98	3.4
92 93	Peru Honduras	3.5 3.4	93 104	3.2 2.8	91 46	3.4	74 78	3.7
94	Namibia	3.4	98	3.0	57	3.7	92	3.5
95	Senegal	3.4	106	2.6	53	3.8	68	3.8
96	Botswana	3.4	94	3.2	96	3.4	89	3.6
97	Dominican Republic	3.4	95	3.2	88	3.5	95	3.5
98 99	Venezuela Iran, Islamic Rep.	3.3	74 90	3.9	131 126	3.0	118 93	3.0
100	Côte d'Ivoire	3.3	109	2.6	65	3.6	80	3.7
101	Bhutan	3.3	99	2.9	111	3.2	83	3.6
102	Gambia, The	3.3	108	2.6	85	3.5	77	3.7
103	India	3.3	120	2.1	75	3.6	59	4.1
104 105	Kyrgyz Republic Guyana	3.2	88 105	3.5 2.7	109 76	3.2	117 99	3.0
106	Guatemala	3.2	100	2.8	45	3.9	122	2.9
107	Bosnia and Herzegovina	3.2	73	4.0	123	3.1	133	2.6
108	Bolivia	3.1	97	3.0	132	3.0	108	3.3
109	Nigeria	3.1	112	2.5	86	3.5	112	3.3
110 111	Cambodia Bangladesh	3.1	101 121	2.8	104 119	3.3	116 72	3.0
112	Paraguay	3.0	96	3.1	121	3.1	128	2.7
113	Zambia	3.0	126	2.0	71	3.6	104	3.3
114	Cameroon	2.9	125	2.0	74	3.6	107	3.3
115	Mali	2.9	113	2.5	124	3.1	113	3.2
116 117	Tajikistan Lao PDR	2.9 2.9	116 124	2.3	102 89	3.4	115 110	3.1
118	Pakistan	2.9	123	2.1	110	3.2	103	3.3
119	Gabon	2.9	110	2.5	115	3.2	119	2.9
120	Uganda	2.9	129	1.9	106	3.3	97	3.4
121	Zimbabwe	2.8	114	2.5	117	3.1	120	2.9
122 123	Benin Ethiopia	2.8	119 136	2.2 1.6	84 127	3.5	127 71	2.8 3.8
124	Mozambique	2.8	128	1.9	114	3.2	109	3.3
125	Algeria	2.8	103	2.8	133	2.9	130	2.7
126	Tanzania	2.7	134	1.7	122	3.1	100	3.4
127	Swaziland	2.7	115	2.4	116	3.2	131	2.7
128 129	Lesotho Nepal	2.7 2.6	122 117	2.1	120 128	3.1	121 129	2.9
130	Liberia	2.6	130	1.8	113	3.2	123	2.9
131	Nicaragua	2.6	111	2.5	130	3.0	138	2.3
132	Madagascar	2.6	135	1.6	100	3.4	125	2.8
133	Mauritania	2.5	118	2.2	135	2.8	134	2.5
134 135	Malawi Guinea	2.5 2.3	137 133	1.5 1.8	118 136	3.1 2.8	126 135	2.8
136	Haiti	2.3	132	1.8	134	2.8	139	2.2
137	Myanmar	2.3	131	1.8	138	2.6	137	2.3
138	Chad	2.2	139	1.3	137	2.6	132	2.6
139	Burundi	2.1	138	1.3	139	2.5	136	2.4

Table 5: Impact subindex and pillars

IMPACT	SUBINDEX			nomic pacts		cial acts	IMPAC	SUBINDEX			nomic pacts	Soc impa
Rank	Country/Economy	Value	Rank	Value	Rank	Value	Rank	Country/Economy	Value	Rank	Value	Rank
1	Singapore	6.1	5	5.9	1	6.2	71	Moldova	3.7	81	3.1	60
2	Netherlands	6.0	6	5.8	3	6.1	72	Senegal	3.6	63	3.3	81
3	Sweden	5.8	3	6.1	12	5.6	73	India	3.6	80	3.1	69
4	Finland	5.8	1	6.1	18	5.5	74	Honduras	3.6	53	3.5	87
5	United States	5.8	7	5.8	7	5.7	75	Ecuador	3.6	86	3.0	68
6 7	Israel United Kingdom	5.7 5.6	4 11	5.9 5.3	15 5	5.5 5.9	76 77	Vietnam Romania	3.6 3.6	92 72	2.9 3.2	65 79
8	Switzerland	5.6	2	6.1	33	5.0	78	Indonesia	3.5	85	3.1	73
9	Norway	5.6	8	5.4	8	5.7	79	Brazil	3.5	75	3.1	77
10	Korea, Rep.	5.6	14	5.1	4	6.0	80	Morocco	3.5	110	2.8	59
11	Canada	5.4	12	5.2	11	5.6	81	Peru	3.5	88	3.0	72
12	Luxembourg	5.4	9	5.4	23	5.3	82	Seychelles	3.5	73	3.2	86
13	Hong Kong SAR	5.3	13	5.2	14	5.5	83	Côte d'Ivoire	3.4	66	3.3	92
14	Japan	5.3	15	5.1	16	5.5	84	Tunisia	3.4	93	2.9	78
15	Germany	5.3	10	5.4	30	5.2	85	Egypt	3.4	58	3.4	103
16	Estonia	5.2	24	4.6	6	5.9	86	Dominican Republic	3.4	68	3.2	94
17	Denmark	5.2	16	5.1	26	5.3	87	Cape Verde	3.4	77	3.1	89
18	United Arab Emirates	5.2 5.2	26 20	4.3 4.9	2 17	6.1 5.5	88	Trinidad and Tobago	3.4	78 79	3.1	90
19 20	France Chinese Taipei	5.2	18	5.0	20	5.4	89 90	Serbia Kuwait	3.4 3.4	102	3.1 2.9	93 84
21	Australia	5.2	23	4.7	9	5.7	91	El Salvador	3.4	102	2.8	80
22	Iceland	5.1	22	4.8	21	5.4	92	Argentina	3.4	87	3.0	88
23	Belgium	5.0	19	4.9	31	5.1	93	South Africa	3.4	57	3.4	112
24	Austria	5.0	21	4.9	29	5.2	94	Jamaica	3.3	76	3.1	97
25	New Zealand	5.0	25	4.6	19	5.4	95	Guyana	3.3	94	2.9	91
26	Ireland	5.0	17	5.0	34	5.0	96	Guatemala	3.3	71	3.2	107
27	Qatar	4.9	28	4.2	10	5.6	97	Albania	3.3	121	2.6	76
28	Lithuania	4.8	27	4.3	25	5.3	98	Bhutan	3.2	119	2.6	85
29	Portugal	4.7	31	4.1	24	5.3	99	Tajikistan	3.2	101	2.9	96
30 31	Malaysia Latvia	4.6 4.5	30 34	4.1	28 32	5.2 5.1	100	Gambia, The Namibia	3.2 3.2	103 98	2.9	95 100
32	Bahrain	4.5	48	3.5	13	5.5	101	Iran, Islamic Rep.	3.2	100	2.9	100
33	Malta	4.5	33	4.0	37	4.9	103	Lebanon	3.2	83	3.1	114
34	Spain	4.4	35	4.0	39	4.8	104	Lao PDR	3.1	97	2.9	110
35	Chile	4.4	47	3.5	27	5.2	105	Pakistan	3.1	105	2.8	106
36	Uruguay	4.4	62	3.4	22	5.4	106	Bolivia	3.1	113	2.7	98
37	Slovenia	4.3	29	4.1	50	4.5	107	Bangladesh	3.1	104	2.8	108
38	Saudi Arabia	4.3	40	3.7	36	4.9	108	Botswana	3.1	107	2.8	105
39	China	4.2	37	3.8	41	4.7	109	Mali	3.1	96	2.9	113
40	Kazakhstan	4.2	51	3.5	35	4.9	110	Kyrgyz Republic	3.1	114	2.7	104
41 42	Russian Federation Costa Rica	4.1 4.1	38 49	3.7	45 40	4.6 4.8	111	Ghana Venezuela	3.1 3.0	117 118	2.7	99 102
42	Czech Republic	4.1	32	4.1	67	4.0	113	Zambia	3.0	115	2.7	111
43	Slovak Republic	4.1	41	3.6	47	4.6	114	Nigeria	3.0	90	2.7	123
45	Panama	4.0	45	3.6	51	4.5	115	Cameroon	3.0	89	2.9	124
46	Azerbaijan	4.0	50	3.5	48	4.5	116	Mozambique	2.9	112	2.7	117
47	Hungary	4.0	36	3.8	64	4.2	117	Cambodia	2.9	111	2.7	122
48	Italy	4.0	39	3.7	62	4.2	118	Paraguay	2.9	109	2.8	125
49	Sri Lanka	4.0	70	3.2	42	4.7	119	Ethiopia	2.9	131	2.4	109
50	Kenya	3.9	54	3.4	52	4.5	120	Uganda	2.9	120	2.6	118
51	Jordan	3.9	61	3.4	53	4.4	121	Bosnia and Herzegovina	2.8	123	2.6	119
52	Colombia	3.9	84	3.1	43	4.7	122	Tanzania	2.8	132	2.4	115
53	Macedonia, FYR	3.9	55	3.4	55	4.3	123	Benin	2.8	108	2.8	128
54	Armenia	3.9	56	3.4	56	4.3	124	Zimbabwe Lesotho	2.8	133	2.3	116
55 56	Rwanda Cyprus	3.9 3.9	99 43	2.9	38 70	4.8 4.1	125 126	Liberia	2.7 2.7	130 125	2.4	121 127
57	Montenegro	3.8	52	3.5	63	4.1	127	Madagascar	2.7	126	2.5	127
58	Turkey	3.8	67	3.2	54	4.4	128	Nepal	2.7	136	2.3	120
59	Poland	3.8	44	3.6	74	4.0	129	Algeria	2.6	124	2.6	132
60	Mongolia	3.8	82	3.1	49	4.5	130	Gabon	2.6	127	2.5	129
61	Greece	3.8	65	3.3	58	4.3	131	Malawi	2.6	128	2.5	130
62	Philippines	3.8	60	3.4	66	4.2	132	Nicaragua	2.6	122	2.6	133
63	Georgia	3.8	91	2.9	44	4.6	133	Mauritania	2.5	116	2.7	134
64	Croatia	3.8	42	3.6	82	3.9	134	Swaziland	2.5	134	2.3	131
65	Thailand	3.7	74	3.2	57	4.3	135	Myanmar	2.4	129	2.4	135
66	Oman	3.7	95	2.9	46	4.6	136	Haiti	2.3	135	2.3	136
67	Mauritius	3.7	69	3.2	61	4.2	137	Burundi	2.1	137	2.1	138
68	Bulgaria Ukraine	3.7 3.7	46 59	3.5 3.4	83 75	3.9 4.0	138 139	Guinea Chad	2.1 2.1	139 138	2.0	137 139
69												

Social impacts Rank Value 60 4.2

> 81 3.9

69 4.1 87 3.8 68 4.1 4.2 65 79 3.9 73 4.0 4.3 72 4.1

86 3.8 92 3.6

78 3.9

103 3.5 94 3.6

89 3.7 90 3.7 3.6 84 3.9

80 3.9

88 3.7

112 3.3

97 3.5

91 3.7

107 3.4 4.0 76 85 3.8 96 3.5 3.5 95 100 3.5

106 3.4

98 3.5

108 3.4

105 3.4

113 3.3

99 3.5

124 3.0

117 3.1 3.0

125 3.0

109 3.4 3.1

119 3.1

128 2.8

121 3.1

127 2.9 2.9

132 2.7

130 2.7

134 2.4

135 2.4

136 2.4

138 2.2

139 2.1

3.5 3.3

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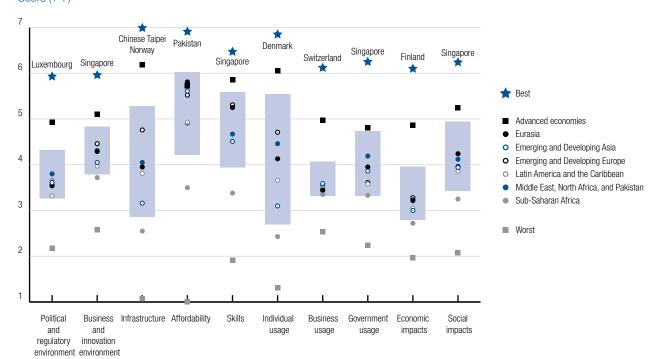


Figure 11: Best and worst performers and regional performance by NRI pillar Score (1-7)

Notes: The light blue boxes identify the interguartile range—from the 75th to the 25th percentile—for each distribution. Regional groupings follow the IMF classification; IMF "CIS" = "Eurasia."

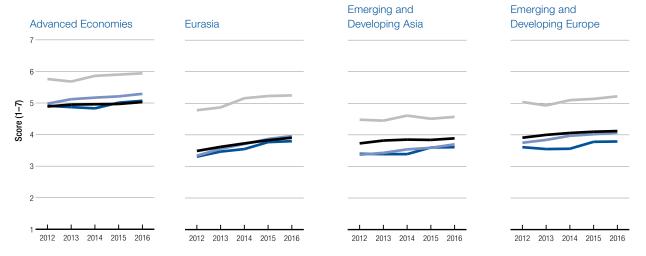
The overall improvement in the NRI score masks a diversity of trends across subindexes (Figure 12 on page 22). Most importantly, there is a clear positive trend both in terms of Usage and Impact across regions. The regulatory and innovation environment is perceived to be improving as well, but although this improvement has been large in Eurasia, it is almost negligible in Latin America and the Caribbean, where regulatory reforms seem to have come to a standstill in many countries. Performance in terms of Readiness is mostly stagnant, with large intertemporal fluctuations driven by changes in affordability and sluggish improvements in skills and infrastructure, where investments have not been enough to keep up with the pace of increase in Usage. Affordability remains a barrier to ICT adoption and use in sub-Saharan Africa, and indeed this barrier seems to be growing.

The distribution of scores across the 10 pillars shows interesting patterns (Figure 11) and provides further support for the findings outlined above. Infrastructure and individual usage are the two areas with the largest dispersion of performance across countries, with advanced economies leading the way and sub-Saharan Africa still behind other regionsalthough certain countries in the region are pushing ahead (see the Country/Economy Profiles). Countries' scores in business usage and economic impact is most skewed toward the lower end of the distribution, with the average performance of advanced economies placed well ahead that of the rest of the world and that of the best performers (Switzerland and Finland,

respectively) having the largest gap from the upper end of the interquartile range. This confirms that businesses in only a few economies are leveraging ICTs at their full potential and reaping the resulting strong economic impact. As in previous years, affordability is the only area where advanced economies as a whole are not the best-performing group (note that while "affordability" indicators capture prices without quality adjustments, it is ultimately the price that poses the entry barrier for the poorest and not the quality-adjusted price). The advanced economies are preceded in this regard by the group of Eurasian countries, and Pakistan is the market with the lowest price points. Sub-Saharan Africa is at this moment still the lowest-scoring region, with the notable exception of the perceived political and regulatory environment, where the region follows advanced economies and MENAP countries and precedes Emerging and Developing Asia, Emerging and Developing Europe, Eurasia, and Latin America and the Caribbean. In terms of best performers, Luxembourg replaces New Zealand this year as having the best political and regulatory environment, and Finland has been toppled by Singapore as the country with the best

Overall, and as was explored in detail in the 2015 edition of this Report, the digital divide is still wide, yet progress is being made. In particular, several initiatives have been formed to tackle this gap, including the World Economic Forum's Internet for All initiative, which aims to help connect the 4 billion people who are not yet online (see Box 5).

Figure 12: Trends at the subindex level, 2012-16 Score (1-7)



Source: NRI, 2012-2016 editions

### Top 10 NRI performers

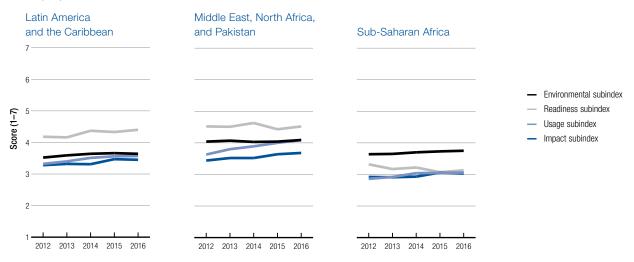
The composition of the group of top 10 performers is unchanged from last year. The group consists of a mix of high-income Southeast Asian (Singapore and Japan) and European countries (Finland, Sweden, Norway, the Netherlands, Switzerland, the United Kingdom, and Luxembourg) as well as the United States. Networked readiness therefore remains highly correlated with per capita income.

- 1. Singapore tops the Index this year, defending its number 1 position. Its outstanding performance is underlined by the fact that it ranks 1st in the world in three of the four subindexes (Environment, Usage, and Impact), driven by top spots on several pillars: political and regulatory environment (2nd), business and innovation environment (1st), skills (1st), government usage (1st), and social impact (1st). Overall, this ranking is to a large extent the result of strong government commitment to the digital agenda, including its Smart Nation program. The drop in the Readiness subindex to 16th place is largely explained by a drop in the affordability of broadband, although the price points of broadband packages may hide quality differences (i.e., a price increase may come with a quality increase). Singapore currently has an offline population of 18 percent, potentially explained by its demographics, and the country is still out of the top 10 for individual usage (12th) and business adoption (14th). Nevertheless, gains from ICT adoption are widely shared in Singapore, as the country tops the Social impacts pillar, making excellent use of digital technologies to provide access to basic and government services and ensuring that schools are connected.
- 2. Finland stays in 2nd place with an unchanged overall score, but sees some slight rank drops for the Environment, Usage, and Impact subindexes. The

country tops the rankings in the Readiness subindex. This is the result of high scores in particular in the infrastructure (3rd) and skills pillars (2nd); in addition, affordability is very good (13th), although Finland is one of several countries that sees broadband prices increase significantly this year (51st, down from 39th in 2015). There is currently room for improvement in particular in the business and innovation environment, where Finland ranks 9th. With 14 days to start a business, the country comes in only at a low 81st place in this particular indicator; as pressure for firms to bring products to market quickly is increasing, these types of framework conditions matter more than ever. That said, Finland has extremely good access to the latest technologies (1st) as well as venture capital (6th), and its businesses are highly connected (5th on business usage). These factors are all important in helping Finland achieve its top global rank in economic impacts. The government is currently perceived as playing a less proactive role in promoting ICTs than in the past (21st place, down from 10th in 2013): indicators are dropping for government procurement of advanced technologies, importance of ICTs to government vision, government success in ICT promotion, and ICT use to boost government efficiency.

3. Sweden keeps its 3rd position in the NRI as scores in all four subindexes remain almost unchanged. Overall, it ranks best in Usage (4th), which derives from very high scores in individual (4th) and business usage (2nd), and notably does very well in Impact (3rd). Businesses are taking advantage of the fact that their consumer base is highly connected, which is reflected in one of the highest rates of B2C interaction globally (4th). Government, on the other hand, is not yet connecting with citizens online to the same extent as business, with a 45th rank for the government E-Participation

Figure 12: Trends at the subindex level, 2012–16 (cont'd.) Score (1-7)



Notes: Based on a constant sample of 127 economies. Groupings follow the IMF classification: IMF "CIS" = "Eurasia."

Index. In general, the Swedish government is perceived as less proactive than other advanced economies in their use of digital technologies (23rd for government usage); in particular, business executives feel that it has somewhat been losing sight of the digital agenda (20th for government ICT vision, down from 11th in 2014). Yet the government has been taking steps to improve the overall framework conditions for business: there is visible progress in several areas of the political and regulatory environment and the business and innovation environment pillars. In particular, Sweden slashes the number of days it takes to start a business from 16 to 7, moving it up 45 places in the ranking in this indicator to 42nd place. Driven to an important extent by the business sector, digital technologies are making themselves felt in terms of economic impact (3rd) and an improvement by four places in social impact to 12th.

4. Norway moves up one rank to 4th place, with small but positive score changes in all four subindexes. The country seems to have reached a plateau, with little

### Box 5: The World Economic Forum's Internet for All initiative

Internet for All is one of the core projects of the Forum's Digital Economy and Society System Initiative. As a critical enabler of the Fourth Industrial Revolution, Internet for All focuses on connecting the over 4 billion people not yet connected to the Internet. The project's core objective is to develop scalable, replicable, public-private collaboration models to accelerate Internet access and adoption at the national, regional, and global levels.

In 2015, Internet for All convened stakeholders from various backgrounds to collect successful practice examples for global Internet access and adoption, and to develop a framework in which to accelerate achieving "Internet for all." The framework emphasizes the need for an ecosystem approach to simultaneously address the challenges related to infrastructure, affordability, skills and awareness, and content. The report also includes a checklist, based on the framework, to help policymakers and others assess where their countries currently stand and the kinds of programs to consider. The white paper "Internet for All: A Framework for Accelerating Internet Access and Adoption" can be accessed at http:// www3.weforum.org/docs/WEF\_Internet\_for\_All\_Framework\_ Accelerating\_Internet\_Access\_Adoption\_report\_2016.pdf.

In 2016, Internet for All has two main objectives:

- 1. To develop new scalable and replicable on-the-ground models of public-private collaboration, in partnership with governments, to accelerate the achievement of the broader social and economic priorities of the country/region in the context of accelerating Internet for all. Programs will be launched initially in up to three countries/regions. The first such program, for Northern Corridor countries in East Africa (Kenya, Rwanda, South Sudan, and Uganda), was launched in May 2016, and additional country program partnership opportunities in Asia and Latin America will also be explored.
- 2. To develop a physical and digital platform that results in increased coordination and collaboration among the multiple private, bilateral/multilateral, and non-profit organizations involved in catalyzing Internet access and adoption at the global, regional, and country levels.

movement in its total NRI score in recent years. Its digital economy is built on the very solid basis of top regulatory and innovation environments (6th and 7th, respectively) as well as the world's best ICT infrastructure. Although fixed broadband prices are relatively high (71st) there has not been a further increase this year, and with 96.3 percent of the population online (2nd for individuals using the Internet), the high prices do not seem to act as an access barrier. Similar to the situation in Sweden, Norwegian firms are capitalizing on the high ICT literacy among the general population and workforce by using digital technologies heavily in their interactions with consumers as well as among each other (8th and 7th, respectively). There has also been a visible positive move in government usage (importance in vision, success in ICT promotion, and government efficiency), moving the country up six places to the 18th rank in the government usage pillar. Unsurprisingly, these strong digital foundations are reflected in two 8th ranks for the two Impact pillars.

- 5. The United States moves up two ranks overall, continuing a positive trend from 2013 (from 9th place in 2013 to 7th in both 2014 and 2015 to 5th place this year). This is based on improvements in all four subindexes.<sup>24</sup> The United States stands out in terms of its extremely favorable business and innovation environment (3rd), which has given rise to one of the most agile and digitized business sectors globally. The public sector is also using digital technologies effectively to deliver services to citizens (4th the on Government Online Service index) and to facilitate participation (9th on the E-Participation Index). All stakeholders can take advantage of very low broadband prices (ranked 17th), with the cheapest package at US\$16 per month, compared to a global average of US\$52 and an average of US\$26 in high-income countries;25 however, although international Internet bandwidth per user has been growing steadily in recent years, the race has accelerated such that the United States is slipping from 34rd in 2013 to 42nd this year. The overall impact of digital technologies in the United States is strong (it ranks 7th for both economic and social impacts) and growing, in particular in the social dimension: this year, the United States moves up 15 places to rank 15th in the perceived impact of ICTs on access to basic services.
- 6. The Netherlands drops by two spots in the overall rankings, but remains one of the countries that makes the best use of digital technologies to achieve both economic and, in particular, social impacts (it ranks 6th and 3rd, respectively, in the two pillars and 2nd in the Impact subindex). This is despite high mobile tariffs (105th) and high and rising broadband prices (85th, down from 68th). Other drops at the indicator level can largely be attributed to the fact that, although conditions are stable or even improving slightly in absolute terms, other countries are moving ahead faster. This is true in particular for the business and innovation environment

- as well as ICT infrastructure. The Dutch population is one of the most technology savvy and connected in the world (8th for individual usage), an asset that both the government and the business sector are making good use of (3rd for B2C Internet use, 8th for the Government Online Service index, and 1st for the E-Participation index). Businesses are extensively deploying digital technologies to reshape their business and organizational models (4th in both indicators) and basic service providers, whether they are public or private, are working hand-in-hand with the population to facilitate access via their platforms (2nd).
- 7. Switzerland slips by one spot overall to 7th, placing in the top 10 for the Environment, Readiness, and Impact and 12th for Usage subindexes. The country moves up by two places in the innovation environment assessment, largely driven by a jump in perceived availability of venture capital as well as continued high levels of government procurement of advanced technologies; this is against an overall global trend of falling government demand for the latest technologies. However, in general the government has so far been a less avid adopter and promoter of digitization, as reflected in a 43rd place for government usage. Although it is strong in the high-tech procurement market, it seems to be using digital technologies relatively less to interact with citizens. On the other hand, the country remarkably places 1st for business usage, driven by high business technology absorption and innovation capacity and high levels of digital B2B interaction (interestingly, more than with consumers). This in turn has been generating strong economic impact (2nd rank), as reflected also in a steady upward trend in the share of knowledge-intensive jobs (3rd).
- 8. The United Kingdom remains in 8th position, improving slightly in absolute scores on all four subindexes. Improvements at the indicator level are particularly concentrated in the business and innovation environment: perceived venture capital availability, the quality of management schools, and government procurement of advanced technologies have all increased compared to last year, while the number of days and procedures to start a business was reduced. Although infrastructure and individual usage are moving in the right direction, they are not moving fast enough to result in gains in the rankings. Business adoption is high and UK businesses are top in the world in making use of the Internet to interact with their consumers as well as with their production network (1st in B2C, 2nd in B2B). They are also pushing the boundaries in terms of using ICTs to reshape their business and organizational models (ranking 2nd and 1st, respectively). The government is also moving closer to the global frontier in terms of technology use, jumping six places into the top 10 of the government usage pillar.
- 9. Luxembourg's NRI rank stays the same as last year at 9th place, with its overall score continuing its steady upward trend. Improvements at the pillar level

come in three areas: political and regulatory environment and individual usage, moving Luxembourg to 1st and 2nd place in these categories, respectively, and in the area where the country is most behind, affordability: here in particular, a large drop in mobile cellular tariffs moves the country up 14 places in the affordability pillar. Although performance in terms of innovation environment is mixed, good availability of venture capital (8th) and a strong government commitment to procuring advanced technologies (5th) bode well for the commercialization of new ideas. In general government is perceived to play an important role in supporting Luxembourg's digital economy, with business executives attesting to a high importance of ICTs in the government's vision (5th) and its success in ICT promotion (6th). Furthermore, strong framework conditions have been put in place, reflected in the top rank regarding the level of sophistication for ICT related laws (e.g., for e-commerce, digital signatures, and consumer protection). The country also boasts a top infrastructure with top ranks for international bandwidth (1st) and the number of secure servers per capita (3rd).

10. Japan remains in 10th place overall, as in 2015, and is able to climb two places to 2nd in the Usage subindex; with business and government usage already among the highest globally (3rd and 7th, respectively), the country moves up two places in individual usage to 11th place. The business and innovation environment is improving visibly with progress in the perceived availability of venture capital, the quality of management schools, and government procurement of advanced technologies; this is the continuation of a strong positive trend, moving the country from 40th place in 2014 to 33rd in 2016 in this particular pillar. Japan also keeps building out its infrastructure, in particular international Internet bandwidth and the number of secure servers. In terms of impact, the country is slightly losing ground, mainly because its peers are moving ahead faster.

### Top movers

Italy is among the group of top movers this year, climbing up by 10 places to an overall NRI rank of 45. The most significant driver is a large improvement in terms of both economic and social impacts, putting Italy 18 places ahead in the Impact rankings to 48th. Over the past years, the Italian government has launched a number of policies aiming at improving the provision of online services to its citizens and creating a better environment for start-ups and innovative companies. However, key constraints remain, including the lack of venture capital and the overall political and business environment. Here the country seems to be moving in the right direction, gaining in almost every aspect of the regulatory environment pillar, but it remains far below the global average. Italy is currently doing best in individual usage (37th), followed by business (52nd) and government use (62nd). Yet only a small portion of Italians are connected to fixed broadband:

the number has been historically low but the gap with other advanced economies has only increased in recent years, when subscriptions per 100 people increased by less than 10 percent from 21.9 (28th highest, in 2010) to 23.5 (36th, in 2014). With the private sector currently reorganizing itself and the launch of the 2015 national Digital Agenda, which will unfold in the coming years, the country has an opportunity to close this gap. Going forward, it will be important to capitalize on this positive momentum.

The Slovak Republic is one of the two biggest movers in this year's NRI, climbing 12 ranks to 47th place, mainly on the back of reinforced effort from the public sector: although the country ranks fairly low in the regulatory environment (its lowest ranks overall are in this category), it is starting to catch up this year in terms of the effectiveness of law-making bodies, laws relating to ICTs, and judicial independence. Furthermore, the government is perceived to have been more active in procuring advanced technologies as well as putting digital technologies to use to increase government efficiency. This is reflected in large moves compared to last year for these indicators, of 29 and 31 places, respectively (to 89th and 80th). In addition, the business and innovation environment is perceived to be improving markedly in terms of venture capital and tech availability, as well as procedures to start a business. Together with fairly high individual usage (34th), a good level of buy-in from the business sector (48th), and quickly dropping fixed broadband prices, the efforts to embrace the digital economy are starting to pay off: the Slovak Republic is able to improve its ranking in the Impact subindex by 14 places to 44th. This is thanks to better access to basic services as well as firms taking advantage of digital technologies to innovate in terms of organizational and business models.

Kuwait is another top mover in the NRI this year, moving up 11 spots to 61st place. This gain is supported by substantial improvements in particular in Readiness, Usage, and Impact. These improvements are very much driven by individuals and businesses. Kuwait is doing very well overall in terms of individual adoption-ranking overall 32nd and very high in individual indicators: mobile coverage (1st), mobile phone subscriptions (2nd), households with personal computers (14th), and mobile broadband subscriptions (2nd)—and is close to attaining a rank in the top half for business adoption. In particular, the country substantially improves its international Internet bandwidth per user, jumping more than 50 places to rank 51st, according to ITU data. All of this is starting to show in terms of economic impacts: Kuwait reports a large perceived improvement in ICT impact on business model innovation this year (although starting from a low base). Although social impact is perceived to have improved less than economic impact, it is worth noting that the social impact of ICTs in Kuwait is perceived to be substantially higher than economic impact (84th for social, 102nd for

economic). This is a good basis on which to build for further improvements, and the government continues on its course to improve the regulatory environment, as it has done over the past year.

Despite an overall mixed performance, South Africa makes large strides in the overall NRI rankings to 65th, almost entirely driven by improvements in infrastructure and affordability. South Africa's digital transformation is mostly business driven, as the country notably performs best in business usage (32nd), followed by individual usage (77th), followed by government usage (105th). Although the country is perceived by South African business executives to be performing relatively well in terms of its regulatory and political environment, its innovation and business environment is rated significantly worse and, in addition, shows strong signs of deterioration-especially regarding technology and venture capital availability, government procurement of the latest technologies, and days as well as procedures to start a business. It would be a pity if these developments were to offset investments in infrastructure that have significantly increased international Internet bandwidth and put the country among the top 20 globally on this particular indicator. Furthermore, mobile tariffs have more than halved and broadband tariffs dropped slightly, reducing barriers to adoption also in terms of affordability. In order for impact to start materializing, significantly more buy-in from government will be needed across all areas of vision, promotion, and efficient use.

**Lebanon** is the second biggest mover this year, gaining 11 ranks to land in 88th place in the overall NRI. Importantly, the country is registering substantial positive moves in all four subindexes. In terms of adoption, Lebanon is doing best in individual usage (46th), followed by business usage (97th) and government usage (124th). Most indicators of personal usage have been improving over the past year, with the business sector catching up in its use and adoption of digital technologies; with overall perceived progress in business adoption being slow around the world, this is a positive exception to the trend. Starting from a low level, government indicators are also moving in the right direction: in particular, the regulatory environment is improving in terms of judicial independence, the efficiency of the legal system, and the effectiveness of law-making bodies. Substantial improvements are registered for the impact of ICTs on business models, organizational models, basic services, and government efficiency. Building also on a solid basis in terms of education, skills, and knowledge-intensive jobs, Lebanon has many of the factors in place to continue on this positive trajectory.

**Côte d'Ivoire** stands out as improving in almost every dimension of networked readiness. All but eight indicators go up this year, leaving the country nine places improved in 106th position. The business community reports large gains in the regulatory and

business environment. In particular, strong government efforts to lower entry barriers by slashing the number of days (from 32 to 7 days since 2013) and procedures to start a business (4 steps, down from 10) are noteworthy. Business executives also feel that the government has a strong ICT vision and correspondingly considerable success in ICT promotion (80th place for government usage, up from 114th). In addition, they attest to considerable ICT-driven improvements in government efficiency. As business and individual usage are also growing strongly, the existing infrastructure is starting to be stretched-this is one of the few areas where Côte d'Ivoire is falling behind. Going forward, progress in upgrading infrastructure and tackling affordability seem top priorities for sustaining momentum.

Ethiopia moves up 10 spots to 120th place in the NRI, led by the government sector (71st for government usage). Yet the business sector is starting to catch up, moving up 8 spots to 127th, as executives feel innovation capacity in the country is increasing and businesses are starting to explore the use of the Internet to interact with consumers (123rd this year, up from 138th). It will be important that this momentum is not broken by a deteriorating business environment; in particular, setting up a new business seems to be getting tougher, with the required number of days and procedures increasing. The private sector is also still constrained by a very small base of online consumers: only 31 percent of the population had a mobile phone subscription in 2014. Yet, because prices are falling significantly, ICTs will become accessible to a larger part of the population (93rd rank on affordability, up from 113th). In addition, the country has been edging forward on the skills dimension, although a large gap remains to be closed. Importantly, the NRI figures suggest that there have been significant improvements in giving schoolchildren access to the Internet (ranking 96th, up from 115th), an effort that will most certainly pay off in the coming years.

### Other selected economies

The Republic of Korea further improves its score but less than its peers, and thus slips one notch to 13th. The country's political and regulatory environment, historically one of its relative weaknesses, has improved significantly, especially when it comes to the judicial system. Infrastructure has also improved further, allowing Korea to climb to 5th position globally on the back of increased international bandwidth capacity (approximately 50 percent higher) and a further increase in the number of secure servers installed in the country. Digital technologies are fully leveraged in Korea to provide online services to the population (4th) and allowing the participation of citizens in public life and decision-making (1st). With 98.5 percent of households having access to the Internet, Korea has one of the most tech-savvy populations in the world. However, a stronger entrepreneurial spirit will be necessary to bring

innovation out of the large chaebols and into the rest of the economy. Although it has increased in recent years, venture capital availability is still low, with most funds being channeled to existing companies rather than startups in the seed and early-growth stages.

Canada improves its absolute performance but less than its peers, thus sliding down three positions to 14th. The country can rely on one of the best business and innovation environments in the world (4th), where starting a business is easy and quick (ranking 3rd on both time and procedures to start a business). The potential of a highly skilled workforce (11th) remains partially untapped, as individual usage remains relatively low (30th): for example, there are only 54.3 mobile broadband subscriptions per 100 people in Canada (52nd), compared to 102.7 in the United States. Although the government has been quite successful in using digital technologies to provide online services (10th) and allow citizens' e-participation (14th), it has not shown a strong vision for ICTs (49th) nor has it been particularly successful in promoting them (38th). This might change in the future because the government is stepping up efforts to promote innovation policies, which will need to include a strong ICT component. Once an innovation leader in the mobile industry, Canada still relies heavily on mining and medium-technology sectors. Improving businesses' adoption of ICTs (22nd) can be a powerful driver of innovation for the country.

**Germany** drops two spots this year to 15th place, despite a slight improvement in its absolute score. Although businesses operate in a very good regulatory environment (16th), more can be done to support new firms-for example, by reducing further the number of days and procedures required to start a business. Germany's infrastructure and skills base is one of the best in the world, while fixed broadband prices are high and rising. Individual adoption and usage is increasing further, although it is not moving fast enough to move Germany up in the rankings on this dimension. Germany is one of the highest-scoring countries for business usage (6th), yet the government is not yet using digital technologies to their full potential (30th); that said, executives feel that the government is starting to develop a stronger digital vision. A big positive jump is registered this year for the impact of ICTs on access to basic services.

With a stable overall score, Australia slips two spots to 18th position. Improvements in terms of Environment (16th, up one) are outweighed by a deterioration of the country's level of Readiness, especially when it comes to affordability (57th), where fixed broadband subscriptions remain particularly expensive (US\$46.7 PPP per month, ranked 100th worldwide). Individual usage has also increased in the country, with mobile broadband subscriptions largely widespread (10th highest penetration in the world) and more common than fixed ones (25th). The Australian government and public sector are among the leaders in the world in providing online services (8th)

and allowing citizens' e-participation (7th), but there is room for improvement in the level of businesses' adoption of ICTs (28th), as the country still relies heavily on mining industries. The country's National Innovation and Science Agenda, launched in December 2015, if fully implemented, might help to orient Australia's economy more toward innovation, bridging some of the gaps, especially in venture capital availability (40th worldwide) and the creation of new business models via ICTs (41st).

With an improvement of performance across the board, France climbs up two positions to 24th place. Government and businesses are pushing the frontier of networked readiness in the country. France is the global leader in delivering public online services to its citizens and one of the best in terms of allowing their e-participation to the government's decision process (4th). Over the past year, the government has also increased efforts in promoting ICTs and providing a long-term vision for the sector, including a Digital Republic Bill aiming to guide the way in which the ICT revolution will shape French society in the future. French businesses have also stepped up their efforts to leverage ICTs, especially in terms of adopting new organizational models (26th, up 22 positions) and improving B2B transactions (33rd, up 11). The country can rely on a skilled workforce (18th) and on good infrastructure (22nd), allowing, among other things, one of the highest penetrations in the world of fixed broadband (4th). Issues remain especially in the business environment, which has one of the highest taxation rates in the world—62.7 percent—although on a slowly declining trend.

The United Arab Emirates continues to lead the Arab world in terms of networked readiness in 26th position. The government is leading the way to greater digital connectivity (2nd in terms of government usage), providing a consistent vision for the sector and achieving success at promoting it (1st on both indicators). Individual usage has also further improved (19th, up one spot) especially in terms of mobile broadband subscriptions and households with Internet access, although other important ICT services are not yet widely available: in 2014, fixed broadband subscriptions were still 11.6 per 100 people. Businesses' adoption of and the economic impacts of ICTs have been improving in recent years, but a gap still exists with most advanced economies in this area. Patent activity, both general and ICT-related, remains relatively low.

Malaysia's overall position in the NRI has remained largely stable in recent years, with the country climbing one spot to 31st position in 2016. This strong performance continues to be supported by a government that is fully committed to the digital agenda and that is seen to be ahead of its peers in terms of adopting the latest technologies. With approximately two-thirds of the population online, individual usage is growing further (47th, up 10 spots); in particular, the uptake of mobile broadband has taken off and reached almost 60 percent. An agile business sector (26th for business usage) is using ICTs to its advantage, interacting with consumers online and re-optimizing business models and organizational structures, thereby contributing to the overall strong performance. An increase in international Internet bandwidth (currently ranked 81st) combined with a drop in broadband prices (110th) would give a further boost to Malaysia's digital economy.

Saudi Arabia climbs up two positions to 33rd this year. The government is leading the way to increased networked readiness, promoting ICTs in the country; however, individual usage (21st) and business adoption (42nd) are still lagging behind. Affordability of ICTs (101st) and the general level of skills in the workforce (49th) remain an issue, with only 64 percent of the population using the Internet on a regular basis. Allowing further means of e-participation (51st) might contribute to spurring individual ICT adoption. The business and innovation environment is hampered by one of the most complex and lengthy processes in the world to start a business (125th and 97th, respectively), which reduces access to the market of potential new and innovative competitors. Saudi Arabia remains an oil-based economy, with low patenting activity in both general technology and ICTs. A transition to a more innovationdriven economic model will require improvements in the country's ICT readiness, with a broad-based participation of the population and of the business community in the digital revolution.

The Russian Federation remains in 41st place this year, as in 2015. The country places in the top third of the rankings for Readiness, Usage, and Impact, yet continues to be held back by a weak and deteriorating regulatory environment. As mobile and fixed Internet tariffs are very low and dropping further (10th place overall on affordability), individual usage continues to rise in almost every dimension, leaving Russia in 40th place in this category. However, the data suggest that infrastructure build-out is not keeping up with demand as Russia sees its availability of Internet bandwidth per user falling. Although Russia is close to the median in terms of business use overall, online sales to consumers (as opposed to other firms) are particularly strong (35th place). The positive impact of ICTs is felt both in the economic and the social dimensions, as reflected in rankings in the top third for both impact pillars.

Turkey's overall ranking and score remains unchanged from last year at 48th place, yet this fact masks strong conflicting movements at the pillar level. With some of the cheaper mobile and fixed Internet tariffs around and improving digital skills in the population, individual usage is broadening further. Yet these positive movements are offset by a deteriorating regulatory and business environment as well as the declining importance of ICTs in the government's vision and promotion. Overall, the negative effects seem to

outweigh the positive ones, with economic impacts and particularly social outcomes suffering. Turkey, however, remains in the top third of the rankings in terms of its business and innovation environment, a good basis from which to push further ahead.

China moves up by three places to 59th based on improvements in Usage and Impact. Adoption by individuals has increased, particularly in terms of mobile broadband subscriptions, which nearly doubled in one year from 21.4 to 41.8 per 100 population. Chinese businesses will need to step up their efforts to embrace digital technologies and spur innovative processes for the country to become an innovation-driven, highincome economy. Although patenting activity has increased significantly in recent years, it is still relatively low compared with that of advanced economies, and the full economic and social impacts of ICTs are still in the process of materializing. The business environment remains one of the key bottlenecks (104th): according to World Bank data, China maintains high taxation on businesses (67.8 percent) and has lengthy and complex processes to set up a new business (121st and 120th, respectively), discouraging new and more competitive firms from entering the market. Recognizing the challenge, the government is currently implementing a reform program to streamline business procedures across the country. The full results of these reforms will be reflected in future assessments.

Colombia maintains the same score as last year, but slips four ranks to 68th because other countries improved their performances. ICT adoption among the population kept increasing at a fast rate: there were 45.1 mobile broadband subscriptions per 100 people in 2014, up from 25.0 in 2013 and 3.7 in 2011. This increase in individual usage has not been matched by a similar trend among businesses or within the government. The extent of usage of ICTs for B2B and B2C operations as well as for the creation of new business models has been stagnating in past years. The overall political and business environment in the country remains its main weakness, with low effectiveness of law-making bodies (121st) and an inefficient judicial system (1,288 days are required to enforce a contract, ranking 133rd in the world in this indicator). Taxation also remains disproportionately high, at a rate of 69.7 percent (6th highest among the countries in the sample).

Brazil comes in at 72nd place this year, partially reversing the strong downward trend of recent years.<sup>26</sup> ICT adoption and usage by both individuals and the business community is good and supported by very good affordability—in particular, cheap fixed broadband Internet connections (14th). Brazil makes large strides in terms of improving individual usage this year, climbing five places to 57th—this is a considerable achievement, given that other countries are also moving quickly on individual adoption. Yet networked readiness in the country continues to be held back by a weak regulatory environment. The business and innovation environment is also ranked as one of the weakest in the world (124th), with both venture capital availability and government technology procurement falling further. Government support of the ICT agenda is perceived to be weak and the business community sees the government as failing to deliver in terms of incorporating digital technologies in their overall strategy (121st) as well as in the direct promotion of ICT (122nd).

**Indonesia** moves up six spots to 73rd place this year, driven in part by improvements in affordability and an accompanying strong rise in individual usage (92nd, up five spots). In order to capitalize on this positive trend, infrastructure will need to keep up; as the number of users is increasing, the existing infrastructure is starting to be stretched, which has the country dropping seven spots to rank 105th in this particular pillar. Business and government usage are already high at 34th and 65th rank, with a flat trend line for business and one that has been slightly on the decline for government. Although momentum across pillars is somewhat heterogeneous, a recently reformed regulatory (65th) and business environment (64th) provide a good basis for building out the digital economy, as long as recent backward slides for some important indicators are reversed (legislative, legal system, availability of latest technologies, and number of procedures to start a business).

Mexico places 76th in the NRI overall this year.<sup>27</sup> Individual usage (84th) is rising further; in particular, mobile broadband subscriptions are becoming increasingly popular and individual usage is thus catching up with business usage (66th) and government usage (52nd). Although government use of ICTs was already considered relatively strong in the 2015 NRI, Mexico moves up 13 places in government ICT vision this year, to 71st; importantly, the government makes good use of ICTs to interact with the population, ranking 35th on the government services index. At the same time, the regulatory environment is perceived to have deteriorated along several lines, such as the efficiency of the legal system in settling disputes (104th) and challenging regulations (102nd). Economic impact is on an upward trajectory and Mexico is edging back on the social impacts ranking, having been overtaken by a significant number of countries between 2014 and 2015.

Rwanda climbs three spots this year to 80th position, driven by a government that is very focused on the digital agenda. The government is also making strong efforts to provide a stable regulatory framework, resulting in an improvement of five ranks in the Environment subindex. The private sector is making large strides in terms of adopting digital technologies, moving up 10 places to 60th rank for business usage. Individual adoption is still lagging (127th) as mobile fees and broadband prices remain high; efforts to provide Internet access in schools is an important step in the direction of boosting social gains, providing the next generation with

important digital skills. In general, the social impact of digital technologies is being felt, in particular with regard to giving access to basic services.

Argentina continues on its upward trajectory, ranking 89th this year. Weak (though improving) regulatory and innovation environments seem to be the two biggest bottlenecks preventing larger gains from digital technologies. With mobile phone use one of the highest in the world (13th) and an overall solid adoption rate among individuals, businesses are making use of digital technologies to transact with consumers (76th), yet B2B ICT use remains low (120th). There is also much room for greater public-sector adoption of digital technologies: although the Argentinian government seems to be making good use of ICTs to provide services to the population (55th), the business community in 2015 perceived the government as lacking in vision and effort when it comes to ICT promotion. Yet the recent change in government looks ready to bring renewed momentum to the digital agenda. Consistent with previous years, Argentina does not have data in the affordability pillar because of the lack of reliable PPP estimates.

Despite of improvements in its political and regulatory environment (78th, up four) and in its business and innovation environment (110th, up five), India slips down two positions to an overall rank of 91. Although India's absolute score has changed only marginally in recent years, the drop can be attributed in part to the fact that other countries are moving ahead at higher speeds. In addition, lack of infrastructure (114th) and low levels of skills among the population (101st) remain the key bottlenecks to widespread ICT adoption, especially in terms of individual usage (120th). A third of the Indian population is still illiterate (95th) and a similar share of youth is not enrolled in secondary education (103rd). Only 15 out of 100 households have access to the Internet and mobile broadband remains a privilege of the few, with only 5.5 subscriptions for every 100 people. This is in spite of the fact that affordability has long been one of the strengths of the Indian ICT ecosystem, with the country ranking 8th this year in this area. A deep divide persists between well-connected metropolitan hubs and remote rural areas, where even the most basic infrastructure is insufficient. In 2015 the government launched the Digital India program, which aims to close this gap by fostering investment in digital infrastructure, improving digital literacy, and increasingly providing online services to citizens. India's performance in terms of providing online services and allowing e-participation has so far been in line with that of peer countries, but far from the global best (57th and 40th, respectively).

Although Nigeria did not move overall in the NRI rankings, staying in 119th position, this fact masks significant heterogeneity in terms of moves in individual dimensions of networked readiness—in particular, a six-spot move up in Readiness (to 117th) and a ten-spot move down in Impacts (to 114th). The improvement in Readiness is to a large extent thanks to Nigeria reaching full mobile coverage this year; broadband prices have also fallen slightly, although they remain high. The political and regulatory environment are perceived to be improving on several fronts, while at the same time the business and innovation environment are perceived as deteriorating. Government usage and engagement is perceived to have dropped significantly over the course of the last year, yet this may change under the new government that came to power in 2015. Overall, conditions for ICT impacts seem to have deteriorated: both economic and social impacts record a decline. A policy priority with far-reaching benefits in other areas should be to address the country's skills gap (134th).

### CONCLUSIONS

The picture that emerges from this year's analysis gives reason for optimism but not for complacency. Although there are still large heterogeneities across countries in terms of networked readiness, the overall trend is positive across all regions of the world.

In particular, individual adoption is growing steadily across the globe as efforts continue to close the digital divide. Business executives are optimistic about their countries' growing innovation capacities, yet the digital innovation impact is so far coming through much more strongly in some countries than in others—the gap between seven digital front runners and the followers is wide. The analysis identifies a high level of business adoption and usage of digital technologies as one of the key characteristics of countries in which ICTs are having a robust economic and digital innovation impact. In most countries, businesses are perceived to be moving at only a moderate pace in truly embracing all dimensions of digitization—in their relations upstream with suppliers and downstream with consumers. This process will need renewed momentum if firms are hoping to thrive in the Fourth Industrial Revolution.

Although government use and promotion of ICTs has recently started to fall short of expectations across regions, a number of countries are making large strides in the Index thanks to a strong government ICT vision and engagement in the digital economy. Overall, governments can do more to drive the social impact of digital technologies-for example, by using them to make basic government services more accessible. As technologies are rapidly evolving and can be expected to have a profound impact on our economies and societies, new governance structures will also urgently need to be put in place in order to channel technological forces in ways that bring broad-based gains to societies.

### **NOTES**

- 1 Varian 2010.
- Owen et al. 2012.

- 3 For instance, the prevalence of Internet in schools would ideally be measured by computing the percentage of a country's schools that have Internet access. Similarly, the intensity of competition would ideally be measured by computing a business concentration index (Herfindahl-Hirschman Index). In both cases, however, such statistics are not available for enough countries.
- 4 Eurostat and OECD 2005, p. 46; cited in Dutta et al. 2015.
- 5 Varian 2010.
- 6 For additional detailed case study evidence, see http://reports. weforum.org/digital-transformation-of-industries/go-to-the-casestudies/
- 7 Mettler and Williams 2011, pp. 26-27.
- 8 Positive network effects arise from the fact that a larger number of participants will lead to better and more frequent matches, which in turn means higher value creation, making it more attractive still for new participants to join.
- 9 Fox 2014.
- 10 Christensen 2012.
- 11 The change in the mean of the score distribution from 2015 to 2016 is positive and significantly different from zero at the 10 percent level.
- 12 BCG 2015. In addition, the following factors are often cited as critical for innovation in the Digital Age: capitalizing on the Internet of Things, high-quality broadband, increasing automation and autonomy of production, a tech savvy and experimenting/ risk-loving customer base, availability of venture capital, and a government that puts in place rules that inspire trust in the system (World Economic Forum/Accenture, 2016).
- 13 See INSEAD's Global Talent Competitiveness Index, which in its 2017 edition will focus on technology and talent: http://globalindices.insead.edu/gtci/.
- 14 Fox 2014.
- 15 Autor 2010.
- 16 World Economic Forum 2016b.
- 17 Sundararajan 2016.
- 18 For example, these principles are embedded in the Europe 2020 strategy to create smart growth and the Horizon 2020 program that defines tackling societal challenges as one of the main priorities; see also, for example, Owen et al. 2012.
- 19 von Schomberg 2011.
- 20 Lund Declaration 2009.
- 21 European Commission 2012.
- 22 See the European Union's Founding Principles of the Union. available at http://europa.eu/scadplus/constitution/objectives\_ en.htm.
- 23 United Nations 2000.
- 24 Note that the improvement in readiness is largely the result of a large drop in fixed broadband tariffs; this drop occurred between 2014 and 2015, yet was not reflected in the data collected for the 2015 edition of the NRI. The price correction was made by the ITU after the publication of the NRI in 2015.
- 25 ITU 2015.
- 26 Although there has been an upward movement in the NRI rankings for Brazil this year, this is to some extent the result of a reinstatement of indicator 5.03 (secondary education enrollment rate), which was not available last year.
- 27 Note that Mexico is seeing a deterioration in its assessment of Readiness this year because of the way in which the pricing of broadband access is captured. The ITU reports the price of the cheapest package provided by the market leader. The reported price increase came at the same time as an increase in broadband speed included in the package, so it can to some extent be attributed to an increase in quality; nevertheless, accessibility is reduced, which is what the rank move reflects.

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## Appendix:

## The Networked Readiness Index framework: A methodological note

The Global Information Technology Report series and the Networked Readiness Index (NRI) were launched by the World Economic Forum in 2001. This represented one of the first attempts to make conceptual sense of the complex information and communication technologies (ICT) reality, identifying the common factors that enable countries to use technology effectively. The networked readiness framework that underpins the NRI was intended to provide guidance for policymakers and civil society on the factors that they need to take into account to fully leverage ICTs in their growth strategies.

The economic literature has largely established the fundamental role of innovation in boosting long-term productivity and growth. Although networked readiness represents only one ingredient in the innovation process, it has become an increasingly important one. Several studies have established the link between ICTs and productivity gains, especially in advanced economies.<sup>1</sup> This will be particularly important in the next decades as the Fourth Industrial Revolution transforms the way economies work and the way societies organize themselves.

The impact of ICTs on our lives goes well beyond their effects on productivity and growth; they also act as a vector of social development and transformation. ICTs can improve access to basic services, enhance connectivity, and create new employment opportunities. Ultimately, ICTs hold significant potential to improve the quality of people's lives and to enhance the way they live, communicate, interact, and engage among themselves and with their governments.

In recent years, the emphasis has moved from the issue of ensuring access to the question of how to make the best use of ICTs in order to improve business innovation, governance, citizens' political participation, and social cohesion. In light of this shift in emphasis, and after two years of research and consultations with experts, the Impact subindex was added to the NRI framework in 2012.2 Yet there is still room to improve the way we measure the actual impact of ICTs because the availability of data remains limited to only some of the relevant areas of impact. In addition, the complex relationships between ICTs and socioeconomic performance are not fully understood and their causality not fully established. However, our hope is to highlight the opportunities offered by ICTs and provide an indication of the ways they are transforming economies and societies around the world.

The networked readiness framework, briefly outlined in the chapter, rests on six principles:

- A high-quality regulatory and business environment is critical in order to fully leverage ICTs and generate impact.
- Similarly, ICT readiness—as measured by ICT affordability, skills, and infrastructure—is a precondition to generating impact.
- Fully leveraging ICTs requires a society-wide effort. All stakeholders—the government, the business sector, and the population at large—have a role to
- ICT use should not be an end in itself. The impact that ICTs actually have on the economy and society is what ultimately matters.
- The set of drivers—the environment, readiness, and use-interact, co-evolve, and reinforce each other to create greater impact. In turn, greater impact creates more incentives for countries to further improve their framework conditions, their readiness for ICTs, and their use of ICTs, thus creating a virtuous cycle. Conversely, weaknesses in any particular dimension are likely to hinder progress in others.
- Finally, the networked readiness framework should provide clear policy guidance.

### STRUCTURE OF THE NETWORKED READINESS **INDEX**

The networked readiness framework translates into the NRI, a composite index made up of four main categories (subindexes), 10 subcategories (pillars), and 53 individual indicators distributed across the different pillars. The full list of indicators, grouped by pillars and subindexes, is provided below.

In this list, the number preceding the period indicates the pillar to which the variable belongs (e.g., indicator 2.05 belongs to the 2nd pillar; indicator 8.03 belongs to the 8th pillar). The numbering of the indicators matches the numbering of the data tables at the end of the Report.

The computation of the NRI is based on successive aggregations of scores, from the indicator level (i.e., the most disaggregated level) to the overall NRI score (i.e., the highest level). Scores for indicators derived from the World Economic Forum's Executive Opinion Survey (the Survey) are always measured on a 1-to-7 scale and therefore do not require transformation prior to aggregation. These are identified in the list of indicators by an asterisk (\*). All the other indicators come from external sources, as described in the Technical Notes and Sources section at the end of the Report. In order to align them with the Survey's results, we apply a min-max transformation, transforming them into a 1-to-7 scale.3

Unless noted otherwise, we use an arithmetic mean to aggregate individual indicators within each pillar and also for higher aggregation levels (i.e., pillars and

Throughout the Report, scores in the various dimensions of the NRI pillars are reported with a precision of one decimal point. However, exact figures are always used at every step of the computation of the NRI.

A description of each subindex and pillar are provided below, along with the rationale for their inclusion.<sup>10</sup>

### **Environment subindex**

The success of a country in leveraging ICTs depends in part on the quality of the overall operating environment. The *Environment* subindex therefore assesses the extent to which a country's market conditions and regulatory framework support entrepreneurship, innovation, and ICT development.

The Political and regulatory environment pillar (nine indicators) assesses the extent to which a country's political and regulatory environments facilitate ICT penetration and the development of business activities. It does so by measuring the extent of intellectual property rights protection, the prevalence of software piracy, the efficiency and independence of the judiciary, the efficiency of the law-making process, and the overall quality of regulations pertaining to ICTs.

The Business and innovation environment pillar (nine indicators) gauges the extent to which the business environment supports entrepreneurship by taking into account measures of red tape, the ease of starting a business, and taxation. It also measures the conditions that allow innovation to flourish by including indicators on the overall availability of technology, the intensity of competition, the demand conditions for innovative products (as proxied by the development of government procurement of advanced technology products), and the availability of venture capital for funding innovationrelated projects.

### Readiness subindex

The Readiness subindex measures the extent to which a country has in place the infrastructure and other factors to support the uptake of ICTs.

The *Infrastructure* pillar (four indicators) captures the state of a country's ICT infrastructure as well as infrastructure that matters for ICT development: mobile network coverage, international Internet bandwidth, secure Internet servers, and electricity production. The Affordability pillar (three indicators) assesses the affordability of ICTs in a country through measures of mobile telephony usage costs and broadband Internet subscription costs, as well as an indicator that assesses the state of liberalization in 17 categories of ICT services, because more intense competition tends to reduce retail prices in the long run.

The Skills pillar (four indicators) measures the capacity of the population to make effective use of ICTs by taking into account the enrollment rate in secondary education, the overall quality of the education system, and of mathematics and science education in particular, and the adult literacy rate.

### Usage subindex

The Usage subindex assesses the level of ICT adoption by a society's main stakeholders: government, businesses, and individuals.

The Individual usage pillar (seven indicators) measures the level of diffusion of selected ICTs among a country's population, using mobile telephony penetration, Internet usage, personal computer ownership, and the use of social networks.

The Business usage pillar (six indicators) captures the extent to which businesses in a country use the Internet for business-to-business (B2B) and businessto-consumer (B2C) operations, as well as their efforts to integrate ICTs in their operations. It also measures the capacity of firms to come up with new technologies by taking into account the number of patent applications under the Patent Cooperation Treaty (PCT). Finally, it measures the extent of staff training as a proxy for the capacity of management and staff to innovate.

The Government usage pillar (three indicators) assesses the leadership and success of the government in developing and implementing strategies for ICT development, as well as in using ICTs, as measured by the availability and quality of government online services.

### Impact subindex

The Impact subindex gauges the broad economic and social impacts accruing from ICTs.

The Economic impacts pillar (four indicators) measures the effect of ICTs on competitiveness through technological and non-technological innovations in a country-as measured by the number of patent applications as well as by the

### **NETWORKED READINESS INDEX 2016**

### Networked Readiness

Index = 1/4 Environment subindex

- + 1/4 Readiness subindex
- + 1/4 Usage subindex
- + 1/4 Impact subindex

### **ENVIRONMENT SUBINDEX**

Environment subindex = 1/2 Political and regulatory

environment

+ 1/2 Business and innovation environment

### 1st pillar: Political and regulatory environment

- 1.01 Effectiveness of law-making bodies\*
- 1.02 Laws relating to ICTs\*
- 1.03 Judicial independence\*
- 1.04 Efficiency of legal system in settling disputes\*5
- 1.05 Efficiency of legal system in challenging regulations\*5
- 1.06 Intellectual property protection\*
- 1.07 Software piracy rate, % software installed
- 1.08 Number of procedures to enforce a contract<sup>6</sup>
- 1.09 Number of days to enforce a contract<sup>6</sup>

### 2nd pillar: Business and innovation environment

- 2.01 Availability of latest technologies\*
- 2.02 Venture capital availability\*
- 2.03 Total tax rate, % profits
- 2.04 Number of days to start a business<sup>7</sup>
- 2.05 Number of procedures to start a business<sup>7</sup>
- 2.06 Intensity of local competition\*
- 2.07 Tertiary education gross enrollment rate, %
- 2.08 Quality of management schools\*
- 2.09 Government procurement of advanced technology products\*

### **READINESS SUBINDEX**

Readiness subindex = 1/3 Infrastructure

- + 1/3 Affordability
- + 1/3 Skills

### 3rd pillar: Infrastructure

- 3.01 Electricity production, kWh/capita
- 3.02 Mobile network coverage, % population
- 3.03 International Internet bandwidth, kb/s per user
- 3.04 Secure Internet servers per million population

### 4th pillar: Affordability<sup>8</sup>

- 4.01 Prepaid mobile cellular tariffs, PPP \$/min.
- 4.02 Fixed broadband Internet tariffs, PPP \$/month
- 4.03 Internet and telephony sectors competition index, 0-2 (best)

### 5th pillar: Skills

- 5.01 Quality of education system\*
- 5.02 Quality of math and science education\*
- 5.03 Secondary education gross enrollment rate, %
- 5.04 Adult literacy rate, %

### **USAGE SUBINDEX**

Usage subindex = 1/3 Individual usage

- + 1/3 Business usage
- + 1/3 Government usage

### 6th pillar: Individual usage

- 6.01 Mobile phone subscriptions per 100 population
- 6.02 Percentage of individuals using the Internet
- 6.03 Percentage of households with computer
- 6.04 Households with Internet access, %
- 6.05 Fixed broadband Internet subscriptions per 100 population
- 6.06 Mobile broadband Internet subscriptions per 100 population
- 6.07 Use of virtual social networks\*

### 7th pillar: Business usage

- 7.01 Firm-level technology absorption\*
- 7.02 Capacity for innovation\*
- 7.03 PCT patent applications per million population
- 7.04 ICT use for business-to-business transactions\*9
- 7.05 Business-to-consumer Internet use\*9
- 7.06 Extent of staff training\*

### 8th pillar: Government usage

- 8.01 Importance of ICTs to government vision\*
- 8.02 Government Online Service Index, 0-1 (best)
- 8.03 Government success in ICT promotion\*

### IMPACT SUBINDEX

Impact subindex = 1/2 Economic impacts

+ 1/2 Social impacts

### 9th pillar: Economic impacts

- 9.01 Impact of ICTs on business models\*
- 9.02 ICT PCT patent applications per million population
- 9.03 Impact of ICTs on organizational models\*
- 9.04 Knowledge intensive jobs, % workforce

### 10th pillar: Social impacts

- 10.01 Impact of ICTs on access to basic services\*
- 10.02 Internet access in schools\*
- 10.03 ICT use and government efficiency\*
- 10.04 E-Participation Index, 0-1 (best)

role of ICTs in the development of new products, processes, and organizational models. It also measures the overall shift of an economy toward more knowledgeintensive activities.

The Social impacts pillar (four indicators) aims to assess a country's societal progress brought about or enhanced by the use of ICTs. Such progress includes—but is not limited to—access to education and healthcare, energy savings, and more-active civil participation. Currently, because of data limitations, this pillar focuses on assessing the extent to which ICTs allow access to basic services (education, financial services, and healthcare); the use of the Internet at school, as a proxy for the potential benefits that are associated with the use of ICTs in education; the impact of ICTs on government efficiency; and the quality and usefulness of information and services provided by a country for the purpose of engaging its citizens in public policymaking through the use of e-government programs.

Measuring the impacts of ICTs remains a complex task, and the development of rigorous, international comparable statistics is still in its infancy. As a result, many of the areas where ICTs have a significant impact—especially those where the impact does not translate directly into commercial activities, as is the case in environment, healthcare, and education-are not captured in the NRI. Therefore the Impact subindex should be regarded as work in progress.

### METHODOLOGY AND DATA

The structure of the NRI is unchanged from the previous edition.

About half of the 53 individual indicators used in the NRI are sourced from international organizations. The main providers are the International Telecommunication Union (ITU); the World Bank; the United Nations Educational, Scientific and Cultural Organization (UNESCO); and other UN agencies. Carefully chosen alternative data sources, including national sources, are used to fill data gaps in certain cases. The other half of the NRI indicators are derived from the World Economic Forum's annual Survey. The Survey is used to measure concepts that are qualitative in nature or for which internationally comparable statistics are not available for enough countries.<sup>11</sup>

The Survey is administered annually to over 14,000 business executives in all the economies included in the NRI (see Browne et al. 2015 for more details). The Survey represents a unique source of insight into many critical aspects related to a country's enabling environment, such as the extent of red tape and the degree of intellectual property protection; aspects related to the preparedness of its population, such as the quality of the education system; to ICT usage, such as its capacity to innovate and the importance of its government's vision

for ICTs; and to ICT impacts, such as the contribution of ICTs to the development of new products and services and to improving access to basic services.

Some of the indicators composing the Index are subject to significant changes in value from one year to the next. In particular, the two price measures (indicators 4.01 and 4.02) used to calculate the affordability pillar score can reflect changes in both the benchmarks used by the ITU and in the Purchasing Power Parity (PPP) estimates sourced from the World Bank. Although there have been no changes to the PPP methodology this year (the conversion factor used is still based on the International Comparison Program 2011),12 figures for the costs in local currencies of four different services provided by the ITU have changed significantly for some countries.

For two indicators, the number of missing data points remains very high. Indicators 1.07 Software piracy rate and 9.04 Share of workforce employed in knowledge-intensive jobs are missing data for 35 and 29 economies, respectively, and were not included the calculation for those economies. For each of the other 53 indicators of the NRI, the number of missing data points does not exceed four. In addition, in the absence of data on the adult literacy rate (indicator 5.04) for as many as 22 Organisation for Economic Co-operation and Development (OECD) member countries and Hong Kong SAR, a value of 99 percent was assumed for the purpose of calculating the Skills pillar score.

### **COUNTRY COVERAGE**

The inclusion of an economy depends on the availability and quality of indicators. To be included in the NRI, the number of missing (or outdated) data points for an economy cannot reach five, or 10 percent of all indicators. Because almost half of the indicators entering the NRI are derived from the Executive Opinion Survey, which is the basis for the Global Competitiveness Report (GCR), the coverage of a country in the GCR is a necessary—but not a sufficient—condition for a country's inclusion in the NRI.

### NOTES

- 1 Draca et al. 2006; Cardona et al. 2013.
- 2 Dutta et al. 2012.
- 3 Formally, we have:

6 x 
$$\left(\frac{\text{country score - sample minimum}}{\text{sample maximum - sample minimum}}\right)$$
 + 1

The sample minimum and sample maximum are, respectively, the lowest and highest country scores in the sample of economies covered by the GCI. In some instances, adjustments were made to account for extreme outliers. For those indicators for which a higher value indicates a worse outcome (i.e., indicators 1.07, 1.08, 1.09, 2.03, 2.04, 2.05, 4.01, and 4.02), the transformation formula takes the following form, thus ensuring that 1 and 7 still corresponds to the worst and best possible outcomes, respectively:

4 Formally, for a category *i* composed of *K* indicators, we have:

category<sub>i</sub> = 
$$\frac{\sum_{k=1}^{K} indicator_{k}}{K}$$

When two individual indicators are averaged (e.g., indicators 1.04 and 1.05 in the 1st pillar), each receives half the weight of a normal

- For indicators 1.04 and 1.05, the average of the two scores is used in the computation of the NRI.
- 6 For indicators 1.08 and 1.09, the average of the two normalized scores is used in the computation of the NRI.
- 7 For indicators 2.04 and 2.05, the average of the two normalized scores is used in the computation of the NRI.
- The affordability pillar is computed as follows: the average of the normalized scores of indicators 4.01 Prepaid mobile cellular tariffs and 4.02 Fixed broadband Internet tariffs is multiplied by a competition factor, the value of which is derived from indicator 4.03 Internet and telephony sectors competition index. It corresponds to the score achieved by an economy on this indicator normalized on a scale from 0.75 (worst) to 1.00 (best), using the min-max transformation described above. A normalized score of 0.75 is assigned to an economy with a competition index score of 0, which means that a monopolistic situation prevails in the 17 categories of ICT services considered. A normalized score of 1.00 is assigned to an economy where all 17 categories are fully liberalized. Where data are missing for indicator 4.03 (i.e., Mongolia and Venezuela), the score on the affordability pillar, which is simply the average of the normalized scores of indicators 4.01 and 4.02, is used. The competition index score for Chinese Taipei was derived from national sources.
- For indicators 7.04 and 7.05, the average of the two scores is used in the computation of the NRI.
- 10 See Dutta et al. 2012 for a more detailed description of each component.
- 11 For instance, the prevalence of Internet in schools would ideally be measured by computing the percentage of a country's schools that have Internet access. Similarly, the intensity of competition would ideally be measured by computing a business concentration index (Herfindahl-Hirschman Index). In both cases, however, such statistics are not available for enough countries
- See http://icp.worldbank.org/ for more information about PPP and the 2011 revision.

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### **CHAPTER 1.2**

# Cross-Border Data Flows, Digital Innovation, and **Economic Growth**

Robert Pepper John Garrity Connie LaSalle **CISCO SYSTEMS**  Forty years ago, the queen of England became one of the first individuals, and the first head of state, to transmit real-time electronic data over national borders.1 In 1976, just three years after the United States connected ARPANET to London's University College and the Royal Radar Establishment in Norway, Her Majesty Queen Elizabeth II sent an email under the username "HME2."<sup>2</sup> Today over 3.2 billion people across the world have access to and use the Internet, and the flow of digital communication between countries, companies, and citizens, as a component of the "knowledge economy," has been recognized for years as a critical driver of economic growth and productivity.3 Countries adept at fostering digital activity have witnessed the emergence of new industries as well as the accelerated development of traditional sectors.<sup>4</sup> However, despite the intensive and extensive growth of the global Internet, concerns over growing barriers to digital flows are mounting.

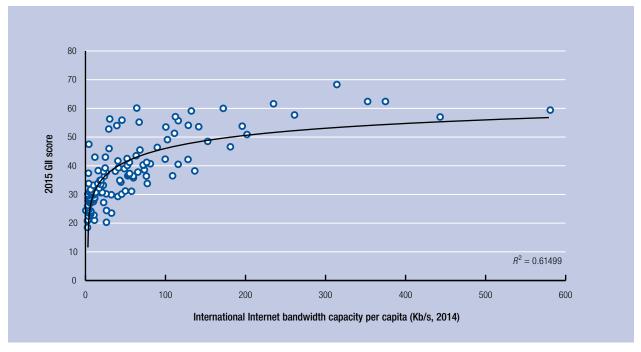
This chapter explores the impact of the free flow of data across national borders on innovation and growth. First reviewed is the literature on the impact of cross-border data flows on countries, companies, and individuals. The chapter then presents an original analysis of the growth of new services built on the free flow of trade through global digitization, and concludes by discussing policy guidelines that mitigate national concerns over data transmission while simultaneously maximizing the benefits of cross-border data flows.

### THE GROWTH OF GLOBAL DIGITAL INDUSTRIES AND THEIR NATIONAL ECONOMIC IMPACTS

The development of the commercial Internet has occurred concurrently with a massive expansion of the global economy, which has experienced 6.6-fold growth in nominal terms—from US\$11.1 trillion to US\$73.5 trillion since 1980.5 Internet protocol (IP) traffic continues to advance rapidly, with 2019 traffic projected to be 64 times its 2005 volume. 6 Global Internet bandwidth accounts for much of this growth, more than quadrupling between 2010 (<50 terabytes per second) and 2014 (>200 terabytes per second).7 More importantly, total cross-border Internet traffic increased 18-fold from 2005 to 2012.8

This cumulative growth impacts all facets of national economies, not just their budding technology sectors—in fact, an estimated 75 percent of the Internet's benefit is captured by companies in traditional industries.9 A wide range of positive economic impacts stems from the flow of digital data across borders. For example, 61 percent (US\$383.7 billion) of total US service exports were digitally delivered in 2012, and 53 percent of total US imports were digitally delivered. 10 In absolute terms, the amount of digitally delivered exports and imports is even larger in the European Union, which digitally delivered US\$465 billion in exports in 2012 and spent US\$297 billion on imports. Digital trade is credited with

Figure 1: Cross-border data traffic and national innovation, by country



Sources: Cornell University, INSEAD, and WIPO 2015; ITU 2015b. Note: The Global Innovation Index (GII) scores range from 0 to 100 (best). Kb/s = kilobits per second.

an estimated increase in US gross domestic product (GDP) of 3.4 percent to 4.8 percent in 2011 and with the creation of up to 2.4 million jobs, according to the United States International Trade Commission (US ITC).11 The United Nations Conference on Trade and Development (UNCTAD) also estimates that about 50 percent of all traded services is enabled by innovation stemming from the technology sector, which includes the facilitation of cross-border data flows.<sup>12</sup> According to a newly released report by McKinsey & Company, data flows account for US\$2.8 trillion of global GDP in 2014 and "cross-border data flows now generate more economic value than traditional flows of traded goods."13

Beyond this economic impact, the free flow of data is, itself, a significant driver of innovation. It allows the sharing of ideas and information and the dissemination of knowledge as well as collaboration and cross-pollination among individuals and companies. Internet-enabled innovation requires an environment that encourages individuals to experiment with new

uses of the Internet. In places with severe restrictions that inhibit digital collaboration, people are less likely to experiment and, as a result, innovation is less likely to emerge. Countries with an open Internet tend to be more innovative, as demonstrated in Figure 1, which illustrates the relationship between a country's ability to share information and its capacity for innovation. The figure demonstrates that countries with a higher capacity to share data internationally (as reflected by a high international Internet bandwidth capacity per capita) tend to have a greater degree of national innovation as well, quantified in the figure by each country's score on the 2015 Global Innovation Index, a leading measure of innovation capacity at the country level, which is calculated according to 79 different indicators.14

Additionally, a high degree of correlation is observed between various measures of potential data flow at the country level and outcome measures. One measure of potential data flow is Freedom House's 2015 Freedom on the Net indicator, which measures 65 countries

Table 1: Correlation coefficients

Country correlation coefficients		Measures of potential data flows		
Country CC	orrelation coefficients	International Internet bandwidth	Freedom on the Net (inverse scale; high to low)	
Outcome mecanine	Global Innovation Index score	0.72	-0.49	
Outcome measures	2015 NRI Economic impacts pillar	0.71	-0.49	

Sources: Cornell University, INSEAD, and WIPO 2015: Freedom House 2015: ITU 2015b; World Economic Forum 2015. Note: The Freedom on the Net scores range from 0 to 100, where 0 = most free and 100 = least free. Thus a lower score (greater freedom) for a given country is correlated with higher innovation and better economic outcomes.899

on the basis of obstacles to Internet access, limits on content, and violations of user rights. When correlated with the Economic impacts pillar of the 2015 Networked Readiness Index's Impact subindex (Table 1), which serves as an outcome measure, a clear relationship is demonstrated.

### THE IMPACT OF CROSS-BORDER DATA FLOWS: FIRMS AND THE ENGINE OF ECONOMIC ACTIVITY

Cross-border data flows acutely impact the ability of firms to conduct business internationally.

In a recent report, Business Roundtable identifies at least six different areas of activity whereby firms may transmit data across national borders to support business operations. These include interconnected machinery, big data analytics, back-office consolidation, supply-chain automation, digital collaboration, and cloud scalability. 15 See Box 1.

Cross-border flows (data and voice, in particular) reduce costs related to both trade and transactions. This includes customer engagement (finding and fulfilling orders) as well as other operational costs associated with doing business. One recent report by the US ITC estimates that the Internet reduces trade costs by 26 percent on average.<sup>16</sup> Additionally, small- and mediumsized enterprises that utilize the Internet to trade on global platforms have a survival rate of 54 percent, which is 30 percent higher than that of offline businesses. Furthermore, those small- and medium-sized firms that are online are almost as likely to export as large businesses.<sup>17</sup>

At the firm level, a multitude of specific examples illustrate how the ability to transmit data internationally improves firm operations and performance. For example, Unilever, the consumer goods company with over 174,000 employees and operations across 190 countries, has developed a global enterprise data warehouse wherein it collects information from all of its operations to deliver full visibility into the entire system. The primary objective of this effort was to compile a comprehensive consumer database, enabling analysis at the most granular level possible. Additionally, aggregating information on the firm's operations helps identify areas where lowering costs and improving business performance can drive more affordable products for consumers.<sup>18</sup>

Similarly, Rio Tinto, the mining company with operations in over 40 countries across six continents, collects real-time data from its trucks and drills, which are then transmitted to its Processing Excellence Center (PEC) in Brisbane, Australia. Active monitoring and realtime adjustment of Rio Tinto's operations have already driven significant savings from operational efficiencies, with more savings certain to follow on the heels of new and emerging process innovation.<sup>19</sup>

At Cisco, the ability to transfer data across borders optimizes the company's operations. For example, the

### Box 1: Firms' uses of cross-border data flows

In a 2015 report, Business Roundtable—an industry group representing companies with \$7.2 trillion in annual revenues and 16 million employees—identified the following six mechanisms by which cross-border data flows drive business benefits to firms.

Interconnected machinery. Companies improve processes and optimize efficiency by interconnecting elements of the production chain, such as real-time monitoring of capital equipment to reduce downtime or to be able to prepare for immediate service replacements.

Big data analytics. Companies collect data gathered from various, or all, aspects of their operations across regions and apply advanced statistical analysis to be able to make better decisions, both for the business and for customer satisfaction.

Back-office consolidation. Companies centralize standard business operations to take advantage of economies of scale (e.g., human resources, accounting, payroll, support call centers, marketing, etc.) by improving buying power and eliminating overlap.

Supply-chain automation. Companies track inventory levels, process reordering automatically, and match supply and demand.

Digital collaboration. Companies increase communication and collaboration between teams.

Cloud scalability. Companies lower capital expenditure and cost structure of information technology (IT) hardware, infrastructure, software, and applications, all provided as a service, and they reduce capital investment in idle capacity, thus lowering the total cost of ownership and increasing business agility and resilience to failures.

Source: Business Roundtable 2015.

Research Triangle Park facility in Raleigh, North Carolina (Cisco's largest technical assistance center, which has more than 4,500 employees) provides around-the-clock tech support to customers 24 hours a day, 7 days a week, anywhere in the world. When customers and Cisco employees confront challenging hardware or software problems, technical experts are able to log in remotely, run diagnostic tools, and exchange data to and from one another seamlessly. This type of business activity fundamentally relies upon the free flow of data.<sup>20</sup> As the appendix to this chapter further illustrates, firms around the world innovate and optimize business outcomes by transferring data across borders. Moreover, when trade flows between businesses are curtailed, innovation may decelerate through the interruption of technology transfer or through the reduction of competition-driven development, which is why the uninhibited exchange of data is increasingly critical to productivity and growth.

30 0 (US\$ by country, normalized by population) 0 20 Value at stake 0 15 00 10 0 O 5 0 O 000 0 0 100 80 60 40 20 n Freedom on the Net score

Figure 2: Freedom on the Net as a driver of innovation, by country

Sources: Authors' calculation; Barbier et al. 2016; Freedom House 2015; IMF 2015. Note: Freedom on the Net scores range from 0 to 100, where 0 = most free, 100 = least free.

### THE IMPACT OF CROSS-BORDER DATA FLOWS: INDIVIDUALS AND ENTREPRENEURS

At the individual level, the ability to access cloud-based information provides significant benefit. Individuals are increasingly storing more of their personal information online. Cisco's Global Cloud Index estimates that, by 2019, 2 billion Internet users (or 55 percent of all consumer Internet users) will use personal cloud storage, up from 1.1 billion users in 2014. Globally, consumer cloud storage traffic per user will be 1.6 gigabytes per month by 2019, compared to 992 megabytes per month in 2014.21 Cloud-based services may be hosted in the domestic market or in other countries.

New entrepreneurs also benefit from access to infrastructure, platforms, and software from cloudbased services, which may reside in other countries. These include applications, data, middleware, operating systems, virtualization, servers, storage, and networking capabilities or equipment. Because of the ability to access these services on a pay-as-you-go model rather than committing to a large initial capital investment, the financial barriers to new business entry have fallen significantly. By one estimate, the cost for an entrepreneur to establish a business with a working prototype has fallen from around US\$2 million in the 1990s down to less than US\$50,000 and approximately six weeks of work.<sup>22</sup> Furthermore, depending on the business model, in some cases startup costswhen supported by the affordability of cloud-based infrastructure—can be as low as US\$3,000.23

### THE FREE FLOW OF DATA AND THE DIGITAL **ECONOMY VALUE AT STAKE**

Cisco's data analysis demonstrates that the free flow of data enables people and things to connect, which can improve processes and add tremendous value to any given economy. The potential bottom-line value at stake (defined as the combination of increased revenues and lower costs that is created or will migrate among companies and industries as a result of increasing the adoption of Internet technologies) is estimated to be US\$29.7 trillion over the 2015-24 period.<sup>24</sup> This includes up to US\$23.8 trillion in the private sector, where up to one-third of corporate profits may be at stake and where telecommunications service providers have an opportunity to capture US\$1.8 trillion in new economic value. Up to US\$5.9 trillion may be generated in the public sector as well. These improvements to the overall digital economy represent a potential annual GDP upside of 0.43 percent and potential employment creation of 2.7 million jobs worldwide.

Figure 2 highlights the relationship between the value at stake that can be generated by the digital economy and the Freedom on the Net score. The figure suggests that countries with higher Freedom on the Net scores are better poised to benefit from potential value at stake from digitization.

In other words, those countries and companies that have not positioned themselves in an environment that fosters open Internet practices may find innovation and economic growth hampered. Risks related to

Table 2: Examples of cross-border data flow restrictions

Restriction type	Restriction description
Local data storage	Restricts data flows by requiring specified data—often but not always personal information—to be stored on local servers. May also require specific applications or services to operate in-country, processing data locally to avoid offshore transfer.
Data protection	Restricts data flows through the application of data privacy laws with adequacy and/or consent requirements that cannot reasonably be met without local data storage.
Geolocation data privacy	Restricts data flows by preventing the collection, disclosure, transfer, or storage of geolocation data without an individual's consent.
Traffic routing	Affects data flows by requiring communications providers to route Internet traffic in a specific way.

Source: Business Roundtable 2015.

cybersecurity also slow innovation, as demonstrated by new Cisco survey research, wherein senior executives have determined that cybersecurity concerns have forced their companies to drop some mission-critical projects. Specifically, 39 percent of the 1,014 executives surveyed state that their organization has "halted a mission-critical initiative due to cybersecurity concerns." In Cisco's survey, 71 percent of all respondents somewhat or strongly agree that cybersecurity threats—both potential and actual—hinder innovation. Furthermore, 60 percent somewhat or strongly agree that cybersecurity risk dampens smart and connected product development, a critical element on the path to digitization.<sup>25</sup>

### RESTRICTIONS ON CROSS-BORDER DATA FLOWS

The Internet was architected with protocols to identify the fastest possible route to transmit packets of data between any two points. However, increasing concerns of national governments around privacy, security, and local competition have resulted in some policy and regulatory impediments. Difficulties arise when overly restrictive regulations on cross-border data flows create trade barriers and impact business models. Overly burdensome regulations can slow or prevent business transactions, which increases costs and obstructs the delivery of products to the market. Examples of these restrictions, as noted by Business Roundtable, are included in Table 2.

The number and impact of restrictions that are implemented around the world appear to be increasing. The US ITC identifies localization requirements as a barrier for 82 percent of large firms and 52 percent of small- and medium-sized enterprises in the digital communications sector. Localization mandates are the most frequently identified digital trade barrier.<sup>26</sup>

These restrictions impose significant business costs. The burden of compliance related to both cost and logistics can slow or stop business activity and

limit innovation. For example, one analysis estimates that disruptions to cross-border data flows and services trade could result in a negative impact on the European Union of up to 1.3 percent of GDP as well as a potential drop in EU manufacturing exports to the United States of up to 11 percent.<sup>27</sup> In seven different countries and regions of the world studied in one analysis, data localization requirements would also result in lower GDP.<sup>28</sup> Conversely, efforts to decrease barriers to crossborder data traffic have been shown to drive growth and, based on 2014 estimates, the removal of obstacles to the flow of data could increase GDP by 0.1 percent to 0.3 percent in the United States.29

### THE PATH FORWARD: BALANCING GROWTH, DATA FLOWS, AND NATIONAL CONCERNS

As demonstrated above, the benefits of cross-border data flows are significant. Additional empirical work needs to be done, however.<sup>30</sup> And there are still cases where national concerns over privacy, security, and local economic activity may prompt regulations to curb some flows. In those instances, we propose the following guidelines (see Box 2 for examples):

- Minimize fragmentation by ensuring that any policy actions are least-trade-restrictive to achieve legitimate public policy objectives.
- Carefully craft regulations that are as narrow in scope as possible, with clearly articulated goals.
- Coordinate globally to minimize conflicts in regulations between different jurisdictions.
- Evaluate the full costs of any proposed regulation and ensure that costs of compliance do not outweigh the quantifiable benefits.
- Adhere to trade obligations.

In sum, any limitations on cross-border data flows should address specific concrete—not merely

### Box 2: Country examples: Singapore and the **Netherlands**

Steps taken in several economies embody the spirit of the proposed guidelines, illustrating the feasibility of their implementation across national boundaries. For example, the government of Singapore has promoted data centers in an effort to attract their establishment by private or third party entities within its borders. Additionally, Singapore's Personal Data Protection Commission (PDPC) has actively engaged industry in the development of good practices in data management, including those that regard the transfer of data.<sup>2</sup> Furthermore, guidelines for industry compliance with the Personal Data Protection Act (2014) developed by the PDPC have been narrow in scope and organized by sector, and developed in consultation with industry.

While Singapore has enhanced its presence as a global leader in digital transfer by emerging as a major hub for finance and services, the Netherlands has done so by serving as a major port for traded goods as well as a hub for European data traffic. Despite taking different routes to become more connected, both economies have recognized the importance of digital flows, including those both internally and externally facing. Supporting this notion, in the March 2016 report on digital globalization, the McKinsey Global Institute (MGI) finds that global flows of goods, foreign direct investment, people, and data contribute structurally to economic growth by increasing productivity.<sup>3</sup> Assessing MGI's two most highly ranked economies in country connectedness, Singapore (1st) and the Netherlands (2nd) both also rank in the top 10 for data flow, underscoring the crucial significance of open borders for data transfer and, subsequently, global competitiveness and innovation.

### Notes

- See the Singapore, Ministry of Communications and Information website at http://www.mci.gov.sg/web/content/ infocomm-media-masterplan/preliminary-ideas/establish-agilepervasive-and-trusted-icm-infrastructure/digital-harbour.
- 2 See PDPC Singapore 2016.
- 3 Manyika et al. 2016.

theoretical-problems, be least intrusive, be minimally restrictive, and, if possible, be time-bound. In cases where market-driven forces justify fragmentation because of business-enhancing reasons, such as when intellectual property may be affected, segmentation should be driven by the market rather than by government requirements.

These actions would minimize any collateral damage done to the economy imposing restrictions, and they would ensure that the Internet continues to serve as a driver of innovation, economic growth, and social development.

### **NOTES**

- 1 Wired.com 2012.
- 2 History.com Staff 2010.

- 3 Katz 2012; ITU 2015a.
- 4 Pélissié du Rausas 2011.
- 5 IMF 2015.
- 6 Cisco VNI 2015.
- 7 TeleGeography, available at https://www.telegeography.com/ research-services/global-bandwidth-research-service/.
- 8 Manyika et al. 2014.
- 9 Pélissié du Rausas 2011.
- 10 Meltzer 2014. Note that a major challenge for understanding just how potent this impact is, however, is the lack of data available.
- 11 US ITC 2014.
- 12 Lee-Makiyama 2015; UNCTAD 2009.
- 13 Manyika et al. 2016, p. 2.
- 14 Cornell University, INSEAD, and WIPO 2015.
- 15 Business Roundtable 2015.
- 16 US ITC 2014, p. 65.
- 17 Austin and Olarreaga 2012.
- 18 Castro and McQuinn 2015.
- 19 Castro and McQuinn 2015.
- 20 Moore 2015.
- 21 Cisco 2015.
- 22 Center for an Urban Future 2012; Mulas, Minges, and Applebaum
- 23 Mulas, Minges, and Applebaum 2015; Mytton 2010.
- 24 Barbier et al. 2016.
- 25 Barbier et al 2016
- 26 US ITC 2014
- 27 Bauer et al. 2013, p. 3; Castro and McQuinn 2015.
- 28 Bauer et al. 2014.
- 29 Castro and McQuinn 2015; US ITC 2014.
- 30 For example, quantifying firm-level impact of new or existing processes enabled by cross-border data flows.

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### **Appendix:**

## Examples of firm-level cross-border data flows

### **Alliance Medical**

Alliance Medical has been a pioneer in the trend of remote interpretation and diagnosis of medical images such as x-rays, ultrasounds, and magnetic resonance imaging (MRI) images. This service reduces wait times and improves the expediency of diagnoses. In addition to the efficiency cost savings, offloading these tasks also allows doctors to spend more time with patients.

### Caterpillar

Caterpillar is a global leader in the manufacture of heavy machinery and engines for use in industries from construction and mining to heavy-duty transportation. Real-time sensors in their products monitor performance data and transmit via cellular and satellite connectivity, allowing users to remotely analyze and monitor assets. This allows customers to identify underutilized machines, thus maximizing efficiency, and to make better equipment placement decisions, thus creating substantial cost savings for customers. Cross-border data flow restrictions, such as constraints on the movement of Global Positioning System (GPS) data, may limit Caterpillar's ability to offer such advanced services in certain markets.

### **Boeing**

Boeing has developed a real-time information tool, the Airplane Health Management (AHM), that gathers and transmits data in real time to maintenance crews on the ground. The data are sent across borders (while aircraft are in the air) and helps to reduce delays, midflight turn-backs, and cancellations. A single Boeing 737 engine produces up to 20 terabytes of data every hour in flight. Data are analyzed in real time, even mid-flight, to find and diagnose problems. Any issues are relayed to waiting airline maintenance personnel at the aircraft's next airport destination. The crews can then meet the aircraft with the appropriate airplane parts to make necessary repairs. This sort of intelligence aids operators in spotting trends, eliminating inefficiencies, saving money, and reducing wait times.

### General Electric (GE)

GE has embedded advanced sensors in a wide array of machinery to improve the performance of industrial equipment and machines purchased by its customers. The sensors remotely capture performance data from around the globe; these data are used to improve product reliability, safety, and efficiency. For example, in aviation, GE monitors sensor data from aircraft engines around the globe, thus optimizing engines, to help airlines anticipate maintenance issues and address them before aircraft need to be grounded, saving time and money for airlines and travelers. This sensor system saves airlines more than US\$2 billion per year worldwide because the sensor technology reduces delays and cancellations caused by aircraft maintenance needs-a capability predicated on the ability to aggregate and analyze sensor data supplied from locations to generate savings for individuals, governments, and businesses across the globe.

### MasterCard

As a global payments industry leader, MasterCard connects consumers, financial institutions, merchants, governments, and businesses through electronic payments. The company processes payment transactions initiated in more than 40 million locations in more than 210 countries and territories. Global payment services are inherently dependent on crossborder data flows because each payment transaction requires transfers of payment transaction data between the merchant, the merchant's bank, MasterCard, and the consumer's bank. MasterCard enables merchants to engage in international trade and sell goods and services to foreign travelers. Even when the merchant, the consumer, and their banks are all based in the same country, MasterCard may leverage its global operations hub to add value to the transaction and facilitate safe, efficient, and cost-effective transactions. However, some countries impose restrictions that require local processing of all electronic payment transactions. In doing so, restrictions can force the building or replication of costly infrastructure domestically; this cost may then be passed onto consumers.

### **Royal Dutch Shell**

Royal Dutch Shell has over 150,000 employees across 90 countries and is headquartered in the Netherlands. As one of the world's largest oil and gas companies, it also has a global computing footprint with three main global data centers. Shell uses these computing resources to manage and analyze the data generated by sensors in its wells, particularly from sensitive, lowpower sensors that generate high-resolution seismic data. Transmitting data to the global data centers, these sensors are able to detect resources in wells thought to have run dry.

### Tesco

Tesco is a global retailer with stores in 12 countries in Asia, Europe, and North America. The consumer goods giant processes real-time data from its electronic shelves to make national pricing changes instantly as well as to predict when products on its shelves need to be reordered, thus preventing understocking and lost revenue. These benefits are passed on to customers in the form of better service, fresher ingredients, lower prices, boosted convenience, and fully stocked shelves. Tesco also combines weather forecasts for each location, updated several times a day, to adjust deliveries and refrigeration needs to prevent food spoilage.

### Volvo

Volvo is a Swedish vehicle manufacturer employing over 115,000 people, with operations in over 190 countries. The company embeds real-time vehicle location data and diagnostic information and transmission capabilities into its vehicles and allows for their systems to alert drivers to needed repairs or software upgrades, as well as locating lost or stolen vehicles during emergencies. The company enables customers to gather data on all of their trucks for real-time monitoring, optimizing vehicle and fleet fuel efficiency.

### Walmart

Walmart is the world's largest retailer, with over 11,000 stores in 27 countries employing over 2.2 million people worldwide; it maintains e-commerce websites in 10 countries. The company tracks its performance and global operations by collecting data on all aspects of its business, centralizing data, and deploying shared services (such as human resources support with cloud-based platforms). Virtualizing support operations and back-office consolidation helps to reduce the duplication of hardware and software and to increase operating efficiency through economies of scale. Data flow restrictions can prevent such efficiency-enhancing innovations and in the long run discourage larger jobcreating investments in other areas of the business.

Sources: Business Roundtable 2015; Castro and McQuinn 2015.

# Part 2 Data Presentation

# 2.1 Country/Economy Profiles

# How to Read the Country/Economy Profiles

The Country/Economy Profiles section presents a profile for each of the 139 economies covered in The Global Information Technology Report 2016. Each profile summarizes an economy's performance in the various dimensions of the Networked Readiness Index (NRI).

### PERFORMANCE HIGHLIGHTS

The first section of the profile presents the economy's performance in the overall NRI, the four main components, and the 10 pillars. For each of these dimensions, the economy's rank (out of 139 economies) and score (on a 1-to-7 scale) are reported.

2 On the radar chart to the right of the table, a blue line plots the economy's score on each of the 10 pillars. The gray line represents the average score of all economies in the income group to which the economy under review belongs. The country classification by income group is defined by the World Bank and reflects the situation as of July 2015. Note that the two highincome groups in this classification, High income: OECD and High income: non-OECD, were merged into a single group for the purpose of the analysis.

# 3 THE NETWORKED READINESS INDEX IN

This section presents an economy's performance in each of the 53 indicators composing the NRI. The indicators are organized by pillar. The numbering of the variables matches that of the data tables in the next section of the Report, which provides descriptions, rankings, and scores for all the indicators. The indicators derived from the 2014 and 2015 editions of the World Economic Forum's Executive Opinion Survey are identified by an asterisk (\*). These indicators are always measured on a 1-to-7 scale (where 1 and 7 correspond to the worst and best possible outcomes, respectively). For more information on the Executive Opinion Survey and a detailed explanation of how scores are computed, refer to Chapter 1.3 of The Global Competitiveness Report 2015–2016, available for free on the World Economic Forum website at www.weforum.org/gcr.

For those indicators not derived from the Executive Opinion Survey, the scale is reported next to the title. The Technical Notes and Sources at the end of this



Report provide further details on each indicator, including its definition, method of computation, and sources. Note that for the sake of readability, the years were omitted. However, the year of each data point is indicated in the corresponding data table. For more information on the framework and computation of the NRI, refer to Chapter 1.1.

### THE GITR ONLINE

In complement to the analysis presented in this Report, the GITR's portal—available at www.weforum.org/gitr offers additional analysis and a number of analytical tools and visualizations, including sortable rankings and maps. The portal also offers the option of downloading portions of the NRI dataset.

# **Index of Countries/Economies**

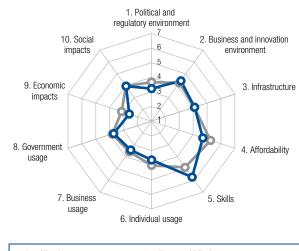
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Sweden	177
Switzerland	178
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Thailand	181
Trinidad and Tobago	182
Tunisia	183
Turkey	184
Uganda	185
Ukraine	186
United Arab Emirates	187
United Kingdom	188
United States	189
Uruguay	190
Venezuela	191
Vietnam	192
Zambia	193
Zimbabwe	194

	Rank (out of 139)	
Networked Readiness Index	84.	. ,
Networked Readiness Index 2015 (out of 143)	92.	3.7
Networked Readiness Index 2014 (out of 148)		
Networked Readiness Index 2013 (out of 144)	83.	3.8
A. Environment subindex	88.	3.8
1st pillar: Political and regulatory environment	109.	3.2
2nd pillar: Business and innovation environment	61 .	4.4
B. Readiness subindex	68.	4.8
3rd pillar: Infrastructure	75.	4.1
4th pillar: Affordability	92.	4.7
5th pillar: Skills	29.	5.7
C. Usage subindex	86.	3.6
6th pillar: Individual usage	83.	3.6
7th pillar: Business usage	93.	3.4
8th pillar: Government usage	76.	3.7
D. Impact subindex	97.	3.3
9th pillar: Economic impacts	121.	2.6
10th pillar: Social impacts	76.	4.0



-O- Albania -O- Upper-middle-income group average

## The Networked Readiness Index in detail

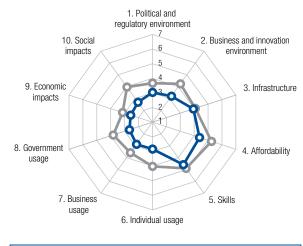
	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*58
1.02	Laws relating to ICTs*1113.1
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*120 2.8
1.05	Efficiency of legal system in challenging regs*1082.9
1.06	Intellectual property protection*1103.2
1.07	Software piracy rate, % software installed7675
1.08	No. procedures to enforce a contract8939
1.09	No. days to enforce a contract66525
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*1153.9
2.02	Venture capital availability*
2.03	Total tax rate, % profits
2.04	No. days to start a business 28 6
2.05	No. procedures to start a business
2.06	Intensity of local competition*1334.0
2.07	Tertiary education gross enrollment rate, %38 62.7
2.08	Quality of management schools*614.3
2.09	Gov't procurement of advanced tech*313.8
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita74 2401.8
3.02	Mobile network coverage, % pop49 99.8
3.03	Int'l Internet bandwidth, kb/s per user74 32.1
3.04	Secure Internet servers/million pop80 23.8
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min134 0.71
4.02	Fixed broadband Internet tariffs, PPP \$/month7 14.98
4.03	Internet & telephony competition, 0-2 (best)80 1.86
	5th pillar: Skills
5.01	Quality of education system*294.5
5.02	Quality of math & science education*284.8
5.03	Secondary education gross enrollment rate, %59 96.4
5.04	Adult literacy rate, %

	INDICATOR	RANK/139	VALUE
	6th pillar: Individual usage		
6.01	Mobile phone subscriptions/100 pop	88	105.5
6.02	Individuals using Internet, %	57	60.1
6.03	Households w/ personal computer, %	94	23.5
6.04	Households w/ Internet access, %	87	26.6
6.05	Fixed broadband Internet subs/100 pop	78	6.6
6.06	Mobile broadband subs/100 pop	84	30.9
6.07	Use of virtual social networks*	50	5.8
	7th pillar: Business usage		
7.01	Firm-level technology absorption*	112	4.1
7.02	Capacity for innovation*	103	3.6
7.03	PCT patents, applications/million pop	87	0.2
7.04	ICT use for business-to-business transaction	ons*113	4.0
7.05	Business-to-consumer Internet use*	78	4.2
7.06	Extent of staff training*	37	4.3
	8th pillar: Government usage		
8.01	Importance of ICTs to gov't vision*	75	3.9
8.02	Government Online Service Index, 0-1 (be	st)72	0.45
8.03	Gov't success in ICT promotion*	98	3.6
	9th pillar: Economic impacts		
9.01	Impact of ICTs on business models*	118	3.7
9.02	ICT PCT patents, applications/million pop.	86	0.1
9.03	Impact of ICTs on organizational models*	134	2.9
9.04	Knowledge-intensive jobs, % workforce	80	17.7
	10th pillar: Social impacts		
10.01	Impact of ICTs on access to basic services		
10.02	Internet access in schools*	45	4.8
10.03	ICT use & gov't efficiency*	78	3.8
10.04	E-Participation Index, 0-1 (best)	59	0.53

Note: Indicators followed by an asterisk (\*) are measured on a 1-to-7 (best) scale. For further details and explanation, please refer to the section "How to Read the Country/Economy Profiles" on page 53.

Rank Value

	(out of 139)	(1-7)
Networked Readiness Index	117.	.3.2
Networked Readiness Index 2015 (out of 143)	120.	3.1
Networked Readiness Index 2014 (out of 148)	129.	3.0
Networked Readiness Index 2013 (out of 144)	131 .	2.8
A. Environment subindex	131 .	3.1
1st pillar: Political and regulatory environment	123.	3.0
2nd pillar: Business and innovation environment	133.	3.2
B. Readiness subindex	95.	4.3
3rd pillar: Infrastructure	80.	3.9
4th pillar: Affordability	99.	4.4
5th pillar: Skills	89.	4.6
C. Usage subindex	125.	2.8
6th pillar: Individual usage	103.	2.8
7th pillar: Business usage	133.	2.9
8th pillar: Government usage	130.	2.7
D. Impact subindex	129.	2.6
9th pillar: Economic impacts	124.	2.6
10th pillar: Social impacts	132.	2.7



-O- Upper-middle-income group average - Algeria

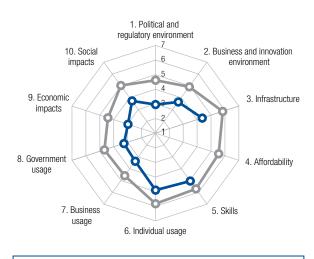
## The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*1103.0
1.02	Laws relating to ICTs*
1.03	Judicial independence*9595
1.04	Efficiency of legal system in settling disputes*85 3.4
1.05	Efficiency of legal system in challenging regs*85
1.06	Intellectual property protection*105
1.07	Software piracy rate, % software installed9685
1.08	No. procedures to enforce a contract
1.09	No. days to enforce a contract9797630
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*1293.6
2.02	Venture capital availability*
2.03	Total tax rate, % profits136 72.7
2.04	No. days to start a business
2.05	No. procedures to start a business12512
2.06	Intensity of local competition*1373.7
2.07	Tertiary education gross enrollment rate, %75 34.6
2.08	Quality of management schools*1173.4
2.09	Gov't procurement of advanced tech*923.1
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita86 1568.4
3.02	Mobile network coverage, % pop6799.0
3.03	Int'l Internet bandwidth, kb/s per user72 32.9
3.04	Secure Internet servers/million pop
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min79 0.28
4.02	Fixed broadband Internet tariffs, PPP \$/month 101 49.98
4.03	Internet & telephony competition, 0–2 (best) 105 1.33
	5th pillar: Skills
5.01	Quality of education system*913.3
5.02	Quality of math & science education*1053.3
5.03	Secondary education gross enrollment rate, $\%4299.9$
5.04	Adult literacy rate, %8480.2

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop105 92.9
6.02	Individuals using Internet, %106 18.1
6.03	Households w/ personal computer, %89 28.2
6.04	Households w/ Internet access, %8925.9
6.05	Fixed broadband Internet subs/100 pop894.0
6.06	Mobile broadband subs/100 pop98 20.8
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop890.2
7.04	ICT use for business-to-business transactions*132 3.6
7.05	Business-to-consumer Internet use*1283.3
7.06	Extent of staff training*1263.3
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*1193.1
8.02	Government Online Service Index, 0-1 (best)130 0.08
8.03	Gov't success in ICT promotion*1153.4
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*126
9.02	ICT PCT patents, applications/million pop95 0.0
9.03	Impact of ICTs on organizational models*133 2.9
9.04	Knowledge-intensive jobs, % workforce81 17.6
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*1243.2
10.02	Internet access in schools*1282.8
10.03	ICT use & gov't efficiency*1163.3
10.04	E-Participation Index, 0-1 (best)132 0.08

Note: Indicators followed by an asterisk (\*) are measured on a 1-to-7 (best) scale. For further details and explanation, please refer to the section "How to Read the Country/Economy Profiles" on page 53.

	Rank (out of 139)	• α.α.ο
Networked Readiness Index	89.	. 3.8
Networked Readiness Index 2015 (out of 143)	91.	3.7
Networked Readiness Index 2014 (out of 148)	100.	3.5
Networked Readiness Index 2013 (out of 144)	99.	3.5
A. Environment subindex	124.	3.3
1st pillar: Political and regulatory environment	127.	3.0
2nd pillar: Business and innovation environment	115.	3.6
B. Readiness subindex	78.	4.7
3rd pillar: Infrastructure	66.	4.3
4th pillar: Affordability	n/a.	n/a
5th pillar: Skills	71.	5.0
C. Usage subindex	73.	3.8
6th pillar: Individual usage	53.	4.9
7th pillar: Business usage	103.	3.4
8th pillar: Government usage	111.	3.3
D. Impact subindex	92.	3.4
9th pillar: Economic impacts	87.	3.0
10th pillar: Social impacts	88.	3.7



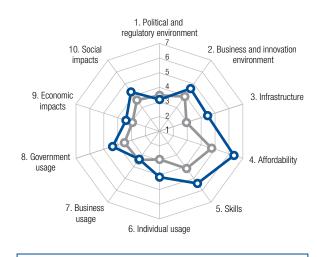
- Argentina - High-income group average

## The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*1322.3
1.02	Laws relating to ICTs*1143.0
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*1282.7
1.05	Efficiency of legal system in challenging regs*1332.3
1.06	Intellectual property protection*1243.0
1.07	Software piracy rate, % software installed6769
1.08	No. procedures to enforce a contract5836
1.09	No. days to enforce a contract84 590
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*126
2.02	Venture capital availability*126
2.03	Total tax rate, % profits
2.04	No. days to start a business106
2.05	No. procedures to start a business13514
2.06	Intensity of local competition*1234.3
2.07	Tertiary education gross enrollment rate, %1580.0
2.08	Quality of management schools*354.8
2.09	Gov't procurement of advanced tech*1342.5
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita61 3271.7
3.02	Mobile network coverage, % pop109 94.1
3.03	Int'l Internet bandwidth, kb/s per user56 48.1
3.04	Secure Internet servers/million pop
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/minn/an/a
4.02	Fixed broadband Internet tariffs, PPP \$/month.n/an/a
4.03	Internet & telephony competition, 0–2 (best)1 2.00
	5th pillar: Skills
5.01	Quality of education system*1083.1
5.02	Quality of math & science education*1133.1
5.03	Secondary education gross enrollment rate, %28 106.3
5.04	Adult literacy rate, %

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop13 158.8
6.02	Individuals using Internet, %48 64.7
6.03	Households w/ personal computer, %55 62.1
6.04	Households w/ Internet access, %6152.0
6.05	Fixed broadband Internet subs/100 pop52 15.6
6.06	Mobile broadband subs/100 pop53 53.6
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption* 115 4.0
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop70 1.2
7.04	ICT use for business-to-business transactions*120 3.9
7.05	Business-to-consumer Internet use*
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*1372.6
8.02	Government Online Service Index, 0-1 (best)55 0.55
8.03	Gov't success in ICT promotion*1332.9
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*1253.6
9.02	ICT PCT patents, applications/million pop73 0.2
9.03	Impact of ICTs on organizational models*853.8
9.04	Knowledge-intensive jobs, % workforce60 23.9
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*109 3.5
10.02	Internet access in schools*
10.03	ICT use & gov't efficiency*126
10.04	E-Participation Index, 0-1 (best)54 0.55

	(out of 139) (1-7)
Networked Readiness Index	564.3
Networked Readiness Index 2015 (out of 143)	584.2
Networked Readiness Index 2014 (out of 148)	65 4.0
Networked Readiness Index 2013 (out of 144)	823.8
A. Environment subindex	783.9
1st pillar: Political and regulatory environment	1163.2
2nd pillar: Business and innovation environment	504.6
B. Readiness subindex	43 5.4
3rd pillar: Infrastructure	61 4.4
4th pillar: Affordability	18 6.3
5th pillar: Skills	51 5.4
C. Usage subindex	65 4.0
6th pillar: Individual usage	69 4.1
7th pillar: Business usage	101 3.4
8th pillar: Government usage	464.4
D. Impact subindex	54 3.9
9th pillar: Economic impacts	563.4
10th pillar: Social impacts	56 4.3



- Armenia -O- Lower-middle-income group average

## The Networked Readiness Index in detail

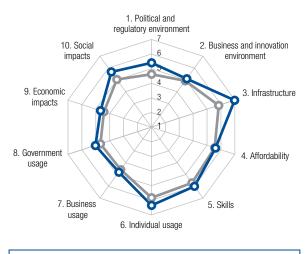
	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*98
1.02	Laws relating to ICTs*504.2
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*89 3.3
1.05	Efficiency of legal system in challenging regs*115 2.8
1.06	Intellectual property protection*933.5
1.07	Software piracy rate, % software installed9986
1.08	No. procedures to enforce a contract
1.09	No. days to enforce a contract75570
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*874.4
2.02	Venture capital availability*9092.5
2.03	Total tax rate, % profits
2.04	No. days to start a business9
2.05	No. procedures to start a business2
2.06	Intensity of local competition*854.8
2.07	Tertiary education gross enrollment rate, %58 46.6
2.08	Quality of management schools*1153.4
2.09	Gov't procurement of advanced tech*1082.8
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita70 2576.7
3.02	Mobile network coverage, % pop 1 100.0
3.03	Int'l Internet bandwidth, kb/s per user58 44.5
3.04	Secure Internet servers/million pop70 40.9
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min56 0.22
4.02	Fixed broadband Internet tariffs, PPP \$/month24 21.04
4.03	Internet & telephony competition, 0–2 (best)1 2.00
	5th pillar: Skills
5.01	Quality of education system*843.5
5.02	Quality of math & science education*474.4
5.03	Secondary education gross enrollment rate, %58 96.6
5.04	Adult literacy rate, %

	INDICATOR RANK/139	VALUE
	6th pillar: Individual usage	
6.01	Mobile phone subscriptions/100 pop64	. 115.9
6.02	Individuals using Internet, %75	46.3
6.03	Households w/ personal computer, %68	51.5
6.04	Households w/ Internet access, %70	46.6
6.05	Fixed broadband Internet subs/100 pop72	9.1
6.06	Mobile broadband subs/100 pop77	34.2
6.07	Use of virtual social networks*59	5.7
	7th pillar: Business usage	
7.01	Firm-level technology absorption*113	4.1
7.02	Capacity for innovation*87	3.8
7.03	PCT patents, applications/million pop56	2.8
7.04	ICT use for business-to-business transactions*70	4.7
7.05		
7.06	Extent of staff training*116	3.4
	8th pillar: Government usage	
8.01	Importance of ICTs to gov't vision*54	4.1
8.02	Government Online Service Index, 0-1 (best)43	0.61
8.03	Gov't success in ICT promotion*50	4.3
	9th pillar: Economic impacts	
9.01	Impact of ICTs on business models*62	4.5
9.02	ICT PCT patents, applications/million pop66	0.4
9.03	Impact of ICTs on organizational models*61	4.3
9.04	Knowledge-intensive jobs, % workforce50	26.9
	10th pillar: Social impacts	
10.01	Impact of ICTs on access to basic services*63	4.3
10.02	2 Internet access in schools*70	4.2
10.03	B ICT use & gov't efficiency*40	4.5
10.04	E-Participation Index, 0-1 (best)59	0.53

# Australia

	Rank (out of 139)	
Networked Readiness Index	18.	.5.5
Networked Readiness Index 2015 (out of 143)	16.	5.5
Networked Readiness Index 2014 (out of 148)	18.	5.4
Networked Readiness Index 2013 (out of 144)	18.	5.3
A. Environment subindex	16.	5.2
1st pillar: Political and regulatory environment	13.	5.4
2nd pillar: Business and innovation environment	23.	5.1
B. Readiness subindex	10.	6.2
3rd pillar: Infrastructure	7.	7.0
4th pillar: Affordability	57.	5.6
5th pillar: Skills	13.	6.0
C. Usage subindex	22.	5.4
6th pillar: Individual usage	13.	6.3
7th pillar: Business usage	24.	4.8
8th pillar: Government usage	22.	5.0
D. Impact subindex	21 .	5.2
9th pillar: Economic impacts	23.	4.7

10th pillar: Social impacts......9.....5.7



- Australia - High-income group average

#### The Networked Readiness Index in detail

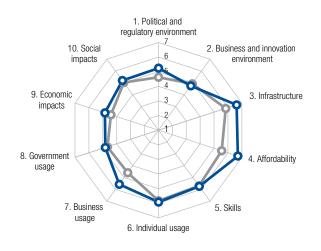
	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*
1.02	Laws relating to ICTs*
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*224.9
1.05	Efficiency of legal system in challenging regs*23 4.7
1.06	Intellectual property protection*135.8
1.07	Software piracy rate, % software installed5 21
1.08	No. procedures to enforce a contract1228
1.09	No. days to enforce a contract23395
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*24
2.02	Venture capital availability*403.1
2.03	Total tax rate, % profits
2.04	No. days to start a business6
2.05	No. procedures to start a business11
2.06	Intensity of local competition*99
2.07	Tertiary education gross enrollment rate, %6 86.6
2.08	Quality of management schools*19
2.09	Gov't procurement of advanced tech*703.3
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita11 . 10765.5
3.02	Mobile network coverage, % pop67 99.0
3.03	Int'l Internet bandwidth, kb/s per user38 75.1
3.04	Secure Internet servers/million pop14 1348.6
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min19 0.10
4.02	Fixed broadband Internet tariffs, PPP \$/month 100 46.70
4.03	Internet & telephony competition, 0-2 (best)1 2.00
	5th pillar: Skills
5.01	Quality of education system*135.1
5.02	Quality of math & science education*274.8
5.03	Secondary education gross enrollment rate, %3 137.6
5.04	Adult literacy rate, %n/an/a <sup>1</sup>

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop43 131.2
6.02	Individuals using Internet, %1984.6
6.03	Households w/ personal computer, %17 85.6
6.04	Households w/ Internet access, %1786.9
6.05	Fixed broadband Internet subs/100 pop25 27.7
6.06	Mobile broadband subs/100 pop10 112.2
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*
7.02	Capacity for innovation*254.8
7.03	PCT patents, applications/million pop22 76.4
7.04	ICT use for business-to-business transactions*26 5.5
7.05	Business-to-consumer Internet use*
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*474.3
8.02	Government Online Service Index, 0-1 (best)8 0.93
8.03	Gov't success in ICT promotion*
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*414.9
9.02	ICT PCT patents, applications/million pop20 24.0
9.03	Impact of ICTs on organizational models*255.0
9.04	Knowledge-intensive jobs, % workforce13 44.9
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*27 5.4
10.02	Internet access in schools*666
10.03	ICT use & gov't efficiency*
10.04	E-Participation Index, 0-1 (best)7 0.94

Note: Indicators followed by an asterisk (\*) are measured on a 1-to-7 (best) scale. For further details and explanation, please refer to the section "How to Read the Country/Economy Profiles" on page 53.

<sup>1</sup> See the "Technical Notes and Sources" section.

	(out of 139)	(1-7)
Networked Readiness Index	20.	.5.4
Networked Readiness Index 2015 (out of 143)	20.	5.4
Networked Readiness Index 2014 (out of 148)	22.	5.3
Networked Readiness Index 2013 (out of 144)	19.	5.2
A. Environment subindex	25.	5.0
1st pillar: Political and regulatory environment	19.	5.2
2nd pillar: Business and innovation environment	40.	4.7
B. Readiness subindex	6.	6.3
3rd pillar: Infrastructure	13.	6.6
4th pillar: Affordability	5.	6.7
5th pillar: Skills	28.	5.7
C. Usage subindex	21 .	5.4
6th pillar: Individual usage	27.	5.9
7th pillar: Business usage	10.	5.6
8th pillar: Government usage	28.	4.8
D. Impact subindex	24.	5.0
9th pillar: Economic impacts	21.	4.9
10th pillar: Social impacts	29.	5.2



- Austria -O- High-income group average

## The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*4242
1.02	Laws relating to ICTs*19
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*21 5.0
1.05	Efficiency of legal system in challenging regs*20 4.7
1.06	Intellectual property protection*19
1.07	Software piracy rate, % software installed6
1.08	No. procedures to enforce a contract4
1.09	No. days to enforce a contract26397
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*19 6.1
2.02	Venture capital availability*58
2.03	Total tax rate, % profits
2.04	No. days to start a business10422
2.05	No. procedures to start a business928
2.06	Intensity of local competition*15
2.07	Tertiary education gross enrollment rate, %14 80.0
2.08	Quality of management schools*
2.09	Gov't procurement of advanced tech*66
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita26 7611.3
3.02	Mobile network coverage, % pop67 99.0
3.03	Int'l Internet bandwidth, kb/s per user36 79.6
3.04	Secure Internet servers/million pop
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min14 0.08
4.02	Fixed broadband Internet tariffs, PPP \$/month30 22.93
4.03	Internet & telephony competition, 0–2 (best)1 2.00
	5th pillar: Skills
5.01	Quality of education system*374.3
5.02	Quality of math & science education*374.6
5.03	Secondary education gross enrollment rate, %50 99.3
5.04	Adult literacy rate, %n/an/a

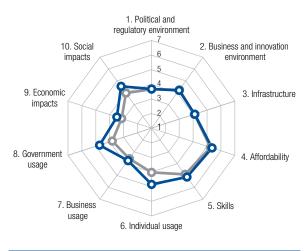
	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop18 151.9
6.02	Individuals using Internet, %
6.03	Households w/ personal computer, %21 83.7
6.04	Households w/ Internet access, %2681.0
6.05	Fixed broadband Internet subs/100 pop24 27.7
6.06	Mobile broadband subs/100 pop32 67.2
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop11 169.0
7.04	ICT use for business-to-business transactions*15 5.7
7.05	Business-to-consumer Internet use*
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*414.4
8.02	Government Online Service Index, 0–1 (best)23 0.75
8.03	Gov't success in ICT promotion*
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*25
9.02	ICT PCT patents, applications/million pop13 37.3
9.03	Impact of ICTs on organizational models*32 4.7
9.04	Knowledge-intensive jobs, % workforce22 40.4
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*9 5.9
10.02	Internet access in schools*
10.03	ICT use & gov't efficiency*
10.04	E-Participation Index, 0–1 (best)
Note:	Indicators followed by an asterisk (*) are measured on a 1-to-7 (best) scale. For

Note: Indicators followed by an asterisk (\*) are measured on a 1-to-7 (best) scale. For further details and explanation, please refer to the section "How to Read the Country/Economy Profiles" on page 53.

<sup>1</sup> See the "Technical Notes and Sources" section.

# Azerbaijan

	Rank (out of 139)	Value (1–7)
Networked Readiness Index	53.	.4.3
Networked Readiness Index 2015 (out of 143)	57.	4.3
Networked Readiness Index 2014 (out of 148)	49.	4.3
Networked Readiness Index 2013 (out of 144)		
A. Environment subindex	74.	3.9
1st pillar: Political and regulatory environment	79.	3.7
2nd pillar: Business and innovation environment	74.	4.2
B. Readiness subindex	67.	4.8
3rd pillar: Infrastructure	74.	4.1
4th pillar: Affordability	71.	5.3
5th pillar: Skills	68.	5.1
C. Usage subindex	41 .	4.4
6th pillar: Individual usage	56.	4.8
7th pillar: Business usage	58.	3.7
8th pillar: Government usage	35.	4.7
D. Impact subindex	46.	4.0
9th pillar: Economic impacts	50.	3.5
10th nillar: Social impacts		



- Azerbaijan -O- Upper-middle-income group average

## The Networked Readiness Index in detail

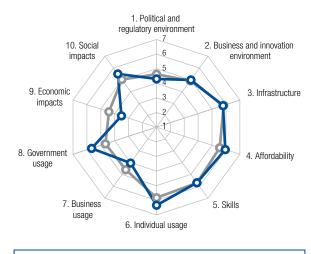
	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*76
1.02	Laws relating to ICTs*245.0
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*63 3.8
1.05	Efficiency of legal system in challenging regs*623.5
1.06	Intellectual property protection*923.5
1.07	Software piracy rate, % software installed9685
1.08	No. procedures to enforce a contract9494
1.09	No. days to enforce a contract6 277
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*54
2.02	Venture capital availability*
2.03	Total tax rate, % profits
2.04	No. days to start a business9
2.05	No. procedures to start a business
2.06	Intensity of local competition*1204.3
2.07	Tertiary education gross enrollment rate, %90 23.2
2.08	Quality of management schools*1213.3
2.09	Gov't procurement of advanced tech*12124.2
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita71 2480.0
3.02	Mobile network coverage, % pop1 100.0
3.03	Int'l Internet bandwidth, kb/s per user73 32.2
3.04	Secure Internet servers/million pop 88 13.5
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min100 0.35
4.02	Fixed broadband Internet tariffs, PPP \$/month49 28.34
4.03	Internet & telephony competition, 0-2 (best)92 1.73
	5th pillar: Skills
5.01	Quality of education system*107
5.02	Quality of math & science education*1043.3
5.03	Secondary education gross enrollment rate, %32 102.8
5.04	Adult literacy rate, %

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop77 110.9
6.02	Individuals using Internet, %5461.0
6.03	Households w/ personal computer, %6751.7
6.04	Households w/ Internet access, %5954.6
6.05	Fixed broadband Internet subs/100 pop45 19.9
6.06	Mobile broadband subs/100 pop41 61.5
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*
7.02	Capacity for innovation*534.1
7.03	PCT patents, applications/million pop79
7.04	ICT use for business-to-business transactions*38 5.2
7.05	Business-to-consumer Internet use*
7.06	Extent of staff training*903.7
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*
8.02	Government Online Service Index, 0–1 (best)75 0.43
8.03	Gov't success in ICT promotion*
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*454.8
9.02	ICT PCT patents, applications/million pop80 0.1
9.03	Impact of ICTs on organizational models*30 4.8
9.04	Knowledge-intensive jobs, % workforce62 23.4
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*42 4.9
10.02	Internet access in schools*
10.03	ICT use & gov't efficiency*
10.04	E-Participation Index, 0–1 (best)75 0.43

## Bahrain

Rank (out of 139) (1-7)

#### Networked Readiness Index......28..5.1 A. Environment subindex......35.....4.6 B. Readiness subindex .......26 ..... 26 ..... 5.8 C. Usage subindex......24..... 5.3



-O- Bahrain - High-income group average

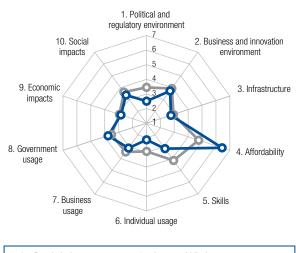
#### The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE		
	1st pillar: Political and regulatory environment		
1.01	Effectiveness of law-making bodies*27		
1.02	Laws relating to ICTs*		
1.03	Judicial independence*		
1.04	Efficiency of legal system in settling disputes*33 4.5		
1.05	Efficiency of legal system in challenging regs*284.4		
1.06	Intellectual property protection*314.8		
1.07	Software piracy rate, % software installed4353		
1.08	No. procedures to enforce a contract		
1.09	No. days to enforce a contract98 635		
	2nd pillar: Business and innovation environment		
2.01	Availability of latest technologies*29		
2.02	Venture capital availability*		
2.03	Total tax rate, % profits4 13.5		
2.04	No. days to start a business9		
2.05	No. procedures to start a business747		
2.06	Intensity of local competition*475.3		
2.07	Tertiary education gross enrollment rate, %72 36.8		
2.08	Quality of management schools*434.6		
2.09	Gov't procurement of advanced tech*		
	3rd pillar: Infrastructure		
3.01	Electricity production, kWh/capita3 . 19205.2		
3.02	Mobile network coverage, % pop 100.0		
3.03	Int'l Internet bandwidth, kb/s per user52 49.1		
3.04	Secure Internet servers/million pop43 177.0		
	4th pillar: Affordability		
4.01	Prepaid mobile cellular tariffs, PPP \$/min38 0.15		
4.02	Fixed broadband Internet tariffs, PPP \$/month69 34.08		
4.03	Internet & telephony competition, 0–2 (best)69 1.90		
	5th pillar: Skills		
5.01	Quality of education system*264.6		
5.02	Quality of math & science education*424.6		
5.03	Secondary education gross enrollment rate, %48 99.4		
5.04	Adult literacy rate, %		

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop5 173.3
6.02	Individuals using Internet, %10 91.0
6.03	Households w/ personal computer, %
6.04	Households w/ Internet access, %25 81.0
6.05	Fixed broadband Internet subs/100 pop42 21.4
6.06	Mobile broadband subs/100 pop4 126.2
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop55
7.04	ICT use for business-to-business transactions*31 5.4
7.05	Business-to-consumer Internet use*
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*99
8.02	Government Online Service Index, 0-1 (best)7 0.94
8.03	Gov't success in ICT promotion*12
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*
9.02	ICT PCT patents, applications/million pop76 0.2
9.03	Impact of ICTs on organizational models*37 4.6
9.04	Knowledge-intensive jobs, % workforcen/an/a
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*26 5.4
10.02	Internet access in schools*345.3
10.03	ICT use & gov't efficiency*105.4
10.04	E-Participation Index, 0-1 (best)

# Bangladesh

	Rank (out of 139)	• α.α.ο
Networked Readiness Index	112.	. 3.3
Networked Readiness Index 2015 (out of 143)	109.	3.3
Networked Readiness Index 2014 (out of 148)	119.	3.2
Networked Readiness Index 2013 (out of 144)	114.	3.2
A. Environment subindex	130.	3.1
1st pillar: Political and regulatory environment	137.	2.5
2nd pillar: Business and innovation environment	107.	3.7
B. Readiness subindex	98.	4.1
3rd pillar: Infrastructure	107.	2.8
4th pillar: Affordability	14.	6.4
5th pillar: Skills	122.	3.1
C. Usage subindex	111.	3.0
6th pillar: Individual usage	121.	2.1
7th pillar: Business usage	119.	3.1
8th pillar: Government usage	72.	3.8
D. Impact subindex	107.	3.1
9th pillar: Economic impacts	104.	2.8
10th pillar: Social impacts	108.	3.4



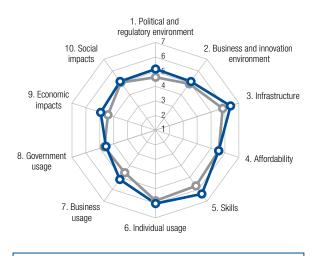
-O- Bangladesh -O- Lower-middle-income group average

## The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*
1.02	Laws relating to ICTs*1183.0
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*130 2.6
1.05	Efficiency of legal system in challenging regs*117 2.7
1.06	Intellectual property protection*1342.6
1.07	Software piracy rate, % software installed10087
1.08	No. procedures to enforce a contract10841
1.09	No. days to enforce a contract138 1442
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*1064.0
2.02	Venture capital availability*122
2.03	Total tax rate, % profits44 31.6
2.04	No. days to start a business
2.05	No. procedures to start a business
2.06	Intensity of local competition*755.0
2.07	Tertiary education gross enrollment rate, %107 13.4
2.08	Quality of management schools*1053.7
2.09	Gov't procurement of advanced tech*1292.6
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita116 337.5
3.02	Mobile network coverage, % pop67 99.0
3.03	Int'l Internet bandwidth, kb/s per user1106.6
3.04	Secure Internet servers/million pop
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min3 0.04
4.02	Fixed broadband Internet tariffs, PPP \$/month4 12.77
4.03	Internet & telephony competition, 0–2 (best) 105 1.33
	5th pillar: Skills
5.01	Quality of education system*8787
5.02	Quality of math & science education*1063.3
5.03	Secondary education gross enrollment rate, %112 58.3
5.04	Adult literacy rate, %

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop116 80.0
6.02	Individuals using Internet, %1269.6
6.03	Households w/ personal computer, %124 6.9
6.04	Households w/ Internet access, %119 6.5
6.05	Fixed broadband Internet subs/100 pop992.0
6.06	Mobile broadband subs/100 pop107 13.4
6.07	Use of virtual social networks*118 4.8
	7th pillar: Business usage
7.01	Firm-level technology absorption*108 4.1
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop112 0.0
7.04	ICT use for business-to-business transactions*124 3.8
7.05	Business-to-consumer Internet use*
7.06	Extent of staff training*1293.2
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*56 4.1
8.02	Government Online Service Index, 0-1 (best)90 0.35
8.03	Gov't success in ICT promotion*
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*116
9.02	ICT PCT patents, applications/million pop100 0.0
9.03	Impact of ICTs on organizational models*106 3.5
9.04	Knowledge-intensive jobs, % workforce71 20.0
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*110 3.5
10.02	Internet access in schools* 121 3.2
10.03	ICT use & gov't efficiency*983.5
10.04	E-Participation Index, 0-1 (best)81 0.39

	(out of 139)	(1-7)
Networked Readiness Index	23.	.5.4
Networked Readiness Index 2015 (out of 143)	24.	5.3
Networked Readiness Index 2014 (out of 148)	27.	5.1
Networked Readiness Index 2013 (out of 144)	24	5.1
A. Environment subindex	22.	5.1
1st pillar: Political and regulatory environment	20.	5.2
2nd pillar: Business and innovation environment	22.	5.1
B. Readiness subindex	17	6.1
3rd pillar: Infrastructure	19.	6.4
4th pillar: Affordability	62.	5.5
5th pillar: Skills	4.	6.4
C. Usage subindex	27 .	5.2
6th pillar: Individual usage	22.	6.0
7th pillar: Business usage	17.	5.2
8th pillar: Government usage	42.	4.6
D. Impact subindex	23.	5.0
9th pillar: Economic impacts	19.	4.9
10th pillar: Social impacts	31 .	5.1



-O- High-income group average -O- Belgium

## The Networked Readiness Index in detail

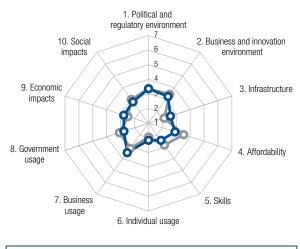
	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*
1.02	Laws relating to ICTs*
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*34 4.5
1.05	Efficiency of legal system in challenging regs*224.7
1.06	Intellectual property protection*18
1.07	Software piracy rate, % software installed9 24
1.08	No. procedures to enforce a contract
1.09	No. days to enforce a contract54 505
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*15
2.02	Venture capital availability*
2.03	Total tax rate, % profits
2.04	No. days to start a business4
2.05	No. procedures to start a business113
2.06	Intensity of local competition*66
2.07	Tertiary education gross enrollment rate, %24 72.3
2.08	Quality of management schools*2 6.0
2.09	Gov't procurement of advanced tech*
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita29 7342.8
3.02	Mobile network coverage, % pop37 99.9
3.03	Int'l Internet bandwidth, kb/s per user11 263.9
3.04	Secure Internet servers/million pop21 854.2
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min92 0.32
4.02	Fixed broadband Internet tariffs, PPP \$/month59 30.41
4.03	Internet & telephony competition, 0–2 (best)1 2.00
	5th pillar: Skills
5.01	Quality of education system*55.5
5.02	Quality of math & science education*3 6.0
5.03	Secondary education gross enrollment rate, %1 163.1
5.04	Adult literacy rate, %n/an/a

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop69 114.3
6.02	Individuals using Internet, %18 85.0
6.03	Households w/ personal computer, %20 83.8
6.04	Households w/ Internet access, %22 82.8
6.05	Fixed broadband Internet subs/100 pop8 36.0
6.06	Mobile broadband subs/100 pop48 57.8
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop16 107.0
7.04	ICT use for business-to-business transactions*18 5.7
7.05	Business-to-consumer Internet use*305.3
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*52
8.02	Government Online Service Index, 0-1 (best)31 0.68
8.03	Gov't success in ICT promotion*464.4
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*205.4
9.02	ICT PCT patents, applications/million pop1928.3
9.03	Impact of ICTs on organizational models*22 5.1
9.04	Knowledge-intensive jobs, % workforce10 46.2
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*18 5.7
10.02	Internet access in schools*
10.03	ICT use & gov't efficiency*504.4
10.04	E-Participation Index, 0–1 (best)
Note:	Indicators followed by an asterisk (*) are measured on a 1-to-7 (best) scale. For further details and explanation, please refer to the section "How to Read the

Country/Economy Profiles" on page 53.

1 See the "Technical Notes and Sources" section.

	Rank (out of 139)	
Networked Readiness Index	128.	. 2.9
Networked Readiness Index 2015 (out of 143)	n/a.	n/a
Networked Readiness Index 2014 (out of 148)	135.	2.8
Networked Readiness Index 2013 (out of 144)	123.	3.0
A. Environment subindex	123.	3.3
1st pillar: Political and regulatory environment	99.	3.4
2nd pillar: Business and innovation environment	130.	3.3
B. Readiness subindex	128.	2.6
3rd pillar: Infrastructure	116.	2.6
4th pillar: Affordability	126.	2.9
5th pillar: Skills	133.	2.4
C. Usage subindex	122.	2.8
6th pillar: Individual usage	119.	2.2
7th pillar: Business usage	84.	3.5
8th pillar: Government usage	127.	2.8
D. Immont subjectory	100	0.0



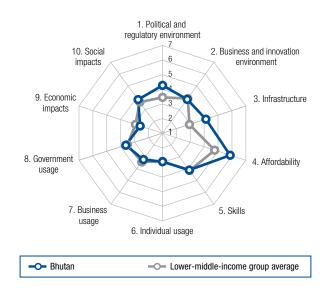
- Benin - Low-income group average

## The Networked Readiness Index in detail

1st pillar: Political and regulatory environment         1.01 Effectiveness of law-making bodies*
1.02       Laws relating to ICTs*       130       2.5         1.03       Judicial independence*       87       3.5         1.04       Efficiency of legal system in settling disputes*       100       3.2         1.05       Efficiency of legal system in challenging regs*       89       3.2         1.06       Intellectual property protection*       78       3.8         1.07       Software piracy rate, % software installed       n/a       n/a         1.08       No. procedures to enforce a contract       108       41         1.09       No. days to enforce a contract       112       750         2nd pillar: Business and innovation environment         2.01       Availability of latest technologies*       132       3.5         2.02       Venture capital availability*       114       2.2         2.03       Total tax rate, % profits       125       63.3         2.04       No. days to start a business       72       12         2.05       No. procedures to start a business       74       7         2.06       Intensity of local competition*       81       4.9         2.07       Tertiary education gross enrollment rate, %       105       15.4         2.08       Quality
1.03       Judicial independence*       87       3.5         1.04       Efficiency of legal system in settling disputes*       100       3.2         1.05       Efficiency of legal system in challenging regs*       89       3.2         1.06       Intellectual property protection*       78       3.8         1.07       Software piracy rate, % software installed       n/a       n/a         1.08       No. procedures to enforce a contract       108       41         1.09       No. days to enforce a contract       112       750         2nd pillar: Business and innovation environment         2.01       Availability of latest technologies*       132       3.5         2.02       Venture capital availability*       114       2.2         2.03       Total tax rate, % profits       125       63.3         2.04       No. days to start a business       72       12         2.05       No. procedures to start a business       74       7         2.06       Intensity of local competition*       81       4.9         2.07       Tertiary education gross enrollment rate, %       105       15.4         2.08       Quality of management schools*       119       3.3         2.09
1.04       Efficiency of legal system in settling disputes* 100
1.05       Efficiency of legal system in challenging regs*89
1.06       Intellectual property protection*       .78       3.8         1.07       Software piracy rate, % software installed
1.07       Software piracy rate, % software installed      n/a      n/a         1.08       No. procedures to enforce a contract
1.08       No. procedures to enforce a contract       108       41         1.09       No. days to enforce a contract       112       750         2nd pillar: Business and innovation environment         2.01       Availability of latest technologies*       132       3.5         2.02       Venture capital availability*       114       2.2         2.03       Total tax rate, % profits       125       63.3         2.04       No. days to start a business       72       12         2.05       No. procedures to start a business       74       7         2.06       Intensity of local competition*       81       4.9         2.07       Tertiary education gross enrollment rate, %       105       15.4         2.08       Quality of management schools*       119       3.3         2.09       Gov't procurement of advanced tech*       111       2.8
2.09 No. days to enforce a contract       112       .750         2nd pillar: Business and innovation environment         2.01 Availability of latest technologies*       132       3.5         2.02 Venture capital availability*       114       2.2         2.03 Total tax rate, % profits       125       63.3         2.04 No. days to start a business       72       12         2.05 No. procedures to start a business       74       7         2.06 Intensity of local competition*       81       4.9         2.07 Tertiary education gross enrollment rate, %       105       15.4         2.08 Quality of management schools*       119       3.3         2.09 Gov't procurement of advanced tech*       111       2.8
2nd pillar: Business and innovation environment           2.01         Availability of latest technologies*         132         3.5           2.02         Venture capital availability*         114         2.2           2.03         Total tax rate, % profits         125         63.3           2.04         No. days to start a business         72         12           2.05         No. procedures to start a business         74         7           2.06         Intensity of local competition*         81         4.9           2.07         Tertiary education gross enrollment rate, %         105         15.4           2.08         Quality of management schools*         119         3.3           2.09         Gov't procurement of advanced tech*         111         2.8
2.01       Availability of latest technologies*       132       3.5         2.02       Venture capital availability*       114       2.2         2.03       Total tax rate, % profits       125       63.3         2.04       No. days to start a business       72       12         2.05       No. procedures to start a business       74       7         2.06       Intensity of local competition*       81       4.9         2.07       Tertiary education gross enrollment rate, %       105       15.4         2.08       Quality of management schools*       119       3.3         2.09       Gov't procurement of advanced tech*       111       2.8
2.02       Venture capital availability*       114       2.2         2.03       Total tax rate, % profits       125       63.3         2.04       No. days to start a business       72       12         2.05       No. procedures to start a business       74       7         2.06       Intensity of local competition*       81       4.9         2.07       Tertiary education gross enrollment rate, %       105       15.4         2.08       Quality of management schools*       119       3.3         2.09       Gov't procurement of advanced tech*       111       2.8
2.03       Total tax rate, % profits       125       63.3         2.04       No. days to start a business       72       12         2.05       No. procedures to start a business       74       7         2.06       Intensity of local competition*       81       4.9         2.07       Tertiary education gross enrollment rate, %       105       15.4         2.08       Quality of management schools*       119       3.3         2.09       Gov't procurement of advanced tech*       111       2.8
2.04       No. days to start a business
2.05       No. procedures to start a business       .74       .7         2.06       Intensity of local competition*       .81       .4.9         2.07       Tertiary education gross enrollment rate, %       .105       .15.4         2.08       Quality of management schools*       .119       .3.3         2.09       Gov't procurement of advanced tech*       .111       .2.8
2.06 Intensity of local competition*
2.07 Tertiary education gross enrollment rate, %10515.4         2.08 Quality of management schools*
2.08 Quality of management schools*
2.09 Gov't procurement of advanced tech*111 2.8
<u> </u>
3rd pillar: Infrastructure
3.01 Electricity production, kWh/capita138 16.8
3.02 Mobile network coverage, % pop67 99.0
3.03 Int'l Internet bandwidth, kb/s per user130
3.04 Secure Internet servers/million pop1192.2
4th pillar: Affordability
4.01 Prepaid mobile cellular tariffs, PPP \$/min78 0.27
4.02 Fixed broadband Internet tariffs, PPP \$/month 125 113.62
4.03 Internet & telephony competition, 0-2 (best)126 0.91
5th pillar: Skills
5.01 Quality of education system*
5.02 Quality of math & science education*1093.2
5.03 Secondary education gross enrollment rate, % 116 54.4
5.04 Adult literacy rate, %

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop9699.7
6.02	Individuals using Internet, %1325.3
6.03	Households w/ personal computer, %129 4.8
6.04	Households w/ Internet access, %1333.5
6.05	Fixed broadband Internet subs/100 pop116 0.4
6.06	Mobile broadband subs/100 pop1302.8
6.07	Use of virtual social networks*122 4.7
	7th pillar: Business usage
7.01	Firm-level technology absorption* 117 4.0
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop121 0.0
7.04	ICT use for business-to-business transactions*100 4.3
7.05	Business-to-consumer Internet use*1073.8
7.06	Extent of staff training*1103.5
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*1153.2
8.02	Government Online Service Index, 0-1 (best)126 0.11
8.03	Gov't success in ICT promotion*1083.4
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*1143.8
9.02	ICT PCT patents, applications/million pop103 0.0
9.03	Impact of ICTs on organizational models*1103.5
9.04	Knowledge-intensive jobs, % workforcen/an/a
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*137 2.6
10.02	Internet access in schools*1153.3
10.03	ICT use & gov't efficiency*1183.2
10.04	E-Participation Index, 0-1 (best)119 0.18

	Rank (out of 139)	Value (1–7)
Networked Readiness Index	87.	.3.8
Networked Readiness Index 2015 (out of 143)	88.	3.7
Networked Readiness Index 2014 (out of 148)	94.	3.7
Networked Readiness Index 2013 (out of 144)	n/a.	n/a
A. Environment subindex	63.	4.1
1st pillar: Political and regulatory environment	37.	4.3
2nd pillar: Business and innovation environment	102.	3.9
B. Readiness subindex	80.	4.7
3rd pillar: Infrastructure	73.	4.1
4th pillar: Affordability	45.	5.9
5th pillar: Skills	103.	4.1
C. Usage subindex	101 .	3.3
6th pillar: Individual usage	99.	2.9
7th pillar: Business usage	111.	3.2
8th pillar: Government usage	83.	3.6
D. Impact subindex	98.	3.2
9th pillar: Economic impacts		

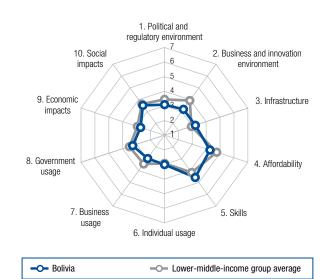


## The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*24
1.02	Laws relating to ICTs*
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*30 4.5
1.05	Efficiency of legal system in challenging regs*434.0
1.06	Intellectual property protection*54
1.07	Software piracy rate, % software installedn/an/a
1.08	No. procedures to enforce a contract
1.09	No. days to enforce a contract
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*1054.1
2.02	Venture capital availability*832.6
2.03	Total tax rate, % profits62 35.3
2.04	No. days to start a business8615
2.05	No. procedures to start a business92
2.06	Intensity of local competition*1024.6
2.07	Tertiary education gross enrollment rate, %112 10.9
2.08	Quality of management schools*983.8
2.09	Gov't procurement of advanced tech*41
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita15 . 10004.8
3.02	Mobile network coverage, % pop 1 100.0
3.03	Int'l Internet bandwidth, kb/s per user1312.5
3.04	Secure Internet servers/million pop
	4th pillar: Affordability
4.01	4th pillar: Affordability Prepaid mobile cellular tariffs, PPP \$/min36 0.14
4.01 4.02	•
	Prepaid mobile cellular tariffs, PPP \$/min36 0.14
4.02	Prepaid mobile cellular tariffs, PPP \$/min36 0.14 Fixed broadband Internet tariffs, PPP \$/month41 26.21
4.02	Prepaid mobile cellular tariffs, PPP \$/min36 0.14 Fixed broadband Internet tariffs, PPP \$/month41 26.21 Internet & telephony competition, 0–2 (best)105 1.33  5th pillar: Skills Quality of education system*
4.02 4.03	Prepaid mobile cellular tariffs, PPP \$/min36
4.02 4.03 5.01	Prepaid mobile cellular tariffs, PPP \$/min360.14  Fixed broadband Internet tariffs, PPP \$/month41 26.21  Internet & telephony competition, 0–2 (best)1051.33  5th pillar: Skills  Quality of education system*

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop112 82.1
6.02	Individuals using Internet, %9434.4
6.03	Households w/ personal computer, %95 21.9
6.04	Households w/ Internet access, %
6.05	Fixed broadband Internet subs/100 pop923.3
6.06	Mobile broadband subs/100 pop89 28.2
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption* 120 3.9
7.02	Capacity for innovation*883.8
7.03	PCT patents, applications/million pop121 0.0
7.04	ICT use for business-to-business transactions*122 3.9
7.05	Business-to-consumer Internet use*
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*454.3
8.02	Government Online Service Index, 0-1 (best)106 0.24
8.03	Gov't success in ICT promotion*
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*1193.7
9.02	ICT PCT patents, applications/million pop103 0.0
9.03	Impact of ICTs on organizational models*123 3.3
9.04	Knowledge-intensive jobs, % workforce88 14.8
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*69 4.2
10.02	Internet access in schools*923.8
10.03	ICT use & gov't efficiency*
10.04	E-Participation Index, 0–1 (best)

	Rank (out of 139)	
Networked Readiness Index	111.	.3.3
Networked Readiness Index 2015 (out of 143)	111.	3.3
Networked Readiness Index 2014 (out of 148)		
Networked Readiness Index 2013 (out of 144)	119.	3.0
A. Environment subindex	129.	3.1
1st pillar: Political and regulatory environment	119.	3.1
2nd pillar: Business and innovation environment	134.	3.2
B. Readiness subindex	102.	4.0
3rd pillar: Infrastructure	91 .	3.2
4th pillar: Affordability	103.	4.3
5th pillar: Skills	90.	4.6
C. Usage subindex	108.	3.1
6th pillar: Individual usage	97.	3.0
7th pillar: Business usage	132.	3.0
8th pillar: Government usage	108.	3.3
D. Impact subindex	106.	3.1
9th pillar: Economic impacts	113.	2.7
10th pillar: Social impacts	98.	3.5



## The Networked Readiness Index in detail

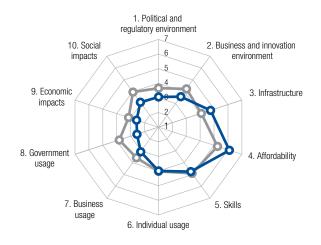
	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*903.4
1.02	Laws relating to ICTs*
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*102 3.2
1.05	Efficiency of legal system in challenging regs*1192.7
1.06	Intellectual property protection*1073.2
1.07	Software piracy rate, % software installed8279
1.08	No. procedures to enforce a contract9494
1.09	No. days to enforce a contract85 591
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*1243.8
2.02	Venture capital availability*
2.03	Total tax rate, % profits
2.04	No. days to start a business12850
2.05	No. procedures to start a business13615
2.06	Intensity of local competition*1264.3
2.07	Tertiary education gross enrollment rate, %71 38.4
2.08	Quality of management schools*1293.1
2.09	Gov't procurement of advanced tech*72
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita102 775.3
3.02	Mobile network coverage, % pop 1 100.0
3.03	Int'l Internet bandwidth, kb/s per user93 15.5
3.04	Secure Internet servers/million pop89 12.9
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min117 0.46
4.02	Fixed broadband Internet tariffs, PPP \$/month57 30.40
4.03	Internet & telephony competition, 0–2 (best) 130 0.80
	5th pillar: Skills
5.01	Quality of education system*1053.1
5.02	Quality of math & science education*1252.8
5.03	Secondary education gross enrollment rate, %86 84.7
5.04	Adult literacy rate, %

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop9996.3
6.02	Individuals using Internet, %91 39.0
6.03	Households w/ personal computer, %82 34.9
6.04	Households w/ Internet access, %10117.0
6.05	Fixed broadband Internet subs/100 pop1021.6
6.06	Mobile broadband subs/100 pop90 28.1
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*1313.7
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop101 0.1
7.04	ICT use for business-to-business transactions*130 3.7
7.05	Business-to-consumer Internet use*1303.3
7.06	Extent of staff training*1233.3
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*1033.4
8.02	Government Online Service Index, 0-1 (best)81 0.39
8.03	Gov't success in ICT promotion*1253.1
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*1153.8
9.02	ICT PCT patents, applications/million pop103 0.0
9.03	Impact of ICTs on organizational models*1073.5
9.04	Knowledge-intensive jobs, % workforce85 15.3
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*99 3.8
10.02	Internet access in schools*1073.5
10.03	ICT use & gov't efficiency*1143.4
10.04	E-Participation Index, 0-1 (best)78 0.41

# Bosnia and Herzegovina

Rank Value

	(out of 139)	(1-7)
Networked Readiness Index	97.	. 3.6
Networked Readiness Index 2015 (out of 143)	n/a.	n/a
Networked Readiness Index 2014 (out of 148)	68.	4.0
Networked Readiness Index 2013 (out of 144)	78.	3.8
A. Environment subindex	121 .	3.3
1st pillar: Political and regulatory environment	120.	3.1
2nd pillar: Business and innovation environment	120.	3.6
B. Readiness subindex	50.	5.2
3rd pillar: Infrastructure	50.	4.7
4th pillar: Affordability	32.	6.1
5th pillar: Skills	84.	4.7
C. Usage subindex	107.	3.2
6th pillar: Individual usage	73.	4.0
7th pillar: Business usage	123.	3.1
8th pillar: Government usage	133.	2.6
D. Impact subindex	121 .	2.8
9th pillar: Economic impacts	123.	2.6
10th pillar: Social impacts	119.	3.1



-O- Bosnia and Herzegovina - Upper-middle-income group average

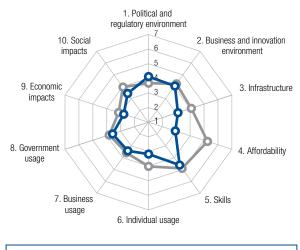
#### The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*115
1.02	Laws relating to ICTs*
1.03	Judicial independence*1102.9
1.04	Efficiency of legal system in settling disputes*127 2.7
1.05	Efficiency of legal system in challenging regs*1162.8
1.06	Intellectual property protection*1302.9
1.07	Software piracy rate, % software installed6165
1.08	No. procedures to enforce a contract6937
1.09	No. days to enforce a contract87595
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*103 4.2
2.02	Venture capital availability*106
2.03	Total tax rate, % profits2123.3
2.04	No. days to start a business
2.05	No. procedures to start a business12512
2.06	Intensity of local competition*1174.4
2.07	Tertiary education gross enrollment rate, %92 22.1
2.08	Quality of management schools*1203.3
2.09	Gov't procurement of advanced tech*1372.4
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita49 4564.1
3.02	Mobile network coverage, % pop49 99.8
3.03	Int'l Internet bandwidth, kb/s per user59 43.0
3.04	Secure Internet servers/million pop72 35.9
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min91 0.32
4.02	Fixed broadband Internet tariffs, PPP \$/month12 16.39
4.03	Internet & telephony competition, 0–2 (best)80 1.86
	5th pillar: Skills
5.01	Quality of education system*1352.4
5.02	Quality of math & science education*923.6
5.03	Secondary education gross enrollment rate, %76 89.0
5.04	Adult literacy rate, %

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop107 91.3
6.02	Individuals using Internet, %56 60.8
6.03	Households w/ personal computer, %74 45.0
6.04	Households w/ Internet access, %6550.0
6.05	Fixed broadband Internet subs/100 pop57 14.2
6.06	Mobile broadband subs/100 pop92 27.8
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*834.4
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop601.7
7.04	ICT use for business-to-business transactions*115 4.0
7.05	Business-to-consumer Internet use*994.0
7.06	Extent of staff training*1362.9
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*1362.6
8.02	Government Online Service Index, 0-1 (best)103 0.28
8.03	Gov't success in ICT promotion*1382.3
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*1223.6
9.02	ICT PCT patents, applications/million pop68 0.3
9.03	Impact of ICTs on organizational models*128 3.1
9.04	Knowledge-intensive jobs, % workforcen/an/a
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*113 3.5
10.02	Internet access in schools*833.9
10.03	ICT use & gov't efficiency*
10.04	E-Participation Index, 0–1 (best)110 0.24

## Botswana

	Rank (out of 139)	
Networked Readiness Index	,	` '
Networked Readiness Index 2015 (out of 143)		
Networked Readiness Index 2014 (out of 148)		
Networked Readiness Index 2013 (out of 144)	96.	3.5
A. Environment subindex	59.	4.1
1st pillar: Political and regulatory environment	46.	4.1
2nd pillar: Business and innovation environment	84.	4.1
B. Readiness subindex	111 .	3.5
3rd pillar: Infrastructure	95.	3.1
4th pillar: Affordability	125.	2.9
5th pillar: Skills	87.	4.6
C. Usage subindex	96.	3.4
6th pillar: Individual usage	94.	3.2
7th pillar: Business usage	96.	3.4
8th pillar: Government usage	89.	3.6
D. Impact subindex	108.	3.1
9th pillar: Economic impacts	107.	2.8
10th pillar: Social impacts	105.	3.4



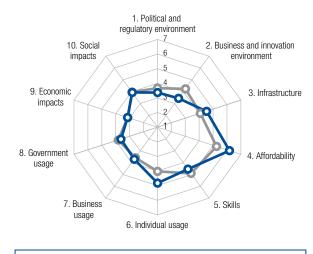
- Botswana -O- Upper-middle-income group average

#### The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*
1.02	Laws relating to ICTs*1023.3
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*32 4.5
1.05	Efficiency of legal system in challenging regs*334.2
1.06	Intellectual property protection*474.3
1.07	Software piracy rate, % software installed8279
1.08	No. procedures to enforce a contract1228
1.09	No. days to enforce a contract9696
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*98
2.02	Venture capital availability*
2.03	Total tax rate, % profits2525.1
2.04	No. days to start a business12748
2.05	No. procedures to start a business
2.06	Intensity of local competition*72
2.07	Tertiary education gross enrollment rate, %84 27.5
2.08	Quality of management schools*1123.5
2.09	Gov't procurement of advanced tech*543.5
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita113 400.2
3.02	Mobile network coverage, % pop90 98.0
3.03	Int'l Internet bandwidth, kb/s per user91 16.4
3.04	Secure Internet servers/million pop95 11.3
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min111 0.41
4.02	Fixed broadband Internet tariffs, PPP \$/month 115 73.04
4.03	Internet & telephony competition, 0-2 (best)113 1.21
	5th pillar: Skills
5.01	Quality of education system*773.6
5.02	Quality of math & science education*953.5
5.03	Secondary education gross enrollment rate, %89 83.9
5.04	Adult literacy rate, %

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop8 167.3
6.02	Individuals using Internet, %105 18.5
6.03	Households w/ personal computer, %106 14.8
6.04	Households w/ Internet access, %10912.1
6.05	Fixed broadband Internet subs/100 pop1011.6
6.06	Mobile broadband subs/100 pop58 49.7
6.07	Use of virtual social networks*95
	7th pillar: Business usage
7.01	Firm-level technology absorption*
7.02	Capacity for innovation*1023.6
7.03	PCT patents, applications/million pop9696
7.04	ICT use for business-to-business transactions*85 4.5
7.05	Business-to-consumer Internet use*1173.6
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*614.0
8.02	Government Online Service Index, 0-1 (best)98 0.31
8.03	Gov't success in ICT promotion*783.9
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*1063.9
9.02	ICT PCT patents, applications/million pop103 0.0
9.03	Impact of ICTs on organizational models*117 3.4
9.04	Knowledge-intensive jobs, % workforce78 17.9
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*101 3.7
10.02	Internet access in schools*1163.3
10.03	ICT use & gov't efficiency*813.8
10.04	E-Participation Index, 0-1 (best)98 0.31

	(out of 139)	(1-7)
Networked Readiness Index	72	.4.0
Networked Readiness Index 2015 (out of 143)	84.	3.9
Networked Readiness Index 2014 (out of 148)	69.	4.0
Networked Readiness Index 2013 (out of 144)	60.	4.0
A. Environment subindex	118.	3.4
1st pillar: Political and regulatory environment	98.	3.4
2nd pillar: Business and innovation environment	124.	3.4
B. Readiness subindex	55 .	5.1
3rd pillar: Infrastructure	58.	4.5
4th pillar: Affordability	26.	6.2
5th pillar: Skills	91 .	4.5
C. Usage subindex	57 .	4.0
6th pillar: Individual usage	57.	4.8
7th pillar: Business usage	59.	3.7
8th pillar: Government usage	84.	3.6
D. Impact subindex	79.	3.5
9th pillar: Economic impacts	75.	3.1
10th pillar: Social impacts	77 .	3.9



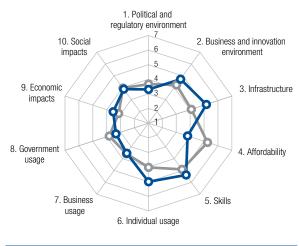
-O- Upper-middle-income group average -O- Brazil

## The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*
1.02	Laws relating to ICTs*803.7
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*123 2.8
1.05	Efficiency of legal system in challenging regs*1062.9
1.06	Intellectual property protection*833.7
1.07	Software piracy rate, % software installed3850
1.08	No. procedures to enforce a contract
1.09	No. days to enforce a contract109731
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*854.5
2.02	Venture capital availability*
2.03	Total tax rate, % profits
2.04	No. days to start a business13583
2.05	No. procedures to start a business12011
2.06	Intensity of local competition*415.4
2.07	Tertiary education gross enrollment rate, %60 45.1
2.08	Quality of management schools*844.0
2.09	Gov't procurement of advanced tech*943.1
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita68 2792.2
3.02	Mobile network coverage, % pop35 100.0
3.03	Int'l Internet bandwidth, kb/s per user60 43.0
3.04	Secure Internet servers/million pop
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min87 0.31
4.02	Fixed broadband Internet tariffs, PPP \$/month14 17.62
4.03	Internet & telephony competition, 0–2 (best)1 2.00
	5th pillar: Skills
5.01	Quality of education system*1312.4
5.02	Quality of math & science education*1332.5
5.03	Secondary education gross enrollment rate, %4999.4
5.04	Adult literacy rate, %6692.6

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop35 139.0
6.02	Individuals using Internet, %5857.6
6.03	Households w/ personal computer, %66 52.0
6.04	Households w/ Internet access, %6648.0
6.05	Fixed broadband Internet subs/100 pop63 11.7
6.06	Mobile broadband subs/100 pop24 78.2
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*
7.02	Capacity for innovation*803.8
7.03	PCT patents, applications/million pop513.4
7.04	ICT use for business-to-business transactions*78 4.6
7.05	Business-to-consumer Internet use*405.0
7.06	Extent of staff training*614.0
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*1213.1
8.02	Government Online Service Index, 0-1 (best)49 0.60
8.03	Gov't success in ICT promotion*1223.2
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*764.3
9.02	ICT PCT patents, applications/million pop58 0.5
9.03	Impact of ICTs on organizational models*784.0
9.04	Knowledge-intensive jobs, % workforce64 21.6
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*111 3.5
10.02	Internet access in schools*97
10.03	ICT use & gov't efficiency*1103.4
10.04	E-Participation Index, 0–1 (best)24 0.71

	Rank (out of 139)	
Networked Readiness Index	,	, ,
Networked Readiness Index 2015 (out of 143)	73.	4.0
Networked Readiness Index 2014 (out of 148)		
Networked Readiness Index 2013 (out of 144)		
A. Environment subindex	66.	4.0
1st pillar: Political and regulatory environment	101 .	3.3
2nd pillar: Business and innovation environment	42.	4.7
B. Readiness subindex	72.	4.8
3rd pillar: Infrastructure	38.	5.2
4th pillar: Affordability	111.	3.8
5th pillar: Skills	52.	5.4
C. Usage subindex	64.	4.0
6th pillar: Individual usage	48.	5.0
7th pillar: Business usage	77.	3.5
8th pillar: Government usage	102.	3.3
D. Impact subindex	68.	3.7
9th pillar: Economic impacts	46.	3.5
10th pillar: Social impacts	83.	3.9



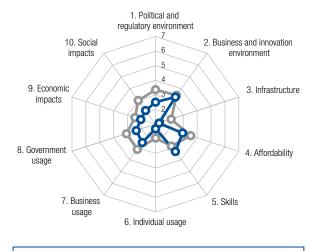
- Bulgaria -O- Upper-middle-income group average

#### The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*
1.02	Laws relating to ICTs*574.1
1.03	Judicial independence*1162.7
1.04	Efficiency of legal system in settling disputes*115 2.9
1.05	Efficiency of legal system in challenging regs*1142.8
1.06	Intellectual property protection*1173.1
1.07	Software piracy rate, % software installed6063
1.08	No. procedures to enforce a contract7638
1.09	No. days to enforce a contract72 564
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*
2.02	Venture capital availability*62
2.03	Total tax rate, % profits2827.0
2.04	No. days to start a business9318
2.05	No. procedures to start a business4
2.06	Intensity of local competition*1044.6
2.07	Tertiary education gross enrollment rate, %27 70.8
2.08	Quality of management schools*1113.6
2.09	Gov't procurement of advanced tech*8681
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita36 5928.2
3.02	Mobile network coverage, % pop32 100.0
3.03	Int'l Internet bandwidth, kb/s per user20 135.1
3.04	Secure Internet servers/million pop44 176.7
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min136 0.78
4.02	Fixed broadband Internet tariffs, PPP \$/month32 24.12
4.03	Internet & telephony competition, 0–2 (best) 105 1.33
	5th pillar: Skills
5.01	Quality of education system*933.3
5.02	Quality of math & science education*62
5.03	
0.00	Secondary education gross enrollment rate, %38 100.9

	INDICATOR R	ANK/139	VALUE
	6th pillar: Individual usage		
6.01	Mobile phone subscriptions/100 pop	36	137.7
6.02	Individuals using Internet, %	61	55.5
6.03	Households w/ personal computer, %	58	57.9
6.04	Households w/ Internet access, %	55	56.7
6.05	Fixed broadband Internet subs/100 pop	44	20.7
6.06	Mobile broadband subs/100 pop	35	66.4
6.07	Use of virtual social networks*	62	5.7
	7th pillar: Business usage		
7.01	Firm-level technology absorption*	85	4.4
7.02	Capacity for innovation*	79	3.8
7.03	PCT patents, applications/million pop	44	6.8
7.04	ICT use for business-to-business transaction	ns*54	4.9
7.05	Business-to-consumer Internet use*	50	4.8
7.06	Extent of staff training*	117	3.4
	8th pillar: Government usage		
8.01	Importance of ICTs to gov't vision*		
8.02	Government Online Service Index, 0-1 (bes	t)110	0.24
8.03	Gov't success in ICT promotion*	81	3.8
	9th pillar: Economic impacts		
9.01	Impact of ICTs on business models*	74	4.4
9.02	ICT PCT patents, applications/million pop.	41	2.4
9.03	Impact of ICTs on organizational models*	63	4.2
9.04	Knowledge-intensive jobs, % workforce	43	31.9
	10th pillar: Social impacts		
10.01	Impact of ICTs on access to basic services	*64	4.3
10.02	Internet access in schools*	50	4.7
10.03	ICT use & gov't efficiency*	67	4.0
10.04	E-Participation Index, 0-1 (best)	105	0.25

	(out of 139)	(1-7)
Networked Readiness Index	138.	. 2.4
Networked Readiness Index 2015 (out of 143)	141	2.4
Networked Readiness Index 2014 (out of 148)	147	2.3
Networked Readiness Index 2013 (out of 144)	144	2.3
A. Environment subindex	134	2.9
1st pillar: Political and regulatory environment	136	2.5
2nd pillar: Business and innovation environment	129.	3.3
B. Readiness subindex	133	2.5
3rd pillar: Infrastructure	134	1.3
4th pillar: Affordability	124	2.9
5th pillar: Skills	119.	3.3
C. Usage subindex	139	2.1
6th pillar: Individual usage	138	1.3
7th pillar: Business usage	139	2.5
8th pillar: Government usage	136	2.4
D. Impact subindex	137	2.1
9th pillar: Economic impacts	137	2.1
10th pillar: Social impacts	138.	2.2



- Burundi -O- Low-income group average

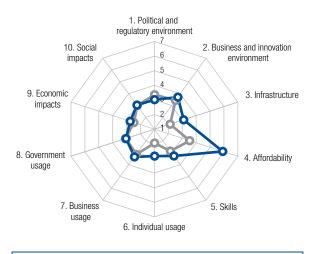
## The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE	
	1st pillar: Political and regulatory environment	
1.01	Effectiveness of law-making bodies*	
1.02	Laws relating to ICTs*1362.4	
1.03	Judicial independence*	
1.04	Efficiency of legal system in settling disputes*1162.9	
1.05	Efficiency of legal system in challenging regs*110 2.9	
1.06	Intellectual property protection*1352.6	
1.07	Software piracy rate, % software installedn/an/a	
1.08	No. procedures to enforce a contract12244	
1.09	No. days to enforce a contract115 832	
2nd pillar: Business and innovation environment		
2.01	Availability of latest technologies*1373.1	
2.02	Venture capital availability*	
2.03	Total tax rate, % profits8140.3	
2.04	No. days to start a business4	
2.05	No. procedures to start a business113	
2.06	Intensity of local competition*1353.9	
2.07	Tertiary education gross enrollment rate, %1314.4	
2.08	Quality of management schools*1372.6	
2.09	Gov't procurement of advanced tech*1262.7	
	3rd pillar: Infrastructure	
3.01	Electricity production, kWh/capita13720.0	
3.02	Mobile network coverage, % pop136 30.0	
3.03	Int'l Internet bandwidth, kb/s per user1096.9	
3.04	Secure Internet servers/million pop	
	4th pillar: Affordability	
4.01	Prepaid mobile cellular tariffs, PPP \$/min98 0.34	
4.02	Fixed broadband Internet tariffs, PPP \$/month 129 139.23	
4.03	Internet & telephony competition, 0–2 (best)99 1.54	
	5th pillar: Skills	
5.01	Quality of education system*1262.6	
5.02	Quality of math & science education*983.5	
5.03	Secondary education gross enrollment rate, $\%13137.9$	
5.04	Adult literacy rate, %7885.6	

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop139 30.5
6.02	Individuals using Internet, %1391.4
6.03	Households w/ personal computer, %139 0.1
6.04	Households w/ Internet access, %
6.05	Fixed broadband Internet subs/100 pop1360.0
6.06	Mobile broadband subs/100 pop134 0.5
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*
7.02	Capacity for innovation*1372.8
7.03	PCT patents, applications/million pop1210.0
7.04	ICT use for business-to-business transactions*138 2.9
7.05	Business-to-consumer Internet use*
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*1253.0
8.02	Government Online Service Index, 0-1 (best)136 0.02
8.03	Gov't success in ICT promotion*1293.0
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models* 139 2.7
9.02	ICT PCT patents, applications/million pop103 0.0
9.03	Impact of ICTs on organizational models*138 2.4
9.04	Knowledge-intensive jobs, % workforcen/an/a
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services* 136 2.8
10.02	Internet access in schools* 138 1.7
10.03	ICT use & gov't efficiency*
10.04	E-Participation Index, 0–1 (best)1360.06

## Cambodia

	Rank (out of 139)	· and o
Networked Readiness Index	109.	. 3.4
Networked Readiness Index 2015 (out of 143)	110.	3.3
Networked Readiness Index 2014 (out of 148)	108.	3.4
Networked Readiness Index 2013 (out of 144)	106.	3.3
A. Environment subindex	119.	3.4
1st pillar: Political and regulatory environment	124.	3.0
2nd pillar: Business and innovation environment	108.	3.7
B. Readiness subindex	100.	4.1
3rd pillar: Infrastructure	98.	3.1
4th pillar: Affordability	43.	5.9
5th pillar: Skills	120.	3.3
C. Usage subindex	110.	3.1
6th pillar: Individual usage	101 .	2.8
7th pillar: Business usage	104.	3.3
8th pillar: Government usage	116.	3.0
D. Impact subindex	117.	2.9
9th pillar: Economic impacts	111.	2.7
10th pillar: Social impacts	122.	3.0



-Cambodia - Low-income group average

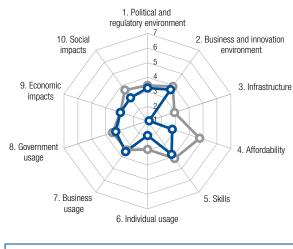
#### The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*1142.9
1.02	Laws relating to ICTs*1093.1
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*119 2.8
1.05	Efficiency of legal system in challenging regs*1242.6
1.06	Intellectual property protection*1312.8
1.07	Software piracy rate, % software installedn/an/a
1.08	No. procedures to enforce a contract12244
1.09	No. days to enforce a contract51 483
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*1014.2
2.02	Venture capital availability*
2.03	Total tax rate, % profits1421.0
2.04	No. days to start a business
2.05	No. procedures to start a business74
2.06	Intensity of local competition*974.7
2.07	Tertiary education gross enrollment rate, $\%$ 10115.9
2.08	Quality of management schools*1243.2
2.09	Gov't procurement of advanced tech*1142.8
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita127 117.9
3.02	Mobile network coverage, % pop6799.0
3.03	Int'l Internet bandwidth, kb/s per user92 16.3
3.04	Secure Internet servers/million pop1133.0
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min65 0.23
4.02	Fixed broadband Internet tariffs, PPP $\mbox{\sc s/month}\56\\ 29.81$
4.03	Internet & telephony competition, 0-2 (best)1 2.00
	5th pillar: Skills
5.01	Quality of education system*1003.2
5.02	Quality of math & science education*112
5.03	Secondary education gross enrollment rate, % 121 45.1
5.04	Adult literacy rate, %

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop40 132.7
6.02	Individuals using Internet, %1279.0
6.03	Households w/ personal computer, %112 10.6
6.04	Households w/ Internet access, %1167.0
6.05	Fixed broadband Internet subs/100 pop114 0.4
6.06	Mobile broadband subs/100 pop81 31.1
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*97
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop108 0.0
7.04	ICT use for business-to-business transactions*82 4.5
7.05	Business-to-consumer Internet use*984.0
7.06	Extent of staff training*95
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*953.5
8.02	Government Online Service Index, 0-1 (best)114 0.17
8.03	Gov't success in ICT promotion*1023.6
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*4.4
9.02	ICT PCT patents, applications/million pop93 0.0
9.03	Impact of ICTs on organizational models*644.2
9.04	Knowledge-intensive jobs, % workforce104 4.1
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services* 120 3.3
10.02	Internet access in schools* 106 3.5
10.03	ICT use & gov't efficiency*1203.2
10.04	E-Participation Index, 0–1 (best)115 0.20

## Cameroon

	Rank (out of 139)	
Networked Readiness Index	124.	.3.0
Networked Readiness Index 2015 (out of 143)	126.	3.0
Networked Readiness Index 2014 (out of 148)	131	2.9
Networked Readiness Index 2013 (out of 144)	124.	2.9
A. Environment subindex	114	3.5
1st pillar: Political and regulatory environment	105	3.3
2nd pillar: Business and innovation environment	114	3.7
B. Readiness subindex	131	2.6
3rd pillar: Infrastructure	138	1.1
4th pillar: Affordability	128	2.8
5th pillar: Skills	107	3.8
C. Usage subindex	114	2.9
6th pillar: Individual usage	125	2.0
7th pillar: Business usage	74.	3.6
8th pillar: Government usage	107.	3.3
D. Immant authinday	445	2.0



-Cameroon -O- Lower-middle-income group average

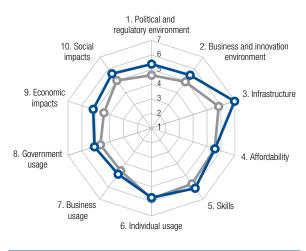
#### The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*
1.02	Laws relating to ICTs*110
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*73 3.6
1.05	Efficiency of legal system in challenging regs*73 3.4
1.06	Intellectual property protection*69
1.07	Software piracy rate, % software installed9082
1.08	No. procedures to enforce a contract11342
1.09	No. days to enforce a contract114 800
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*1233.8
2.02	Venture capital availability*
2.03	Total tax rate, % profits
2.04	No. days to start a business8615
2.05	No. procedures to start a business415
2.06	Intensity of local competition*1064.6
2.07	Tertiary education gross enrollment rate, %110 11.9
2.08	Quality of management schools*
2.09	Gov't procurement of advanced tech*
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita117 308.4
3.02	Mobile network coverage, % pop
3.03	Int'l Internet bandwidth, kb/s per user1341.8
3.04	Secure Internet servers/million pop1261.7
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min102 0.35
4.02	Fixed broadband Internet tariffs, PPP \$/month 126 127.72
4.03	Internet & telephony competition, 0–2 (best) 111 1.22
	5th pillar: Skills
5.01	Quality of education system*723.6
5.02	Quality of math & science education*664.1
5.03	Secondary education gross enrollment rate, $\%11556.4$
5.04	Adult literacy rate, %9275.0

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop11975.7
6.02	Individuals using Internet, %12111.0
6.03	Households w/ personal computer, %114 9.6
6.04	Households w/ Internet access, %1196.5
6.05	Fixed broadband Internet subs/100 pop132 0.1
6.06	Mobile broadband subs/100 pop137 0.0
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*84 4.4
7.02	Capacity for innovation*4643
7.03	PCT patents, applications/million pop109 0.0
7.04	ICT use for business-to-business transactions*92 4.4
7.05	Business-to-consumer Internet use*
7.06	Extent of staff training*704.0
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*92
8.02	Government Online Service Index, 0-1 (best)113 0.20
8.03	Gov't success in ICT promotion*604.1
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*93 4.1
9.02	ICT PCT patents, applications/million pop103 0.0
9.03	Impact of ICTs on organizational models*893.8
9.04	Knowledge-intensive jobs, % workforcen/an/a
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*127 3.1
10.02	Internet access in schools*1143.4
10.03	ICT use & gov't efficiency*1033.5
10.04	E-Participation Index, 0-1 (best)123 0.16

## Canada

	Rank (out of 139)	
Networked Readiness Index	14.	.5.6
Networked Readiness Index 2015 (out of 143)	11.	5.5
Networked Readiness Index 2014 (out of 148)	17.	5.4
Networked Readiness Index 2013 (out of 144)	12.	5.4
A. Environment subindex	10.	5.4
1st pillar: Political and regulatory environment	15.	5.4
2nd pillar: Business and innovation environment	4.	5.5
B. Readiness subindex	8.	6.2
3rd pillar: Infrastructure	7.	7.0
4th pillar: Affordability	61 .	5.6
5th pillar: Skills	11.	6.1
C. Usage subindex	26.	5.2
6th pillar: Individual usage	30.	5.7
7th pillar: Business usage	22.	4.9
8th pillar: Government usage	19.	5.1
D. Impact subindex	11.	5.4
9th pillar: Economic impacts	12.	5.2
10th pillar: Social impacts	11.	5.6



-Canada - High-income group average

## The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*135.3
1.02	Laws relating to ICTs*
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*17 5.2
1.05	Efficiency of legal system in challenging regs*14 5.0
1.06	Intellectual property protection*12
1.07	Software piracy rate, % software installed1425
1.08	No. procedures to enforce a contract5836
1.09	No. days to enforce a contract75 570
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*116.2
2.02	Venture capital availability*203.7
2.03	Total tax rate, % profits1521.1
2.04	No. days to start a business
2.05	No. procedures to start a business
2.06	Intensity of local competition*245.6
2.07	Tertiary education gross enrollment rate, %n/an/a
2.08	Quality of management schools*5
2.09	Gov't procurement of advanced tech*55
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita4 . 18539.2
3.02	Mobile network coverage, % pop67 99.0
3.03	Int'l Internet bandwidth, kb/s per user21 129.2
3.04	Secure Internet servers/million pop
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min60 0.23
4.02	Fixed broadband Internet tariffs, PPP \$/month81 37.50
4.03	Internet & telephony competition, 0–2 (best)1 2.00
	5th pillar: Skills
5.01	Quality of education system*145.1
5.02	Quality of math & science education*185.1
5.03	Secondary education gross enrollment rate, %19 110.3
5.04	Adult literacy rate, %n/an/an/a

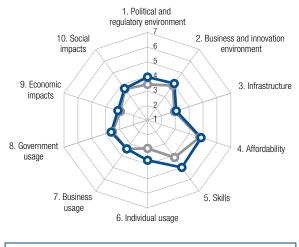
	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop114 81.0
6.02	Individuals using Internet, %1487.1
6.03	Households w/ personal computer, %15 87.6
6.04	Households w/ Internet access, %1886.6
6.05	Fixed broadband Internet subs/100 pop11 35.4
6.06	Mobile broadband subs/100 pop52 54.3
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop19 89.3
7.04	ICT use for business-to-business transactions*23 5.6
7.05	Business-to-consumer Internet use*13 5.7
7.06	Extent of staff training*254.7
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*494.3
8.02	Government Online Service Index, 0-1 (best)10 0.91
8.03	Gov't success in ICT promotion*
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*18
9.02	ICT PCT patents, applications/million pop12 38.2
9.03	Impact of ICTs on organizational models*12 5.4
9.04	Knowledge-intensive jobs, % workforce16 43.7
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*12 5.8
10.02	Internet access in schools*13
10.03	ICT use & gov't efficiency*
10.04	E-Participation Index, 0–1 (best)140.82

Note: Indicators followed by an asterisk (\*) are measured on a 1-to-7 (best) scale. For further details and explanation, please refer to the section "How to Read the Country/Economy Profiles" on page 53.

<sup>1</sup> See the "Technical Notes and Sources" section.

# Cape Verde

	Rank	
	(out of 139)	, ,
Networked Readiness Index	85	3.8
Networked Readiness Index 2015 (out of 143)	87.	3.8
Networked Readiness Index 2014 (out of 148)	89.	3.7
Networked Readiness Index 2013 (out of 144)	81 .	3.8
A. Environment subindex	64 .	4.0
1st pillar: Political and regulatory environment	55.	4.0
2nd pillar: Business and innovation environmen	t80.	4.1
B. Readiness subindex	96.	4.3
3rd pillar: Infrastructure	100.	3.1
4th pillar: Affordability	86.	4.8
5th pillar: Skills	75.	5.0
C. Usage subindex	87.	3.6
6th pillar: Individual usage	81 .	3.7
7th pillar: Business usage	95.	3.4
8th pillar: Government usage	88.	3.6
D. Impact subindex	87 .	3.4
Oth nillar: Economic impacts	77	3.1



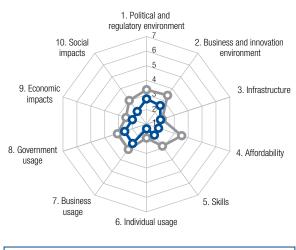
Cape Verde -O- Lower-middle-income group average

#### The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*
1.02	Laws relating to ICTs*823.7
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*93 3.3
1.05	Efficiency of legal system in challenging regs*783.4
1.06	Intellectual property protection*973.4
1.07	Software piracy rate, % software installedn/an/a
1.08	No. procedures to enforce a contract6937
1.09	No. days to enforce a contract34425
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*75
2.02	Venture capital availability*
2.03	Total tax rate, % profits
2.04	No. days to start a business5710
2.05	No. procedures to start a business74
2.06	Intensity of local competition*114 4.4
2.07	Tertiary education gross enrollment rate, %91 23.0
2.08	Quality of management schools*764.0
2.09	Gov't procurement of advanced tech*
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita107 612.9
3.02	Mobile network coverage, % pop89 98.4
3.03	Int'l Internet bandwidth, kb/s per user98 12.3
3.04	Secure Internet servers/million pop
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min132 0.65
4.02	Fixed broadband Internet tariffs, PPP \$/month18 19.17
4.03	Internet & telephony competition, 0–2 (best)1 2.00
	5th pillar: Skills
5.01	Quality of education system*554.0
5.02	Quality of math & science education*774.0
5.03	Secondary education gross enrollment rate, %65 92.6
5.04	Adult literacy rate, %7487.6

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop54 121.8
6.02	Individuals using Internet, %8740.3
6.03	Households w/ personal computer, %8732.2
6.04	Households w/ Internet access, %91 24.8
6.05	Fixed broadband Internet subs/100 pop91
6.06	Mobile broadband subs/100 pop56 51.3
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop121 0.0
7.04	ICT use for business-to-business transactions*88 4.4
7.05	Business-to-consumer Internet use*91
7.06	Extent of staff training*1003.6
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*384.5
8.02	Government Online Service Index, 0-1 (best)117 0.17
8.03	Gov't success in ICT promotion*4545
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*654.5
9.02	ICT PCT patents, applications/million pop103 0.0
9.03	Impact of ICTs on organizational models*823.9
9.04	Knowledge-intensive jobs, % workforcen/an/a
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*62 4.3
10.02	Internet access in schools*
10.03	ICT use & gov't efficiency*
10.04	E-Participation Index, 0–1 (best)130 0.10

	Rank (out of 139)	
Networked Readiness Index	139	.2.2
Networked Readiness Index 2015 (out of 143)	143.	2.3
Networked Readiness Index 2014 (out of 148)		
Networked Readiness Index 2013 (out of 144)	142.	2.5
A. Environment subindex	138.	2.7
1st pillar: Political and regulatory environment	132.	2.7
2nd pillar: Business and innovation environment	139.	2.6
B. Readiness subindex	138.	1.9
3rd pillar: Infrastructure	127.	2.0
4th pillar: Affordability	137.	1.9
5th pillar: Skills	139.	1.9
C. Usage subindex	138.	2.2
6th pillar: Individual usage	139.	1.3
7th pillar: Business usage	137.	2.6
8th pillar: Government usage	132.	2.6
D. Impact subindex	139.	2.1
9th pillar: Economic impacts	138.	2.0
10th pillar: Social impacts	139.	2.1



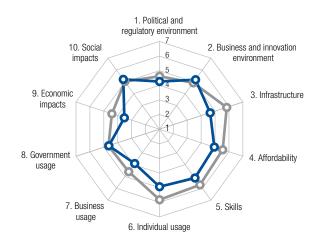
-Chad -O- Low-income group average

## The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*
1.02	Laws relating to ICTs*
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*1182.9
1.05	Efficiency of legal system in challenging regs*1252.6
1.06	Intellectual property protection*1322.8
1.07	Software piracy rate, % software installedn/an/a
1.08	No. procedures to enforce a contract10841
1.09	No. days to enforce a contract111743
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*1382.9
2.02	Venture capital availability*
2.03	Total tax rate, % profits
2.04	No. days to start a business13160
2.05	No. procedures to start a business
2.06	Intensity of local competition*1383.7
2.07	Tertiary education gross enrollment rate, %1353.4
2.08	Quality of management schools*1273.1
2.09	Gov't procurement of advanced tech*1282.6
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita139 16.1
3.02	Mobile network coverage, % pop124 86.0
3.03	Int'l Internet bandwidth, kb/s per user1370.7
3.04	Secure Internet servers/million pop
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min131 0.65
4.02	Fixed broadband Internet tariffs, PPP \$/month 137 . 1275.69
4.03	Internet & telephony competition, 0–2 (best) 101 1.50
	5th pillar: Skills
5.01	Quality of education system*1232.7
5.02	Quality of math & science education*1203.0
5.03	Secondary education gross enrollment rate, % 138 22.4
5.04	Adult literacy rate, %

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop136 39.8
6.02	Individuals using Internet, %1362.5
6.03	Households w/ personal computer, %1352.9
6.04	Households w/ Internet access, %1362.7
6.05	Fixed broadband Internet subs/100 pop128 0.1
6.06	Mobile broadband subs/100 pop137 0.0
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop121 0.0
7.04	ICT use for business-to-business transactions*139 2.9
7.05	Business-to-consumer Internet use*1392.2
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*1273.0
8.02	Government Online Service Index, 0-1 (best)133 0.05
8.03	Gov't success in ICT promotion*1073.4
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*1382.8
9.02	ICT PCT patents, applications/million pop103 0.0
9.03	Impact of ICTs on organizational models*1392.2
9.04	Knowledge-intensive jobs, % workforcen/an/a
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*139 2.5
10.02	Internet access in schools*1391.6
10.03	ICT use & gov't efficiency*1342.7
10.04	E-Participation Index, 0–1 (best)

(out of 139)	(1-7)
Networked Readiness Index38	.4.6
Networked Readiness Index 2015 (out of 143)38.	4.6
Networked Readiness Index 2014 (out of 148)35.	4.6
Networked Readiness Index 2013 (out of 144)34.	4.6
A. Environment subindex32.	4.7
1st pillar: Political and regulatory environment	4.3
2nd pillar: Business and innovation environment	5.2
B. Readiness subindex65.	4.9
3rd pillar: Infrastructure54.	4.6
4th pillar: Affordability84.	4.9
5th pillar: Skills67.	5.1
C. Usage subindex39.	4.5
6th pillar: Individual usage52.	4.9
7th pillar: Business usage	3.9
8th pillar: Government usage39.	4.6
D. Impact subindex35.	4.4
9th pillar: Economic impacts	3.5
10th pillar: Social impacts	5.2



-O- High-income group average -Chile

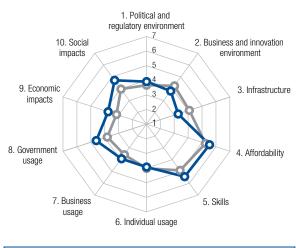
## The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*64
1.02	Laws relating to ICTs*4045
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*47 4.0
1.05	Efficiency of legal system in challenging regs* 42 4.0
1.06	Intellectual property protection*4949
1.07	Software piracy rate, % software installed5159
1.08	No. procedures to enforce a contract5836
1.09	No. days to enforce a contract50480
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*
2.02	Venture capital availability*
2.03	Total tax rate, % profits
2.04	No. days to start a business6
2.05	No. procedures to start a business74
2.06	Intensity of local competition*225.6
2.07	Tertiary education gross enrollment rate, %9 83.8
2.08	Quality of management schools*215.3
2.09	Gov't procurement of advanced tech*893.1
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita52 4157.1
3.02	Mobile network coverage, % pop 104 95.0
3.03	Int'l Internet bandwidth, kb/s per user40 73.1
3.04	Secure Internet servers/million pop47 127.6
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min93 0.32
4.02	Fixed broadband Internet tariffs, PPP \$/month92 43.12
4.03	Internet & telephony competition, 0–2 (best)1 2.00
	5th pillar: Skills
5.01	Quality of education system*863.4
5.02	Quality of math & science education*1073.3
5.03	Secondary education gross enrollment rate, %40 100.5
5.04	Adult literacy rate, %36 97.3

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop39 133.3
6.02	Individuals using Internet, %3672.4
6.03	Households w/ personal computer, %57 60.3
6.04	Households w/ Internet access, %6053.9
6.05	Fixed broadband Internet subs/100 pop58 14.1
6.06	Mobile broadband subs/100 pop57 50.5
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*
7.02	Capacity for innovation*853.8
7.03	PCT patents, applications/million pop437.1
7.04	ICT use for business-to-business transactions*37 5.2
7.05	Business-to-consumer Internet use*385.1
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*68
8.02	Government Online Service Index, 0-1 (best)16 0.82
8.03	Gov't success in ICT promotion*614.1
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*315.1
9.02	ICT PCT patents, applications/million pop52 0.8
9.03	Impact of ICTs on organizational models*494.4
9.04	Knowledge-intensive jobs, % workforce56 24.8
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*385.0
10.02	Internet access in schools*4949
10.03	ICT use & gov't efficiency*
10.04	E-Participation Index, 0–1 (best)7 0.94

	Rank	
	(out of 139)	
Networked Readiness Index	59.	. 4.2
Networked Readiness Index 2015 (out of 143)	62.	4.2
Networked Readiness Index 2014 (out of 148)	62.	4.1
Networked Readiness Index 2013 (out of 144)	58.	4.0
A. Environment subindex	83.	3.9
1st pillar: Political and regulatory environment	58.	3.9
2nd pillar: Business and innovation environment	104.	3.8
B. Readiness subindex	75.	4.7
3rd pillar: Infrastructure	90.	3.3
4th pillar: Affordability	63.	5.5
5th pillar: Skills	47.	5.4
C. Usage subindex	51 .	4.1
6th pillar: Individual usage	75.	3.9
7th pillar: Business usage	44.	3.9
8th pillar: Government usage	40.	4.6
D. Impact subindex	39.	4.2
9th pillar: Economic impacts	37.	3.8

10th pillar: Social impacts......41 .... 4.7



-China -O- Upper-middle-income group average

## The Networked Readiness Index in detail

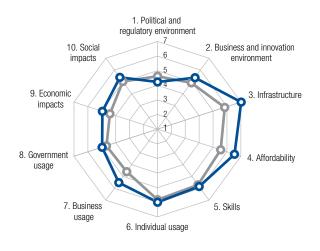
	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*40
1.02	Laws relating to ICTs*4942
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*50 4.0
1.05	Efficiency of legal system in challenging regs*663.5
1.06	Intellectual property protection*634.0
1.07	Software piracy rate, % software installed7374
1.08	No. procedures to enforce a contract6937
1.09	No. days to enforce a contract44 453
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*95
2.02	Venture capital availability*
2.03	Total tax rate, % profits
2.04	No. days to start a business12131
2.05	No. procedures to start a business12011
2.06	Intensity of local competition*3636
2.07	Tertiary education gross enrollment rate, %80 30.2
2.08	Quality of management schools*85
2.09	Gov't procurement of advanced tech*9 4.3
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita55 4005.2
3.02	Mobile network coverage, % pop61 99.5
3.03	Int'l Internet bandwidth, kb/s per user119 5.0
3.04	Secure Internet servers/million pop1027.0
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min6 0.06
4.02	Fixed broadband Internet tariffs, PPP \$/month68 33.99
4.03	Internet & telephony competition, 0-2 (best)118 1.14
	5th pillar: Skills
5.01	Quality of education system*5658
5.02	Quality of math & science education*494.4
5.03	Secondary education gross enrollment rate, %60 96.2
5.04	Adult literacy rate, %

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop106 92.3
6.02	Individuals using Internet, %70 49.3
6.03	Households w/ personal computer, %71 46.7
6.04	Households w/ Internet access, %6947.4
6.05	Fixed broadband Internet subs/100 pop56 14.4
6.06	Mobile broadband subs/100 pop71 41.8
6.07	Use of virtual social networks* 121 4.7
	7th pillar: Business usage
7.01	Firm-level technology absorption*
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop32 15.2
7.04	ICT use for business-to-business transactions*57 4.9
7.05	Business-to-consumer Internet use*
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*27
8.02	Government Online Service Index, 0-1 (best)47 0.61
8.03	Gov't success in ICT promotion*
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*
9.02	ICT PCT patents, applications/million pop26 9.5
9.03	Impact of ICTs on organizational models*314.7
9.04	Knowledge-intensive jobs, % workforcen/an/a
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*47 4.6
10.02	Internet access in schools*474.8
10.03	ICT use & gov't efficiency*414.5
10.04	E-Participation Index, 0–1 (best)33 0.65

# Chinese Taipei

Rank Value

	(out of 139)	(1-I)
Networked Readiness Index	19.	.5.5
Networked Readiness Index 2015 (out of 143)	18.	5.5
Networked Readiness Index 2014 (out of 148)	14.	5.5
Networked Readiness Index 2013 (out of 144)	10	5.5
A. Environment subindex	29.	4.8
1st pillar: Political and regulatory environment	40.	4.2
2nd pillar: Business and innovation environment	14.	5.3
B. Readiness subindex	2.	6.4
3rd pillar: Infrastructure	1.	7.0
4th pillar: Affordability	12.	6.5
5th pillar: Skills	23.	5.8
C. Usage subindex	16.	5.5
6th pillar: Individual usage	24.	6.0
7th pillar: Business usage	12.	5.5
8th pillar: Government usage	24.	5.0
D. Impact subindex	20.	5.2
9th pillar: Economic impacts	18.	5.0
10th pillar: Social impacts	20.	5.4



-Chinese Taipei

- High-income group average

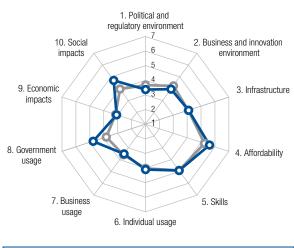
## The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies* 104 3.1
1.02	Laws relating to ICTs*
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*56 3.9
1.05	Efficiency of legal system in challenging regs*63 3.5
1.06	Intellectual property protection*275.2
1.07	Software piracy rate, % software installed2538
1.08	No. procedures to enforce a contract12545
1.09	No. days to enforce a contract58 510
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*36
2.02	Venture capital availability*
2.03	Total tax rate, % profits57 34.5
2.04	No. days to start a business5710
2.05	No. procedures to start a business113
2.06	Intensity of local competition*5 6.0
2.07	Tertiary education gross enrollment rate, %83.9
2.08	Quality of management schools*
2.09	Gov't procurement of advanced tech*29
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita13 . 10646.5
3.02	Mobile network coverage, % pop 100.0
3.03	Int'l Internet bandwidth, kb/s per user46 60.4
3.04	Secure Internet servers/million pop9 1752.0
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min63 0.23
4.02	Fixed broadband Internet tariffs, PPP \$/month9 15.65
4.03	Internet & telephony competition, 0–2 (best)1 2.00
	5th pillar: Skills
5.01	Quality of education system*464.1
5.02	Quality of math & science education*155.2
5.03	Secondary education gross enrollment rate, %41 100.2
5.04	Adult literacy rate, %

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop44 130.2
6.02	Individuals using Internet, %2284.0
6.03	Households w/ personal computer, %3678.0
6.04	Households w/ Internet access, %3277.5
6.05	Fixed broadband Internet subs/100 pop16 31.9
6.06	Mobile broadband subs/100 pop33 66.9
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*
7.02	Capacity for innovation*
7.03	PCT patents, applications/million popn/an/a
7.04	ICT use for business-to-business transactions*25 5.5
7.05	Business-to-consumer Internet use*315.3
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*11
8.02	Government Online Service Index, 0-1 (best)n/a n/a
8.03	Gov't success in ICT promotion*
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*
9.02	ICT PCT patents, applications/million popn/a n/a
9.03	Impact of ICTs on organizational models*21 5.1
9.04	Knowledge-intensive jobs, % workforce39 33.3
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*13 5.8
10.02	Internet access in schools*
10.03	ICT use & gov't efficiency*
10.04	E-Participation Index, 0–1 (best)n/an/a

# Colombia

	Rank (out of 139)	
Networked Readiness Index	68.	.4.1
Networked Readiness Index 2015 (out of 143)	64.	4.1
Networked Readiness Index 2014 (out of 148)	63.	4.0
Networked Readiness Index 2013 (out of 144)	66.	3.9
A. Environment subindex	102.	3.7
1st pillar: Political and regulatory environment	97.	3.4
2nd pillar: Business and innovation environment	94.	4.0
B. Readiness subindex	66.	4.9
3rd pillar: Infrastructure	76.	4.1
4th pillar: Affordability	58.	5.6
5th pillar: Skills	79.	4.9
C. Usage subindex	54.	4.1
6th pillar: Individual usage	71.	4.1
7th pillar: Business usage	82.	3.5
8th pillar: Government usage	31.	4.8
D. Impact subindex	52.	3.9
9th pillar: Economic impacts	84.	3.1
4 Otto sellione O o elet income etc	40	4 7



- Colombia -O- Upper-middle-income group average

#### The Networked Readiness Index in detail

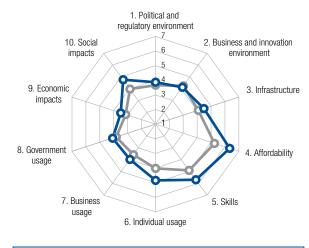
	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*1212.8
1.02	Laws relating to ICTs*594.1
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*105 3.1
1.05	Efficiency of legal system in challenging regs*100 3.0
1.06	Intellectual property protection*793.7
1.07	Software piracy rate, % software installed4152
1.08	No. procedures to enforce a contract3433
1.09	No. days to enforce a contract133 1288
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*824.5
2.02	Venture capital availability*
2.03	Total tax rate, % profits
2.04	No. days to start a business67
2.05	No. procedures to start a business
2.06	Intensity of local competition*355.4
2.07	Tertiary education gross enrollment rate, %54 51.3
2.08	Quality of management schools*794.0
2.09	Gov't procurement of advanced tech*683.3
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita93 1366.3
3.02	Mobile network coverage, % pop1 100.0
3.03	Int'l Internet bandwidth, kb/s per user67 35.0
3.04	Secure Internet servers/million pop66 47.1
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min84 0.29
4.02	Fixed broadband Internet tariffs, PPP \$/month63 31.24
4.03	Internet & telephony competition, 0-2 (best)1 2.00
	5th pillar: Skills
5.01	Quality of education system*1023.1
5.02	Quality of math & science education*1173.1
5.03	Secondary education gross enrollment rate, %52 99.2
5.04	Adult literacy rate, %

	INDICATOR RANK/139 VALUE	E
	6th pillar: Individual usage	
6.01	Mobile phone subscriptions/100 pop71 113.	1
6.02	Individuals using Internet, %	6
6.03	Households w/ personal computer, %75 44.5	5
6.04	Households w/ Internet access, %75 38.0	Э
6.05	Fixed broadband Internet subs/100 pop67 10.3	3
6.06	Mobile broadband subs/100 pop65 45.	1
6.07	Use of virtual social networks*	4
	7th pillar: Business usage	
7.01	Firm-level technology absorption*	4
7.02	Capacity for innovation*	7
7.03	PCT patents, applications/million pop59	7
7.04	ICT use for business-to-business transactions*69 4.7	7
7.05	Business-to-consumer Internet use*	7
7.06	Extent of staff training*	7
	8th pillar: Government usage	
8.01	Importance of ICTs to gov't vision*46	3
8.02	Government Online Service Index, 0-1 (best)17 0.79	
8.03	Gov't success in ICT promotion*534.2	2
	9th pillar: Economic impacts	
9.01	Impact of ICTs on business models*56	3
9.02	ICT PCT patents, applications/million pop690.3	3
9.03	Impact of ICTs on organizational models*434.5	5
9.04	Knowledge-intensive jobs, % workforce93 11.7	7
	10th pillar: Social impacts	
10.01	Impact of ICTs on access to basic services*67 4.2	
10.02	Internet access in schools*	
10.03	ICT use & gov't efficiency*56	
10.04	E-Participation Index, 0-1 (best)11 0.88	3

# Costa Rica

Rank (out of 139) (1-7)

Networked Readiness Index	44 4.5		
Networked Readiness Index 2015 (out of 143)	494.4		
Networked Readiness Index 2014 (out of 148)534			
Networked Readiness Index 2013 (out of 144)	53 4.1		
A. Environment subindex	69 4.0		
1st pillar: Political and regulatory environment	60 3.9		
2nd pillar: Business and innovation environment	784.1		
B. Readiness subindex	38 5.5		
3rd pillar: Infrastructure	60 4.5		
4th pillar: Affordability	21 6.3		
5th pillar: Skills	30 5.7		
C. Usage subindex	46 4.3		
6th pillar: Individual usage	55 4.8		
7th pillar: Business usage	38 4.0		
8th pillar: Government usage	56 4.1		
D. Impact subindex	42 4.1		
9th pillar: Economic impacts	49 3.5		
10th pillar: Social impacts	40 4.8		



-Costa Rica - Upper-middle-income group average

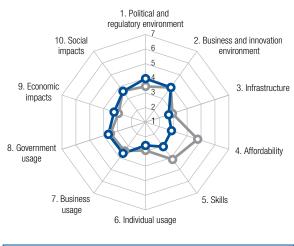
#### The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*
1.02	Laws relating to ICTs*
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*79 3.5
1.05	Efficiency of legal system in challenging regs*32 4.3
1.06	Intellectual property protection*444.3
1.07	Software piracy rate, % software installed51
1.08	No. procedures to enforce a contract9494
1.09	No. days to enforce a contract117 852
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*64
2.02	Venture capital availability*
2.03	Total tax rate, % profits
2.04	No. days to start a business10524
2.05	No. procedures to start a business9
2.06	Intensity of local competition*555.2
2.07	Tertiary education gross enrollment rate, %51 53.0
2.08	Quality of management schools*275.1
2.09	Gov't procurement of advanced tech*1022.9
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita79 2174.7
3.02	Mobile network coverage, % pop 100.0
3.03	Int'l Internet bandwidth, kb/s per user55 48.2
3.04	Secure Internet servers/million pop
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min17 0.09
4.02	Fixed broadband Internet tariffs, PPP \$/month22 20.75
4.03	Internet & telephony competition, 0-2 (best)1031.44
	5th pillar: Skills
5.01	Quality of education system*284.5
5.02	Quality of math & science education*554.3
5.03	Secondary education gross enrollment rate, %10 120.3
5.04	Adult literacy rate, %

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop33 143.8
6.02	Individuals using Internet, %6949.4
6.03	Households w/ personal computer, %6552.3
6.04	Households w/ Internet access, %5755.1
6.05	Fixed broadband Internet subs/100 pop65 10.5
6.06	Mobile broadband subs/100 pop19 87.2
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop572.4
7.04	ICT use for business-to-business transactions*46 5.1
7.05	Business-to-consumer Internet use*
7.06	Extent of staff training*314.5
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*853.6
8.02	Government Online Service Index, 0-1 (best)43 0.61
8.03	Gov't success in ICT promotion*
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models* 44 4.8
9.02	ICT PCT patents, applications/million pop60 0.5
9.03	Impact of ICTs on organizational models*40 4.6
9.04	Knowledge-intensive jobs, % workforce54 25.0
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*484.6
10.02	Internet access in schools*534.7
10.03	ICT use & gov't efficiency*83
10.04	E-Participation Index, 0–1 (best)14 0.82

# Côte d'Ivoire

	Rank (out of 139)	
Networked Readiness Index	106.	.3.4
Networked Readiness Index 2015 (out of 143)	115.	3.2
Networked Readiness Index 2014 (out of 148)	122.	3.1
Networked Readiness Index 2013 (out of 144)	120.	3.0
A. Environment subindex	72.	4.0
1st pillar: Political and regulatory environment	51.	4.0
2nd pillar: Business and innovation environment	96.	3.9
B. Readiness subindex	126.	2.9
3rd pillar: Infrastructure	110.	2.7
4th pillar: Affordability	127.	2.9
5th pillar: Skills	123.	3.1
C. Usage subindex	100.	3.3
6th pillar: Individual usage	109.	2.6
7th pillar: Business usage	65.	3.6
8th pillar: Government usage	80.	3.7
D. Impact subindex	83.	3.4
9th pillar: Economic impacts	66.	3.3
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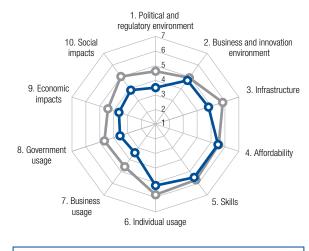
Côte d'Ivoire -O- Lower-middle-income group average

## The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*
1.02	Laws relating to ICTs*614.0
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*29 4.6
1.05	Efficiency of legal system in challenging regs*38 4.1
1.06	Intellectual property protection*67
1.07	Software piracy rate, % software installed8580
1.08	No. procedures to enforce a contract27
1.09	No. days to enforce a contract66 525
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*66
2.02	Venture capital availability*
2.03	Total tax rate, % profits117 51.9
2.04	No. days to start a business
2.05	No. procedures to start a business
2.06	Intensity of local competition*1054.6
2.07	Tertiary education gross enrollment rate, %1188.7
2.08	Quality of management schools*424.6
2.09	Gov't procurement of advanced tech*443.7
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita114 350.0
3.02	Mobile network coverage, % pop94 97.9
3.03	Int'l Internet bandwidth, kb/s per user1175.2
3.04	Secure Internet servers/million pop
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min101 0.35
4.02	Fixed broadband Internet tariffs, PPP \$/month 117 79.04
4.03	Internet & telephony competition, 0-2 (best) 111 1.22
	5th pillar: Skills
5.01	Quality of education system*484.1
5.02	Quality of math & science education*17
5.03	Secondary education gross enrollment rate, % 126 40.1
5.04	Adult literacy rate, %

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop84 106.2
6.02	Individuals using Internet, %11714.6
6.03	Households w/ personal computer, %1237.2
6.04	Households w/ Internet access, %10812.2
6.05	Fixed broadband Internet subs/100 pop112 0.6
6.06	Mobile broadband subs/100 pop95 24.6
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop105 0.1
7.04	ICT use for business-to-business transactions*94 4.3
7.05	Business-to-consumer Internet use*1024.0
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*304.6
8.02	Government Online Service Index, 0-1 (best)114 0.17
8.03	Gov't success in ICT promotion*474.3
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*
9.02	ICT PCT patents, applications/million pop103 0.0
9.03	Impact of ICTs on organizational models*574.3
9.04	Knowledge-intensive jobs, % workforcen/an/a
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*78 4.0
10.02	Internet access in schools*804.0
10.03	ICT use & gov't efficiency*4844
10.04	E-Participation Index, 0-1 (best)119 0.18

	(out of 139)	(1-7)
Networked Readiness Index	54.	.4.3
Networked Readiness Index 2015 (out of 143)	54	4.3
Networked Readiness Index 2014 (out of 148)	46	4.3
Networked Readiness Index 2013 (out of 144)	51	4.2
A. Environment subindex	57	4.1
1st pillar: Political and regulatory environment	92	3.5
2nd pillar: Business and innovation environment	44	4.7
B. Readiness subindex	47	5.3
3rd pillar: Infrastructure	47	4.8
4th pillar: Affordability	66	5.5
5th pillar: Skills	42	5.5
C. Usage subindex	58	4.0
6th pillar: Individual usage	43	5.2
7th pillar: Business usage	98	3.4
8th pillar: Government usage	90	3.5
D. Impact subindex	64	3.8
9th pillar: Economic impacts	42	3.6
10th pillar: Social impacts	82.	3.9



-O- High-income group average -Croatia

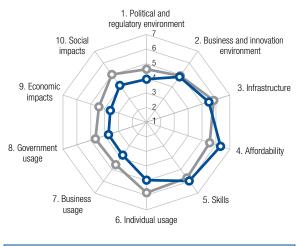
## The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*102
1.02	Laws relating to ICTs*67
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*1362.3
1.05	Efficiency of legal system in challenging regs*1322.3
1.06	Intellectual property protection*873.6
1.07	Software piracy rate, % software installed4152
1.08	No. procedures to enforce a contract7638
1.09	No. days to enforce a contract78 572
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*57
2.02	Venture capital availability*
2.03	Total tax rate, % profits
2.04	No. days to start a business7212
2.05	No. procedures to start a business747
2.06	Intensity of local competition*834.9
2.07	Tertiary education gross enrollment rate, %41 61.7
2.08	Quality of management schools*804.0
2.09	Gov't procurement of advanced tech*1242.7
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita63 3131.3
3.02	Mobile network coverage, % pop 100.0
3.03	Int'l Internet bandwidth, kb/s per user47 58.0
3.04	Secure Internet servers/million pop40 219.5
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min76 0.27
4.02	Fixed broadband Internet tariffs, PPP \$/month74 35.52
4.03	Internet & telephony competition, 0-2 (best)1 2.00
	5th pillar: Skills
5.01	Quality of education system*1033.1
5.02	Quality of math & science education*314.8
5.03	Secondary education gross enrollment rate, %43 99.8
5.04	Adult literacy rate, %

	INDICATOR	RANK/139	VALUE
	6th pillar: Individual usage		
6.01	Mobile phone subscriptions/100 pop	91	104.4
6.02	Individuals using Internet, %	43	68.6
6.03	Households w/ personal computer, %	44	70.1
6.04	Households w/ Internet access, %	44	68.4
6.05	Fixed broadband Internet subs/100 pop	39	23.0
6.06	Mobile broadband subs/100 pop	30	68.5
6.07	Use of virtual social networks*	84	5.4
	7th pillar: Business usage		
7.01	Firm-level technology absorption*	70	4.6
7.02	Capacity for innovation*	122	3.3
7.03	PCT patents, applications/million pop	39	9.6
7.04	ICT use for business-to-business transact	ions*65	4.7
7.05	Business-to-consumer Internet use*	71	4.3
7.06	Extent of staff training*	122	3.3
	8th pillar: Government usage		
8.01	Importance of ICTs to gov't vision*	101	3.4
8.02	Government Online Service Index, 0-1 (be	est)70	0.46
8.03	Gov't success in ICT promotion*	112	3.4
	9th pillar: Economic impacts		
9.01	Impact of ICTs on business models*	78	4.3
9.02	ICT PCT patents, applications/million pop.	43	2.0
9.03	Impact of ICTs on organizational models*	60	4.3
9.04	Knowledge-intensive jobs, % workforce	34	35.7
	10th pillar: Social impacts		
10.01	Impact of ICTs on access to basic service	s*58	4.3
10.02	Internet access in schools*	55	4.6
10.03	ICT use & gov't efficiency*	93	3.6
10.04	E-Participation Index, 0-1 (best)	89	0.33

	Rank (out of 139)	• 4.40
Networked Readiness Index	40.	. 4.6
Networked Readiness Index 2015 (out of 143)	36.	4.7
Networked Readiness Index 2014 (out of 148)	37.	4.6
Networked Readiness Index 2013 (out of 144)	35.	4.6
A. Environment subindex	43.	4.4
1st pillar: Political and regulatory environment		
2nd pillar: Business and innovation environment	36.	4.8
B. Readiness subindex	21 .	5.9
3rd pillar: Infrastructure	33.	5.5
4th pillar: Affordability	22.	6.3
5th pillar: Skills	16.	6.0
C. Usage subindex	52.	4.1
6th pillar: Individual usage	51.	4.9
7th pillar: Business usage	54.	3.8
8th pillar: Government usage	75.	3.7
D. Impact subindex	56.	3.9
9th pillar: Economic impacts	43.	3.6

10th pillar: Social impacts......70.....4.1



-Cyprus - High-income group average

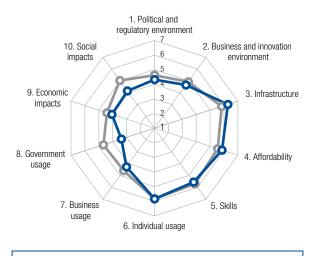
## The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE			
	1st pillar: Political and regulatory environment			
1.01	Effectiveness of law-making bodies*70			
1.02	Laws relating to ICTs*66			
1.03	Judicial independence*			
1.04	Efficiency of legal system in settling disputes*68 3.7			
1.05	Efficiency of legal system in challenging regs*45 3.9			
1.06	Intellectual property protection*434.4			
1.07	Software piracy rate, % software installed3347			
1.08	No. procedures to enforce a contract11843			
1.09	No. days to enforce a contract1281100			
	2nd pillar: Business and innovation environment			
2.01	Availability of latest technologies*44 5.2			
2.02	Venture capital availability*1072.3			
2.03	Total tax rate, % profits			
2.04	No. days to start a business8			
2.05	No. procedures to start a business			
2.06	Intensity of local competition*465.3			
2.07	Tertiary education gross enrollment rate, %50 53.1			
2.08	Quality of management schools*364.7			
2.09	Gov't procurement of advanced tech*713.3			
	3rd pillar: Infrastructure			
3.01	Electricity production, kWh/capita56 3757.7			
3.02	Mobile network coverage, % pop35 100.0			
3.03	Int'l Internet bandwidth, kb/s per user39 75.1			
3.04	Secure Internet servers/million pop28 606.8			
	4th pillar: Affordability			
4.01	Prepaid mobile cellular tariffs, PPP \$/min32 0.12			
4.02	Fixed broadband Internet tariffs, PPP \$/month33 24.15			
4.03	Internet & telephony competition, 0-2 (best)93 1.71			
	5th pillar: Skills			
5.01	Quality of education system*174.9			
5.02	Quality of math & science education*225.0			
5.03	Secondary education gross enrollment rate, %47 99.4			
5.04	Adult literacy rate, %			

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop100 96.3
6.02	Individuals using Internet, %4269.3
6.03	Households w/ personal computer, %40 74.0
6.04	Households w/ Internet access, %42 68.6
6.05	Fixed broadband Internet subs/100 pop43 21.1
6.06	Mobile broadband subs/100 pop70 42.1
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*
7.02	Capacity for innovation*90
7.03	PCT patents, applications/million pop42 7.7
7.04	ICT use for business-to-business transactions*62 4.8
7.05	Business-to-consumer Internet use*65
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*833.7
8.02	Government Online Service Index, 0-1 (best)68 0.47
8.03	Gov't success in ICT promotion*963.7
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*
9.02	ICT PCT patents, applications/million pop353.7
9.03	Impact of ICTs on organizational models*764.0
9.04	Knowledge-intensive jobs, % workforce3335.8
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services* 49 4.6
10.02	Internet access in schools*
10.03	ICT use & gov't efficiency*
10.04	E-Participation Index, 0–1 (best)98 0.31

# Czech Republic

	Rank (out of 139)	Value (1–7)
Networked Readiness Index	36.	.4.7
Networked Readiness Index 2015 (out of 143)	43.	4.5
Networked Readiness Index 2014 (out of 148)	42.	4.5
Networked Readiness Index 2013 (out of 144)	42.	4.4
A. Environment subindex	40.	4.5
1st pillar: Political and regulatory environment	35.	4.3
2nd pillar: Business and innovation environment	47.	4.6
B. Readiness subindex	22.	5.9
3rd pillar: Infrastructure	23.	6.3
4th pillar: Affordability	46.	5.8
5th pillar: Skills	39.	5.5
C. Usage subindex	37.	4.5
6th pillar: Individual usage	29.	5.8
7th pillar: Business usage	31 .	4.3
8th pillar: Government usage		



-Czech Republic

- High-income group average

#### The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*96
1.02	Laws relating to ICTs*454.3
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*90 3.3
1.05	Efficiency of legal system in challenging regs*76 3.4
1.06	Intellectual property protection*344.6
1.07	Software piracy rate, % software installed2034
1.08	No. procedures to enforce a contract9
1.09	No. days to enforce a contract92 611
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*325.6
2.02	Venture capital availability*
2.03	Total tax rate, % profits112 50.4
2.04	No. days to start a business8615
2.05	No. procedures to start a business928
2.06	Intensity of local competition*145.7
2.07	Tertiary education gross enrollment rate, %33 65.4
2.08	Quality of management schools*634.3
2.09	Gov't procurement of advanced tech*83
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita22 8194.6
3.02	Mobile network coverage, % pop
3.03	Int'l Internet bandwidth, kb/s per user25 116.8
3.04	Secure Internet servers/million pop25 691.6
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min72 0.26
4.02	Fixed broadband Internet tariffs, PPP \$/month39 26.18
4.03	Internet & telephony competition, 0–2 (best)75 1.87
	5th pillar: Skills
5.01	Quality of education system*60
5.02	Quality of math & science education*574.3
5.03	Secondary education gross enrollment rate, $\%30104.4$
5.04	Adult literacy rate, %n/an/a1

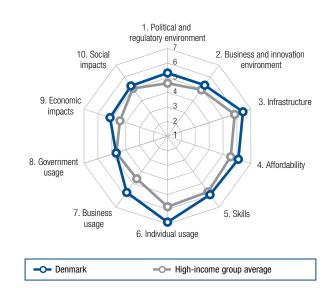
	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop45 129.5
6.02	Individuals using Internet, %2779.7
6.03	Households w/ personal computer, %34 78.5
6.04	Households w/ Internet access, %3178.0
6.05	Fixed broadband Internet subs/100 pop23 27.9
6.06	Mobile broadband subs/100 pop34 66.7
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop28 21.4
7.04	ICT use for business-to-business transactions*28 5.5
7.05	Business-to-consumer Internet use*115.8
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*1063.3
8.02	Government Online Service Index, 0-1 (best)85 0.37
8.03	Gov't success in ICT promotion*1013.6
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*
9.02	ICT PCT patents, applications/million pop33 4.3
9.03	Impact of ICTs on organizational models*294.9
9.04	Knowledge-intensive jobs, % workforce28 37.9
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*41 4.9
10.02	Internet access in schools*295.4
10.03	ICT use & gov't efficiency*873.8
10.04	E-Participation Index, 0–1 (best)1050.25
Note:	Indicators followed by an asterisk (*) are measured on a 1-to-7 (best) scale. For

further details and explanation, please refer to the section "How to Read the Country/Economy Profiles" on page 53.

<sup>1</sup> See the "Technical Notes and Sources" section.

## Denmark

	Rank (out of 139)	
Networked Readiness Index	11.	. 5.6
Networked Readiness Index 2015 (out of 143)	15.	5.5
Networked Readiness Index 2014 (out of 148)	13.	5.5
Networked Readiness Index 2013 (out of 144)	8.	5.6
A. Environment subindex	14.	5.3
1st pillar: Political and regulatory environment	17.	5.3
2nd pillar: Business and innovation environment	16.	5.3
B. Readiness subindex	12.	6.1
3rd pillar: Infrastructure	17.	6.4
4th pillar: Affordability	31 .	6.1
5th pillar: Skills	17.	5.9
C. Usage subindex	10.	5.8
6th pillar: Individual usage	1.	6.9
7th pillar: Business usage	9.	5.7
8th pillar: Government usage	38.	4.7
D. Impact subindex	17.	5.2
9th pillar: Economic impacts	16.	5.1
10th pillar: Social impacts	26.	5.3



## The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*
1.02	Laws relating to ICTs*14
1.03	Judicial independence* 5 6.3
1.04	Efficiency of legal system in settling disputes*19 5.0
1.05	Efficiency of legal system in challenging regs*374.1
1.06	Intellectual property protection*21
1.07	Software piracy rate, % software installed7 23
1.08	No. procedures to enforce a contract4835
1.09	No. days to enforce a contract29 410
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*23 6.0
2.02	Venture capital availability*
2.03	Total tax rate, % profits2424.5
2.04	No. days to start a business9
2.05	No. procedures to start a business
2.06	Intensity of local competition*455.3
2.07	Tertiary education gross enrollment rate, %13 81.2
2.08	Quality of management schools*175.4
2.09	Gov't procurement of advanced tech*65
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita33 6188.7
3.02	Mobile network coverage, % pop 59 99.5
3.03	Int'l Internet bandwidth, kb/s per user9 341.7
3.04	Secure Internet servers/million pop
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min9 0.06
4.02	Fixed broadband Internet tariffs, PPP $\mbox{\sc s/month}\70\\ 34.15$
4.03	Internet & telephony competition, 0–2 (best)71 1.88
	5th pillar: Skills
5.01	Quality of education system*16
5.02	Quality of math & science education*294.8
5.03	Secondary education gross enrollment rate, $\%6$ 129.8
5.04	Adult literacy rate, %n/an/a <sup>1</sup>

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop50 125.9
6.02	Individuals using Internet, %3 96.0
6.03	Households w/ personal computer, %6 95.0
6.04	Households w/ Internet access, %
6.05	Fixed broadband Internet subs/100 pop2 41.3
6.06	Mobile broadband subs/100 pop8 115.6
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop8 209.3
7.04	ICT use for business-to-business transactions*22 5.6
7.05	Business-to-consumer Internet use*215.6
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*36
8.02	Government Online Service Index, 0-1 (best)35 0.66
8.03	Gov't success in ICT promotion*
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*29 5.1
9.02	ICT PCT patents, applications/million pop11 42.1
9.03	Impact of ICTs on organizational models*24 5.0
9.04	Knowledge-intensive jobs, % workforce11 45.3
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*16 5.7
10.02	Internet access in schools*
10.03	ICT use & gov't efficiency*165.1
10.04	E-Participation Index, 0–1 (best)54 0.55
Note:	Indicators followed by an asterisk (*) are measured on a 1-to-7 (best) scale. For further details and explanation, please refer to the section "How to Read the

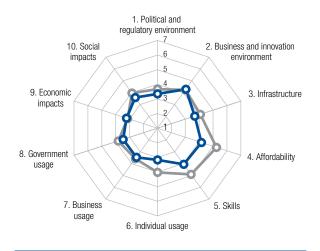
Country/Economy Profiles" on page 53.

 $<sup>^{1}\,\,</sup>$  See the "Technical Notes and Sources" section.

# Dominican Republic

Rank Value

	(out of 139)	(1-7)
Networked Readiness Index	98.	. 3.6
Networked Readiness Index 2015 (out of 143)	95.	3.6
Networked Readiness Index 2014 (out of 148)	93.	3.7
Networked Readiness Index 2013 (out of 144)	90.	3.6
A. Environment subindex	87.	3.8
1st pillar: Political and regulatory environment	100.	3.4
2nd pillar: Business and innovation environment	69.	4.3
B. Readiness subindex	103.	4.0
3rd pillar: Infrastructure	85.	3.7
4th pillar: Affordability	106.	4.2
5th pillar: Skills	104.	4.0
C. Usage subindex	97.	3.4
6th pillar: Individual usage	95.	3.2
7th pillar: Business usage	88.	3.5
8th pillar: Government usage	95.	3.5
D. Impact subindex	86.	3.4
9th pillar: Economic impacts	68.	3.2
10th pillar: Social impacts	94.	3.6



-O- Dominican Republic -O- Upper-middle-income group average

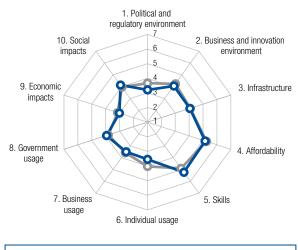
#### The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*1073.0
1.02	Laws relating to ICTs*853.6
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*99 3.2
1.05	Efficiency of legal system in challenging regs*1072.9
1.06	Intellectual property protection*863.6
1.07	Software piracy rate, % software installed7675
1.08	No. procedures to enforce a contract4234
1.09	No. days to enforce a contract4545
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*634.9
2.02	Venture capital availability*
2.03	Total tax rate, % profits90 42.4
2.04	No. days to start a business85
2.05	No. procedures to start a business74
2.06	Intensity of local competition*445.3
2.07	Tertiary education gross enrollment rate, %56 47.5
2.08	Quality of management schools*1033.7
2.09	Gov't procurement of advanced tech*
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita84 1719.6
3.02	Mobile network coverage, % pop 88 98.5
3.03	Int'l Internet bandwidth, kb/s per user84 24.9
3.04	Secure Internet servers/million pop77 28.3
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min119 0.47
4.02	Fixed broadband Internet tariffs, PPP \$/month98 44.63
4.03	Internet & telephony competition, 0–2 (best)95 1.71
	5th pillar: Skills
5.01	Quality of education system*1252.6
5.02	Quality of math & science education*1372.2
5.03	Secondary education gross enrollment rate, %9378.4
5.04	Adult literacy rate, %

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop117 78.9
6.02	Individuals using Internet, %68 49.6
6.03	Households w/ personal computer, %92 26.2
6.04	Households w/ Internet access, %969621.1
6.05	Fixed broadband Internet subs/100 pop815.7
6.06	Mobile broadband subs/100 pop86 30.1
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop85 0.3
7.04	ICT use for business-to-business transactions*73 4.6
7.05	Business-to-consumer Internet use*
7.06	Extent of staff training*1033.6
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*1003.5
8.02	Government Online Service Index, 0-1 (best)83 0.39
8.03	Gov't success in ICT promotion*973.6
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*
9.02	ICT PCT patents, applications/million pop88 0.0
9.03	Impact of ICTs on organizational models*514.4
9.04	Knowledge-intensive jobs, % workforce82 17.2
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*73 4.1
10.02	Internet access in schools*1083.5
10.03	ICT use & gov't efficiency*843.8
10.04	E-Participation Index, 0–1 (best)89 0.33

## **Ecuador**

	Rank (out of 139)	
Networked Readiness Index	,	` ′
Networked Readiness Index 2015 (out of 143)		
Networked Readiness Index 2014 (out of 148)	82.	3.9
Networked Readiness Index 2013 (out of 144)	91 .	3.6
A. Environment subindex	105.	3.6
1st pillar: Political and regulatory environment	111.	3.2
2nd pillar: Business and innovation environment	86.	4.1
B. Readiness subindex	71 .	4.8
3rd pillar: Infrastructure	78.	4.0
4th pillar: Affordability	78.	5.1
5th pillar: Skills	63.	5.2
C. Usage subindex	82.	3.7
6th pillar: Individual usage	87.	3.5
7th pillar: Business usage	83.	3.5
8th pillar: Government usage	64.	3.9
D. Impact subindex	75.	3.6
9th pillar: Economic impacts	86.	3.0



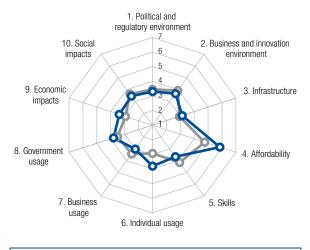
- Ecuador -O- Upper-middle-income group average

## The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*1192.8
1.02	Laws relating to ICTs*624.0
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*1083.1
1.05	Efficiency of legal system in challenging regs*1382.0
1.06	Intellectual property protection*773.8
1.07	Software piracy rate, % software installed6568
1.08	No. procedures to enforce a contract8939
1.09	No. days to enforce a contract83 588
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*804.5
2.02	Venture capital availability*105
2.03	Total tax rate, % profits52 33.0
2.04	No. days to start a business
2.05	No. procedures to start a business12512
2.06	Intensity of local competition*76
2.07	Tertiary education gross enrollment rate, %65 40.5
2.08	Quality of management schools*654.3
2.09	Gov't procurement of advanced tech*743.3
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita88 1485.1
3.02	Mobile network coverage, % pop9996.9
3.03	Int'l Internet bandwidth, kb/s per user65 36.9
3.04	Secure Internet servers/million pop
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min104 0.36
4.02	Fixed broadband Internet tariffs, PPP \$/month77 36.13
4.03	Internet & telephony competition, 0-2 (best)1 2.00
	5th pillar: Skills
5.01	Quality of education system*713.6
5.02	Quality of math & science education*85
5.03	Secondary education gross enrollment rate, %31 104.2
5.04	Adult literacy rate, %

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop92 103.9
6.02	Individuals using Internet, %828243.0
6.03	Households w/ personal computer, %80 38.0
6.04	Households w/ Internet access, %81 32.0
6.05	Fixed broadband Internet subs/100 pop74 8.3
6.06	Mobile broadband subs/100 pop85 30.9
6.07	Use of virtual social networks* 114 4.8
	7th pillar: Business usage
7.01	Firm-level technology absorption*
7.02	Capacity for innovation*69
7.03	PCT patents, applications/million pop88 0.2
7.04	ICT use for business-to-business transactions*75 4.6
7.05	Business-to-consumer Internet use*884.1
7.06	Extent of staff training*943.7
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*67
8.02	Government Online Service Index, 0-1 (best)66 0.48
8.03	Gov't success in ICT promotion*714.0
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*64
9.02	ICT PCT patents, applications/million pop85 0.1
9.03	Impact of ICTs on organizational models*594.3
9.04	Knowledge-intensive jobs, % workforce91 12.3
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*56 4.4
10.02	Internet access in schools*
10.03	ICT use & gov't efficiency*
10.04	E-Participation Index, 0–1 (best)6464

	(out of 139)	(1-7)
Networked Readiness Index	96	.3.7
Networked Readiness Index 2015 (out of 143)	94.	3.6
Networked Readiness Index 2014 (out of 148)	91.	3.7
Networked Readiness Index 2013 (out of 144)	80.	3.8
A. Environment subindex	113.	3.5
1st pillar: Political and regulatory environment	102.	3.3
2nd pillar: Business and innovation environment	113.	3.7
B. Readiness subindex	97.	4.2
3rd pillar: Infrastructure	94.	3.1
4th pillar: Affordability	47 .	5.8
5th pillar: Skills	111.	3.7
C. Usage subindex	89.	3.5
6th pillar: Individual usage	80.	3.8
7th pillar: Business usage	129.	3.0
8th pillar: Government usage	67.	3.8
D. Impact subindex	85.	3.4
9th pillar: Economic impacts	58.	3.4
10th pillar: Social impacts	103.	3.5



-O- Lower-middle-income group average -C- Egypt

## The Networked Readiness Index in detail

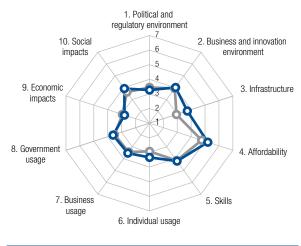
	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*
1.02	Laws relating to ICTs*
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*82 3.4
1.05	Efficiency of legal system in challenging regs*70 3.4
1.06	Intellectual property protection*1083.2
1.07	Software piracy rate, % software installed5662
1.08	No. procedures to enforce a contract
1.09	No. days to enforce a contract1261010
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*1203.9
2.02	Venture capital availability*
2.03	Total tax rate, % profits
2.04	No. days to start a business8
2.05	No. procedures to start a business747
2.06	Intensity of local competition*1274.2
2.07	Tertiary education gross enrollment rate, %79 30.3
2.08	Quality of management schools*1382.5
2.09	Gov't procurement of advanced tech*803.2
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita81 1915.4
3.02	Mobile network coverage, % pop49 99.8
3.03	Int'l Internet bandwidth, kb/s per user1039.3
3.04	Secure Internet servers/million pop
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min11 0.07
4.02	Fixed broadband Internet tariffs, PPP \$/month72 34.88
4.03	Internet & telephony competition, 0–2 (best)98 1.60
	5th pillar: Skills
5.01	Quality of education system*1382.1
5.02	Quality of math & science education*1302.6
5.03	Secondary education gross enrollment rate, %83 86.0
5.04	Adult literacy rate, %919175.2

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop68 114.3
6.02	Individuals using Internet, %95 31.7
6.03	Households w/ personal computer, %73 45.1
6.04	Households w/ Internet access, %7736.8
6.05	Fixed broadband Internet subs/100 pop903.7
6.06	Mobile broadband subs/100 pop68 43.5
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*126
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop74 0.7
7.04	ICT use for business-to-business transactions*67 4.7
7.05	Business-to-consumer Internet use*90
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*1123.2
8.02	Government Online Service Index, 0-1 (best)51 0.59
8.03	Gov't success in ICT promotion*993.6
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*984.0
9.02	ICT PCT patents, applications/million pop71 0.2
9.03	Impact of ICTs on organizational models*903.7
9.04	Knowledge-intensive jobs, % workforce31 36.3
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*108 3.5
10.02	Internet access in schools*
10.03	ICT use & gov't efficiency*1123.4
10.04	E-Participation Index, 0-1 (best)54 0.55

## El Salvador

	Rank (out of 139)	
Networked Readiness Index	,	. ,
Networked Readiness Index 2015 (out of 143)		
Networked Readiness Index 2014 (out of 148)		
Networked Readiness Index 2013 (out of 144)		
A. Environment subindex	104.	3.6
1st pillar: Political and regulatory environment		
2nd pillar: Business and innovation environment		
3. Readiness subindex		
3rd pillar: Infrastructure	83.	3.7
4th pillar: Affordability		
5th pillar: Skills	98.	4.2
C. Usage subindex	90.	3.5
6th pillar: Individual usage		
7th pillar: Business usage	78.	3.5
8th pillar: Government usage	85.	3.6
D. Impact subindex		
9th pillar: Economic impacts		

10th pillar: Social impacts......80....3.9



- El Salvador -O- Lower-middle-income group average

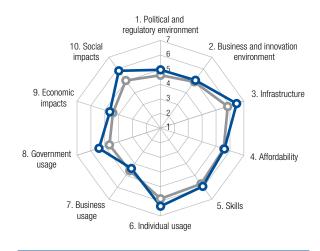
#### The Networked Readiness Index in detail

INDICATOR RANK/139 VALUE
1st pillar: Political and regulatory environment
Effectiveness of law-making bodies*1053.1
Laws relating to ICTs*923.5
Judicial independence*903.4
Efficiency of legal system in settling disputes*110 3.0
Efficiency of legal system in challenging regs*1033.0
Intellectual property protection*983.4
Software piracy rate, % software installed8580
No. procedures to enforce a contract4835
No. days to enforce a contract113786
2nd pillar: Business and innovation environment
Availability of latest technologies*93 4.3
Venture capital availability*
Total tax rate, % profits
No. days to start a business9117
No. procedures to start a business928
Intensity of local competition*625.1
Tertiary education gross enrollment rate, %8229.2
Quality of management schools*903.9
Gov't procurement of advanced tech*973.0
3rd pillar: Infrastructure
Electricity production, kWh/capita97 958.2
Mobile network coverage, % pop121 87.6
Int'l Internet bandwidth, kb/s per user50 50.3
Secure Internet servers/million pop83 22.1
4th pillar: Affordability
Prepaid mobile cellular tariffs, PPP \$/min88 0.31
Fixed broadband Internet tariffs, PPP \$/month80 36.62
Internet & telephony competition, 0–2 (best)75 1.87
5th pillar: Skills
Quality of education system*1162.9
Quality of math & science education*1193.0
Consider a squastion suggest sold and the O/ O4 70.1
Secondary education gross enrollment rate, %94 78.1

	INDICATOR	RANK/139	VALUE
	6th pillar: Individual usage		
6.01	Mobile phone subscriptions/100 pop	32	144.0
6.02	Individuals using Internet, %	96	29.7
6.03	Households w/ personal computer, %	93	25.2
6.04	Households w/ Internet access, %	95	23.3
6.05	Fixed broadband Internet subs/100 pop	84	5.0
6.06	Mobile broadband subs/100 pop	100	18.4
6.07	Use of virtual social networks*	79	5.5
	7th pillar: Business usage		
7.01	Firm-level technology absorption*	81	4.4
7.02	Capacity for innovation*	59	4.0
7.03	PCT patents, applications/million pop	94	0.2
7.04	ICT use for business-to-business transaction	ons*95	4.3
7.05	Business-to-consumer Internet use*	63	4.6
7.06	Extent of staff training*	97	3.7
	8th pillar: Government usage		
8.01	Importance of ICTs to gov't vision*		
8.02	Government Online Service Index, 0-1 (bes	st)59	0.54
8.03	Gov't success in ICT promotion*	119	3.2
	9th pillar: Economic impacts		
9.01	Impact of ICTs on business models*	94	4.1
9.02	ICT PCT patents, applications/million pop.	99	0.0
9.03	Impact of ICTs on organizational models*	80	3.9
9.04	Knowledge-intensive jobs, % workforce	92	12.1
	10th pillar: Social impacts		
10.01	Impact of ICTs on access to basic services	s*79	4.0
10.02	Internet access in schools*	99	3.6
10.03	ICT use & gov't efficiency*	105	3.4
10.04	E-Participation Index, 0-1 (best)	45	0.61

Rank (out of 139) (1-7)

#### Networked Readiness Index......22...5.4 A. Environment subindex......23.....5.0 1st pillar: Political and regulatory environment......27..... 5.0 B. Readiness subindex ......18 ..... 6.0 C. Usage subindex......23..... 5.4



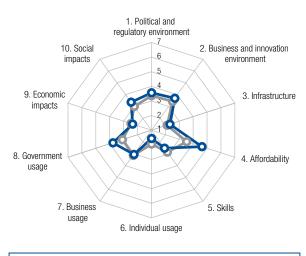
-C Estonia - High-income group average

#### The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*28
1.02	Laws relating to ICTs*
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*39 4.3
1.05	Efficiency of legal system in challenging regs*25 4.5
1.06	Intellectual property protection*26
1.07	Software piracy rate, % software installed3347
1.08	No. procedures to enforce a contract4835
1.09	No. days to enforce a contract34425
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*26
2.02	Venture capital availability*
2.03	Total tax rate, % profits
2.04	No. days to start a business4
2.05	No. procedures to start a business
2.06	Intensity of local competition*205.6
2.07	Tertiary education gross enrollment rate, %2372.9
2.08	Quality of management schools*37
2.09	Gov't procurement of advanced tech*203.9
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita14 . 10072.1
3.02	Mobile network coverage, % pop 100.0
3.03	Int'l Internet bandwidth, kb/s per user78 28.7
3.04	Secure Internet servers/million pop
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min97 0.33
4.02	Fixed broadband Internet tariffs, PPP \$/month50 28.36
4.03	Internet & telephony competition, 0–2 (best)1 2.00
	5th pillar: Skills
5.01	Quality of education system*344.4
5.02	Quality of math & science education*145.2
5.03	Secondary education gross enrollment rate, %23 108.6
5.04	Adult literacy rate, %

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop12 160.7
6.02	Individuals using Internet, %2184.2
6.03	Households w/ personal computer, %25 82.5
6.04	Households w/ Internet access, %21 82.9
6.05	Fixed broadband Internet subs/100 pop21 28.9
6.06	Mobile broadband subs/100 pop6 117.0
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*31 5.4
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop29 18.1
7.04	ICT use for business-to-business transactions*5 6.0
7.05	Business-to-consumer Internet use*
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*12
8.02	Government Online Service Index, 0-1 (best)18 0.77
8.03	Gov't success in ICT promotion*
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models* 5.6
9.02	ICT PCT patents, applications/million pop25 9.8
9.03	Impact of ICTs on organizational models* 5.6
9.04	Knowledge-intensive jobs, % workforce19 42.7
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*11 5.9
10.02	Internet access in schools* 8 6.1
10.03	ICT use & gov't efficiency*
10.04	E-Participation Index, 0–1 (best)22 0.76

	(out of 139)	Value (1–7)
Networked Readiness Index	120.	. ,
Networked Readiness Index 2015 (out of 143)	130.	2.9
Networked Readiness Index 2014 (out of 148)		
Networked Readiness Index 2013 (out of 144)	128.	2.9
A. Environment subindex	106.	3.6
1st pillar: Political and regulatory environment	89.	3.6
2nd pillar: Business and innovation environment	109.	3.7
B. Readiness subindex	116.	3.1
3rd pillar: Infrastructure	122.	2.3
4th pillar: Affordability	93.	4.6
5th pillar: Skills	131.	2.5
C. Usage subindex	123.	2.8
6th pillar: Individual usage	136.	1.6
7th pillar: Business usage	127.	3.0
8th pillar: Government usage	71.	3.8
D. Impact subindex	119.	2.9
9th pillar: Economic impacts	131.	2.4
10th pillar: Social impacts	109.	3.4



--- Ethiopia - Low-income group average

## The Networked Readiness Index in detail

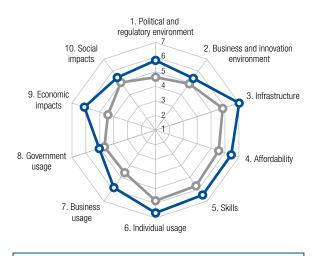
	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*
1.02	Laws relating to ICTs*
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*663.7
1.05	Efficiency of legal system in challenging regs*963.1
1.06	Intellectual property protection*1033.3
1.07	Software piracy rate, % software installedn/an/a
1.08	No. procedures to enforce a contract76
1.09	No. days to enforce a contract68 530
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*1193.9
2.02	Venture capital availability*
2.03	Total tax rate, % profits46 32.1
2.04	No. days to start a business97
2.05	No. procedures to start a business12011
2.06	Intensity of local competition*1254.3
2.07	Tertiary education gross enrollment rate, %1256.3
2.08	Quality of management schools*993.7
2.09	Gov't procurement of advanced tech*493.6
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita130 92.2
3.02	Mobile network coverage, % pop116 90.0
3.03	Int'l Internet bandwidth, kb/s per user1185.0
3.04	Secure Internet servers/million pop
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min26 0.11
4.02	Fixed broadband Internet tariffs, PPP $\mbox{\sc PP}$ month67 33.50
4.03	Internet & telephony competition, 0-2 (best) 135 0.00
	5th pillar: Skills
5.01	Quality of education system*68
5.02	Quality of math & science education*873.7
5.03	Secondary education gross enrollment rate, % 133 36.2
5.04	Adult literacy rate, %

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop138 31.6
6.02	Individuals using Internet, %1352.9
6.03	Households w/ personal computer, %136 2.8
6.04	Households w/ Internet access, %1352.9
6.05	Fixed broadband Internet subs/100 pop113 0.5
6.06	Mobile broadband subs/100 pop1207.5
6.07	Use of virtual social networks*128 4.4
	7th pillar: Business usage
7.01	Firm-level technology absorption*128
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop113 0.0
7.04	ICT use for business-to-business transactions*134 3.5
7.05	Business-to-consumer Internet use*
7.06	Extent of staff training*1123.4
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*843.6
8.02	Government Online Service Index, 0-1 (best)71 0.46
8.03	Gov't success in ICT promotion*74
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*1213.6
9.02	ICT PCT patents, applications/million pop97 0.0
9.03	Impact of ICTs on organizational models*112 3.5
9.04	Knowledge-intensive jobs, % workforce1063.8
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*114 3.5
10.02	Internet access in schools*9696
10.03	ICT use & gov't efficiency*853.8
10.04	E-Participation Index, 0-1 (best)105 0.25

# Finland

Rank Value

(out of 139)	(1-7)
Networked Readiness Index2.	.6.0
Networked Readiness Index 2015 (out of 143)2	6.0
Networked Readiness Index 2014 (out of 148)1	6.0
Networked Readiness Index 2013 (out of 144)1.	6.0
A. Environment subindex5.	5.6
1st pillar: Political and regulatory environment4.	5.8
2nd pillar: Business and innovation environment9	5.4
B. Readiness subindex1	6.6
3rd pillar: Infrastructure	7.0
4th pillar: Affordability13.	6.4
5th pillar: Skills2.	6.5
C. Usage subindex7.	5.8
6th pillar: Individual usage6.	6.6
7th pillar: Business usage5	5.8
8th pillar: Government usage	5.0
D. Impact subindex4.	5.8
9th pillar: Economic impacts1.	6.1
10th pillar: Social impacts	5.5



--- Finland -O- High-income group average

## The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*
1.02	Laws relating to ICTs* 10 5.3
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*3 5.8
1.05	Efficiency of legal system in challenging regs*1 5.8
1.06	Intellectual property protection*1
1.07	Software piracy rate, % software installed9 24
1.08	No. procedures to enforce a contract3433
1.09	No. days to enforce a contract19375
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*1
2.02	Venture capital availability*
2.03	Total tax rate, % profits7237.9
2.04	No. days to start a business8114
2.05	No. procedures to start a business113
2.06	Intensity of local competition*894.8
2.07	Tertiary education gross enrollment rate, %3 91.1
2.08	Quality of management schools*135.4
2.09	Gov't procurement of advanced tech*
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita9 . 13100.1
3.02	Mobile network coverage, % pop32 100.0
3.03	Int'l Internet bandwidth, kb/s per user14 218.7
3.04	Secure Internet servers/million pop8 1791.3
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min12 0.07
4.02	Fixed broadband Internet tariffs, PPP $\mbox{\sc s/month}\51\\ 28.63$
4.03	Internet & telephony competition, 0–2 (best)1 2.00
	5th pillar: Skills
5.01	Quality of education system*4 5.7
5.02	Quality of math & science education*2 6.1
5.03	Secondary education gross enrollment rate, $\%2143.2$
5.04	Adult literacy rate, %n/an/an/a

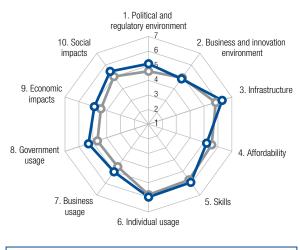
	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop34 139.7
6.02	Individuals using Internet, %7 92.4
6.03	Households w/ personal computer, %9 91.9
6.04	Households w/ Internet access, %13 89.8
6.05	Fixed broadband Internet subs/100 pop15 32.3
6.06	Mobile broadband subs/100 pop3 138.5
6.07	Use of virtual social networks*10 6.4
	7th pillar: Business usage
7.01	Firm-level technology absorption* 10 5.8
7.02	Capacity for innovation* 6 5.6
7.03	PCT patents, applications/million pop4 289.5
7.04	ICT use for business-to-business transactions*8 5.9
7.05	Business-to-consumer Internet use*
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*22 4.8
8.02	Government Online Service Index, 0-1 (best)18 0.77
8.03	Gov't success in ICT promotion*284.7
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*
9.02	ICT PCT patents, applications/million pop2 149.0
9.03	Impact of ICTs on organizational models*3 5.8
9.04	Knowledge-intensive jobs, % workforce12 45.2
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*20 5.7
10.02	Internet access in schools*
10.03	ICT use & gov't efficiency*
10.04	E-Participation Index, 0–1 (best)24 0.71
Note:	Indicators followed by an asterisk (*) are measured on a 1-to-7 (best) scale. For further details and explanation, please refer to the section "How to Read the

further details and explanation, please refer to the section "How to Read the Country/Economy Profiles" on page 53.

1 See the "Technical Notes and Sources" section.

## France

	Rank (out of 139)	
Networked Readiness Index	24.	.5.3
Networked Readiness Index 2015 (out of 143)	26.	5.2
Networked Readiness Index 2014 (out of 148)	25.	5.1
Networked Readiness Index 2013 (out of 144)	26.	5.1
A. Environment subindex	26.	5.0
1st pillar: Political and regulatory environment	23.	5.1
2nd pillar: Business and innovation environment	35.	4.8
B. Readiness subindex	27.	5.8
3rd pillar: Infrastructure	22.	6.3
4th pillar: Affordability	76.	5.2
5th pillar: Skills	18.	5.9
C. Usage subindex	20.	5.4
6th pillar: Individual usage	25.	6.0
7th pillar: Business usage	19.	5.0
8th pillar: Government usage	15.	5.3
D. Impact subindex	19.	5.2
9th pillar: Economic impacts	20.	4.9
10th pillar: Social impacts	17.	5.5



--- France - High-income group average

#### The Networked Readiness Index in detail

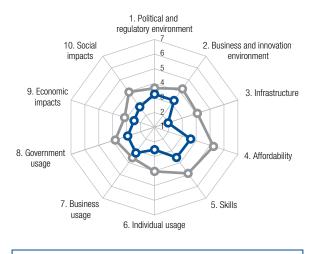
	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*
1.02	Laws relating to ICTs* 17 5.1
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*28 4.6
1.05	Efficiency of legal system in challenging regs*27 4.4
1.06	Intellectual property protection*14
1.07	Software piracy rate, % software installed2236
1.08	No. procedures to enforce a contract1429
1.09	No. days to enforce a contract23395
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*21
2.02	Venture capital availability*
2.03	Total tax rate, % profits
2.04	No. days to start a business
2.05	No. procedures to start a business415
2.06	Intensity of local competition*295.5
2.07	Tertiary education gross enrollment rate, %40 62.1
2.08	Quality of management schools*115.5
2.09	Gov't procurement of advanced tech*19
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita20 8606.2
3.02	Mobile network coverage, % pop6799.0
3.03	Int'l Internet bandwidth, kb/s per user12 221.7
3.04	Secure Internet servers/million pop26 683.4
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min121 0.48
4.02	Fixed broadband Internet tariffs, PPP \$/month37 25.32
4.03	Internet & telephony competition, 0–2 (best)1 2.00
	5th pillar: Skills
5.01	Quality of education system*304.5
5.02	Quality of math & science education*195.1
5.03	Secondary education gross enrollment rate, %17 110.9
5.04	Adult literacy rate, %n/an/a1

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop95 101.2
6.02	Individuals using Internet, %2383.8
6.03	Households w/ personal computer, %24 82.8
6.04	Households w/ Internet access, %2083.0
6.05	Fixed broadband Internet subs/100 pop4 40.2
6.06	Mobile broadband subs/100 pop37 66.3
6.07	Use of virtual social networks*45
	7th pillar: Business usage
7.01	Firm-level technology absorption*26
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop14 117.2
7.04	ICT use for business-to-business transactions*33 5.3
7.05	Business-to-consumer Internet use*
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*424.4
8.02	Government Online Service Index, 0-1 (best)1 1.00
8.02 8.03	Gov't success in ICT promotion*
	Gov't success in ICT promotion*374.5
8.03	Gov't success in ICT promotion*374.5  9th pillar: Economic impacts
9.01	Gov't success in ICT promotion*
9.01 9.02	Gov't success in ICT promotion*
9.01 9.02 9.03	Gov't success in ICT promotion*
9.01 9.02 9.03	Gov't success in ICT promotion*
9.01 9.02 9.03 9.04	Gov't success in ICT promotion*
9.01 9.02 9.03 9.04	Gov't success in ICT promotion*
9.01 9.02 9.03 9.04 10.01 10.02	Gov't success in ICT promotion*
9.01 9.02 9.03 9.04 10.01 10.02 10.03	Gov't success in ICT promotion*

Note: Indicators followed by an asterisk (\*) are measured on a 1-to-7 (best) scale. For further details and explanation, please refer to the section "How to Read the Country/Economy Profiles" on page 53.

<sup>1</sup> See the "Technical Notes and Sources" section.

	(out of 139)	(1-7)
Networked Readiness Index	125.	.2.9
Networked Readiness Index 2015 (out of 143)	122	3.0
Networked Readiness Index 2014 (out of 148)	128.	3.0
Networked Readiness Index 2013 (out of 144)	121	3.0
A. Environment subindex	126	3.3
1st pillar: Political and regulatory environment	107.	3.3
2nd pillar: Business and innovation environment	131	3.3
B. Readiness subindex	119.	3.0
3rd pillar: Infrastructure	128.	2.0
4th pillar: Affordability	113.	3.6
5th pillar: Skills	116.	3.5
C. Usage subindex	119	2.9
6th pillar: Individual usage	110.	2.5
7th pillar: Business usage	115.	3.2
8th pillar: Government usage	119.	2.9
D. Impact subindex	130	2.6
9th pillar: Economic impacts	127	2.5
10th pillar: Social impacts	129.	2.7



- Gabon -O- Upper-middle-income group average

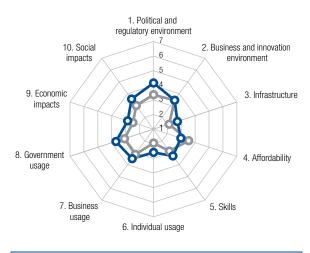
## The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*66
1.02	Laws relating to ICTs*1262.7
1.03	Judicial independence*1043.0
1.04	Efficiency of legal system in settling disputes*80 3.5
1.05	Efficiency of legal system in challenging regs*1043.0
1.06	Intellectual property protection*9494
1.07	Software piracy rate, % software installedn/an/a
1.08	No. procedures to enforce a contract7638
1.09	No. days to enforce a contract1271070
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*1163.9
2.02	Venture capital availability*
2.03	Total tax rate, % profits98 45.7
2.04	No. days to start a business12850
2.05	No. procedures to start a business74
2.06	Intensity of local competition*1324.1
2.07	Tertiary education gross enrollment rate, %119 8.4
2.08	Quality of management schools*1103.6
2.09	Gov't procurement of advanced tech*1252.7
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita89 1454.2
3.02	Mobile network coverage, % pop1381.9
3.03	Int'l Internet bandwidth, kb/s per user90 19.7
3.04	Secure Internet servers/million pop97 10.7
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min115 0.44
4.02	Fixed broadband Internet tariffs, PPP \$/month 105 54.72
4.03	Internet & telephony competition, 0-2 (best) 110 1.23
	5th pillar: Skills
5.01	Quality of education system*119
5.02	Quality of math & science education*108
5.03	Secondary education gross enrollment rate, % 117 53.3
5.04	Adult literacy rate, %

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop7 171.4
6.02	Individuals using Internet, %1259.8
6.03	Households w/ personal computer, %108 12.5
6.04	Households w/ Internet access, %1129.7
6.05	Fixed broadband Internet subs/100 pop111 0.6
6.06	Mobile broadband subs/100 pop137 0.0
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*864.4
7.02	Capacity for innovation*1163.4
7.03	PCT patents, applications/million pop100 0.1
7.04	ICT use for business-to-business transactions*128 3.7
7.05	Business-to-consumer Internet use*1333.2
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*943.6
8.02	Government Online Service Index, 0-1 (best)128 0.09
8.03	Gov't success in ICT promotion*953.7
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*1303.5
9.02	ICT PCT patents, applications/million pop103 0.0
9.03	Impact of ICTs on organizational models*1313.0
9.04	Knowledge-intensive jobs, % workforcen/an/a
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*134 3.0
10.02	Internet access in schools*
10.03	ICT use & gov't efficiency*1213.1
10.04	E-Participation Index, 0–1 (best)112 0.22

# Gambia, The

	Rank (out of 139)	
Networked Readiness Index	113.	. 3.3
Networked Readiness Index 2015 (out of 143)	108.	3.3
Networked Readiness Index 2014 (out of 148)	107.	3.4
Networked Readiness Index 2013 (out of 144)	98.	3.5
A. Environment subindex	90.	3.8
1st pillar: Political and regulatory environment	43.	4.2
2nd pillar: Business and innovation environment	123.	3.4
B. Readiness subindex	122.	3.0
3rd pillar: Infrastructure	109.	2.7
4th pillar: Affordability	123.	3.0
5th pillar: Skills	121.	3.2
C. Usage subindex	102.	3.3
6th pillar: Individual usage	108.	2.6
7th pillar: Business usage	85.	3.5
8th pillar: Government usage	77.	3.7
D. Impact subindex	100.	3.2
9th pillar: Economic impacts	103.	2.9
101 11 0 111	0.5	0.5



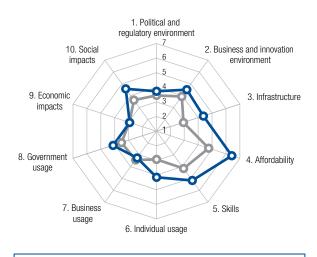
- Gambia, The - Low-income group average

#### The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*
1.02	Laws relating to ICTs*883.6
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*35 4.4
1.05	Efficiency of legal system in challenging regs*543.7
1.06	Intellectual property protection*6665
1.07	Software piracy rate, % software installedn/an/a
1.08	No. procedures to enforce a contract3433
1.09	No. days to enforce a contract
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*814.5
2.02	Venture capital availability*
2.03	Total tax rate, % profits
2.04	No. days to start a business10625
2.05	No. procedures to start a business747
2.06	Intensity of local competition*934.7
2.07	Tertiary education gross enrollment rate, %1363.4
2.08	Quality of management schools*64
2.09	Gov't procurement of advanced tech*303.8
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita126 130.0
3.02	Mobile network coverage, % pop110 94.0
3.03	Int'l Internet bandwidth, kb/s per user100 10.9
3.04	Secure Internet servers/million pop
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min80 0.28
4.02	Fixed broadband Internet tariffs, PPP $\mbox{\sc s/month}\ 130\dots 141.78$
4.03	Internet & telephony competition, 0–2 (best) 119 1.13
	5th pillar: Skills
5.01	Quality of education system*394.3
5.02	Quality of math & science education*933.6
5.03	Secondary education gross enrollment rate, $\%11357.5$
5.04	Adult literacy rate, %

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop58 119.6
6.02	Individuals using Internet, %114 15.6
6.03	Households w/ personal computer, %118 8.3
6.04	Households w/ Internet access, %113 8.5
6.05	Fixed broadband Internet subs/100 pop124 0.1
6.06	Mobile broadband subs/100 pop117 8.0
6.07	Use of virtual social networks*101 5.1
	7th pillar: Business usage
7.01	Firm-level technology absorption*
7.02	Capacity for innovation*67
7.03	PCT patents, applications/million pop80 0.4
7.04	ICT use for business-to-business transactions*105 4.2
7.05	Business-to-consumer Internet use*1143.6
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*374.5
8.02	Government Online Service Index, 0-1 (best)112 0.20
8.03	Gov't success in ICT promotion*434.4
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*96
9.02	ICT PCT patents, applications/million pop62 0.4
9.03	Impact of ICTs on organizational models*111 3.5
9.04	Knowledge-intensive jobs, % workforcen/an/a
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*77 4.0
10.02	Internet access in schools*933.8
10.03	ICT use & gov't efficiency*64
10.04	E-Participation Index, 0-1 (best)112 0.22

(out of 139)	(1-7)
Networked Readiness Index58.	. 4.3
Networked Readiness Index 2015 (out of 143)60.	4.2
Networked Readiness Index 2014 (out of 148)60.	4.1
Networked Readiness Index 2013 (out of 144)65.	3.9
A. Environment subindex56.	4.1
1st pillar: Political and regulatory environment73.	3.7
2nd pillar: Business and innovation environment	4.5
B. Readiness subindex46.	5.3
3rd pillar: Infrastructure	4.4
4th pillar: Affordability15.	6.4
5th pillar: Skills64.	5.1
C. Usage subindex72.	3.8
6th pillar: Individual usage68.	4.1
7th pillar: Business usage	3.2
8th pillar: Government usage54.	4.1
D. Impact subindex63.	3.8
9th pillar: Economic impacts91.	2.9
10th pillar: Social impacts	4.6



- Georgia -C Lower-middle-income group average

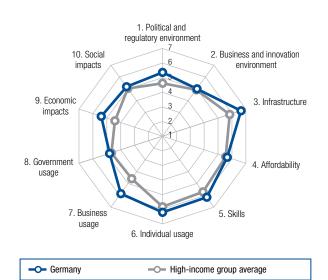
## The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*56
1.02	Laws relating to ICTs*76
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*54 3.9
1.05	Efficiency of legal system in challenging regs*55 3.7
1.06	Intellectual property protection*1013.3
1.07	Software piracy rate, % software installed10290
1.08	No. procedures to enforce a contract3433
1.09	No. days to enforce a contract
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*97
2.02	Venture capital availability*1192.2
2.03	Total tax rate, % profits8 16.4
2.04	No. days to start a business2
2.05	No. procedures to start a business2
2.06	Intensity of local competition*9191
2.07	Tertiary education gross enrollment rate, %6739.2
2.08	Quality of management schools*973.8
2.09	Gov't procurement of advanced tech*953.0
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita78 2241.7
3.02	Mobile network coverage, % pop66 99.1
3.03	Int'l Internet bandwidth, kb/s per user43 71.0
3.04	Secure Internet servers/million pop7137.1
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min18 0.09
4.02	Fixed broadband Internet tariffs, PPP \$/month53 29.25
4.03	Internet & telephony competition, 0–2 (best)1 2.00
	5th pillar: Skills
5.01	Quality of education system*1013.1
5.02	Quality of math & science education*973.5
5.03	Secondary education gross enrollment rate, $\%4699.4$
5.04	Adult literacy rate, %

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop51 124.9
6.02	Individuals using Internet, %72 48.9
6.03	Households w/ personal computer, %72 45.8
6.04	Households w/ Internet access, %7441.0
6.05	Fixed broadband Internet subs/100 pop61 12.2
6.06	Mobile broadband subs/100 pop97 21.8
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption* 103 4.2
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop61 1.7
7.04	ICT use for business-to-business transactions*79 4.6
7.05	Business-to-consumer Internet use*94
7.06	Extent of staff training*1183.4
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*813.7
8.02	Government Online Service Index, 0-1 (best)49 0.60
8.03	Gov't success in ICT promotion*
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*1024.0
9.02	ICT PCT patents, applications/million pop55 0.7
9.03	Impact of ICTs on organizational models*116 3.4
9.04	Knowledge-intensive jobs, % workforce63 22.2
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*51 4.5
10.02	Internet access in schools*
10.03	ICT use & gov't efficiency*
10.04	E-Participation Index, 0–1 (best)

# Germany

	Rank (out of 139)	
Networked Readiness Index	15.	.5.6
Networked Readiness Index 2015 (out of 143)	13	5.5
Networked Readiness Index 2014 (out of 148)	12.	5.5
Networked Readiness Index 2013 (out of 144)	13.	5.4
A. Environment subindex	20	5.2
1st pillar: Political and regulatory environment	16.	5.4
2nd pillar: Business and innovation environment	28.	5.0
B. Readiness subindex	13	6.1
3rd pillar: Infrastructure	12	6.6
4th pillar: Affordability	55	5.6
5th pillar: Skills	8	6.1
C. Usage subindex	14	5.6
6th pillar: Individual usage	18.	6.2
7th pillar: Business usage	6.	5.8
8th pillar: Government usage	30.	4.8
D. Impact subindex	15	5.3
9th pillar: Economic impacts	10.	5.4
10th pillar: Social impacts	30	5.2



## The Networked Readiness Index in detail

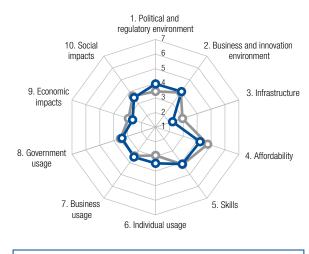
	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*17
1.02	Laws relating to ICTs*
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*16 5.3
1.05	Efficiency of legal system in challenging regs*11 5.2
1.06	Intellectual property protection*20
1.07	Software piracy rate, % software installed9 24
1.08	No. procedures to enforce a contract2231
1.09	No. days to enforce a contract
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*12
2.02	Venture capital availability*25
2.03	Total tax rate, % profits105 48.8
2.04	No. days to start a business6511
2.05	No. procedures to start a business1059
2.06	Intensity of local competition*7
2.07	Tertiary education gross enrollment rate, %43 61.1
2.08	Quality of management schools*25
2.09	Gov't procurement of advanced tech*10
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita24 7779.4
3.02	Mobile network coverage, % pop67 99.0
3.03	Int'l Internet bandwidth, kb/s per user19 146.0
3.04	Secure Internet servers/million pop13 1420.0
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min27 0.11
4.02	Fixed broadband Internet tariffs, PPP \$/month97 44.40
4.03	Internet & telephony competition, 0–2 (best)1 2.00
	5th pillar: Skills
5.01	Quality of education system*105.4
5.02	Quality of math & science education*16
5.03	Secondary education gross enrollment rate, %33 102.5
5.04	Adult literacy rate, %n/an/an/a

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop56 120.4
6.02	Individuals using Internet, %1686.2
6.03	Households w/ personal computer, %11 90.6
6.04	Households w/ Internet access, %1589.5
6.05	Fixed broadband Internet subs/100 pop10 35.8
6.06	Mobile broadband subs/100 pop39 63.6
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop7 217.6
7.04	ICT use for business-to-business transactions*19 5.7
7.05	Business-to-consumer Internet use*12
7.06	Extent of staff training*135.1
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*244.7
8.02	Government Online Service Index, 0-1 (best)34 0.67
8.03	Gov't success in ICT promotion*
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*21
9.02	ICT PCT patents, applications/million pop10 52.3
9.03	Impact of ICTs on organizational models*18 5.2
9.04	Knowledge-intensive jobs, % workforce17 43.5
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*14 5.8
10.02	Internet access in schools*
10.03	ICT use & gov't efficiency*
10.04	E-Participation Index, 0–1 (best)24 0.71
	Indicators followed by an actorick (*) are measured an a 1 to 7 (host) code. For

Note: Indicators followed by an asterisk (\*) are measured on a 1-to-7 (best) scale. For further details and explanation, please refer to the section "How to Read the Country/Economy Profiles" on page 53.

<sup>1</sup> See the "Technical Notes and Sources" section.

	(out of 139)	(1-7)
Networked Readiness Index	102.	. 3.5
Networked Readiness Index 2015 (out of 143)	101	3.5
Networked Readiness Index 2014 (out of 148)	96	3.6
Networked Readiness Index 2013 (out of 144)	95	3.5
A. Environment subindex	71	4.0
1st pillar: Political and regulatory environment	54	4.0
2nd pillar: Business and innovation environment	92	4.0
B. Readiness subindex	113	3.5
3rd pillar: Infrastructure	125	2.2
4th pillar: Affordability	105.	4.2
5th pillar: Skills	102.	4.1
C. Usage subindex	91	3.5
6th pillar: Individual usage	89	3.5
7th pillar: Business usage	80	3.5
8th pillar: Government usage	98	3.4
D. Impact subindex	111	3.1
9th pillar: Economic impacts	117	2.7
10th pillar: Social impacts	99.	3.5



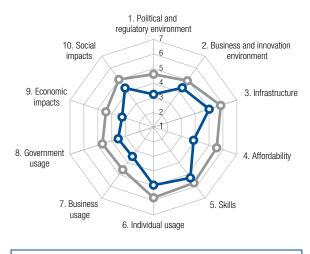
- Ghana -O- Lower-middle-income group average

## The Networked Readiness Index in detail

1st pillar: Political and regulatory environment           1.01         Effectiveness of law-making bodies*         .47         .41           1.02         Laws relating to ICTs*         .101         .34           1.03         Judicial independence*         .49         .43           1.04         Efficiency of legal system in settling disputes*         .43         .42           1.05         Efficiency of legal system in challenging regs*         .47         .38           1.06         Intellectual property protection*         .74         .39           1.07         Software piracy rate, % software installed         .n/a         .n/a           1.08         No. procedures to enforce a contract         .76         .38           1.09         No. days to enforce a contract         .106         .710           2nd pillar: Business and innovation environment           2.01         Availability of latest technologies*         .121         .3.9           2.02         Venture capital availability*         .81         .2.6           2.03         Total tax rate, % profits         .50         .32.7           2.04         No. procedures to start a business         .81         .14           2.05         No. procedures to start a business         .81         <		INDICATOR RANK/139 VALUE
1.02       Laws relating to ICTs*       101       .3.4         1.03       Judicial independence*       .49       .4.3         1.04       Efficiency of legal system in settling disputes*       .43       .4.2         1.05       Efficiency of legal system in settling disputes*       .43       .4.2         1.06       Intellectual property protection*       .74       .3.9         1.07       Software piracy rate, % software installed       .n/a       .n/a         1.08       No. procedures to enforce a contract       .76       .38         1.09       No. days to enforce a contract       .76       .38         1.09       No. days to enforce a contract       .76       .38         1.09       No. days to enforce a contract       .76       .38         1.09       Venture capital availability*       .81       .26         2.01       Availability of latest technologies*       .121       .3.9         2.02       Venture capital availability*       .81       .2.6         2.03       Total tax rate, % profits       .50       .32.7         2.04       No. days to start a business       .81       .14         2.05       No. procedures to start a business       .81       .48		1st pillar: Political and regulatory environment
1.03       Judicial independence*       49       4.3         1.04       Efficiency of legal system in settling disputes*       43       4.2         1.05       Efficiency of legal system in challenging regs*       47       3.8         1.06       Intellectual property protection*       74       3.9         1.07       Software piracy rate, % software installed       n/a       n/a         1.08       No. procedures to enforce a contract       76       38         1.09       No. days to enforce a contract       76       38         1.09       No. days to enforce a contract       106       710         2nd pillar: Business and innovation environment         2.01       Availability of latest technologies*       121       3.9         2.02       Venture capital availability*       81       2.6         2.03       Total tax rate, % profits       50       32.7         2.04       No. days to start a business       81       14         2.05       No. procedures to start a business       81       14         2.05       No. procedures to start a business       92       8         2.06       Intensity of local competition*       86       4.8         2.07       Tertiary education gross enrol	1.01	Effectiveness of law-making bodies*474.1
1.04       Efficiency of legal system in settling disputes*	1.02	Laws relating to ICTs*1013.4
1.05       Efficiency of legal system in challenging regs*	1.03	Judicial independence*
1.06       Intellectual property protection*	1.04	Efficiency of legal system in settling disputes*43 4.2
1.07       Software piracy rate, % software installed	1.05	Efficiency of legal system in challenging regs*473.8
1.08       No. procedures to enforce a contract	1.06	Intellectual property protection*74
1.09       No. days to enforce a contract       106       710         2nd pillar: Business and innovation environment         2.01       Availability of latest technologies*       121       3.9         2.02       Venture capital availability*       81       2.6         2.03       Total tax rate, % profits       50       32.7         2.04       No. days to start a business       81       14         2.05       No. procedures to start a business       92       8         2.06       Intensity of local competition*       86       4.8         2.07       Tertiary education gross enrollment rate, %       104       15.6         2.08       Quality of management schools*       48       4.5         2.09       Gov't procurement of advanced tech*       56       3.5         3rd pillar: Infrastructure         3.01       Electricity production, kWh/capita       112       491.9         3.02       Mobile network coverage, % pop.       122       87.0         3.03       Int'l Internet bandwidth, kb/s per user       126       3.6         3.04       Secure Internet servers/million pop       110       3.7         4.02       Fixed broadband Internet tariffs, PPP \$/month 111       65.43 <td>1.07</td> <td>Software piracy rate, <math display="inline">\%</math> software installedn/an/a</td>	1.07	Software piracy rate, $\%$ software installedn/an/a
2nd pillar: Business and innovation environment           2.01         Availability of latest technologies*	1.08	No. procedures to enforce a contract7638
2.01       Availability of latest technologies*       121       3.9         2.02       Venture capital availability*       81       2.6         2.03       Total tax rate, % profits       50       32.7         2.04       No. days to start a business       81       14         2.05       No. procedures to start a business       92       8         2.06       Intensity of local competition*       86       4.8         2.07       Tertiary education gross enrollment rate, %       104       15.6         2.08       Quality of management schools*       48       4.5         2.09       Gov't procurement of advanced tech*       56       3.5         3rd pillar: Infrastructure         3.01       Electricity production, kWh/capita       112       491.9         3.02       Mobile network coverage, % pop.       122       87.0         3.03       Int'l Internet bandwidth, kb/s per user       126       3.6         3.04       Secure Internet servers/million pop.       110       3.7         4th pillar: Affordability         4.01       Prepaid mobile cellular tariffs, PPP \$/month 111       65.43         4.03       Internet & telephony competition, 0-2 (best)       114       1.20	1.09	No. days to enforce a contract106710
2.02       Venture capital availability*		2nd pillar: Business and innovation environment
2.03       Total tax rate, % profits       .50       .32.7         2.04       No. days to start a business       .81       .14         2.05       No. procedures to start a business       .92       .8         2.06       Intensity of local competition*       .86       .4.8         2.07       Tertiary education gross enrollment rate, %       .104       .15.6         2.08       Quality of management schools*       .48       .4.5         2.09       Gov't procurement of advanced tech*       .56       .3.5         3rd pillar: Infrastructure         3.01       Electricity production, kWh/capita       .112       .491.9         3.02       Mobile network coverage, % pop.       .122       .87.0         3.03       Int'l Internet bandwidth, kb/s per user       .126       .3.6         3.04       Secure Internet servers/million pop.       .110       .3.7         4th pillar: Affordability         4.01       Prepaid mobile cellular tariffs, PPP \$/min       .28       .0.12         4.02       Fixed broadband Internet tariffs, PPP \$/month 111       .65.43         4.03       Internet & telephony competition, 0-2 (best)       .114       .1.20         5th pillar: Skills         5.01 <td>2.01</td> <td>Availability of latest technologies*1213.9</td>	2.01	Availability of latest technologies*1213.9
2.04       No. days to start a business       .81       .14         2.05       No. procedures to start a business       .92       .8         2.06       Intensity of local competition*       .86       .4.8         2.07       Tertiary education gross enrollment rate, %       .104       .15.6         2.08       Quality of management schools*       .48       .4.5         2.09       Gov't procurement of advanced tech*       .56       .3.5         3rd pillar: Infrastructure         3.01       Electricity production, kWh/capita       .112       .491.9         3.02       Mobile network coverage, % pop.       .122       .87.0         3.03       Int'I Internet bandwidth, kb/s per user       .126       .3.6         3.04       Secure Internet servers/million pop       .110       .3.7         4th pillar: Affordability         4.01       Prepaid mobile cellular tariffs, PPP \$/min       .28       .0.12         4.02       Fixed broadband Internet tariffs, PPP \$/month 111       .65.43         4.03       Internet & telephony competition, 0-2 (best)       .114       .1.20         5th pillar: Skills         5.01       Quality of education system*       .76       .3.6	2.02	Venture capital availability*
2.05       No. procedures to start a business	2.03	Total tax rate, % profits5032.7
2.06       Intensity of local competition*	2.04	No. days to start a business8114
2.07       Tertiary education gross enrollment rate, %	2.05	No. procedures to start a business92
2.08       Quality of management schools*	2.06	,
2.09       Gov't procurement of advanced tech*	2.07	Tertiary education gross enrollment rate, %104 15.6
3rd pillar: Infrastructure           3.01         Electricity production, kWh/capita	2.08	, ,
3.01 Electricity production, kWh/capita	2.09	Gov't procurement of advanced tech*56
3.02 Mobile network coverage, % pop		3rd pillar: Infrastructure
3.03       Int'l Internet bandwidth, kb/s per user	3.01	Electricity production, kWh/capita112 491.9
3.04       Secure Internet servers/million pop.       110       3.7         4th pillar: Affordability         4.01       Prepaid mobile cellular tariffs, PPP \$/min.       28       0.12         4.02       Fixed broadband Internet tariffs, PPP \$/month 111       65.43         4.03       Internet & telephony competition, 0-2 (best)       114       1.20         5th pillar: Skills         5.01       Quality of education system*       76       3.6         5.02       Quality of math & science education*       72       4.0         5.03       Secondary education gross enrollment rate, % 101       71.0	3.02	Mobile network coverage, % pop122 87.0
4th pillar: Affordability         4.01       Prepaid mobile cellular tariffs, PPP \$/min280.12         4.02       Fixed broadband Internet tariffs, PPP \$/month 11165.43         4.03       Internet & telephony competition, 0-2 (best)1141.20         5th pillar: Skills         5.01       Quality of education system*	3.03	Int'l Internet bandwidth, kb/s per user126
4.01       Prepaid mobile cellular tariffs, PPP \$/min280.12         4.02       Fixed broadband Internet tariffs, PPP \$/month 11165.43         4.03       Internet & telephony competition, 0–2 (best)1141.20         5th pillar: Skills         5.01       Quality of education system*	3.04	Secure Internet servers/million pop1103.7
4.02       Fixed broadband Internet tariffs, PPP \$/month 111 65.43         4.03       Internet & telephony competition, 0–2 (best) 114 1.20         5th pillar: Skills         5.01       Quality of education system*		4th pillar: Affordability
4.03       Internet & telephony competition, 0–2 (best)114 1.20         5th pillar: Skills         5.01       Quality of education system*	4.01	Prepaid mobile cellular tariffs, PPP \$/min28 0.12
5th pillar: Skills           5.01 Quality of education system*	4.02	Fixed broadband Internet tariffs, PPP $\mbox{\sc prop}$ /month 111 65.43
5.01 Quality of education system*	4.03	Internet & telephony competition, 0-2 (best)114 1.20
5.02 Quality of math & science education*72		5th pillar: Skills
5.03 Secondary education gross enrollment rate, % 101 71.0	5.01	Quality of education system*763.6
•	5.02	Quality of math & science education*724.0
5.04 Adult literacy rate, %90 76.6	5.03	Secondary education gross enrollment rate, $\%10171.0$
	5.04	Adult literacy rate, %90 76.6

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop66 114.8
6.02	Individuals using Internet, %104 18.9
6.03	Households w/ personal computer, %
6.04	Households w/ Internet access, %8329.0
6.05	Fixed broadband Internet subs/100 pop1190.3
6.06	Mobile broadband subs/100 pop44 59.8
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*95
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop1060.0
7.04	ICT use for business-to-business transactions*99 4.3
7.05	Business-to-consumer Internet use*
7.06	Extent of staff training*644.0
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*863.6
8.02	Government Online Service Index, 0-1 (best)95 0.31
8.03	Gov't success in ICT promotion*923.7
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*874.1
9.02	ICT PCT patents, applications/million pop103 0.0
9.03	Impact of ICTs on organizational models $^{\star}$ 103 3.6
9.04	Knowledge-intensive jobs, % workforce9696
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*105 3.6
10.02	Internet access in schools* 105 3.5
10.03	ICT use & gov't efficiency*943.6
10.04	E-Participation Index, 0-1 (best)81 0.39

	Rank (out of 139)	Value (1–7)
Networked Readiness Index	70.	.4.1
Networked Readiness Index 2015 (out of 143)	66.	4.1
Networked Readiness Index 2014 (out of 148)	74.	3.9
Networked Readiness Index 2013 (out of 144)	64.	3.9
A. Environment subindex	92.	3.8
1st pillar: Political and regulatory environment	108.	3.3
2nd pillar: Business and innovation environment	66.	4.3
B. Readiness subindex	77.	4.7
3rd pillar: Infrastructure	42.	5.0
4th pillar: Affordability	110.	3.9
5th pillar: Skills	58.	5.3
C. Usage subindex	62.	4.0
6th pillar: Individual usage	50.	4.9
7th pillar: Business usage	87.	3.5
8th pillar: Government usage	91.	3.5
D. Impact subindex	61 .	3.8
9th pillar: Economic impacts	65.	3.3



- Greece - High-income group average

## The Networked Readiness Index in detail

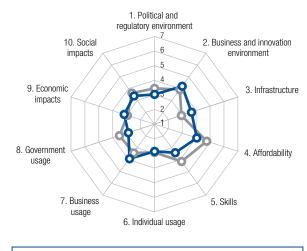
	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*112
1.02	Laws relating to ICTs*943.5
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*131 2.6
1.05	Efficiency of legal system in challenging regs*863.3
1.06	Intellectual property protection*60
1.07	Software piracy rate, % software installed5662
1.08	No. procedures to enforce a contract76
1.09	No. days to enforce a contract1391580
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*56
2.02	Venture capital availability*
2.03	Total tax rate, % profits110 49.6
2.04	No. days to start a business76
2.05	No. procedures to start a business415
2.06	Intensity of local competition*685.1
2.07	Tertiary education gross enrollment rate, %1 110.2
2.08	Quality of management schools*88
2.09	Gov't procurement of advanced tech*1322.6
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita44 5179.2
3.02	Mobile network coverage, % pop37 99.9
3.03	Int'l Internet bandwidth, kb/s per user28 99.5
3.04	Secure Internet servers/million pop46 147.4
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min135 0.77
4.02	Fixed broadband Internet tariffs, PPP \$/month47 28.03
4.03	Internet & telephony competition, 0-2 (best) 85 1.79
	5th pillar: Skills
5.01	Quality of education system*1142.9
5.02	Quality of math & science education*614.3
5.03	Secondary education gross enrollment rate, %26 108.2
5.04	Adult literacy rate, %34 97.7

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop78 110.3
6.02	Individuals using Internet, %51 63.2
6.03	Households w/ personal computer, %54 62.7
6.04	Households w/ Internet access, %47 65.6
6.05	Fixed broadband Internet subs/100 pop22 28.4
6.06	Mobile broadband subs/100 pop73 41.0
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop37 10.2
7.04	ICT use for business-to-business transactions*96 4.3
7.05	Business-to-consumer Internet use*
7.06	Extent of staff training*91
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*1292.9
8.02	Government Online Service Index, 0-1 (best)47 0.61
8.03	Gov't success in ICT promotion*1283.0
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*954.0
9.02	ICT PCT patents, applications/million pop39 2.6
9.03	Impact of ICTs on organizational models*100 3.6
9.04	Knowledge-intensive jobs, % workforce45 30.6
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*82 4.0
10.02	Internet access in schools*8686
10.03	ICT use & gov't efficiency*1003.5
10.04	E-Participation Index, 0-1 (best)17 0.80

## Guatemala

Rank Value

	(out of 139)	(1-7)
Networked Readiness Index	103.	. 3.5
Networked Readiness Index 2015 (out of 143)	107 .	3.3
Networked Readiness Index 2014 (out of 148)	101 .	3.5
Networked Readiness Index 2013 (out of 144)	102.	3.4
A. Environment subindex	107.	3.6
1st pillar: Political and regulatory environment	122.	3.0
2nd pillar: Business and innovation environment	73.	4.2
B. Readiness subindex	109.	3.7
3rd pillar: Infrastructure	86.	3.6
4th pillar: Affordability	108.	4.0
5th pillar: Skills	118.	3.4
C. Usage subindex	106.	3.2
6th pillar: Individual usage	100.	2.8
7th pillar: Business usage	45.	3.9
8th pillar: Government usage	122.	2.9
D. Impact subindex	96.	3.3
9th pillar: Economic impacts	71.	3.2
10th pillar: Social impacts	107.	3.4



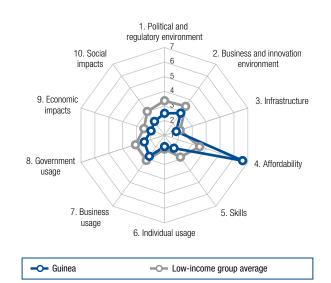
- Guatemala -O- Lower-middle-income group average

## The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*1362.2
1.02	Laws relating to ICTs*79
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*109 3.0
1.05	Efficiency of legal system in challenging regs*82 3.3
1.06	Intellectual property protection*91
1.07	Software piracy rate, % software installed8279
1.08	No. procedures to enforce a contract2231
1.09	No. days to enforce a contract1361402
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*425.3
2.02	Venture capital availability*56
2.03	Total tax rate, % profits7137.5
2.04	No. days to start a business95
2.05	No. procedures to start a business546
2.06	Intensity of local competition*285.5
2.07	Tertiary education gross enrollment rate, %98 18.3
2.08	Quality of management schools*414.6
2.09	Gov't procurement of advanced tech*1302.6
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita106 632.2
3.02	Mobile network coverage, % pop1 100.0
3.03	Int'l Internet bandwidth, kb/s per user80 27.5
3.04	Secure Internet servers/million pop85 17.5
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min130 0.62
4.02	Fixed broadband Internet tariffs, PPP \$/month84 39.11
4.03	Internet & telephony competition, 0–2 (best)1 2.00
	5th pillar: Skills
5.01	Quality of education system*1222.7
5.02	Quality of math & science education*1342.4
5.03	Secondary education gross enrollment rate, % 110 63.5
5.04	Adult literacy rate, %

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop83 106.6
6.02	Individuals using Internet, %
6.03	Households w/ personal computer, %97 20.9
6.04	Households w/ Internet access, %10515.0
6.05	Fixed broadband Internet subs/100 pop952.7
6.06	Mobile broadband subs/100 pop115 9.4
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*45 5.0
7.02	Capacity for innovation*4343
7.03	PCT patents, applications/million pop104 0.1
7.04	ICT use for business-to-business transactions*56 4.9
7.05	Business-to-consumer Internet use*604.6
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*1103.3
8.02	Government Online Service Index, 0-1 (best)120 0.15
8.03	Gov't success in ICT promotion*1063.5
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*36
9.02	ICT PCT patents, applications/million pop103 0.0
9.03	Impact of ICTs on organizational models*344.7
9.04	Knowledge-intensive jobs, % workforce94 10.9
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*614.3
10.02	Internet access in schools*98
10.03	ICT use & gov't efficiency*1043.5
10.04	E-Participation Index, 0–1 (best)1150.20

	Rank (out of 139)	
Networked Readiness Index	134.	. ,
Networked Readiness Index 2015 (out of 143)	142.	2.4
Networked Readiness Index 2014 (out of 148)		
Networked Readiness Index 2013 (out of 144)		
A. Environment subindex	137.	2.7
1st pillar: Political and regulatory environment	138.	2.5
2nd pillar: Business and innovation environment	137.	2.9
B. Readiness subindex	112.	3.5
3rd pillar: Infrastructure	132.	1.8
4th pillar: Affordability	9.	6.6
5th pillar: Skills	137.	2.1
C. Usage subindex	135.	2.3
6th pillar: Individual usage	133.	1.8
7th pillar: Business usage	136.	2.8
8th pillar: Government usage	135.	2.5
D. Impact subindex	138.	2.1
9th pillar: Economic impacts	139.	2.0
10th pillar: Social impacts	137.	2.2

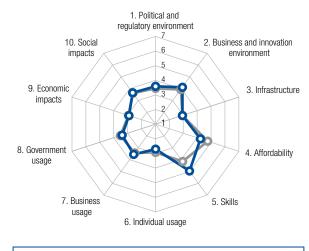


## The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*1332.3
1.02	Laws relating to ICTs*
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*135 2.3
1.05	Efficiency of legal system in challenging regs*130 2.4
1.06	Intellectual property protection*1372.2
1.07	Software piracy rate, % software installedn/an/a
1.08	No. procedures to enforce a contract
1.09	No. days to enforce a contract11311
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*135
2.02	Venture capital availability*
2.03	Total tax rate, % profits
2.04	No. days to start a business 8
2.05	No. procedures to start a business54
2.06	Intensity of local competition*1294.2
2.07	Tertiary education gross enrollment rate, %113 10.8
2.08	Quality of management schools*1392.3
2.09	Gov't procurement of advanced tech*
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita133 83.5
3.02	Mobile network coverage, % pop126 80.0
3.03	Int'l Internet bandwidth, kb/s per user1322.4
3.04	Secure Internet servers/million pop
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min43 0.15
4.02	Fixed broadband Internet tariffs, PPP $\mbox{\sc s/month.n/a}$
4.03	Internet & telephony competition, 0–2 (best)1 2.00
	5th pillar: Skills
5.01	Quality of education system*1322.4
5.02	Quality of math & science education*1153.1
5.03	Secondary education gross enrollment rate, $\%12938.8$
5.04	Adult literacy rate, %

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop12572.1
6.02	Individuals using Internet, %1381.7
6.03	Households w/ personal computer, %1372.3
6.04	Households w/ Internet access, %1381.5
6.05	Fixed broadband Internet subs/100 pop138 0.0
6.06	Mobile broadband subs/100 pop131 2.2
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*
7.02	Capacity for innovation*1382.7
7.03	PCT patents, applications/million pop121 0.0
7.04	ICT use for business-to-business transactions*133 3.5
7.05	Business-to-consumer Internet use*1363.0
7.06	Extent of staff training*1273.2
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*1283.0
8.02	Government Online Service Index, 0-1 (best)137 0.00
8.03	Gov't success in ICT promotion*1093.4
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*
9.02	ICT PCT patents, applications/million pop103 0.0
9.03	Impact of ICTs on organizational models*137 2.7
9.04	Knowledge-intensive jobs, % workforce110 0.7
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*135 3.0
10.02	Internet access in schools*1371.8
10.03	ICT use & gov't efficiency*1322.8
10.04	E-Participation Index, 0-1 (best)137 0.02

	(out of 139)	(1-7)
Networked Readiness Index	100.	.3.6
Networked Readiness Index 2015 (out of 143)	93	3.7
Networked Readiness Index 2014 (out of 148)	88	3.8
Networked Readiness Index 2013 (out of 144)	100	3.4
A. Environment subindex	84	3.9
1st pillar: Political and regulatory environment	86	3.6
2nd pillar: Business and innovation environment	79	4.1
B. Readiness subindex	101	4.0
3rd pillar: Infrastructure	104	2.9
4th pillar: Affordability	104	4.2
5th pillar: Skills	78	4.9
C. Usage subindex	105	3.2
6th pillar: Individual usage	105	2.7
7th pillar: Business usage	76	3.5
8th pillar: Government usage	99	3.4
D. Impact subindex	95	3.3
9th pillar: Economic impacts	94	2.9
10th pillar: Social impacts	91	3.7



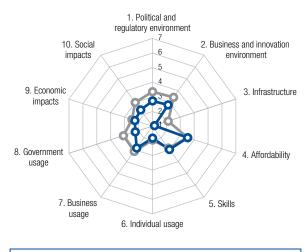
**─** Guyana -O- Lower-middle-income group average

## The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*
1.02	Laws relating to ICTs*97
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*77 3.5
1.05	Efficiency of legal system in challenging regs*69 3.4
1.06	Intellectual property protection*1063.3
1.07	Software piracy rate, % software installedn/an/a
1.08	No. procedures to enforce a contract
1.09	No. days to enforce a contract81 581
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*864.5
2.02	Venture capital availability*343.3
2.03	Total tax rate, % profits4832.3
2.04	No. days to start a business9318
2.05	No. procedures to start a business74
2.06	Intensity of local competition*1104.5
2.07	Tertiary education gross enrollment rate, %108 12.5
2.08	Quality of management schools*444.6
2.09	Gov't procurement of advanced tech*62
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita95 1054.8
3.02	Mobile network coverage, % pop9697.1
3.03	Int'l Internet bandwidth, kb/s per user102 10.0
3.04	Secure Internet servers/million pop98 10.5
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min71 0.26
4.02	Fixed broadband Internet tariffs, PPP \$/month90 42.72
4.03	Internet & telephony competition, 0–2 (best) 131 0.50
	5th pillar: Skills
5.01	Quality of education system*59
5.02	Quality of math & science education*704.1
5.03	Secondary education gross enrollment rate, %75 89.3
5.04	Adult literacy rate, %

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop126 70.5
6.02	Individuals using Internet, %9237.4
6.03	Households w/ personal computer, %91 26.9
6.04	Households w/ Internet access, %9324.2
6.05	Fixed broadband Internet subs/100 pop825.6
6.06	Mobile broadband subs/100 pop1350.2
6.07	Use of virtual social networks*945.2
	7th pillar: Business usage
7.01	Firm-level technology absorption*
7.02	Capacity for innovation*76
7.03	PCT patents, applications/million pop121 0.0
7.04	ICT use for business-to-business transactions*106 4.2
7.05	Business-to-consumer Internet use*
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*773.8
8.02	Government Online Service Index, 0-1 (best)106 0.24
8.03	Gov't success in ICT promotion*76
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*1053.9
9.02	ICT PCT patents, applications/million pop103 0.0
9.03	Impact of ICTs on organizational models*873.8
9.04	Knowledge-intensive jobs, % workforcen/an/a
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*93 3.9
10.02	Internet access in schools*
10.03	ICT use & gov't efficiency*
10.04	E-Participation Index, 0–1 (best)89 0.33

	Rank (out of 139)	
Networked Readiness Index	137.	. 2.5
Networked Readiness Index 2015 (out of 143)	137.	2.5
Networked Readiness Index 2014 (out of 148)	143.	2.5
Networked Readiness Index 2013 (out of 144)	141 .	2.6
A. Environment subindex	136.	2.8
1st pillar: Political and regulatory environment	131.	2.7
2nd pillar: Business and innovation environment		
3. Readiness subindex	132.	2.5
3rd pillar: Infrastructure	137.	1.1
4th pillar: Affordability	115.	3.5
5th pillar: Skills	124.	3.0
C. Usage subindex	136.	2.3
6th pillar: Individual usage	132.	1.8
7th pillar: Business usage	134.	2.8
8th pillar: Government usage	139.	2.2
D. Impact subindex	136.	2.3
9th pillar: Economic impacts	135.	2.3



--- Haiti - Low-income group average

## The Networked Readiness Index in detail

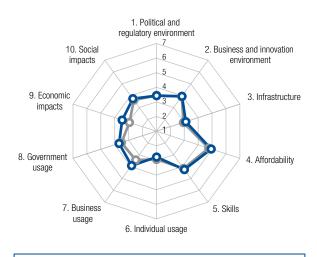
	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*1372.1
1.02	Laws relating to ICTs*
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*1262.7
1.05	Efficiency of legal system in challenging regs*1362.2
1.06	Intellectual property protection*1362.3
1.07	Software piracy rate, % software installedn/an/a
1.08	No. procedures to enforce a contract4835
1.09	No. days to enforce a contract68 530
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*1333.4
2.02	Venture capital availability*
2.03	Total tax rate, % profits81 40.3
2.04	No. days to start a business97
2.05	No. procedures to start a business125
2.06	Intensity of local competition*1363.9
2.07	Tertiary education gross enrollment rate, %123 6.5
2.08	Quality of management schools*1342.9
2.09	Gov't procurement of advanced tech*1352.5
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita129 105.9
3.02	Mobile network coverage, % pop132 63.3
3.03	Int'l Internet bandwidth, kb/s per user139 0.1
3.04	Secure Internet servers/million pop1251.7
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min62 0.23
4.02	Fixed broadband Internet tariffs, PPP \$/month 122 89.97
4.03	Internet & telephony competition, 0-2 (best)1 2.00
	5th pillar: Skills
5.01	Quality of education system*133
5.02	Quality of math & science education*1242.8
5.03	Secondary education gross enrollment rate, % 106 68.1
5.04	Adult literacy rate, %

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop130 64.7
6.02	Individuals using Internet, %12011.4
6.03	Households w/ personal computer, %117 8.7
6.04	Households w/ Internet access, %1314.0
6.05	Fixed broadband Internet subs/100 pop139 0.0
6.06	Mobile broadband subs/100 pop136 0.2
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*
7.02	Capacity for innovation*1273.2
7.03	PCT patents, applications/million pop121 0.0
7.04	ICT use for business-to-business transactions*136 3.3
7.05	Business-to-consumer Internet use*1203.5
7.06	Extent of staff training*1323.0
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*1392.3
8.02	Government Online Service Index, 0-1 (best)126 0.11
8.03	Gov't success in ICT promotion*1352.8
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*
9.02	ICT PCT patents, applications/million pop103 0.0
9.03	Impact of ICTs on organizational models*1352.9
9.04	Knowledge-intensive jobs, % workforcen/an/a
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*138 2.5
10.02	Internet access in schools*
10.03	ICT use & gov't efficiency*
10.04	E-Participation Index, 0-1 (best)119 0.18

## Honduras

Rank Value

	(out of 139)	(1-7)
Networked Readiness Index	94.	.3.7
Networked Readiness Index 2015 (out of 143)	100	3.5
Networked Readiness Index 2014 (out of 148)	116	3.2
Networked Readiness Index 2013 (out of 144)	109.	3.3
A. Environment subindex	98	3.7
1st pillar: Political and regulatory environment	95	3.4
2nd pillar: Business and innovation environment	95	3.9
B. Readiness subindex	99	4.1
3rd pillar: Infrastructure	96	3.1
4th pillar: Affordability	85	4.9
5th pillar: Skills	97	4.2
C. Usage subindex	93	3.4
6th pillar: Individual usage	104	2.8
7th pillar: Business usage	46	3.9
8th pillar: Government usage	78	3.7
D. Impact subindex	74	3.6
9th pillar: Economic impacts	53	3.5
10th pillar: Social impacts	87 .	3.8



- Honduras -O- Lower-middle-income group average

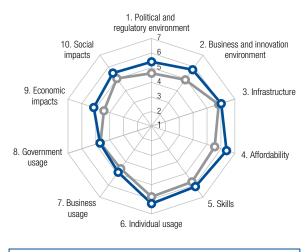
## The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE		
	1st pillar: Political and regulatory environment		
1.01	Effectiveness of law-making bodies*		
1.02	Laws relating to ICTs*		
1.03	Judicial independence*		
1.04	Efficiency of legal system in settling disputes*64 3.7		
1.05	Efficiency of legal system in challenging regs*57 3.7		
1.06	Intellectual property protection*51		
1.07	Software piracy rate, % software installed7374		
1.08	No. procedures to enforce a contract13147		
1.09	No. days to enforce a contract121920		
	2nd pillar: Business and innovation environment		
2.01	Availability of latest technologies*		
2.02	Venture capital availability*		
2.03	Total tax rate, % profits969644.3		
2.04	No. days to start a business8114		
2.05	No. procedures to start a business12512		
2.06	Intensity of local competition*74		
2.07	Tertiary education gross enrollment rate, %94 21.2		
2.08	Quality of management schools*824.0		
2.09	Gov't procurement of advanced tech*47		
	3rd pillar: Infrastructure		
3.01	Electricity production, kWh/capita96 1028.7		
3.02	Mobile network coverage, % pop118 89.9		
3.03	Int'l Internet bandwidth, kb/s per user87 21.8		
3.04	Secure Internet servers/million pop 93 11.4		
	4th pillar: Affordability		
4.01	Prepaid mobile cellular tariffs, PPP \$/min86 0.30		
4.02	Fixed broadband Internet tariffs, PPP \$/month96 44.35		
4.03	Internet & telephony competition, 0–2 (best)651.94		
	5th pillar: Skills		
5.01	Quality of education system*793.5		
5.02	Quality of math & science education*1013.4		
5.03	Secondary education gross enrollment rate, % 104 68.4		
5.04	Adult literacy rate, %		

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop104 93.5
6.02	Individuals using Internet, %103 19.1
6.03	Households w/ personal computer, %96 21.6
6.04	Households w/ Internet access, %9719.6
6.05	Fixed broadband Internet subs/100 pop1031.4
6.06	Mobile broadband subs/100 pop102 16.3
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*
7.02	Capacity for innovation*394.4
7.03	PCT patents, applications/million pop121 0.0
7.04	ICT use for business-to-business transactions*48 5.0
7.05	Business-to-consumer Internet use*62
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*703.9
8.02	Government Online Service Index, 0-1 (best)79 0.40
8.03	Gov't success in ICT promotion*893.8
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*484.8
9.02	ICT PCT patents, applications/million pop103 0.0
9.03	Impact of ICTs on organizational models*354.6
9.04	Knowledge-intensive jobs, % workforcen/an/a
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*66 4.2
10.02	Internet access in schools*823.9
10.03	ICT use & gov't efficiency*
10.04	E-Participation Index, 0-1 (best)89 0.33

## Hong Kong SAR

Rank Value (out of 139) (1-7) Networked Readiness Index......12..5.6 Networked Readiness Index 2014 (out of 148)......8....5.6 A. Environment subindex......4.....5.6 1st pillar: Political and regulatory environment.......14.....5.4 2nd pillar: Business and innovation environment......2.....5.8 B. Readiness subindex ......11 .... 6.2 C. Usage subindex......25..... 25..... 5.3 



- Hong Kong SAR

- High-income group average

#### The Networked Readiness Index in detail

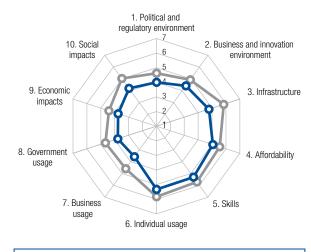
	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*
1.02	Laws relating to ICTs*
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*2 6.0
1.05	Efficiency of legal system in challenging regs*4 5.6
1.06	Intellectual property protection*99
1.07	Software piracy rate, % software installed29 43
1.08	No. procedures to enforce a contract5 26
1.09	No. days to enforce a contract14 360
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*22
2.02	Venture capital availability*
2.03	Total tax rate, % profits
2.04	No. days to start a business2
2.05	No. procedures to start a business
2.06	Intensity of local competition*22 6.2
2.07	Tertiary education gross enrollment rate, %28 68.8
2.08	Quality of management schools*
2.09	Gov't procurement of advanced tech*
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita41 5447.7
3.02	Mobile network coverage, % pop1 100.0
3.03	Int'l Internet bandwidth, kb/s per user2 3721.8
3.04	Secure Internet servers/million pop23 790.6
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min1 0.02
4.02	Fixed broadband Internet tariffs, PPP \$/month54 29.71
4.03	Internet & telephony competition, 0-2 (best)1 2.00
	5th pillar: Skills
5.01	Quality of education system*204.8
5.02	Quality of math & science education*
5.03	Secondary education gross enrollment rate, %39 100.6
5.04	Adult literacy rate, %n/an/a <sup>1</sup>

	INDICATOR RANK/139 VALI	UE
	6th pillar: Individual usage	
6.01	Mobile phone subscriptions/100 pop1 233	.6
6.02	Individuals using Internet, %3474	.6
6.03	Households w/ personal computer, %22 83	.7
6.04	Households w/ Internet access, %2382	.4
6.05	Fixed broadband Internet subs/100 pop17 31	.4
6.06	Mobile broadband subs/100 pop13 104	.5
6.07	Use of virtual social networks*166	.3
	7th pillar: Business usage	
7.01	Firm-level technology absorption*	.6
7.02	Capacity for innovation*	.7
7.03	PCT patents, applications/million popn/an/a	/a
7.04	ICT use for business-to-business transactions*20 5	.7
7.05	Business-to-consumer Internet use*27	.4
7.06	Extent of staff training*	.8
	8th pillar: Government usage	
8.01	Importance of ICTs to gov't vision*284	.7
8.02	Government Online Service Index, 0-1 (best)n/a n.	/a
8.03	Gov't success in ICT promotion*294	.7
	9th pillar: Economic impacts	
9.01	Impact of ICTs on business models*26	.2
9.02	ICT PCT patents, applications/million popn/an	/a
9.03	Impact of ICTs on organizational models*16	.3
9.04	Knowledge-intensive jobs, % workforce2737	.9
	10th pillar: Social impacts	
10.01	Impact of ICTs on access to basic services*22 5	.6
10.02	Internet access in schools* 10 6	.0
10.03	ICT use & gov't efficiency*	.9
10.04	E-Participation Index, 0-1 (best)n/an/	/a

Note: Indicators followed by an asterisk (\*) are measured on a 1-to-7 (best) scale. For further details and explanation, please refer to the section "How to Read the Country/Economy Profiles" on page 53.

See the "Technical Notes and Sources" section.

	(out of 139)	(1-7)
Networked Readiness Index	50	.4.4
Networked Readiness Index 2015 (out of 143)	53.	4.3
Networked Readiness Index 2014 (out of 148)	47 .	4.3
Networked Readiness Index 2013 (out of 144)	44.	4.3
A. Environment subindex	51 .	4.2
1st pillar: Political and regulatory environment	50.	4.0
2nd pillar: Business and innovation environment	59.	4.4
B. Readiness subindex	58.	5.0
3rd pillar: Infrastructure	48.	4.8
4th pillar: Affordability	80.	5.0
5th pillar: Skills	56.	5.3
C. Usage subindex	48.	4.2
6th pillar: Individual usage	41.	5.3
7th pillar: Business usage	73.	3.6
8th pillar: Government usage	70.	3.8
D. Impact subindex	47 .	4.0
9th pillar: Economic impacts	36.	3.8
10th pillar: Social impacts	64.	4.2



- Hungary -O- High-income group average

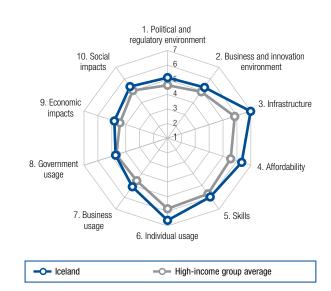
## The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*
1.02	Laws relating to ICTs*51
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*96 3.2
1.05	Efficiency of legal system in challenging regs*120 2.7
1.06	Intellectual property protection*803.7
1.07	Software piracy rate, % software installed2739
1.08	No. procedures to enforce a contract4234
1.09	No. days to enforce a contract
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*46 5.1
2.02	Venture capital availability*101
2.03	Total tax rate, % profits104 48.4
2.04	No. days to start a business
2.05	No. procedures to start a business4
2.06	Intensity of local competition*635.1
2.07	Tertiary education gross enrollment rate, %45 57.0
2.08	Quality of management schools*734.1
2.09	Gov't procurement of advanced tech*1032.9
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita65 3060.0
3.02	Mobile network coverage, % pop67 99.0
3.03	Int'l Internet bandwidth, kb/s per user64 37.0
3.04	Secure Internet servers/million pop34 300.8
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min75 0.27
4.02	Fixed broadband Internet tariffs, PPP \$/month93 43.18
4.03	Internet & telephony competition, 0–2 (best)75 1.87
	5th pillar: Skills
5.01	Quality of education system*993.2
5.02	Quality of math & science education*754.0
5.03	Secondary education gross enrollment rate, $\%25108.2$
5.04	Adult literacy rate, %

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop59 118.1
6.02	Individuals using Internet, %31 76.1
6.03	Households w/ personal computer, %3876.8
6.04	Households w/ Internet access, %3575.1
6.05	Fixed broadband Internet subs/100 pop26 27.3
6.06	Mobile broadband subs/100 pop79 34.0
6.07	Use of virtual social networks*90 5.4
	7th pillar: Business usage
7.01	Firm-level technology absorption*
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop26 23.5
7.04	ICT use for business-to-business transactions*44 5.1
7.05	Business-to-consumer Internet use*52
7.06	Extent of staff training*1133.4
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*983.5
8.02	Government Online Service Index, 0-1 (best)53 0.56
8.03	Gov't success in ICT promotion*1043.5
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*
9.02	ICT PCT patents, applications/million pop29 8.2
9.03	Impact of ICTs on organizational models*73 4.1
9.04	Knowledge-intensive jobs, % workforce3635.3
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*57 4.3
10.02	Internet access in schools*
10.03	ICT use & gov't efficiency*743.9
10.04	E-Participation Index, 0–1 (best)73 0.45

## **Iceland**

	Rank (out of 139)	
Networked Readiness Index	,	, ,
Networked Readiness Index 2015 (out of 143)	19.	5.4
Networked Readiness Index 2014 (out of 148)	19.	5.3
Networked Readiness Index 2013 (out of 144)	17.	5.3
A. Environment subindex	18.	5.2
1st pillar: Political and regulatory environment	22.	5.1
2nd pillar: Business and innovation environment	17.	5.3
B. Readiness subindex	3.	6.4
3rd pillar: Infrastructure	7.	7.0
4th pillar: Affordability	19.	6.3
5th pillar: Skills	15.	6.0
C. Usage subindex	18.	5.5
6th pillar: Individual usage	7.	6.6
7th pillar: Business usage	18.	5.1
8th pillar: Government usage	36.	4.7
D. Impact subindex	22.	5.1
9th pillar: Economic impacts	22.	4.8
10th pillar: Social impacts	21.	5.4



## The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*
1.02	Laws relating to ICTs*9
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*20 5.0
1.05	Efficiency of legal system in challenging regs*13 5.1
1.06	Intellectual property protection*25
1.07	Software piracy rate, % software installed3648
1.08	No. procedures to enforce a contract9 27
1.09	No. days to enforce a contract32417
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*6
2.02	Venture capital availability*
2.03	Total tax rate, % profits
2.04	No. days to start a business15
2.05	No. procedures to start a business415
2.06	Intensity of local competition*8484
2.07	Tertiary education gross enrollment rate, %12 82.2
2.08	Quality of management schools*185.3
2.09	Gov't procurement of advanced tech*4646
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita1 . 55954.3
3.02	Mobile network coverage, % pop67 99.0
3.03	Int'l Internet bandwidth, kb/s per user6 519.9
3.04	Secure Internet servers/million pop 1 3214.4
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min40 0.15
4.02	Fixed broadband Internet tariffs, PPP \$/month44 27.03
4.03	Internet & telephony competition, 0–2 (best)1 2.00
	5th pillar: Skills
5.01	Quality of education system*155.0
5.02	Quality of math & science education*334.8
5.03	Secondary education gross enrollment rate, %15 111.2
5.04	Adult literacy rate, %n/an/an/a

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop76 111.1
6.02	Individuals using Internet, %1 98.2
6.03	Households w/ personal computer, % 98.1
6.04	Households w/ Internet access, %4 96.5
6.05	Fixed broadband Internet subs/100 pop9 35.9
6.06	Mobile broadband subs/100 pop21 85.3
6.07	Use of virtual social networks* 6.7
	7th pillar: Business usage
7.01	Firm-level technology absorption*
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop17 103.6
7.04	ICT use for business-to-business transactions*10 5.9
7.05	Business-to-consumer Internet use*
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*324.6
8.02	Government Online Service Index, 0-1 (best)43 0.61
8.03	Gov't success in ICT promotion*184.9
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*
9.02	ICT PCT patents, applications/million pop22 16.7
9.03	Impact of ICTs on organizational models*135.4
9.04	Knowledge-intensive jobs, % workforce6 48.2
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*7 6.0
10.02	Internet access in schools*1
10.03	ICT use & gov't efficiency*
10.04	E-Participation Index, 0-1 (best)64 0.49

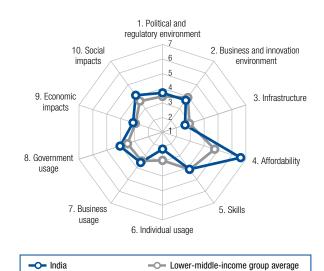
Note: Indicators followed by an asterisk (\*) are measured on a 1-to-7 (best) scale. For further details and explanation, please refer to the section "How to Read the Country/Economy Profiles" on page 53.

<sup>1</sup> See the "Technical Notes and Sources" section.

## India

Rank Value (out of 139) (1-7)Networked Readiness Index......91...3.8 A. Environment subindex......99.....3.7 1st pillar: Political and regulatory environment.......78......3.7 B. Readiness subindex ...... 88 ..... 4.4 C. Usage subindex......103..... 3.3 

9th pillar: Economic impacts......80.....3.1 



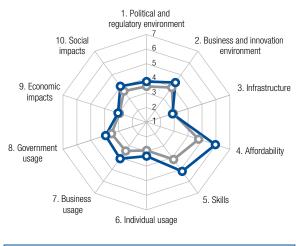
## The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*
1.02	Laws relating to ICTs*
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*42 4.2
1.05	Efficiency of legal system in challenging regs*394.1
1.06	Intellectual property protection*50
1.07	Software piracy rate, % software installed5360
1.08	No. procedures to enforce a contract12846
1.09	No. days to enforce a contract1371420
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*1084.0
2.02	Venture capital availability*
2.03	Total tax rate, % profits
2.04	No. days to start a business11429
2.05	No. procedures to start a business13313
2.06	Intensity of local competition*1014.6
2.07	Tertiary education gross enrollment rate, %89 23.9
2.08	Quality of management schools*554.4
2.09	Gov't procurement of advanced tech*263.9
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita98 932.8
3.02	Mobile network coverage, % pop111 93.5
3.03	Int'l Internet bandwidth, kb/s per user1165.7
3.04	Secure Internet servers/million pop
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min5 0.05
4.02	Fixed broadband Internet tariffs, PPP $\mbox{\sc s/month}\36\\ 24.89$
4.03	Internet & telephony competition, 0–2 (best)1 2.00
	5th pillar: Skills
5.01	Quality of education system*434.2
5.02	Quality of math & science education*634.2
5.03	Secondary education gross enrollment rate, % 103 68.9
5.04	Adult literacy rate, %9572.1

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop120 74.5
6.02	Individuals using Internet, %107 18.0
6.03	Households w/ personal computer, %107 13.0
6.04	Households w/ Internet access, %103 15.3
6.05	Fixed broadband Internet subs/100 pop1051.2
6.06	Mobile broadband subs/100 pop1245.5
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption* 102 4.2
7.02	Capacity for innovation* 50 4.2
7.03	PCT patents, applications/million pop641.5
7.04	ICT use for business-to-business transactions*108 4.1
7.05	Business-to-consumer Internet use*
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*62
8.02	Government Online Service Index, 0-1 (best)57 0.54
8.03	Gov't success in ICT promotion*753.9
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*894.1
9.02	ICT PCT patents, applications/million pop59 0.5
9.03	Impact of ICTs on organizational models*654.2
9.04	Knowledge-intensive jobs, % workforcen/an/a
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*70 4.2
10.02	Internet access in schools*1003.6
10.03	ICT use & gov't efficiency*684.0
10.04	E-Participation Index, 0-1 (best)40 0.63

## Indonesia

	Rank (out of 139)	Value
Networked Readiness Index	,	, ,
Networked Readiness Index 2015 (out of 143)		
Networked Readiness Index 2014 (out of 148)		
Networked Readiness Index 2013 (out of 144)		
A. Environment subindex	62.	4.1
1st pillar: Political and regulatory environment	65.	3.8
2nd pillar: Business and innovation environment	64.	4.4
B. Readiness subindex	81 .	4.6
3rd pillar: Infrastructure	105.	2.9
4th pillar: Affordability		
5th pillar: Skills	65.	5.1
C. Usage subindex	78.	3.8
6th pillar: Individual usage		
7th pillar: Business usage		
8th pillar: Government usage		
D. Impact subindex		
9th pillar: Economic impacts		
10th pillar: Social impacts		



- Indonesia -O- Lower-middle-income group average

#### The Networked Readiness Index in detail

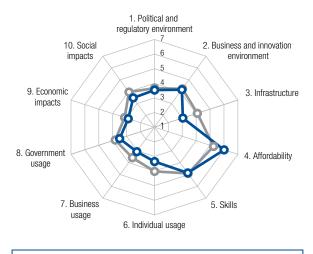
	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*69
1.02	Laws relating to ICTs*564.1
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*53 3.9
1.05	Efficiency of legal system in challenging regs*463.9
1.06	Intellectual property protection*484.3
1.07	Software piracy rate, % software installed9484
1.08	No. procedures to enforce a contract9440
1.09	No. days to enforce a contract49 471
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*
2.02	Venture capital availability*
2.03	Total tax rate, % profits
2.04	No. days to start a business126
2.05	No. procedures to start a business13413
2.06	Intensity of local competition*655.1
2.07	Tertiary education gross enrollment rate, %77 31.3
2.08	Quality of management schools*494.
2.09	Gov't procurement of advanced tech*1314.2
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita100 858.0
3.02	Mobile network coverage, % pop 1 100.0
3.03	Int'l Internet bandwidth, kb/s per user1126.2
3.04	Secure Internet servers/million pop
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min52 0.19
4.02	Fixed broadband Internet tariffs, PPP \$/month46 27.92
4.03	Internet & telephony competition, 0–2 (best)87 1.76
	5th pillar: Skills
5.01	Quality of education system*414.3
5.02	Quality of math & science education*524.4
5.03	Secondary education gross enrollment rate, $\%9182.5$
5.04	Adult literacy rate, %

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop46 128.8
6.02	Individuals using Internet, %113 17.1
6.03	Households w/ personal computer, %10117.8
6.04	Households w/ Internet access, %8229.1
6.05	Fixed broadband Internet subs/100 pop106 1.2
6.06	Mobile broadband subs/100 pop76 34.7
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*41 5.1
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop980.1
7.04	ICT use for business-to-business transactions*53 4.9
7.05	Business-to-consumer Internet use*
7.06	Extent of staff training*334.4
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*434.4
8.02	Government Online Service Index, 0-1 (best)88 0.36
8.03	Gov't success in ICT promotion*51
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*474.8
9.02	ICT PCT patents, applications/million pop91 0.0
9.03	Impact of ICTs on organizational models*394.6
9.04	Knowledge-intensive jobs, % workforce98 8.9
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*54 4.4
10.02	Internet access in schools* 43 4.8
10.03	ICT use & gov't efficiency*
10.04	E-Participation Index, 0–1 (best)101 0.29

# Iran, Islamic Rep.

Rank Value

	(out of 139)	(1-7)
Networked Readiness Index	92.	.3.7
Networked Readiness Index 2015 (out of 143)	96	3.6
Networked Readiness Index 2014 (out of 148)	104.	3.4
Networked Readiness Index 2013 (out of 144)	101	3.4
A. Environment subindex	82	3.9
1st pillar: Political and regulatory environment	91	3.5
2nd pillar: Business and innovation environment	76	4.2
B. Readiness subindex	83	4.6
3rd pillar: Infrastructure	101	3.0
4th pillar: Affordability	37	6.0
5th pillar: Skills	80	4.8
C. Usage subindex	99	3.3
6th pillar: Individual usage	90	3.3
7th pillar: Business usage	126	3.1
8th pillar: Government usage	93	3.5
D. Impact subindex	102	3.2
9th pillar: Economic impacts	100	2.9
10th pillar: Social impacts	101	3.5



- Iran, Islamic Rep. - Upper-middle-income group average

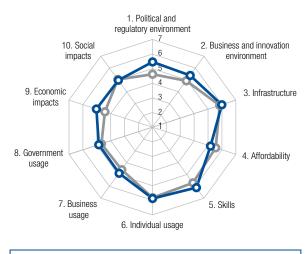
#### The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*67
1.02	Laws relating to ICTs*9696
1.03	Judicial independence*803.6
1.04	Efficiency of legal system in settling disputes*81 3.5
1.05	Efficiency of legal system in challenging regs*1122.9
1.06	Intellectual property protection*1292.9
1.07	Software piracy rate, % software installedn/an/a
1.08	No. procedures to enforce a contract9494
1.09	No. days to enforce a contract54505
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*1114.0
2.02	Venture capital availability*
2.03	Total tax rate, % profits95 44.1
2.04	No. days to start a business8615
2.05	No. procedures to start a business928
2.06	Intensity of local competition*1214.3
2.07	Tertiary education gross enrollment rate, %32 66.0
2.08	Quality of management schools*91
2.09	Gov't procurement of advanced tech*82
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita58 3504.4
3.02	Mobile network coverage, % pop 108 94.2
3.03	Int'l Internet bandwidth, kb/s per user114 6.1
3.04	Secure Internet servers/million pop1202.1
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min20 0.10
4.02	Fixed broadband Internet tariffs, PPP \$/month5 13.48
4.03	Internet & telephony competition, 0-2 (best) 129 0.85
	5th pillar: Skills
5.01	Quality of education system*9595
5.02	Quality of math & science education*364.6
5.03	Secondary education gross enrollment rate, %77 88.4
5.04	Adult literacy rate, %7686.8

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop109 87.8
6.02	Individuals using Internet, %9039.4
6.03	Households w/ personal computer, %62 52.5
6.04	Households w/ Internet access, %7144.7
6.05	Fixed broadband Internet subs/100 pop709.5
6.06	Mobile broadband subs/100 pop113 10.7
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop99 0.1
7.04	ICT use for business-to-business transactions*121 3.9
7.05	Business-to-consumer Internet use*1133.7
7.06	Extent of staff training*1283.2
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*91
8.02	Government Online Service Index, 0-1 (best)85 0.37
8.03	Gov't success in ICT promotion*903.7
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*794.3
9.02	ICT PCT patents, applications/million pop90 0.0
9.03	Impact of ICTs on organizational models*1083.5
9.04	Knowledge-intensive jobs, % workforce83 17.1
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*913.9
10.02	Internet access in schools*1203.2
10.03	ICT use & gov't efficiency*634.1
10.04	E-Participation Index, 0–1 (best)101 0.29

## Ireland

	Rank (out of 139)	
Networked Readiness Index		
Networked Readiness Index 2015 (out of 143)	25.	5.2
Networked Readiness Index 2014 (out of 148)		
Networked Readiness Index 2013 (out of 144)		
A. Environment subindex	11.	5.4
1st pillar: Political and regulatory environment	11.	5.5
2nd pillar: Business and innovation environment	11.	5.4
B. Readiness subindex	29.	5.7
3rd pillar: Infrastructure	27 .	6.0
4th pillar: Affordability	77.	5.2
5th pillar: Skills	9.	6.1
C. Usage subindex	28.	5.2
6th pillar: Individual usage	28.	5.9
7th pillar: Business usage	23.	4.9
8th pillar: Government usage	25.	4.9
D. Impact subindex	26.	5.0
9th pillar: Economic impacts	17.	5.0
10th pillar: Social impacts	34.	5.0



--- Ireland - High-income group average

#### The Networked Readiness Index in detail

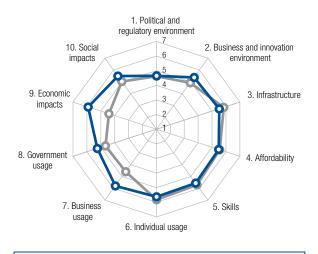
	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*
1.02	Laws relating to ICTs*
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*24 4.9
1.05	Efficiency of legal system in challenging regs*165.0
1.06	Intellectual property protection*105.9
1.07	Software piracy rate, % software installed1933
1.08	No. procedures to enforce a contract
1.09	No. days to enforce a contract100650
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*17
2.02	Venture capital availability*
2.03	Total tax rate, % profits
2.04	No. days to start a business
2.05	No. procedures to start a business
2.06	Intensity of local competition*675.1
2.07	Tertiary education gross enrollment rate, %22 73.2
2.08	Quality of management schools*145.4
2.09	Gov't procurement of advanced tech*51
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita37 5605.8
3.02	Mobile network coverage, % pop67 99.0
3.03	Int'l Internet bandwidth, kb/s per user16 161.0
3.04	Secure Internet servers/million pop24 775.0
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min125 0.54
4.02	Fixed broadband Internet tariffs, PPP \$/month26 21.41
4.03	Internet & telephony competition, 0-2 (best)1 2.00
	5th pillar: Skills
5.01	Quality of education system*9
5.02	Quality of math & science education*215.0
5.03	Secondary education gross enrollment rate, %8 126.5
5.04	Adult literacy rate, %n/an/a <sup>1</sup>

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop89 105.1
6.02	Individuals using Internet, %2879.7
6.03	Households w/ personal computer, %18 84.0
6.04	Households w/ Internet access, %24 82.2
6.05	Fixed broadband Internet subs/100 pop2926.9
6.06	Mobile broadband subs/100 pop22 81.0
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*24 5.6
7.02	Capacity for innovation*17
7.03	PCT patents, applications/million pop20 82.1
7.04	ICT use for business-to-business transactions*30 5.4
7.05	Business-to-consumer Internet use*
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*214.8
8.02	Government Online Service Index, 0-1 (best)31 0.68
8.03	Gov't success in ICT promotion*27
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*12
9.02	ICT PCT patents, applications/million pop15 34.1
9.03	Impact of ICTs on organizational models*14 5.4
9.04	Knowledge-intensive jobs, % workforce23 40.3
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*40 4.9
10.02	Internet access in schools*315.3
10.03	ICT use & gov't efficiency*
10.04	E-Participation Index, 0–1 (best)
	la Martin (Martin Color)

Note: Indicators followed by an asterisk (\*) are measured on a 1-to-7 (best) scale. For further details and explanation, please refer to the section "How to Read the Country/Economy Profiles" on page 53.

<sup>1</sup> See the "Technical Notes and Sources" section.

	(out of 139)	(1-7)
Networked Readiness Index	21.	.5.4
Networked Readiness Index 2015 (out of 143)	21	5.4
Networked Readiness Index 2014 (out of 148)	15	5.4
Networked Readiness Index 2013 (out of 144)	15	5.4
A. Environment subindex	24	5.0
1st pillar: Political and regulatory environment	28	4.7
2nd pillar: Business and innovation environment	12.	5.4
B. Readiness subindex	37	5.5
3rd pillar: Infrastructure	32	5.5
4th pillar: Affordability	68.	5.5
5th pillar: Skills	38.	5.5
C. Usage subindex	15	5.5
6th pillar: Individual usage	31	5.6
7th pillar: Business usage	8	5.8
8th pillar: Government usage	17	5.3
D. Impact subindex	6	5.7
9th pillar: Economic impacts	4	5.9
10th pillar: Social impacts	15.	5.5



-O- High-income group average -O- Israel

## The Networked Readiness Index in detail

1st pillar: Political and regulatory environment  1.01 Effectiveness of law-making bodies*	3.84.75.84.14.25.030359754.5
1.02 Laws relating to ICTs*	4.75.84.14.25.030359754.5
1.03 Judicial independence*	5.84.14.25.03035975 ent6.44.530.6
1.04 Efficiency of legal system in settling disputes*44 1.05 Efficiency of legal system in challenging regs*34 1.06 Intellectual property protection*	4.1 5.0 30 975 ent 6.4 4.5 30.6
1.05 Efficiency of legal system in challenging regs*341.06 Intellectual property protection*	4.2 30 35 975 <b>ent</b> 6.4 4.5 30.6
1.06 Intellectual property protection*	5.0 30 975 <b>ent</b> 6.4 4.5 30.6
1.07 Software piracy rate, % software installed	30 975 <b>ent</b> 6.4 4.5 30.6
1.08 No. procedures to enforce a contract	35 975 <b>ent</b> 6.4 4.5 30.6
2nd pillar: Business and innovation environme 2.01 Availability of latest technologies*	ent 6.4 4.5 30.6
2nd pillar: Business and innovation environme  2.01 Availability of latest technologies*	ent 6.4 4.5 30.6
2.01 Availability of latest technologies*	6.4 4.5 30.6
2.02 Venture capital availability*	4.5 30.6
2.03 Total tax rate, % profits	30.6
2.04 No. days to start a business	
2.05 No. procedures to start a business	13
2.06 Intensity of local competition*	
2.07 Tertiary education gross enrollment rate, %30 2.08 Quality of management schools*29 2.09 Gov't procurement of advanced tech*8  3rd pillar: Infrastructure	5
2.08 Quality of management schools*	4.4
2.09 Gov't procurement of advanced tech*8  3rd pillar: Infrastructure	66.3
3rd pillar: Infrastructure	
•	4.4
3.01 Electricity production, kWh/capita27	
	. 7437.3
3.02 Mobile network coverage, % pop1	100.0
3.03 Int'l Internet bandwidth, kb/s per user29	98.4
3.04 Secure Internet servers/million pop37	254.3
4th pillar: Affordability	
4.01 Prepaid mobile cellular tariffs, PPP \$/min83	0.29
4.02 Fixed broadband Internet tariffs, PPP \$/month60	30.45
4.03 Internet & telephony competition, 0-2 (best)87	1.76
5th pillar: Skills	
5.01 Quality of education system*52	
5.02 Quality of math & science education*68	4.0
5.03 Secondary education gross enrollment rate, %37	
5.04 Adult literacy rate, %n/a	4.1

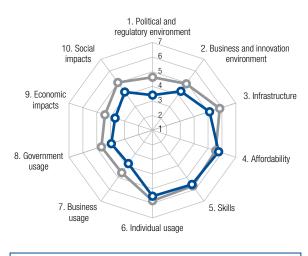
	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop55 121.5
6.02	Individuals using Internet, %3971.5
6.03	Households w/ personal computer, %26 82.4
6.04	Households w/ Internet access, %4071.5
6.05	Fixed broadband Internet subs/100 pop28 27.2
6.06	Mobile broadband subs/100 pop55 52.2
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption* 5 6.0
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop5 242.5
7.04	ICT use for business-to-business transactions*16 5.7
7.05	Business-to-consumer Internet use*19
7.06	Extent of staff training*4342
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*264.7
8.02	Government Online Service Index, 0-1 (best)13 0.87
8.03	Gov't success in ICT promotion*
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*15
9.02	ICT PCT patents, applications/million pop4 117.5
9.03	Impact of ICTs on organizational models*20 5.1
9.04	Knowledge-intensive jobs, % workforce7 47.7
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*215.6
10.02	Internet access in schools*28
10.03	ICT use & gov't efficiency*
10.04	E-Participation Index, 0–1 (best)
Note:	Indicators followed by an asterisk (*) are measured on a 1-to-7 (best) scale. For

further details and explanation, please refer to the section "How to Read the Country/Economy Profiles" on page 53.

1 See the "Technical Notes and Sources" section.

## Italy

	Rank (out of 139)	
Networked Readiness Index	45.	.4.4
Networked Readiness Index 2015 (out of 143)	55.	4.3
Networked Readiness Index 2014 (out of 148)	58.	4.2
Networked Readiness Index 2013 (out of 144)		
A. Environment subindex	85.	3.8
1st pillar: Political and regulatory environment	96.	3.4
2nd pillar: Business and innovation environment	68.	4.3
B. Readiness subindex	41 .	5.5
3rd pillar: Infrastructure	39.	5.1
4th pillar: Affordability	52.	5.7
5th pillar: Skills		
C. Usage subindex	43.	4.4
6th pillar: Individual usage	37.	5.5
7th pillar: Business usage	52.	3.8
8th pillar: Government usage	62.	4.0
D. Impact subindex	48.	4.0
9th pillar: Economic impacts	39.	3.7
4 Otto III O t	00	4.0



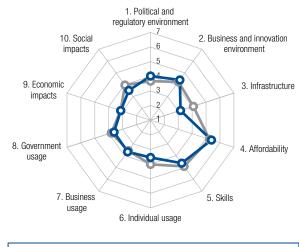
-O- Italy -O- High-income group average

## The Networked Readiness Index in detail

1st pillar: Political and regulatory environment         1.01 Effectiveness of law-making bodies*
1.02       Laws relating to ICTs*       .71       .3.6         1.03       Judicial independence*       .81       .3.6         1.04       Efficiency of legal system in settling disputes*138       .2.1         1.05       Efficiency of legal system in challenging regs*129       .2.4         1.06       Intellectual property protection*       .58       .4.1         1.07       Software piracy rate, % software installed       .33       .47         1.08       No. procedures to enforce a contract       .69       .37         1.09       No. days to enforce a contract       .129       .1120         2nd pillar: Business and innovation environment         2.01       Availability of latest technologies*       .49       .5.2         2.02       Venture capital availability*       .124       .2.2         2.03       Total tax rate, % profits       .129       .64.8         2.04       No. days to start a business       .28       .6         2.05       No. procedures to start a business       .41       .8         2.05       No. procedures to start a business       .41       .8         2.06       Intensity of local competition*       .53       .5.3         2.07       Tertiary education gross enrollment r
1.03       Judicial independence*       81       3.6         1.04       Efficiency of legal system in settling disputes*138       2.7         1.05       Efficiency of legal system in challenging regs*129       2.4         1.06       Intellectual property protection*       58       4.7         1.07       Software piracy rate, % software installed       33       47         1.08       No. procedures to enforce a contract       69       .37         1.09       No. days to enforce a contract       129       1120         2nd pillar: Business and innovation environment         2.01       Availability of latest technologies*       .49       5.7         2.02       Venture capital availability*       124       2.7         2.03       Total tax rate, % profits       129       64.8         2.04       No. days to start a business       28       6         2.05       No. procedures to start a business       .41       .5         2.06       Intensity of local competition*       .53       .53         2.07       Tertiary education gross enrollment rate, %       .35       .63.5         2.09       Gov't procurement of advanced tech*       .113       2.8         3rd pillar: Infrastructure     <
1.04       Efficiency of legal system in settling disputes*138
1.05       Efficiency of legal system in challenging regs* 129
1.06       Intellectual property protection*       .58       .4.*         1.07       Software piracy rate, % software installed       .33       .47         1.08       No. procedures to enforce a contract       .69       .37         1.09       No. days to enforce a contract       .129       .1120         2nd pillar: Business and innovation environment         2.01       Availability of latest technologies*       .49       .5.*         2.02       Venture capital availability*       .124       .2.*         2.03       Total tax rate, % profits       .129       .64.8         2.04       No. days to start a business       .28       .6         2.05       No. procedures to start a business       .41       .5         2.06       Intensity of local competition*       .53       .5.         2.07       Tertiary education gross enrollment rate, %       .35       .63.5         2.08       Quality of management schools*       .28       .5.*         2.09       Gov't procurement of advanced tech*       .113       .2.8         3rd pillar: Infrastructure         3.01       Electricity production, kWh/capita       .46       .4779.8         3.02       Mobile network coverage, % pop.
1.07       Software piracy rate, % software installed
1.08       No. procedures to enforce a contract       .69       .37         1.09       No. days to enforce a contract       .129       .1120         2nd pillar: Business and innovation environment         2.01       Availability of latest technologies*       .49       .5         2.02       Venture capital availability*       .124       .2         2.03       Total tax rate, % profits       .129       .64         2.04       No. days to start a business       .28       .6         2.05       No. procedures to start a business       .41       .5         2.06       Intensity of local competition*       .53       .5         2.07       Tertiary education gross enrollment rate, %       .35       .63         2.08       Quality of management schools*       .28       .5         2.09       Gov't procurement of advanced tech*       .113       .2         3rd pillar: Infrastructure         3.01       Electricity production, kWh/capita       .46       .4779.8         3.02       Mobile network coverage, % pop.       .1       .100.6
1.09       No. days to enforce a contract       129       1120         2nd pillar: Business and innovation environment         2.01       Availability of latest technologies*       .49       .5         2.02       Venture capital availability*       .124       .2         2.03       Total tax rate, % profits       .129       .64         2.04       No. days to start a business       .28       .6         2.05       No. procedures to start a business       .41       .5         2.06       Intensity of local competition*       .53       .5         2.07       Tertiary education gross enrollment rate, %       .35       .63         2.08       Quality of management schools*       .28       .5         2.09       Gov't procurement of advanced tech*       .113       .2         3rd pillar: Infrastructure         3.01       Electricity production, kWh/capita       .46       .4779         3.02       Mobile network coverage, % pop       .1       .100
2nd pillar: Business and innovation environment  2.01 Availability of latest technologies*
2.01       Availability of latest technologies*       .49       .5         2.02       Venture capital availability*       .124       .2         2.03       Total tax rate, % profits       .129       .64         2.04       No. days to start a business       .28       .6         2.05       No. procedures to start a business       .41       .5         2.06       Intensity of local competition*       .53       .5         2.07       Tertiary education gross enrollment rate, %       .35       .63         2.08       Quality of management schools*       .28       .5         2.09       Gov't procurement of advanced tech*       .113       .2         3rd pillar: Infrastructure         3.01       Electricity production, kWh/capita       .46       .4779         3.02       Mobile network coverage, % pop       .1       .100
2.02       Venture capital availability*
2.03       Total tax rate, % profits       129       64.8         2.04       No. days to start a business       28       6         2.05       No. procedures to start a business       41       5         2.06       Intensity of local competition*       53       5.3         2.07       Tertiary education gross enrollment rate, %       35       63.5         2.08       Quality of management schools*       28       5.7         2.09       Gov't procurement of advanced tech*       113       2.8         3rd pillar: Infrastructure         3.01       Electricity production, kWh/capita       46       4779.8         3.02       Mobile network coverage, % pop.       1       100.0
2.04       No. days to start a business       28       6         2.05       No. procedures to start a business       41       5         2.06       Intensity of local competition*       53       5.3         2.07       Tertiary education gross enrollment rate, %       35       63.5         2.08       Quality of management schools*       28       5.7         2.09       Gov't procurement of advanced tech*       113       2.8         3rd pillar: Infrastructure         3.01       Electricity production, kWh/capita       46       4779.8         3.02       Mobile network coverage, % pop.       1       100.0
2.05       No. procedures to start a business       .41       .5         2.06       Intensity of local competition*       .53       .5.3         2.07       Tertiary education gross enrollment rate, %       .35       .63.5         2.08       Quality of management schools*       .28       .5.         2.09       Gov't procurement of advanced tech*       .113       .2.6         3rd pillar: Infrastructure         3.01       Electricity production, kWh/capita       .46       .4779.8         3.02       Mobile network coverage, % pop.       .1       .100.0
2.06 Intensity of local competition*
2.07 Tertiary education gross enrollment rate, %
2.08 Quality of management schools*
2.09 Gov't procurement of advanced tech*
3.01 Electricity production, kWh/capita
3.01 Electricity production, kWh/capita
3.02 Mobile network coverage, % pop1 100.0
3, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,
3.03 Int'l Internet bandwidth, kb/s per user
2.11 2.1
3.04 Secure Internet servers/million pop
4th pillar: Affordability
4.01 Prepaid mobile cellular tariffs, PPP \$/min73 0.26
4.02 Fixed broadband Internet tariffs, PPP \$/month52 28.88
4.03 Internet & telephony competition, 0-2 (best)69 1.90
5th pillar: Skills
5.01 Quality of education system*6565
5.02 Quality of math & science education*414.
5.03 Secondary education gross enrollment rate, %35 102.4
5.04 Adult literacy rate, %

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop17 154.2
6.02	Individuals using Internet, %52 62.0
6.03	Households w/ personal computer, %40 74.0
6.04	Households w/ Internet access, %3972.6
6.05	Fixed broadband Internet subs/100 pop36 23.5
6.06	Mobile broadband subs/100 pop28 70.9
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption* 106 4.2
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop24 55.4
7.04	ICT use for business-to-business transactions*80 4.5
7.05	Business-to-consumer Internet use*
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*1083.3
8.02	Government Online Service Index, 0-1 (best)23 0.75
8.03	Gov't success in ICT promotion*1263.1
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*
9.02	ICT PCT patents, applications/million pop27 9.4
9.03	Impact of ICTs on organizational models*843.8
9.04	Knowledge-intensive jobs, % workforce3535.6
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*89 3.9
10.02	Internet access in schools*883.9
10.03	ICT use & gov't efficiency*1073.4
10.04	E-Participation Index, 0-1 (best)

	(out of 139) (1–7)
Networked Readiness Index	833.9
Networked Readiness Index 2015 (out of 143)	823.9
Networked Readiness Index 2014 (out of 148)	863.8
Networked Readiness Index 2013 (out of 144)	85 3.7
A. Environment subindex	50 4.2
1st pillar: Political and regulatory environment	494.0
2nd pillar: Business and innovation environment	62 4.4
B. Readiness subindex	90 4.4
3rd pillar: Infrastructure	933.2
4th pillar: Affordability	69 5.4
5th pillar: Skills	86 4.6
C. Usage subindex	85 3.6
6th pillar: Individual usage	86 3.5
7th pillar: Business usage	62 3.7
8th pillar: Government usage	87 3.6
D. Impact subindex	94 3.3
9th pillar: Economic impacts	763.1
10th pillar: Social impacts	97 3.5



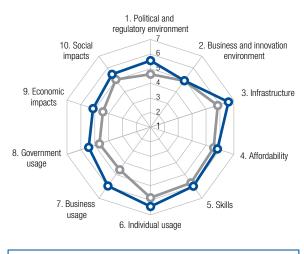
- Jamaica - Upper-middle-income group average

## The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*68
1.02	Laws relating to ICTs*933.5
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*84 3.4
1.05	Efficiency of legal system in challenging regs*67 3.5
1.06	Intellectual property protection*534.2
1.07	Software piracy rate, % software installedn/an/a
1.08	No. procedures to enforce a contract4835
1.09	No. days to enforce a contract101 655
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*43 5.2
2.02	Venture capital availability*
2.03	Total tax rate, % profits6135.2
2.04	No. days to start a business9
2.05	No. procedures to start a business
2.06	Intensity of local competition*395.4
2.07	Tertiary education gross enrollment rate, %8527.4
2.08	Quality of management schools*4645
2.09	Gov't procurement of advanced tech*106
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita87 1530.5
3.02	Mobile network coverage, % pop104 95.0
3.03	Int'l Internet bandwidth, kb/s per user95 14.2
3.04	Secure Internet servers/million pop60 57.0
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min53 0.20
4.02	Fixed broadband Internet tariffs, PPP \$/month91 42.91
4.03	Internet & telephony competition, 0–2 (best)65 1.94
	5th pillar: Skills
5.01	Quality of education system*703.7
5.02	Quality of math & science education*9695
5.03	Secondary education gross enrollment rate, $\%9083.0$
5.04	Adult literacy rate, %6969

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop82 107.4
6.02	Individuals using Internet, %8640.5
6.03	Households w/ personal computer, %85 32.5
6.04	Households w/ Internet access, %9025.7
6.05	Fixed broadband Internet subs/100 pop835.4
6.06	Mobile broadband subs/100 pop75 38.8
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop77 0.6
7.04	ICT use for business-to-business transactions*66 4.7
7.05	Business-to-consumer Internet use*
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*65
8.02	Government Online Service Index, 0-1 (best)95 0.31
8.03	Gov't success in ICT promotion*
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*
9.02	ICT PCT patents, applications/million pop65 0.4
9.03	Impact of ICTs on organizational models*77 4.0
9.04	Knowledge-intensive jobs, % workforce70 20.1
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*75 4.0
10.02	Internet access in schools*
10.03	ICT use & gov't efficiency*903.7
10.04	E-Participation Index, 0–1 (best)

		Value
	(out of 139)	(1–7)
Networked Readiness Index	10.	. 5.6
Networked Readiness Index 2015 (out of 143)	10.	5.6
Networked Readiness Index 2014 (out of 148)	16.	5.4
Networked Readiness Index 2013 (out of 144)	21	5.2
A. Environment subindex	17.	5.2
1st pillar: Political and regulatory environment	9.	5.5
2nd pillar: Business and innovation environment	33.	4.9
B. Readiness subindex	15.	6.1
3rd pillar: Infrastructure	14.	6.6
4th pillar: Affordability	49.	5.8
5th pillar: Skills	14.	6.0
C. Usage subindex	2.	5.9
6th pillar: Individual usage	11.	6.4
7th pillar: Business usage	3.	5.9
8th pillar: Government usage	7.	5.4
D. Impact subindex	14.	5.3
9th pillar: Economic impacts	15.	5.1



- Japan - High-income group average

## The Networked Readiness Index in detail

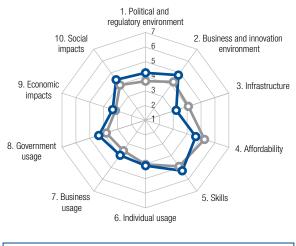
	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*10
1.02	Laws relating to ICTs*
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*13 5.4
1.05	Efficiency of legal system in challenging regs*24 4.6
1.06	Intellectual property protection*66
1.07	Software piracy rate, % software installed2
1.08	No. procedures to enforce a contract2732
1.09	No. days to enforce a contract14360
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*16
2.02	Venture capital availability*213.6
2.03	Total tax rate, % profits114 51.3
2.04	No. days to start a business6410
2.05	No. procedures to start a business928
2.06	Intensity of local competition*1
2.07	Tertiary education gross enrollment rate, %39 62.4
2.08	Quality of management schools*51 4.4
2.09	Gov't procurement of advanced tech*1414
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita23 8155.2
3.02	Mobile network coverage, % pop37 99.9
3.03	Int'l Internet bandwidth, kb/s per user54 48.6
3.04	Secure Internet servers/million pop20 911.7
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min106 0.37
4.02	Fixed broadband Internet tariffs, PPP \$/month21 20.72
4.03	Internet & telephony competition, 0–2 (best)1 2.00
	5th pillar: Skills
5.01	Quality of education system*274.5
5.02	Quality of math & science education*9 5.3
5.03	Secondary education gross enrollment rate, %36 101.9
5.04	Adult literacy rate, %n/an/an/a

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop57 120.2
6.02	Individuals using Internet, %11 90.6
6.03	Households w/ personal computer, %23 83.3
6.04	Households w/ Internet access, %
6.05	Fixed broadband Internet subs/100 pop20 29.3
6.06	Mobile broadband subs/100 pop5 121.4
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop1 335.2
7.04	ICT use for business-to-business transactions*1 6.1
7.05	Business-to-consumer Internet use*
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*14
8.02	Government Online Service Index, 0-1 (best)4 0.94
8.03	Gov't success in ICT promotion*304.7
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*24
9.02	ICT PCT patents, applications/million pop3 137.5
9.03	Impact of ICTs on organizational models*33 4.7
9.04	Knowledge-intensive jobs, % workforce58 24.4
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*285.4
10.02	Internet access in schools*375.0
10.03	ICT use & gov't efficiency*
10.04	E-Participation Index, 0–1 (best)
	Indicators followed by an asterick (*) are measured on a 1-to-7 (bast) scale. For

Note: Indicators followed by an asterisk (\*) are measured on a 1-to-7 (best) scale. For further details and explanation, please refer to the section "How to Read the Country/Economy Profiles" on page 53.

 $^{1}\,\,$  See the "Technical Notes and Sources" section.

Rank Value (out of 139) (1-7) Networked Readiness Index......60..4.2 A. Environment subindex......38.....4.5 B. Readiness subindex .......93 ..... 4.3 



**─** Jordan -O- Upper-middle-income group average

#### The Networked Readiness Index in detail

C. Usage subindex......53..... 53..... 4.1

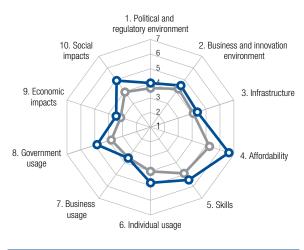
10th pillar: Social impacts......53.....4.4

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*454.1
1.02	Laws relating to ICTs*4443
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*36 4.4
1.05	Efficiency of legal system in challenging $\operatorname{regs}^*$ 30 4.3
1.06	Intellectual property protection*354.6
1.07	Software piracy rate, % software installed4957
1.08	No. procedures to enforce a contract8939
1.09	No. days to enforce a contract104 689
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*475.1
2.02	Venture capital availability*
2.03	Total tax rate, % profits3529.5
2.04	No. days to start a business12
2.05	No. procedures to start a business74
2.06	Intensity of local competition*575.2
2.07	Tertiary education gross enrollment rate, %55 47.6
2.08	Quality of management schools*504.4
2.09	Gov't procurement of advanced tech*42
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita69 2672.3
3.02	Mobile network coverage, % pop6799.0
3.03	Int'l Internet bandwidth, kb/s per user1087.9
3.04	Secure Internet servers/million pop75 30.4
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min7 0.06
4.02	Fixed broadband Internet tariffs, PPP \$/month 112 67.29
4.03	Internet & telephony competition, 0–2 (best)67 1.94
	5th pillar: Skills
5.01	Quality of education system*324.4
5.02	Quality of math & science education*644.2
5.03	Secondary education gross enrollment rate, $\%87 \ldots84.3$
5.04	Adult literacy rate, %

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop24 147.8
6.02	Individuals using Internet, %7944.0
6.03	Households w/ personal computer, %70 51.1
6.04	Households w/ Internet access, %52 60.0
6.05	Fixed broadband Internet subs/100 pop854.7
6.06	Mobile broadband subs/100 pop99 19.1
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop72 0.8
7.04	ICT use for business-to-business transactions*51 5.0
7.05	Business-to-consumer Internet use*
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*354.5
8.02	Government Online Service Index, 0–1 (best)62 0.52
8.03	Gov't success in ICT promotion*404.
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*50 4.7
9.02	ICT PCT patents, applications/million pop64 0.4
9.03	Impact of ICTs on organizational models*56 4.4
9.04	Knowledge-intensive jobs, % workforcen/an/a
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*43 4.8
10.02	Internet access in schools*
10.03	ICT use & gov't efficiency*
10.04	E-Participation Index, 0–1 (best)700.47

## Kazakhstan

	Rank (out of 139)	
Networked Readiness Index	,	` '
Networked Readiness Index 2015 (out of 143)		
Networked Readiness Index 2014 (out of 148)	38.	4.6
Networked Readiness Index 2013 (out of 144)	43.	4.3
A. Environment subindex	47.	4.3
1st pillar: Political and regulatory environment	48.	4.0
2nd pillar: Business and innovation environment	54.	4.5
B. Readiness subindex	39.	5.5
3rd pillar: Infrastructure	64.	4.4
4th pillar: Affordability	7.	6.6
5th pillar: Skills	45.	5.4
C. Usage subindex	44.	4.4
6th pillar: Individual usage	58.	4.8
7th pillar: Business usage	69.	3.6
8th pillar: Government usage	26.	4.8
D. Impact subindex	40.	4.2
9th pillar: Economic impacts	51.	3.5
10th cillary Capial impagata	O.F.	4.0



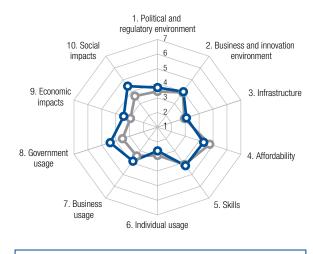
-C- Kazakhstan -O- Upper-middle-income group average

#### The Networked Readiness Index in detail

	INDICATOR RA	ANK/139	VALUE
	1st pillar: Political and regulatory envir	onment	
1.01	Effectiveness of law-making bodies*	30	4.5
1.02	Laws relating to ICTs*	38	4.6
1.03	Judicial independence*	72	3.8
1.04	Efficiency of legal system in settling disputes	s*48	4.0
1.05	Efficiency of legal system in challenging regs	s*52	3.7
1.06	Intellectual property protection*	70	3.9
1.07	Software piracy rate, % software installed	73	74
1.08	No. procedures to enforce a contract	58	36
1.09	No. days to enforce a contract	16	370
	2nd pillar: Business and innovation en	vironme	nt
2.01	Availability of latest technologies*	89	4.4
2.02	Venture capital availability*	59	2.9
2.03	Total tax rate, % profits	34	29.2
2.04	No. days to start a business	26	5
2.05	No. procedures to start a business	22	4
2.06	Intensity of local competition*	94	4.7
2.07	Tertiary education gross enrollment rate, %	59	46.0
2.08	Quality of management schools*	101	3.7
2.09	Gov't procurement of advanced tech*	63	3.4
	3rd pillar: Infrastructure		
3.01	Electricity production, kWh/capita	38	5598.3
3.02	Mobile network coverage, % pop	123	86.6
3.03	Int'l Internet bandwidth, kb/s per user	49	51.5
3.04	Secure Internet servers/million pop	86	14.5
	4th pillar: Affordability		
4.01	Prepaid mobile cellular tariffs, PPP \$/min	29	0.12
4.02	Fixed broadband Internet tariffs, PPP \$/mon	nth20	20.71
4.03	Internet & telephony competition, 0-2 (best)	75	1.87
	5th pillar: Skills		
5.01	Quality of education system*	67	3.7
5.02	Quality of math & science education*		
5.03	Secondary education gross enrollment rate,	%21	109.1
5.04	Adult literacy rate, %	6	99.8

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop6 172.2
6.02	Individuals using Internet, %6254.9
6.03	Households w/ personal computer, %51 64.7
6.04	Households w/ Internet access, %53 58.8
6.05	Fixed broadband Internet subs/100 pop59 12.9
6.06	Mobile broadband subs/100 pop46 59.4
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*90
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop681.4
7.04	ICT use for business-to-business transactions*63 4.8
7.05	Business-to-consumer Internet use*554.7
7.06	Extent of staff training*76
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*444.4
8.02	Government Online Service Index, 0-1 (best)23 0.75
8.03	Gov't success in ICT promotion*
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*
9.02	ICT PCT patents, applications/million pop70 0.2
9.03	Impact of ICTs on organizational models*70 4.1
9.04	Knowledge-intensive jobs, % workforce41 32.3
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*53 4.5
10.02	Internet access in schools*414.9
10.03	ICT use & gov't efficiency*
10.04	E-Participation Index, 0-1 (best)22 0.76

	(out of 139)	(1-7)
Networked Readiness Index	86.	.3.8
Networked Readiness Index 2015 (out of 143)	86.	3.8
Networked Readiness Index 2014 (out of 148)	92.	3.7
Networked Readiness Index 2013 (out of 144)	92.	3.5
A. Environment subindex	81 .	3.9
1st pillar: Political and regulatory environment	75.	3.7
2nd pillar: Business and innovation environment	93.	4.0
B. Readiness subindex	105.	3.9
3rd pillar: Infrastructure	99.	3.1
4th pillar: Affordability	102.	4.3
5th pillar: Skills		
C. Usage subindex	84.	3.6
6th pillar: Individual usage	107.	2.6
7th pillar: Business usage	50.	3.9
8th pillar: Government usage	45.	4.4
D. Impact subindex	50.	3.9
9th pillar: Economic impacts	54.	3.4
10th pillar: Social impacts	52.	4.5



**─** Kenya -O- Lower-middle-income group average

#### The Networked Readiness Index in detail

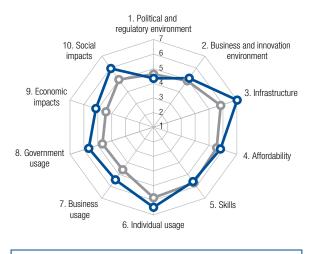
1st pillar: Political and regulatory environment           1.01         Effectiveness of law-making bodies*         60         3.9           1.02         Laws relating to ICTs*         63         4.0           1.03         Judicial independence*         61         4.1           1.04         Efficiency of legal system in settling disputes*         52         4.0           1.05         Efficiency of legal system in challenging regs*         .44         4.0           1.06         Intellectual property protection*         .81         3.7           1.07         Software piracy rate, % software installed         .80         78           1.08         No. procedures to enforce a contract         .122         .44           1.09         No. days to enforce a contract         .47         .465           2nd pillar: Business and innovation environment         2.0         .42           2.01         Availability of latest technologies*         .50         .5.1           2.02         Venture capital availability*         .54         2.9           2.03         Total tax rate, % profits         .69         .37.1           2.04         No. days to start a business         .108         .26           2.05         No. procedures to start a business		INDICATOR RANK/139 VALUE
1.02       Laws relating to ICTs*       63       4.0         1.03       Judicial independence*       61       4.1         1.04       Efficiency of legal system in settling disputes*       52       4.0         1.05       Efficiency of legal system in challenging regs*       .44       .40         1.06       Intellectual property protection*       .81       .37         1.07       Software piracy rate, % software installed       .80       .78         1.08       No. procedures to enforce a contract       .122       .44         1.09       No. days to enforce a contract       .122       .44         1.09       No. days to enforce a contract       .122       .44         1.09       No. days to enforce a contract       .47       .465         2nd pillar: Business and innovation environment         2.01       Availability of latest technologies*       .50       .5.1         2.02       Venture capital availability*       .54       .2.9         2.03       Total tax rate, % profits       .69       .37.1         2.04       No. days to start a business       .108       .26         2.05       No. procedures to start a business       .120       .11         2.06       Intensity of local		1st pillar: Political and regulatory environment
1.03       Judicial independence*       .61       .4.1         1.04       Efficiency of legal system in settling disputes*       .52       .4.0         1.05       Efficiency of legal system in challenging regs*       .44       .4.0         1.06       Intellectual property protection*       .81       .3.7         1.07       Software piracy rate, % software installed       .80       .78         1.08       No. procedures to enforce a contract       .122       .44         1.09       No. days to enforce a contract       .47       .465         2nd pillar: Business and innovation environment         2.01       Availability of latest technologies*       .50       .5.1         2.02       Venture capital availability*       .54       .2.9         2.03       Total tax rate, % profits       .69       .37.1         2.04       No. days to start a business       .108       .26         2.05       No. procedures to start a business       .108       .26         2.05       No. procedures to start a business       .120       .11         2.06       Intensity of local competition*       .23       .5.6         2.07       Tertiary education gross enrollment rate, %       .133       .4.0         2.08	1.01	Effectiveness of law-making bodies*60
1.04       Efficiency of legal system in settling disputes*	1.02	Laws relating to ICTs*634.0
1.05       Efficiency of legal system in challenging regs*	1.03	Judicial independence*614.1
1.06       Intellectual property protection*	1.04	Efficiency of legal system in settling disputes*52 4.0
1.07       Software piracy rate, % software installed	1.05	Efficiency of legal system in challenging regs*444.0
1.08       No. procedures to enforce a contract       122       .44         1.09       No. days to enforce a contract       .47       .465         2nd pillar: Business and innovation environment         2.01       Availability of latest technologies*       .50       .5.1         2.02       Venture capital availability*       .54       .2.9         2.03       Total tax rate, % profits       .69       .37.1         2.04       No. days to start a business       .108       .26         2.05       No. procedures to start a business       .120       .11         2.06       Intensity of local competition*       .23       .5.6         2.07       Tertiary education gross enrollment rate, %       .133       .4.0         2.08       Quality of management schools*       .56       .4.4         2.09       Gov't procurement of advanced tech*       .37       .3.8         3rd pillar: Infrastructure         3.01       Electricity production, kWh/capita       .122       .203.1         3.02       Mobile network coverage, % pop       .119       .89.1         3.03       Int'l Internet bandwidth, kb/s per user       .83       .25.2         3.04       Secure Internet servers/million pop	1.06	Intellectual property protection*813.7
1.09       No. days to enforce a contract	1.07	Software piracy rate, % software installed8078
2nd pillar: Business and innovation environment           2.01         Availability of latest technologies*	1.08	No. procedures to enforce a contract12244
2.01       Availability of latest technologies*       .50       .51         2.02       Venture capital availability*       .54       .29         2.03       Total tax rate, % profits       .69       .37.1         2.04       No. days to start a business       .108       .26         2.05       No. procedures to start a business       .120       .11         2.06       Intensity of local competition*       .23       .56         2.07       Tertiary education gross enrollment rate, %       .133       .4.0         2.08       Quality of management schools*       .56       .4.4         2.09       Gov't procurement of advanced tech*       .37       .3.8         3rd pillar: Infrastructure         3.01       Electricity production, kWh/capita       .122       .203.1         3.02       Mobile network coverage, % pop       .119       .89.1         3.03       Int'I Internet bandwidth, kb/s per user       .83       .25.2         3.04       Secure Internet servers/million pop       .101       .7.8         4th pillar: Affordability         4.01       Prepaid mobile cellular tariffs, PPP \$/month 116       .74.19         4.03       Internet & telephony competition, 0-2 (best)       .1       .2	1.09	No. days to enforce a contract47 465
2.02       Venture capital availability*       .54       .29         2.03       Total tax rate, % profits       .69       .37.1         2.04       No. days to start a business       .108       .26         2.05       No. procedures to start a business       .120       .11         2.06       Intensity of local competition*       .23       .5.6         2.07       Tertiary education gross enrollment rate, %       .133       .4.0         2.08       Quality of management schools*       .56       .4.4         2.09       Gov't procurement of advanced tech*       .37       .3.8         3rd pillar: Infrastructure         3.01       Electricity production, kWh/capita       .122       .203.1         3.02       Mobile network coverage, % pop.       .119       .89.1         3.03       Int'l Internet bandwidth, kb/s per user       .83       .25.2         3.04       Secure Internet servers/million pop       .101       .7.8         4th pillar: Affordability         4.01       Prepaid mobile cellular tariffs, PPP \$/min       .21       .0.10         4.02       Fixed broadband Internet tariffs, PPP \$/month 116       .74.19         4.03       Internet & telephony competition, 0-2 (best)       <		2nd pillar: Business and innovation environment
2.03       Total tax rate, % profits       69       37.1         2.04       No. days to start a business       108       26         2.05       No. procedures to start a business       120       11         2.06       Intensity of local competition*       23       5.6         2.07       Tertiary education gross enrollment rate, %       133       4.0         2.08       Quality of management schools*       56       4.4         2.09       Gov't procurement of advanced tech*       37       3.8         3rd pillar: Infrastructure         3.01       Electricity production, kWh/capita       122       203.1         3.02       Mobile network coverage, % pop.       119       89.1         3.03       Int'l Internet bandwidth, kb/s per user       83       25.2         3.04       Secure Internet servers/million pop       101       7.8         4th pillar: Affordability         4.01       Prepaid mobile cellular tariffs, PPP \$/min       21       0.10         4.02       Fixed broadband Internet tariffs, PPP \$/month 116       74.19         4.03       Internet & telephony competition, 0-2 (best)       1       2.00         5th pillar: Skills         5.01       Quality of math & science e	2.01	Availability of latest technologies*505.1
2.04       No. days to start a business       108       26         2.05       No. procedures to start a business       120       11         2.06       Intensity of local competition*       23       5.6         2.07       Tertiary education gross enrollment rate, %       133       4.0         2.08       Quality of management schools*       56       4.4         2.09       Gov't procurement of advanced tech*       37       3.8         3rd pillar: Infrastructure         3.01       Electricity production, kWh/capita       122       203.1         3.02       Mobile network coverage, % pop.       119       89.1         3.03       Int'l Internet bandwidth, kb/s per user       83       25.2         3.04       Secure Internet servers/million pop.       101       7.8         4th pillar: Affordability         4.01       Prepaid mobile cellular tariffs, PPP \$/min       21       0.10         4.02       Fixed broadband Internet tariffs, PPP \$/month 116       74.19         4.03       Internet & telephony competition, 0-2 (best)       1       2.00         5th pillar: Skills         5.01       Quality of math & science education*       78       3.9         5.02       Seco	2.02	Venture capital availability*54
2.05       No. procedures to start a business       120       11         2.06       Intensity of local competition*       23       5.6         2.07       Tertiary education gross enrollment rate, %       133       4.0         2.08       Quality of management schools*       56       4.4         2.09       Gov't procurement of advanced tech*       37       3.8         3rd pillar: Infrastructure         3.01       Electricity production, kWh/capita       122       203.1         3.02       Mobile network coverage, % pop.       119       89.1         3.03       Int'l Internet bandwidth, kb/s per user       83       25.2         3.04       Secure Internet servers/million pop.       101       7.8         4th pillar: Affordability         4.01       Prepaid mobile cellular tariffs, PPP \$/min.       21       0.10         4.02       Fixed broadband Internet tariffs, PPP \$/month 116       74.19         4.03       Internet & telephony competition, 0-2 (best)       1       2.00         5th pillar: Skills         5.01       Quality of education system*       36       4.3         5.02       Quality of math & science education*       78       3.9         5.03       Sec	2.03	Total tax rate, % profits69 37.1
2.06       Intensity of local competition*	2.04	,
2.07       Tertiary education gross enrollment rate, %	2.05	No. procedures to start a business12011
2.08       Quality of management schools*	2.06	Intensity of local competition*235.6
2.09       Gov't procurement of advanced tech*	2.07	Tertiary education gross enrollment rate, %133 4.0
3rd pillar: Infrastructure           3.01         Electricity production, kWh/capita	2.08	Quality of management schools*56
3.01 Electricity production, kWh/capita	2.09	Gov't procurement of advanced tech*373.8
3.02       Mobile network coverage, % pop.       119       89.1         3.03       Int'l Internet bandwidth, kb/s per user.       83       25.2         3.04       Secure Internet servers/million pop.       101       7.8         4th pillar: Affordability         4.01       Prepaid mobile cellular tariffs, PPP \$/min.       21       0.10         4.02       Fixed broadband Internet tariffs, PPP \$/month 116       74.19         4.03       Internet & telephony competition, 0-2 (best)       2.00         5th pillar: Skills         5.01       Quality of education system*       36       4.3         5.02       Quality of math & science education*       78       3.9         5.03       Secondary education gross enrollment rate, % 107       67.6		3rd pillar: Infrastructure
3.03 Int'l Internet bandwidth, kb/s per user	3.01	Electricity production, kWh/capita122 203.1
3.04       Secure Internet servers/million pop.       101       7.8         4th pillar: Affordability         4.01       Prepaid mobile cellular tariffs, PPP \$/min.       21       0.10         4.02       Fixed broadband Internet tariffs, PPP \$/month 116       74.19         4.03       Internet & telephony competition, 0-2 (best)       2.00         5th pillar: Skills         5.01       Quality of education system*       36       4.3         5.02       Quality of math & science education*       78       3.9         5.03       Secondary education gross enrollment rate, % 107       67.6	3.02	Mobile network coverage, % pop119 89.1
4th pillar: Affordability         4.01       Prepaid mobile cellular tariffs, PPP \$/min	3.03	Int'l Internet bandwidth, kb/s per user83 25.2
4.01       Prepaid mobile cellular tariffs, PPP \$/min	3.04	Secure Internet servers/million pop1017.8
4.02       Fixed broadband Internet tariffs, PPP \$/month 116 74.19         4.03       Internet & telephony competition, 0–2 (best)1 2.00         5th pillar: Skills         5.01       Quality of education system*		4th pillar: Affordability
4.03       Internet & telephony competition, 0–2 (best)1	4.01	Prepaid mobile cellular tariffs, PPP \$/min21 0.10
5th pillar: Skills 5.01 Quality of education system*	4.02	Fixed broadband Internet tariffs, PPP \$/month 116 74.19
5.01 Quality of education system*	4.03	Internet & telephony competition, 0–2 (best)1 2.00
5.02 Quality of math & science education*783.9 5.03 Secondary education gross enrollment rate, % 10767.6		5th pillar: Skills
5.03 $$ Secondary education gross enrollment rate, $%10767.6$	5.01	
	5.02	
5.04 Adult literacy rate, %	5.03	Secondary education gross enrollment rate, % 107 67.6
	5.04	Adult literacy rate, %

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop121 73.8
6.02	Individuals using Internet, %80 43.4
6.03	Households w/ personal computer, %109 12.3
6.04	Households w/ Internet access, % 102 16.9
6.05	Fixed broadband Internet subs/100 pop121 0.2
6.06	Mobile broadband subs/100 pop1169.1
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*54
7.02	Capacity for innovation*4243
7.03	PCT patents, applications/million pop909.
7.04	ICT use for business-to-business transactions*41 5.1
7.05	Business-to-consumer Internet use*54
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*18
8.02	Government Online Service Index, 0-1 (best)76 0.43
8.03	Gov't success in ICT promotion*214.8
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*404.9
9.02	ICT PCT patents, applications/million pop82 0.1
9.03	Impact of ICTs on organizational models*52 4.4
9.04	Knowledge-intensive jobs, % workforcen/an/a
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*52 4.5
10.02	Internet access in schools*91
10.03	ICT use & gov't efficiency*
10.04	E-Participation Index, 0–1 (best)33 0.65

# Korea, Rep.

	Rank (out of 139)	
Networked Readiness Index	13.	5.6
Networked Readiness Index 2015 (out of 143)	12.	5.5
Networked Readiness Index 2014 (out of 148)	10.	5.5
Networked Readiness Index 2013 (out of 144)	11.	5.5
A. Environment subindex	31 .	4.7
1st pillar: Political and regulatory environment	34.	4.3
2nd pillar: Business and innovation environment		
B. Readiness subindex	14.	6.1
3rd pillar: Infrastructure	5.	7.0
4th pillar: Affordability	48.	5.8
5th pillar: Skills	35.	5.6
C. Usage subindex	6.	5.8
6th pillar: Individual usage	10.	6.5
7th pillar: Business usage	13.	5.4
8th pillar: Government usage	4.	5.6
D. Impact subindex	10.	5.6
9th pillar: Economic impacts	14.	5.1

10th pillar: Social impacts......4.....6.0



── Korea, Rep. - High-income group average

#### The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*993.2
1.02	Laws relating to ICTs*21
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*57 3.9
1.05	Efficiency of legal system in challenging regs*74 3.4
1.06	Intellectual property protection*52
1.07	Software piracy rate, % software installed2538
1.08	No. procedures to enforce a contract2732
1.09	No. days to enforce a contract4 230
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*315.6
2.02	Venture capital availability*
2.03	Total tax rate, % profits54 33.2
2.04	No. days to start a business
2.05	No. procedures to start a business11
2.06	Intensity of local competition*135.8
2.07	Tertiary education gross enrollment rate, %2 95.3
2.08	Quality of management schools*
2.09	Gov't procurement of advanced tech*24
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita12 . 10710.8
3.02	Mobile network coverage, % pop37 99.9
3.03	Int'l Internet bandwidth, kb/s per user57 45.2
3.04	Secure Internet servers/million pop5 2178.3
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min35 0.14
4.02	Fixed broadband Internet tariffs, PPP \$/month73 35.00
4.03	Internet & telephony competition, 0–2 (best)89 1.75
	5th pillar: Skills
5.01	Quality of education system*66
5.02	Quality of math & science education*304.8
5.03	Secondary education gross enrollment rate, %57 97.7
5.04	Adult literacy rate, %n/an/a

	INDICATOR RANK/139 VA	LUE
	6th pillar: Individual usage	
6.01	Mobile phone subscriptions/100 pop65 11	5.7
6.02	Individuals using Internet, %208	84.3
6.03	Households w/ personal computer, %35 7	8.3
6.04	Households w/ Internet access, %19	8.5
6.05	Fixed broadband Internet subs/100 pop6 3	8.8
6.06	Mobile broadband subs/100 pop12 10	8.6
6.07	Use of virtual social networks*40	5.9
	7th pillar: Business usage	
7.01	Firm-level technology absorption*27	5.4
7.02	Capacity for innovation*24	4.8
7.03	PCT patents, applications/million pop6 23	31.7
7.04	ICT use for business-to-business transactions*34	5.3
7.05	Business-to-consumer Internet use*10	5.8
7.06	Extent of staff training*36	4.3
	8th pillar: Government usage	
8.01	Importance of ICTs to gov't vision*17	4.9
8.02	Government Online Service Index, 0-1 (best)3 0	.98
8.03	Gov't success in ICT promotion*11	5.2
	9th pillar: Economic impacts	
9.01	Impact of ICTs on business models*17	5.5
9.02	ICT PCT patents, applications/million pop5 10	7.8
9.03	Impact of ICTs on organizational models*28	4.9
9.04	Knowledge-intensive jobs, % workforce65 2	21.6
	10th pillar: Social impacts	
10.01	Impact of ICTs on access to basic services*17	5.7
10.02	Internet access in schools*19	5.8
10.03	ICT use & gov't efficiency*13	5.3
10.04	E-Participation Index, 0-1 (best)1	.00

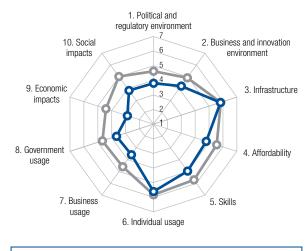
Note: Indicators followed by an asterisk (\*) are measured on a 1-to-7 (best) scale. For further details and explanation, please refer to the section "How to Read the Country/Economy Profiles" on page 53.

<sup>1</sup> See the "Technical Notes and Sources" section.

## Kuwait

Rank Value (out of 139) (1-7) Networked Readiness Index......61...4.2 Networked Readiness Index 2015 (out of 143)......72.....4.0 B. Readiness subindex ......51 ..... 51 ..... 5.2 C. Usage subindex.......47..... 4.3 6th pillar: Individual usage......32.....5.6

10th pillar: Social impacts......84.....3.9



Kuwait - High-income group average

#### The Networked Readiness Index in detail

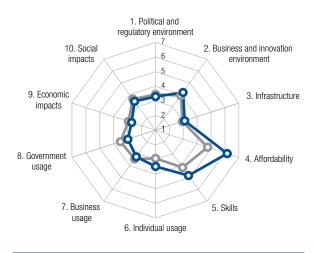
	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*
1.02	Laws relating to ICTs*104
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*45 4.1
1.05	Efficiency of legal system in challenging regs*364.1
1.06	Intellectual property protection*843.7
1.07	Software piracy rate, % software installed5058
1.08	No. procedures to enforce a contract13850
1.09	No. days to enforce a contract74 566
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*674.8
2.02	Venture capital availability*51
2.03	Total tax rate, % profits
2.04	No. days to start a business12031
2.05	No. procedures to start a business12512
2.06	Intensity of local competition*69
2.07	Tertiary education gross enrollment rate, %8627.0
2.08	Quality of management schools*8685
2.09	Gov't procurement of advanced tech*1012.9
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita5 . 16969.2
3.02	Mobile network coverage, % pop 1 100.0
3.03	Int'l Internet bandwidth, kb/s per user51 50.1
3.04	Secure Internet servers/million pop42 198.8
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min74 0.26
4.02	Fixed broadband Internet tariffs, PPP \$/month28 22.27
4.03	Internet & telephony competition, 0–2 (best)133 0.25
	5th pillar: Skills
5.01	Quality of education system*883.4
5.02	Quality of math & science education*993.4
5.03	Secondary education gross enrollment rate, $\%6692.5$
5.04	Adult literacy rate, %

6th pillar: Individual usage           6.01 Mobile phone subscriptions/100 pop		INDICATOR RANK/139 VALUE
6.02       Individuals using Internet, %		6th pillar: Individual usage
6.03       Households w/ personal computer, %       14       87.8         6.04       Households w/ Internet access, %       34       75.4         6.05       Fixed broadband Internet subs/100 pop.       104       1.4         6.06       Mobile broadband subs/100 pop.       2       139.8         6.07       Use of virtual social networks*       42       5.9         7th pillar: Business usage         7.01       Firm-level technology absorption*       60       4.7         7.02       Capacity for innovation*       101       3.6         7.03       PCT patents, applications/million pop.       84       0.3         7.04       ICT use for business-to-business transactions*. 68       4.7         7.05       Business-to-consumer Internet use*       57       4.7         7.06       Extent of staff training*       84       3.8         8th pillar: Government usage         8.01       Importance of ICTs to gov't vision*       113       3.2         8.02       Government Online Service Index, 0-1 (best)       52       0.57         8.03       Gov't success in ICT promotion*       116       3.3         9th pillar: Economic impacts         9.01       Impact of ICTs o	6.01	Mobile phone subscriptions/100 pop2 218.4
6.04       Households w/ Internet access, %       .34       .75.4         6.05       Fixed broadband Internet subs/100 pop.       .104       .1.4         6.06       Mobile broadband subs/100 pop.       .2       .139.8         6.07       Use of virtual social networks*       .42       .5.9         7th pillar: Business usage         7.01       Firm-level technology absorption*       .60       .4.7         7.02       Capacity for innovation*       .101       .3.6         7.03       PCT patents, applications/million pop.       .84       .0.3         7.04       ICT use for business-to-business transactions*. 68       .4.7         7.05       Business-to-consumer Internet use*       .57       .4.7         7.06       Extent of staff training*       .84       3.8         8th pillar: Government usage         8.01       Importance of ICTs to gov't vision*       .113       3.2         8.02       Government Online Service Index, 0–1 (best)       .52       0.57         8.03       Gov't success in ICT promotion*       .116       3.3         9th pillar: Economic impacts         9.01       Impact of ICTs on business models*       100       4.0         9.02	6.02	Individuals using Internet, %2978.7
6.05         Fixed broadband Internet subs/100 pop.         104         1.4           6.06         Mobile broadband subs/100 pop.         2         139.8           6.07         Use of virtual social networks*         42         5.9           7th pillar: Business usage           7.01         Firm-level technology absorption*         60         4.7           7.02         Capacity for innovation*         101         3.6           7.03         PCT patents, applications/million pop.         84         0.3           7.04         ICT use for business-to-business transactions*. 68         4.7           7.05         Business-to-consumer Internet use*         57         4.7           7.06         Extent of staff training*         84         3.8           8th pillar: Government usage           8.01         Importance of ICTs to gov't vision*         113         3.2           8.02         Government Online Service Index, 0-1 (best)         52         0.57           8.03         Gov't success in ICT promotion*         116         3.3           9th pillar: Economic impacts           9.01         Impact of ICTs on business models*         100         4.0           9.02         ICT PCT patents, applications/million p	6.03	Households w/ personal computer, %14 87.8
6.06       Mobile broadband subs/100 pop.       2       139.8         6.07       Use of virtual social networks*       42       5.9         7th pillar: Business usage         7.01       Firm-level technology absorption*       60       4.7         7.02       Capacity for innovation*       101       3.6         7.03       PCT patents, applications/million pop.       84       0.3         7.04       ICT use for business-to-business transactions*. 68       4.7         7.05       Business-to-consumer Internet use*       57       4.7         7.06       Extent of staff training*       84       3.8         8th pillar: Government usage         8.01       Importance of ICTs to gov't vision*       113       3.2         8.02       Government Online Service Index, 0-1 (best)       52       0.57         8.03       Gov't success in ICT promotion*       116       3.3         9th pillar: Economic impacts         9.01       Impact of ICTs on business models*       100       4.0         9.02       ICT PCT patents, applications/million pop.       77       0.1         9.03       Impact of ICTs on organizational models*       98       3.6         9.04       Knowle	6.04	Households w/ Internet access, %3475.4
7th pillar: Business usage           7.01         Firm-level technology absorption*	6.05	Fixed broadband Internet subs/100 pop1041.4
7th pillar: Business usage           7.01         Firm-level technology absorption*	6.06	Mobile broadband subs/100 pop2 139.8
7.01 Firm-level technology absorption*         60         4.7           7.02 Capacity for innovation*         101         3.6           7.03 PCT patents, applications/million pop.         84         0.3           7.04 ICT use for business-to-business transactions*.68         4.7           7.05 Business-to-consumer Internet use*         57         4.7           7.06 Extent of staff training*         84         3.8           8th pillar: Government usage           8.01 Importance of ICTs to gov't vision*         113         3.2           8.02 Government Online Service Index, 0-1 (best)         52         0.57           8.03 Gov't success in ICT promotion*         116         3.3           9th pillar: Economic impacts           9.01 Impact of ICTs on business models*         100         4.0           9.02 ICT PCT patents, applications/million pop.         77         0.1           9.03 Impact of ICTs on organizational models*         98         3.6           9.04 Knowledge-intensive jobs, % workforce.         n/a         n/a           10th pillar: Social impacts           10.01 Impact of ICTs on access to basic services*         71         4.1           10.02 Internet access in schools*         81         4.0           10.03 ICT use & gov't efficiency* <td>6.07</td> <td>Use of virtual social networks*</td>	6.07	Use of virtual social networks*
7.02       Capacity for innovation*       101       3.6         7.03       PCT patents, applications/million pop.       84       0.3         7.04       ICT use for business-to-business transactions*.68       4.7         7.05       Business-to-consumer Internet use*       57       4.7         7.06       Extent of staff training*       84       3.8         8th pillar: Government usage         8.01       Importance of ICTs to gov't vision*       113       3.2         8.02       Government Online Service Index, 0-1 (best)       52       0.57         8.03       Gov't success in ICT promotion*       116       3.3         9th pillar: Economic impacts         9.01       Impact of ICTs on business models*       100       4.0         9.02       ICT PCT patents, applications/million pop.       77       0.1         9.03       Impact of ICTs on organizational models*       98       3.6         9.04       Knowledge-intensive jobs, % workforce.       n/a       n/a         10th pillar: Social impacts         10.01       Impact of ICTs on access to basic services*       71       4.1         10.02       Internet access in schools*       81       4.0         10.03		7th pillar: Business usage
7.03       PCT patents, applications/million pop.       .84       .0.3         7.04       ICT use for business-to-business transactions*68       .4.7         7.05       Business-to-consumer Internet use*       .57       .4.7         7.06       Extent of staff training*       .84       .3.8         8th pillar: Government usage         8.01       Importance of ICTs to gov't vision*       .113       .3.2         8.02       Government Online Service Index, 0–1 (best)       .52       0.57         8.03       Gov't success in ICT promotion*       .116       .3.3         9th pillar: Economic impacts         9.01       Impact of ICTs on business models*       .100       .4.0         9.02       ICT PCT patents, applications/million pop.       .77       0.1         9.03       Impact of ICTs on organizational models*       .98       .3.6         9.04       Knowledge-intensive jobs, % workforce	7.01	Firm-level technology absorption*60 4.7
7.04         ICT use for business-to-business transactions*.68         4.7           7.05         Business-to-consumer Internet use*         57         4.7           7.06         Extent of staff training*         84         3.8           8th pillar: Government usage           8.01         Importance of ICTs to gov't vision*         113         3.2           8.02         Government Online Service Index, 0–1 (best)         52         0.57           8.03         Gov't success in ICT promotion*         116         3.3           9th pillar: Economic impacts           9.01         Impact of ICTs on business models*         100         4.0           9.02         ICT PCT patents, applications/million pop.         77         0.1           9.03         Impact of ICTs on organizational models*         98         3.6           9.04         Knowledge-intensive jobs, % workforce.         n/a         n/a           10th pillar: Social impacts           10.01         Impact of ICTs on access to basic services*         71         4.1           10.02         Internet access in schools*         81         4.0           10.03         ICT use & gov't efficiency*         89         3.7	7.02	Capacity for innovation*1013.6
7.05       Business-to-consumer Internet use*	7.03	PCT patents, applications/million pop84 0.3
8th pillar: Government usage           8.01         Importance of ICTs to gov't vision*	7.04	ICT use for business-to-business transactions*68 4.7
8th pillar: Government usage         8.01       Importance of ICTs to gov't vision*	7.05	Business-to-consumer Internet use*574.7
8.01       Importance of ICTs to gov't vision*	7.06	Extent of staff training*843.8
8.02       Government Online Service Index, 0–1 (best)		8th pillar: Government usage
8.03       Gov't success in ICT promotion*       116       3.3         9th pillar: Economic impacts         9.01       Impact of ICTs on business models*       100       4.0         9.02       ICT PCT patents, applications/million pop.       .77       0.1         9.03       Impact of ICTs on organizational models*       .98       3.6         9.04       Knowledge-intensive jobs, % workforce.       .n/a       n/a         10th pillar: Social impacts         10.01       Impact of ICTs on access to basic services*       .71       4.1         10.02       Internet access in schools*       .81       4.0         10.03       ICT use & gov't efficiency*       .89       3.7	8.01	Importance of ICTs to gov't vision*1133.2
9th pillar: Economic impacts           9.01 Impact of ICTs on business models*	8.02	, , ,
9.01 Impact of ICTs on business models*	8.03	Gov't success in ICT promotion*1163.3
9.02       ICT PCT patents, applications/million pop.		9th pillar: Economic impacts
9.03 Impact of ICTs on organizational models*	9.01	Impact of ICTs on business models*1004.0
9.04 Knowledge-intensive jobs, % workforcen/a      n/a         10th pillar: Social impacts         10.01 Impact of ICTs on access to basic services*71	9.02	ICT PCT patents, applications/million pop77 0.1
10th pillar: Social impacts           10.01 Impact of ICTs on access to basic services*71	9.03	Impact of ICTs on organizational models*983.6
10.01       Impact of ICTs on access to basic services*71	9.04	Knowledge-intensive jobs, % workforcen/an/a
10.02 Internet access in schools*		10th pillar: Social impacts
10.03 ICT use & gov't efficiency*	10.01	Impact of ICTs on access to basic services*71 4.1
,	10.02	Internet access in schools*814.0
10.04 E-Participation Index, 0–1 (best)	10.03	ICT use & gov't efficiency*893.7
	10.04	E-Participation Index, 0–1 (best)75 0.43

## gyz Republic

Rank (out of 139) (1-7)Networked Readiness Index......95...3.7 A. Environment subindex......95......95..... C. Usage subindex......104..... 3.2 

D. Impact subindex ......110 ..... 3.1



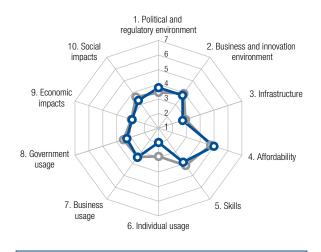
- Kyrgyz Republic -O- Lower-middle-income group average

#### The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*
1.02	Laws relating to ICTs*1153.0
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*112 3.0
1.05	Efficiency of legal system in challenging regs*99 3.0
1.06	Intellectual property protection*1143.1
1.07	Software piracy rate, % software installedn/an/a
1.08	No. procedures to enforce a contract7638
1.09	No. days to enforce a contract29 410
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*1303.6
2.02	Venture capital availability*84
2.03	Total tax rate, % profits
2.04	No. days to start a business5710
2.05	No. procedures to start a business224
2.06	Intensity of local competition*1154.4
2.07	Tertiary education gross enrollment rate, %57 47.3
2.08	Quality of management schools*1313.1
2.09	Gov't procurement of advanced tech*115
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita73 2449.6
3.02	Mobile network coverage, % pop95 97.7
3.03	Int'l Internet bandwidth, kb/s per user107 8.2
3.04	Secure Internet servers/million pop
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min44 0.16
4.02	Fixed broadband Internet tariffs, PPP \$/month48 28.10
4.03	Internet & telephony competition, 0–2 (best)75 1.87
	5th pillar: Skills
5.01	Quality of education system*1123.0
5.02	Quality of math & science education*1183.0
5.03	Secondary education gross enrollment rate, %70 90.8
5.04	Adult literacy rate, %

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop38 134.5
6.02	Individuals using Internet, %
6.03	Households w/ personal computer, %102 17.6
6.04	Households w/ Internet access, %11012.0
6.05	Fixed broadband Internet subs/100 pop884.2
6.06	Mobile broadband subs/100 pop31 68.5
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*1183.9
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop97 0.1
7.04	ICT use for business-to-business transactions*119 3.9
7.05	Business-to-consumer Internet use*
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*1233.1
8.02	Government Online Service Index, 0-1 (best)104 0.28
8.03	Gov't success in ICT promotion*1203.2
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*1293.5
9.02	ICT PCT patents, applications/million pop103 0.0
9.03	Impact of ICTs on organizational models*1093.5
9.04	Knowledge-intensive jobs, % workforce79 17.9
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services* 122 3.2
10.02	Internet access in schools*873.9
10.03	ICT use & gov't efficiency*1193.2
10.04	E-Participation Index, 0–1 (best)78 0.41

	(out of 139) (1-7)
Networked Readiness Index	1043.4
Networked Readiness Index 2015 (out of 143)	973.6
Networked Readiness Index 2014 (out of 148)	109 3.3
Networked Readiness Index 2013 (out of 144)	n/an/a
A. Environment subindex	933.8
1st pillar: Political and regulatory environment	683.8
2nd pillar: Business and innovation environment	106 3.8
B. Readiness subindex	107 3.9
3rd pillar: Infrastructure	1082.7
4th pillar: Affordability	82 5.0
5th pillar: Skills	106 3.9
C. Usage subindex	117 2.9
6th pillar: Individual usage	124 2.0
7th pillar: Business usage	893.4
8th pillar: Government usage	3.3
D. Impact subindex	104 3.1
9th pillar: Economic impacts	972.9
10th pillar: Social impacts	110 3.4



Lao PDR -O- Lower-middle-income group average

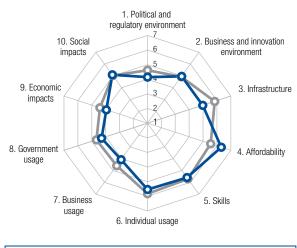
## The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*444.2
1.02	Laws relating to ICTs*993.4
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*46 4.1
1.05	Efficiency of legal system in challenging regs*683.4
1.06	Intellectual property protection*1003.4
1.07	Software piracy rate, % software installedn/an/a
1.08	No. procedures to enforce a contract11342
1.09	No. days to enforce a contract43443
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*1173.9
2.02	Venture capital availability*
2.03	Total tax rate, % profits
2.04	No. days to start a business
2.05	No. procedures to start a business
2.06	Intensity of local competition*1224.3
2.07	Tertiary education gross enrollment rate, %99 17.3
2.08	Quality of management schools*9292
2.09	Gov't procurement of advanced tech*85
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita82 1869.3
3.02	Mobile network coverage, % pop10196.0
3.03	Int'l Internet bandwidth, kb/s per user1292.8
3.04	Secure Internet servers/million pop121 2.1
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min25 0.11
4.02	Fixed broadband Internet tariffs, PPP \$/month88 42.39
4.03	Internet & telephony competition, 0–2 (best)126 0.91
	5th pillar: Skills
5.01	Quality of education system*623.8
5.02	Quality of math & science education*903.6
5.03	Secondary education gross enrollment rate, % 114 57.2
5.04	Adult literacy rate, %8579.9

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop12967.0
6.02	Individuals using Internet, %118 14.3
6.03	Households w/ personal computer, %113 10.5
6.04	Households w/ Internet access, %1285.2
6.05	Fixed broadband Internet subs/100 pop123 0.2
6.06	Mobile broadband subs/100 pop122 6.5
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*96
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop95
7.04	ICT use for business-to-business transactions*97 4.3
7.05	Business-to-consumer Internet use*
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*64
8.02	Government Online Service Index, 0-1 (best)122 0.14
8.03	Gov't success in ICT promotion*674.1
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*1014.0
9.02	ICT PCT patents, applications/million pop92 0.0
9.03	Impact of ICTs on organizational models*953.7
9.04	Knowledge-intensive jobs, % workforce101n/a
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*903.9
10.02	Internet access in schools*1013.6
10.03	ICT use & gov't efficiency*8686
10.04	E-Participation Index, 0-1 (best)115 0.20

	Rank (out of 139)	
Networked Readiness Index	32.	.4.8
Networked Readiness Index 2015 (out of 143)	33.	4.7
Networked Readiness Index 2014 (out of 148)	39.	4.6
Networked Readiness Index 2013 (out of 144)	41.	4.4
A. Environment subindex	37.	4.6
1st pillar: Political and regulatory environment	45.	4.2
2nd pillar: Business and innovation environment	30.	5.0
B. Readiness subindex	31 .	5.6
3rd pillar: Infrastructure	43.	5.0
4th pillar: Affordability	23.	6.3
5th pillar: Skills	36.	5.6
C. Usage subindex	35.	4.6
6th pillar: Individual usage	36.	5.5
7th pillar: Business usage	35.	4.1
8th pillar: Government usage	50.	4.3
D. Impact subindex	31 .	4.5
9th pillar: Economic impacts	34.	4.0

10th pillar: Social impacts......32....5.1



---- Latvia - High-income group average

## The Networked Readiness Index in detail

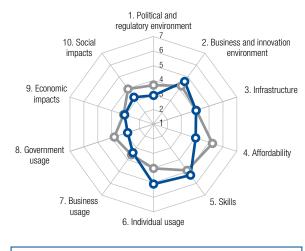
	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*
1.02	Laws relating to ICTs*414.4
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*111 3.0
1.05	Efficiency of legal system in challenging regs*81 3.3
1.06	Intellectual property protection*454.3
1.07	Software piracy rate, % software installed4353
1.08	No. procedures to enforce a contract9
1.09	No. days to enforce a contract48469
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*275.8
2.02	Venture capital availability*
2.03	Total tax rate, % profits63 35.9
2.04	No. days to start a business
2.05	No. procedures to start a business4
2.06	Intensity of local competition*385.4
2.07	Tertiary education gross enrollment rate, %29 67.0
2.08	Quality of management schools*4545
2.09	Gov't procurement of advanced tech*1003.0
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita64 3085.0
3.02	Mobile network coverage, % pop87 98.8
3.03	Int'l Internet bandwidth, kb/s per user31 93.7
3.04	Secure Internet servers/million pop31 360.7
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min50 0.18
4.02	Fixed broadband Internet tariffs, PPP \$/month23 21.04
4.03	Internet & telephony competition, 0-2 (best)89 1.75
	5th pillar: Skills
5.01	Quality of education system*64
5.02	Quality of math & science education*404.6
5.03	Secondary education gross enrollment rate, %18 110.5
5.04	Adult literacy rate, %

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop61 116.8
6.02	Individuals using Internet, %3275.8
6.03	Households w/ personal computer, %4273.5
6.04	Households w/ Internet access, %3873.4
6.05	Fixed broadband Internet subs/100 pop34 24.7
6.06	Mobile broadband subs/100 pop42 61.2
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*465.0
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop31 16.5
7.04	ICT use for business-to-business transactions*32 5.4
7.05	Business-to-consumer Internet use*15
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*873.6
8.02	Government Online Service Index, 0-1 (best)28 0.70
8.03	Gov't success in ICT promotion*
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*4648
9.02	ICT PCT patents, applications/million pop363.5
9.03	Impact of ICTs on organizational models*364.6
9.04	Knowledge-intensive jobs, % workforce2439.6
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*355.0
10.02	Internet access in schools*
10.03	ICT use & gov't efficiency*4944
10.04	E-Participation Index, 0-1 (best)24 0.71

	Halik	
	(out of 139)	(1-7)
Networked Readiness Index	88.	.3.8
Networked Readiness Index 2015 (out of 143)	99.	3.5
Networked Readiness Index 2014 (out of 148)	97.	3.6
Networked Readiness Index 2013 (out of 144)	94.	3.5
A. Environment subindex	91 .	3.8
1st pillar: Political and regulatory environment	126.	3.0
2nd pillar: Business and innovation environment	49.	4.6
B. Readiness subindex	87.	4.5
3rd pillar: Infrastructure	77.	4.0
4th pillar: Affordability	109.	4.0
5th pillar: Skills	55.	5.3
C. Usage subindex	77.	3.8
6th pillar: Individual usage	46.	5.1
7th pillar: Business usage	97.	3.4
8th pillar: Government usage	124.	2.9

D. Impact subindex .......103 .... 3.2

10th pillar: Social impacts......114.....3.3



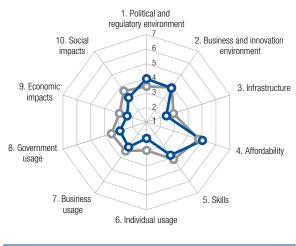
-C- Lebanon - Upper-middle-income group average

#### The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*
1.02	Laws relating to ICTs*
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*103 3.1
1.05	Efficiency of legal system in challenging regs*1132.8
1.06	Intellectual property protection*1213.1
1.07	Software piracy rate, % software installed7071
1.08	No. procedures to enforce a contract69
1.09	No. days to enforce a contract107721
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*90 4.4
2.02	Venture capital availability*42
2.03	Total tax rate, % profits4030.3
2.04	No. days to start a business8615
2.05	No. procedures to start a business546
2.06	Intensity of local competition*345.4
2.07	Tertiary education gross enrollment rate, %62 42.8
2.08	Quality of management schools*12
2.09	Gov't procurement of advanced tech*1312.6
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita54 4039.9
3.02	Mobile network coverage, % pop65 99.1
3.03	Int'l Internet bandwidth, kb/s per user85 24.0
3.04	Secure Internet servers/million pop
	4th pillar: Affordability
	Prepaid mobile cellular tariffs, PPP \$/min120 0.48
4.01	riepaid mobile celiulai tamis, FFF \$/min120 0.40
4.01 4.02	Fixed broadband Internet tariffs, PPP \$/month58 30.40
	•
4.02	Fixed broadband Internet tariffs, PPP \$/month58 30.40
4.02	Fixed broadband Internet tariffs, PPP \$/month58 30.40 Internet & telephony competition, 0–2 (best) 131 0.50
4.02 4.03	Fixed broadband Internet tariffs, PPP \$/month58 30.40 Internet & telephony competition, 0–2 (best) 131 0.50  5th pillar: Skills
4.02 4.03 5.01	Fixed broadband Internet tariffs, PPP \$/month58 30.40 Internet & telephony competition, 0–2 (best) 131 0.50  5th pillar: Skills  Quality of education system*

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop108 88.3
6.02	Individuals using Internet, %3374.7
6.03	Households w/ personal computer, %29 81.0
6.04	Households w/ Internet access, %43 68.4
6.05	Fixed broadband Internet subs/100 pop40 22.8
6.06	Mobile broadband subs/100 pop54 53.5
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop66 1.5
7.04	ICT use for business-to-business transactions*114 4.0
7.05	Business-to-consumer Internet use*1193.5
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*1342.7
8.02	Government Online Service Index, 0-1 (best)89 0.35
8.03	Gov't success in ICT promotion*1372.7
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*1173.7
9.02	ICT PCT patents, applications/million pop61 0.4
9.03	Impact of ICTs on organizational models*122 3.3
9.04	Knowledge-intensive jobs, % workforce44 31.8
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*117 3.4
10.02	Internet access in schools*85
10.03	ICT use & gov't efficiency*125
10.04	E-Participation Index, 0–1 (best)

	Rank (out of 139)	
Networked Readiness Index		. ,
Networked Readiness Index 2015 (out of 143)	124	3.0
Networked Readiness Index 2014 (out of 148)	133	2.9
Networked Readiness Index 2013 (out of 144)	138.	2.7
A. Environment subindex	75	3.9
1st pillar: Political and regulatory environment	52	4.0
2nd pillar: Business and innovation environment	100	3.9
B. Readiness subindex	108	3.7
3rd pillar: Infrastructure	120.	2.4
4th pillar: Affordability	81	5.0
5th pillar: Skills	108.	3.8
C. Usage subindex	128	2.7
6th pillar: Individual usage	122.	2.1
7th pillar: Business usage	120.	3.1
8th pillar: Government usage	121	2.9
D. Impact subindex	125	2.7
9th pillar: Economic impacts	130.	2.4
10th pillar: Social impacts	121	3.1



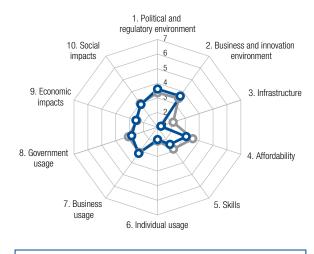
--- Lesotho -O- Lower-middle-income group average

## The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*71
1.02	Laws relating to ICTs*91
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*71 3.7
1.05	Efficiency of legal system in challenging regs*60 3.6
1.06	Intellectual property protection*574.1
1.07	Software piracy rate, % software installedn/an/a
1.08	No. procedures to enforce a contract10841
1.09	No. days to enforce a contract94 615
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*1283.6
2.02	Venture capital availability*
2.03	Total tax rate, % profits5 13.6
2.04	No. days to start a business11429
2.05	No. procedures to start a business747
2.06	Intensity of local competition*1194.4
2.07	Tertiary education gross enrollment rate, %116 9.8
2.08	Quality of management schools*1083.6
2.09	Gov't procurement of advanced tech*61
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita120 236.2
3.02	Mobile network coverage, % pop112 92.7
3.03	Int'l Internet bandwidth, kb/s per user120 4.3
3.04	Secure Internet servers/million pop
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min126 0.55
4.02	Fixed broadband Internet tariffs, PPP \$/month31 23.27
4.03	Internet & telephony competition, 0-2 (best)1 2.00
	5th pillar: Skills
5.01	Quality of education system*4442
5.02	Quality of math & science education*1003.4
5.03	Secondary education gross enrollment rate, % 118 52.2
5.04	Adult literacy rate, %8679.4

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop110 85.0
6.02	Individuals using Internet, %12111.0
6.03	Households w/ personal computer, %124 6.9
6.04	Households w/ Internet access, %1196.5
6.05	Fixed broadband Internet subs/100 pop1310.1
6.06	Mobile broadband subs/100 pop94 25.5
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop121 0.0
7.04	ICT use for business-to-business transactions*135 3.4
7.05	Business-to-consumer Internet use*1293.3
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*1073.3
8.02	Government Online Service Index, 0-1 (best)118 0.16
8.03	Gov't success in ICT promotion*1053.5
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*1273.6
9.02	ICT PCT patents, applications/million pop103 0.0
9.03	Impact of ICTs on organizational models*115 3.4
9.04	Knowledge-intensive jobs, % workforce101 6.8
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services* 104 3.7
10.02	Internet access in schools*1133.4
10.03	ICT use & gov't efficiency*1063.4
10.04	E-Participation Index, 0-1 (best)126 0.14

	(out of 139)	(1-7)
Networked Readiness Index	130.	.2.8
Networked Readiness Index 2015 (out of 143)	n/a	n/a
Networked Readiness Index 2014 (out of 148)	121	3.2
Networked Readiness Index 2013 (out of 144)	97	3.5
A. Environment subindex	108	3.6
1st pillar: Political and regulatory environment	84	3.6
2nd pillar: Business and innovation environment	117	3.6
B. Readiness subindex	135	2.2
3rd pillar: Infrastructure	135	1.2
4th pillar: Affordability	121	3.1
5th pillar: Skills	132.	2.4
C. Usage subindex	130	2.6
6th pillar: Individual usage	130	1.8
7th pillar: Business usage	113.	3.2
8th pillar: Government usage	123.	2.9
D. Impact subindex126		2.7
9th pillar: Economic impacts	125	2.5
10th pillar: Social impacts	127.	2.9



-O- Low-income group average --- Liberia

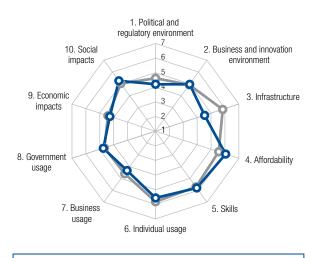
## The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*77
1.02	Laws relating to ICTs*105
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*59 3.8
1.05	Efficiency of legal system in challenging regs*41 4.0
1.06	Intellectual property protection*733.9
1.07	Software piracy rate, % software installedn/an/a
1.08	No. procedures to enforce a contract9494
1.09	No. days to enforce a contract1321280
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*1363.2
2.02	Venture capital availability*45
2.03	Total tax rate, % profits
2.04	No. days to start a business245
2.05	No. procedures to start a business
2.06	Intensity of local competition*1314.1
2.07	Tertiary education gross enrollment rate, %111 11.6
2.08	Quality of management schools*126
2.09	Gov't procurement of advanced tech*36
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita13471.6
3.02	Mobile network coverage, % pop134 60.0
3.03	Int'l Internet bandwidth, kb/s per user111 6.3
3.04	Secure Internet servers/million pop1172.5
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min94 0.33
4.02	Fixed broadband Internet tariffs, PPP \$/month 132 186.23
4.02	
4.02	Internet & telephony competition, 0–2 (best)89 1.75
	Internet & telephony competition, 0–2 (best)89 1.75  5th pillar: Skills
	5th pillar: Skills  Quality of education system*
4.03	5th pillar: Skills
4.03 5.01	5th pillar: Skills  Quality of education system*833.5

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop12273.4
6.02	Individuals using Internet, %1315.4
6.03	Households w/ personal computer, %1382.2
6.04	Households w/ Internet access, %1372.5
6.05	Fixed broadband Internet subs/100 pop126 0.1
6.06	Mobile broadband subs/100 pop119 7.6
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*1303.8
7.02	Capacity for innovation*9695
7.03	PCT patents, applications/million pop121 0.0
7.04	ICT use for business-to-business transactions*123 3.9
7.05	Business-to-consumer Internet use*1183.5
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*1093.3
8.02	Government Online Service Index, 0-1 (best)130 0.08
8.03	Gov't success in ICT promotion*863.8
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*1283.5
9.02	ICT PCT patents, applications/million pop103 0.0
9.03	Impact of ICTs on organizational models*92 3.7
9.04	Knowledge-intensive jobs, % workforce979.3
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services* 103 3.7
10.02	Internet access in schools*1233.0
10.03	ICT use & gov't efficiency*1153.3
10.04	E-Participation Index, 0–1 (best)128 0.12

# Lithuania

	Rank (out of 139)	
Networked Readiness Index	29.	.4.9
Networked Readiness Index 2015 (out of 143)	31.	4.9
Networked Readiness Index 2014 (out of 148)		
Networked Readiness Index 2013 (out of 144)		
A. Environment subindex	36.	4.6
1st pillar: Political and regulatory environment	41.	4.2
2nd pillar: Business and innovation environment	31.	5.0
B. Readiness subindex	42.	5.4
3rd pillar: Infrastructure	57.	4.5
4th pillar: Affordability	34.	6.0
5th pillar: Skills	26.	5.8
C. Usage subindex	31 .	4.9
6th pillar: Individual usage	35.	5.5
7th pillar: Business usage	29.	4.3
8th pillar: Government usage	33.	4.7
D. Impact subindex	28.	4.8
9th pillar: Economic impacts	27.	4.3
10th pillar: Social impacts	25.	5.3



--- Lithuania - High-income group average

## The Networked Readiness Index in detail

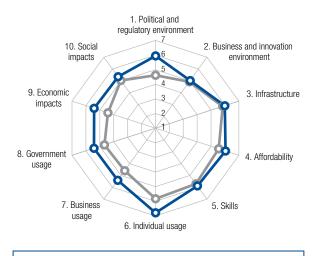
	INDICATOR	RANK/139	VALUE
	1st pillar: Political and regulatory env	vironment	
1.01	Effectiveness of law-making bodies*	80	3.6
1.02	Laws relating to ICTs*	25	4.9
1.03	Judicial independence*	68	3.9
1.04	Efficiency of legal system in settling disput	es*67	3.7
1.05	Efficiency of legal system in challenging re-	gs*93	3.1
1.06	Intellectual property protection*	55	4.1
1.07	Software piracy rate, % software installed.	43	53
1.08	No. procedures to enforce a contract	22	31
1.09	No. days to enforce a contract	9	300
	2nd pillar: Business and innovation e	nvironme	nt
2.01	Availability of latest technologies*	28	5.8
2.02	Venture capital availability*	48	3.0
2.03	Total tax rate, % profits	91	42.6
2.04	No. days to start a business	13	4
2.05	No. procedures to start a business	3	2
2.06	Intensity of local competition*	18	5.6
2.07	Tertiary education gross enrollment rate, %	625	72.0
2.08	Quality of management schools*	53	4.4
2.09	Gov't procurement of advanced tech*	93	3.1
	3rd pillar: Infrastructure		
3.01	Electricity production, kWh/capita	90	1424.8
3.02	Mobile network coverage, % pop	1	100.0
3.03	Int'l Internet bandwidth, kb/s per user	22	125.5
3.04	Secure Internet servers/million pop	41	206.9
	4th pillar: Affordability		
4.01	Prepaid mobile cellular tariffs, PPP \$/min	68	0.25
4.02	Fixed broadband Internet tariffs, PPP \$/ma	onth35	24.86
4.03	Internet & telephony competition, 0-2 (bes	st)1	2.00
	5th pillar: Skills		
5.01	Quality of education system*	53	4.0
5.02	Quality of math & science education*	20	5.1
5.03	Secondary education gross enrollment rate	e, %29	105.4
5.04	Adult literacy rate, %	3	99.8

	INDICATOR	RANK/139	VALUE
	6th pillar: Individual usage		
6.01	Mobile phone subscriptions/100 pop	27	147.0
6.02	Individuals using Internet, %	37	72.1
6.03	Households w/ personal computer, %	47	68.1
6.04	Households w/ Internet access, %	46	66.0
6.05	Fixed broadband Internet subs/100 pop	31	26.7
6.06	Mobile broadband subs/100 pop	40	63.4
6.07	Use of virtual social networks*	9	6.4
	7th pillar: Business usage		
7.01	Firm-level technology absorption*	32	5.4
7.02	Capacity for innovation*	31	4.6
7.03	PCT patents, applications/million pop	33	14.6
7.04	ICT use for business-to-business transact	tions*11	5.8
7.05	Business-to-consumer Internet use*	7	5.8
7.06	Extent of staff training*	35	4.4
	8th pillar: Government usage		
8.01	Importance of ICTs to gov't vision*	53	4.2
8.02	Government Online Service Index, 0-1 (be	est)21	0.76
8.03	Gov't success in ICT promotion*	36	4.6
	9th pillar: Economic impacts		
9.01	Impact of ICTs on business models*	27	5.2
9.02	ICT PCT patents, applications/million pop	34	3.8
9.03	Impact of ICTs on organizational models*	19	5.2
9.04	Knowledge-intensive jobs, % workforce	20	42.6
	10th pillar: Social impacts		
10.01	Impact of ICTs on access to basic service	es*29	5.3
10.02	Internet access in schools*		
10.03	ICT use & gov't efficiency*	24	4.9
10.04	E-Participation Index, 0-1 (best)	33	0.65

# Luxembourg

Rank Value

	(out of 139)	(1-7)
Networked Readiness Index	9.	.5.7
Networked Readiness Index 2015 (out of 143)	9.	5.6
Networked Readiness Index 2014 (out of 148)	11	5.5
Networked Readiness Index 2013 (out of 144)	16	5.4
A. Environment subindex	9.	5.5
1st pillar: Political and regulatory environment	1	5.9
2nd pillar: Business and innovation environment	27	5.0
B. Readiness subindex	19	5.9
3rd pillar: Infrastructure	26	6.0
4th pillar: Affordability	36	6.0
5th pillar: Skills	20	5.9
C. Usage subindex	5	5.9
6th pillar: Individual usage	2.	6.8
7th pillar: Business usage	15.	5.4
8th pillar: Government usage	9.	5.4
D. Impact subindex	12	5.4
9th pillar: Economic impacts	9.	5.4
10th pillar: Social impacts	23	5.3



--- Luxembourg

-O- High-income group average

## The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*
1.02	Laws relating to ICTs* 1 5.9
1.03	Judicial independence* 9 9 6.2
1.04	Efficiency of legal system in settling disputes*9 5.5
1.05	Efficiency of legal system in challenging regs*8 5.4
1.06	Intellectual property protection*2
1.07	Software piracy rate, % software installed320
1.08	No. procedures to enforce a contract
1.09	No. days to enforce a contract12321
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*14
2.02	Venture capital availability*
2.03	Total tax rate, % profits1320.1
2.04	No. days to start a business9519
2.05	No. procedures to start a business
2.06	Intensity of local competition*615.1
2.07	Tertiary education gross enrollment rate, %97 19.4
2.08	Quality of management schools*344.9
2.09	Gov't procurement of advanced tech*5
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita60 3402.9
3.02	Mobile network coverage, % pop6799.0
3.03	Int'l Internet bandwidth, kb/s per user1 6887.7
3.04	Secure Internet servers/million pop
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min47 0.17
4.02	Fixed broadband Internet tariffs, PPP $\mbox{\sc s/month}65 32.20$
4.03	Internet & telephony competition, 0–2 (best)1 2.00
	5th pillar: Skills
5.01	Quality of education system*234.7
5.02	Quality of math & science education*324.8
5.03	Secondary education gross enrollment rate, $\%34102.4$
5.04	Adult literacy rate, %n/an/an/a

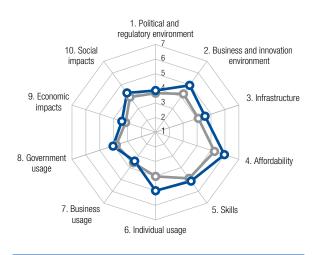
	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop19 149.5
6.02	Individuals using Internet, %4 94.7
6.03	Households w/ personal computer, %4 96.3
6.04	Households w/ Internet access, %
6.05	Fixed broadband Internet subs/100 pop13 34.8
6.06	Mobile broadband subs/100 pop11 111.3
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption* 8 6.0
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop15 113.0
7.04	ICT use for business-to-business transactions*14 5.8
7.05	Business-to-consumer Internet use*17
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*557
8.02	Government Online Service Index, 0-1 (best)42 0.62
8.03	Gov't success in ICT promotion*6 5.8
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*55.8
9.02	ICT PCT patents, applications/million pop18 29.6
9.03	Impact of ICTs on organizational models* 15 5.3
9.04	Knowledge-intensive jobs, % workforce
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*10 5.9
10.02	Internet access in schools*245.6
10.03	ICT use & gov't efficiency*
10.04	E-Participation Index, 0–1 (best)
Note:	Indicators followed by an asterisk (*) are measured on a 1-to-7 (best) scale. For

further details and explanation, please refer to the section "How to Read the Country/Economy Profiles" on page 53.

1 See the "Technical Notes and Sources" section.

# Macedonia, FYR

	Rank (out of 139)	
Networked Readiness Index	46.	. 4.4
Networked Readiness Index 2015 (out of 143)	47.	4.4
Networked Readiness Index 2014 (out of 148)	57.	4.2
Networked Readiness Index 2013 (out of 144)	67.	3.9
A. Environment subindex	42.	4.4
1st pillar: Political and regulatory environment	62.	3.9
2nd pillar: Business and innovation environment	32.	5.0
B. Readiness subindex	49.	5.2
3rd pillar: Infrastructure	56.	4.6
4th pillar: Affordability	39.	5.9
5th pillar: Skills	66.	5.1
C. Usage subindex	50.	4.2
6th pillar: Individual usage	49.	5.0
7th pillar: Business usage	92.	3.4
8th pillar: Government usage	58.	4.1
D. Impact subindex	53.	3.9
9th pillar: Economic impacts	55.	3.4
1011 111 0 1111		4.0



-O- Upper-middle-income group average - Macedonia, FYR

## The Networked Readiness Index in detail

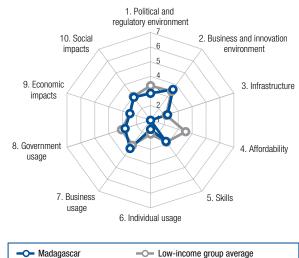
	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*
1.02	Laws relating to ICTs*
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*58 3.9
1.05	Efficiency of legal system in challenging regs*883.2
1.06	Intellectual property protection*644.0
1.07	Software piracy rate, % software installed61
1.08	No. procedures to enforce a contract76
1.09	No. days to enforce a contract90 604
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*525.0
2.02	Venture capital availability*
2.03	Total tax rate, % profits2 12.9
2.04	No. days to start a business
2.05	No. procedures to start a business1
2.06	Intensity of local competition*315.5
2.07	Tertiary education gross enrollment rate, %6639.4
2.08	Quality of management schools*814.0
2.09	Gov't procurement of advanced tech*223.9
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita66 2940.3
3.02	Mobile network coverage, % pop37 99.9
3.03	Int'l Internet bandwidth, kb/s per user62 41.8
3.04	Secure Internet servers/million pop
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min54 0.20
4.02	Fixed broadband Internet tariffs, PPP $\mbox{\sc prop}$ month62 31.07
4.03	Internet & telephony competition, 0–2 (best)1 2.00
	5th pillar: Skills
5.01	Quality of education system*61
5.02	Quality of math & science education*604.3
5.03	Secondary education gross enrollment rate, %92 82.0
5.04	Adult literacy rate, %31 97.8

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop87 105.5
6.02	Individuals using Internet, %44 68.1
6.03	Households w/ personal computer, %44 70.1
6.04	Households w/ Internet access, %45 68.3
6.05	Fixed broadband Internet subs/100 pop50 16.8
6.06	Mobile broadband subs/100 pop59 49.5
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop67
7.04	ICT use for business-to-business transactions*64 4.7
7.05	Business-to-consumer Internet use*
7.06	Extent of staff training*963.7
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*19
8.02	Government Online Service Index, 0-1 (best)106 0.24
8.03	Gov't success in ICT promotion*204.9
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*51
9.02	ICT PCT patents, applications/million pop79 0.1
9.03	Impact of ICTs on organizational models*624.3
9.04	Knowledge-intensive jobs, % workforce51 26.3
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*34 5.0
10.02	Internet access in schools*
10.03	ICT use & gov't efficiency*
10.04	E-Participation Index, 0–1 (best)112 0.22

# Madagascar

Rank Value (out of 139) (1-7)Networked Readiness Index......135...2.6 A. Environment subindex......127.....3.2 C. Usage subindex......132..... 2.6 

......127 ..... 2.7



### - Low-income group average

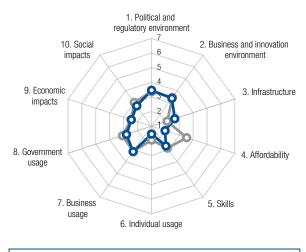
### The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*
1.02	Laws relating to ICTs*
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*122 2.8
1.05	Efficiency of legal system in challenging regs*1282.4
1.06	Intellectual property protection*1263.0
1.07	Software piracy rate, % software installedn/an/a
1.08	No. procedures to enforce a contract7638
1.09	No. days to enforce a contract118871
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*1144.0
2.02	Venture capital availability*
2.03	Total tax rate, % profits73 38.1
2.04	No. days to start a business76
2.05	No. procedures to start a business
2.06	Intensity of local competition*1094.6
2.07	Tertiary education gross enrollment rate, %1324.2
2.08	Quality of management schools*963.8
2.09	Gov't procurement of advanced tech*1102.8
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita13190.8
3.02	Mobile network coverage, % pop113 92.2
3.03	Int'l Internet bandwidth, kb/s per user138 0.3
3.04	Secure Internet servers/million pop
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min137 0.95
4.02	Fixed broadband Internet tariffs, PPP \$/month 133 197.62
4.03	Internet & telephony competition, 0–2 (best)1 2.00
	5th pillar: Skills
5.01	Quality of education system*1152.9
5.02	Quality of math & science education*913.6
5.03	Secondary education gross enrollment rate, $\%13038.4$
5.04	Adult literacy rate, %100 64.7

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop135 41.2
6.02	Individuals using Internet, %
6.03	Households w/ personal computer, %1304.5
6.04	Households w/ Internet access, %1294.7
6.05	Fixed broadband Internet subs/100 pop127 0.1
6.06	Mobile broadband subs/100 pop123 6.1
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*
7.02	Capacity for innovation*783.8
7.03	PCT patents, applications/million pop1070.0
7.04	ICT use for business-to-business transactions*102 4.2
7.05	Business-to-consumer Internet use*
7.06	Extent of staff training*1053.6
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*1302.9
8.02	Government Online Service Index, 0-1 (best)106 0.24
8.03	Gov't success in ICT promotion*1243.1
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*108
9.02	ICT PCT patents, applications/million pop103 0.0
9.03	Impact of ICTs on organizational models*93 3.7
9.04	Knowledge-intensive jobs, % workforce1083.5
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services* 133 3.0
10.02	Internet access in schools*
10.03	ICT use & gov't efficiency*
10.04	E-Participation Index, 0–1 (best)86 0.35

## Malawi

	Rank (out of 139)	Value (1–7)
Networked Readiness Index	132.	.2.7
Networked Readiness Index 2015 (out of 143)	133	2.8
Networked Readiness Index 2014 (out of 148)	132	2.9
Networked Readiness Index 2013 (out of 144)	129.	2.8
A. Environment subindex	117	3.4
1st pillar: Political and regulatory environment	93	3.5
2nd pillar: Business and innovation environment		
B. Readiness subindex	134	2.4
3rd pillar: Infrastructure	111	2.7
4th pillar: Affordability	135	2.0
5th pillar: Skills	130	2.7
C. Usage subindex	134	2.5
6th pillar: Individual usage	137	1.5
7th pillar: Business usage	118	3.1
8th pillar: Government usage	126.	2.8
D. Impact subindex	131	2.6
9th pillar: Economic impacts	128.	2.5



- Malawi - Low-income group average

### The Networked Readiness Index in detail

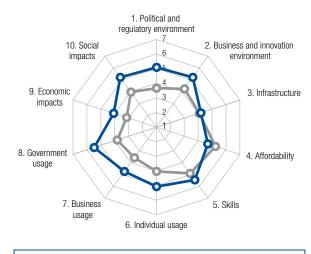
	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*82
1.02	Laws relating to ICTs*
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*98 3.2
1.05	Efficiency of legal system in challenging regs*77 3.4
1.06	Intellectual property protection*1183.1
1.07	Software piracy rate, % software installedn/an/a
1.08	No. procedures to enforce a contract11342
1.09	No. days to enforce a contract40432
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*1313.6
2.02	Venture capital availability*
2.03	Total tax rate, % profits
2.04	No. days to start a business
2.05	No. procedures to start a business928
2.06	Intensity of local competition*665.1
2.07	Tertiary education gross enrollment rate, %137 0.8
2.08	Quality of management schools*1303.1
2.09	Gov't procurement of advanced tech*1202.7
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita124 138.8
3.02	Mobile network coverage, % pop58 99.6
3.03	Int'l Internet bandwidth, kb/s per user1214.2
3.04	Secure Internet servers/million pop
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min129 0.59
4.02	Fixed broadband Internet tariffs, PPP \$/month 119 80.54
4.03	Internet & telephony competition, 0-2 (best)119 1.13
	5th pillar: Skills
5.01	Quality of education system*1043.1
5.02	Quality of math & science education*1282.7
5.03	
0.00	Secondary education gross enrollment rate, % 128 39.5

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop137 33.5
6.02	Individuals using Internet, %1305.8
6.03	Households w/ personal computer, %1285.2
6.04	Households w/ Internet access, %1226.2
6.05	Fixed broadband Internet subs/100 pop133 0.1
6.06	Mobile broadband subs/100 pop1274.1
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption* 125 3.8
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop118 0.0
7.04	ICT use for business-to-business transactions*127 3.8
7.05	Business-to-consumer Internet use*
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*1183.2
8.02	Government Online Service Index, 0-1 (best)114 0.17
8.03	Gov't success in ICT promotion*1213.2
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*1313.4
9.02	ICT PCT patents, applications/million pop103 0.0
9.03	Impact of ICTs on organizational models*132 3.0
9.04	Knowledge-intensive jobs, % workforcen/an/a
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services* 130 3.0
10.02	Internet access in schools*
10.03	ICT use & gov't efficiency*
10.04	E-Participation Index, 0–1 (best)110 0.24

# Malaysia

Rank Value

	(out of 139)	(1-7)
Networked Readiness Index	31	.4.9
Networked Readiness Index 2015 (out of 143)	32	4.9
Networked Readiness Index 2014 (out of 148)	30	4.8
Networked Readiness Index 2013 (out of 144)	30	4.8
A. Environment subindex	21	5.1
1st pillar: Political and regulatory environment	24	5.1
2nd pillar: Business and innovation environment	18	5.2
B. Readiness subindex	73	4.8
3rd pillar: Infrastructure	71	4.2
4th pillar: Affordability	91	4.7
5th pillar: Skills	46	5.4
C. Usage subindex	30	5.1
6th pillar: Individual usage	47	5.1
7th pillar: Business usage	26	4.7
8th pillar: Government usage	6	5.5
D. Impact subindex	30	4.6
9th pillar: Economic impacts	30	4.1
10th pillar: Social impacts	28	5.2



-O- Malaysia - Upper-middle-income group average

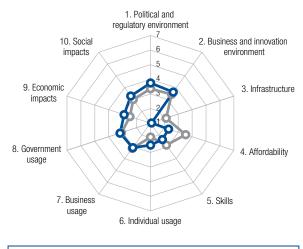
## The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*
1.02	Laws relating to ICTs*
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*15 5.3
1.05	Efficiency of legal system in challenging regs*155.0
1.06	Intellectual property protection*235.4
1.07	Software piracy rate, % software installed4654
1.08	No. procedures to enforce a contract1429
1.09	No. days to enforce a contract34425
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*305.7
2.02	Venture capital availability*
2.03	Total tax rate, % profits
2.04	No. days to start a business4
2.05	No. procedures to start a business113
2.06	Intensity of local competition*375.4
2.07	Tertiary education gross enrollment rate, %70 38.5
2.08	Quality of management schools*22
2.09	Gov't procurement of advanced tech*
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita48 4695.3
3.02	Mobile network coverage, % pop103 95.4
3.03	Int'l Internet bandwidth, kb/s per user81 27.2
3.04	Secure Internet servers/million pop
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min46 0.17
4.02	Fixed broadband Internet tariffs, PPP \$/month 110 60.97
4.03	Internet & telephony competition, 0–2 (best)1 2.00
	5th pillar: Skills
5.01	Quality of education system*6
5.02	Quality of math & science education*12
5.03	Secondary education gross enrollment rate, % 100 71.1
5.04	Adult literacy rate, %

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop23 148.8
6.02	Individuals using Internet, %45 67.5
6.03	Households w/ personal computer, %49 66.5
6.04	Households w/ Internet access, %4865.5
6.05	Fixed broadband Internet subs/100 pop68 10.1
6.06	Mobile broadband subs/100 pop47 58.3
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*
7.02	Capacity for innovation*7
7.03	PCT patents, applications/million pop35 11.3
7.04	ICT use for business-to-business transactions*21 $5.7$
7.05	Business-to-consumer Internet use*
7.06	Extent of staff training*3 5.5
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*6
8.02	Government Online Service Index, 0-1 (best)31 0.68
8.03	Gov't success in ICT promotion*
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models* 10 5.6
9.02	ICT PCT patents, applications/million pop31 6.0
9.03	Impact of ICTs on organizational models* 5.6
9.04	Knowledge-intensive jobs, % workforce53 25.2
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*24 5.5
10.02	Internet access in schools*26
10.03	ICT use & gov't efficiency*
10.04	E-Participation Index, 0-1 (best)59 0.53

	Rank (out of 139)	
Networked Readiness Index	127.	. 2.9
Networked Readiness Index 2015 (out of 143)	127	3.0
Networked Readiness Index 2014 (out of 148)	127.	3.0
Networked Readiness Index 2013 (out of 144)	122	3.0
A. Environment subindex	100	3.7
1st pillar: Political and regulatory environment	71	3.7
2nd pillar: Business and innovation environment	116	3.6
B. Readiness subindex	139	1.9
3rd pillar: Infrastructure	139	1.1
4th pillar: Affordability	132	2.3
5th pillar: Skills	135	2.4
C. Usage subindex	115	2.9
6th pillar: Individual usage	113	2.5
7th pillar: Business usage	124	3.1
8th pillar: Government usage	113	3.2
D. Impact subindex	109	3.1
9th pillar: Economic impacts	96	2.9

10th pillar: Social impacts......113.....3.3



- Mali - Low-income group average

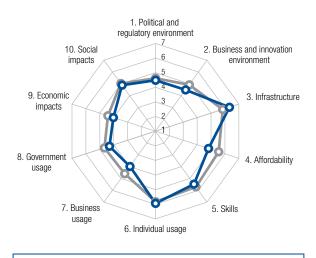
## The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*743.7
1.02	Laws relating to ICTs*106
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*61 3.8
1.05	Efficiency of legal system in challenging regs*583.7
1.06	Intellectual property protection*893.6
1.07	Software piracy rate, % software installedn/an/a
1.08	No. procedures to enforce a contract5836
1.09	No. days to enforce a contract95620
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*1134.0
2.02	Venture capital availability*
2.03	Total tax rate, % profits
2.04	No. days to start a business9
2.05	No. procedures to start a business415
2.06	Intensity of local competition*1134.5
2.07	Tertiary education gross enrollment rate, %122 6.9
2.08	Quality of management schools*1093.6
2.09	Gov't procurement of advanced tech*57
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita135 58.9
3.02	Mobile network coverage, % pop137 20.0
3.03	Int'l Internet bandwidth, kb/s per user1331.9
3.04	Secure Internet servers/million pop1311.3
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min123 0.50
4.02	Fixed broadband Internet tariffs, PPP \$/month 124 108.35
4.03	Internet & telephony competition, 0-2 (best)114 1.20
	5th pillar: Skills
5.01	Quality of education system*1093.1
5.02	Quality of math & science education*1103.2
5.03	Secondary education gross enrollment rate, % 123 43.5

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop21 149.1
6.02	Individuals using Internet, %1287.0
6.03	Households w/ personal computer, %119 8.2
6.04	Households w/ Internet access, %1186.7
6.05	Fixed broadband Internet subs/100 pop135 0.0
6.06	Mobile broadband subs/100 pop111 11.3
6.07	Use of virtual social networks* 127 4.4
	7th pillar: Business usage
7.01	Firm-level technology absorption* 107 4.1
7.02	Capacity for innovation*1233.3
7.03	PCT patents, applications/million pop121 0.0
7.04	ICT use for business-to-business transactions*107 4.1
7.05	Business-to-consumer Internet use*1313.3
7.06	Extent of staff training*1303.2
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*82
8.02	Government Online Service Index, 0-1 (best)124 0.13
8.03	Gov't success in ICT promotion*644.1
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*92
9.02	ICT PCT patents, applications/million pop103 0.0
9.03	Impact of ICTs on organizational models*973.6
9.04	Knowledge-intensive jobs, % workforcen/an/a
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*873.9
10.02	Internet access in schools*1043.5
10.03	ICT use & gov't efficiency*793.8
10.04	E-Participation Index, 0-1 (best)123 0.16

## Malta

Rank Value (out of 139) (1-7)Networked Readiness Index......34..4.8 A. Environment subindex......39.....4.5 C. Usage subindex......33.....4.7 



-O- Malta - High-income group average

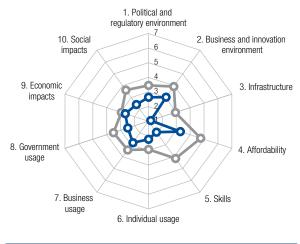
### The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*
1.02	Laws relating to ICTs*
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*60 3.8
1.05	Efficiency of legal system in challenging regs*49 3.8
1.06	Intellectual property protection*33 4.6
1.07	Software piracy rate, % software installed3044
1.08	No. procedures to enforce a contract9494
1.09	No. days to enforce a contract54 505
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*40 5.4
2.02	Venture capital availability*
2.03	Total tax rate, % profits8741.3
2.04	No. days to start a business
2.05	No. procedures to start a business11410
2.06	Intensity of local competition*12
2.07	Tertiary education gross enrollment rate, %61 45.1
2.08	Quality of management schools*394.7
2.09	Gov't procurement of advanced tech*503.6
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita42 5323.9
3.02	Mobile network coverage, % pop 1 100.0
3.03	Int'l Internet bandwidth, kb/s per user3 1178.8
3.04	Secure Internet servers/million pop10 1691.6
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min112 0.41
4.02	Fixed broadband Internet tariffs, PPP \$/month83 38.80
	Internet & telephony competition, 0-2 (best)1 2.00
4.03	internet a telepheny competition, o 2 (2004) inimit inimi 2100
4.03	5th pillar: Skills
4.03 5.01	5th pillar: Skills  Quality of education system*
	5th pillar: Skills
5.01	5th pillar: Skills  Quality of education system*

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop49 127.0
6.02	Individuals using Internet, %3573.2
6.03	Households w/ personal computer, %27 82.2
6.04	Households w/ Internet access, %27 80.7
6.05	Fixed broadband Internet subs/100 pop12 35.2
6.06	Mobile broadband subs/100 pop50 56.6
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop30 18.1
7.04	ICT use for business-to-business transactions*39 5.2
7.05	Business-to-consumer Internet use*
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*234.8
8.02	Government Online Service Index, 0-1 (best)79 0.40
8.03	Gov't success in ICT promotion*26
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*374.9
9.02	ICT PCT patents, applications/million pop30 6.2
9.03	Impact of ICTs on organizational models*424.6
9.04	Knowledge-intensive jobs, % workforce25 39.3
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*32 5.3
10.02	Internet access in schools*
10.03	ICT use & gov't efficiency*
10.04	E-Participation Index, 0-1 (best)70 0.47

## Mauritania

	Rank (out of 139)	
Networked Readiness Index	136.	2.5
Networked Readiness Index 2015 (out of 143)	138.	2.5
Networked Readiness Index 2014 (out of 148)	142.	2.6
Networked Readiness Index 2013 (out of 144)	135.	2.7
A. Environment subindex	135.	2.8
1st pillar: Political and regulatory environment	135.	2.6
2nd pillar: Business and innovation environment	135.	3.0
B. Readiness subindex	136.	2.1
3rd pillar: Infrastructure	136.	1.2
4th pillar: Affordability	118.	3.3
5th pillar: Skills	138.	1.9
C. Usage subindex	133.	2.5
6th pillar: Individual usage	118.	2.2
7th pillar: Business usage	135.	2.8
8th pillar: Government usage	134.	2.5
D. Impact subindex	133.	2.5
9th pillar: Economic impacts	116.	2.7



- Mauritania -O- Lower-middle-income group average

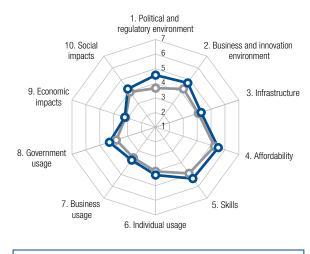
## The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*
1.02	Laws relating to ICTs*
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*132 2.5
1.05	Efficiency of legal system in challenging regs*134 2.3
1.06	Intellectual property protection*1382.1
1.07	Software piracy rate, % software installedn/an/a
1.08	No. procedures to enforce a contract128
1.09	No. days to enforce a contract16370
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*914.4
2.02	Venture capital availability*1331.9
2.03	Total tax rate, % profits13571.3
2.04	No. days to start a business8
2.05	No. procedures to start a business
2.06	Intensity of local competition*1344.0
2.07	Tertiary education gross enrollment rate, %128 5.5
2.08	Quality of management schools*1253.2
2.09	Gov't procurement of advanced tech*123 2.7
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita118 274.0
3.02	Mobile network coverage, % pop133 62.0
3.03	Int'l Internet bandwidth, kb/s per user136 1.5
3.04	Secure Internet servers/million pop116
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min127 0.57
4.02	Fixed broadband Internet tariffs, PPP $\mbox{\sc prop}$ month 108 59.29
4.03	Internet & telephony competition, 0–2 (best)1 2.00
	5th pillar: Skills
5.01	Quality of education system*1302.5
5.02	Quality of math & science education*1232.9
5.03	Secondary education gross enrollment rate, % 135 29.9
5.04	Adult literacy rate, %

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop103 94.2
6.02	Individuals using Internet, %123 10.7
6.03	Households w/ personal computer, %131 4.4
6.04	Households w/ Internet access, %1246.2
6.05	Fixed broadband Internet subs/100 pop120 0.2
6.06	Mobile broadband subs/100 pop105 14.4
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop121 0.0
7.04	ICT use for business-to-business transactions*72 4.6
7.05	Business-to-consumer Internet use*
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*1243.1
8.02	Government Online Service Index, 0-1 (best)133 0.05
8.03	Gov't success in ICT promotion*1233.1
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*123 3.6
9.02	ICT PCT patents, applications/million pop103 0.0
9.03	Impact of ICTs on organizational models*118 3.4
9.04	Knowledge-intensive jobs, % workforcen/an/a
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services* 129 3.0
10.02	Internet access in schools*1362.1
10.03	ICT use & gov't efficiency*
10.04	E-Participation Index, 0–1 (best)132 0.08

## Mauritius

Rank (out of 139) (1-7)Networked Readiness Index......49..4.4 Networked Readiness Index 2013 (out of 144)......55..... 4.1 A. Environment subindex......34.....34.....4.7 B. Readiness subindex ...... 57 ..... 5.0 C. Usage subindex......55..... 55..... 4.1 



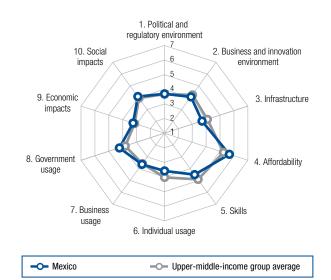
- Mauritius -O- Upper-middle-income group average

### The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*
1.02	Laws relating to ICTs*4743
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*23 4.9
1.05	Efficiency of legal system in challenging regs*31 4.3
1.06	Intellectual property protection*414.4
1.07	Software piracy rate, % software installed4855
1.08	No. procedures to enforce a contract4234
1.09	No. days to enforce a contract64 519
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*535.0
2.02	Venture capital availability*
2.03	Total tax rate, % profits
2.04	No. days to start a business6
2.05	No. procedures to start a business415
2.06	Intensity of local competition*325.5
2.07	Tertiary education gross enrollment rate, %69 38.7
2.08	Quality of management schools*664.3
2.09	Gov't procurement of advanced tech*603.4
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita77 2294.5
3.02	Mobile network coverage, % pop67 99.0
3.03	Int'l Internet bandwidth, kb/s per user71 33.0
3.04	Secure Internet servers/million pop45 154.6
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min49 0.18
4.02	Fixed broadband Internet tariffs, PPP \$/month87 42.35
4.03	Internet & telephony competition, 0–2 (best)1 2.00
	5th pillar: Skills
5.01	Quality of education system*494.1
5.02	Quality of math & science education*50 4.4
5.03	Secondary education gross enrollment rate, %55 97.9
5.04	Adult literacy rate, %

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop41 132.2
6.02	Individuals using Internet, %8541.4
6.03	Households w/ personal computer, %69 51.3
6.04	Households w/ Internet access, %67 47.5
6.05	Fixed broadband Internet subs/100 pop55 14.6
6.06	Mobile broadband subs/100 pop80 31.7
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop63 1.6
7.04	ICT use for business-to-business transactions*74 4.6
7.05	Business-to-consumer Internet use*1083.8
7.06	Extent of staff training*304.5
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*404.4
8.02	Government Online Service Index, 0-1 (best)68 0.47
8.03	Gov't success in ICT promotion*
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*
9.02	ICT PCT patents, applications/million pop54 0.8
9.03	Impact of ICTs on organizational models*684.2
9.04	Knowledge-intensive jobs, % workforce69 20.4
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*60 4.3
10.02	Internet access in schools*
10.03	ICT use & gov't efficiency*554.2
10.04	E-Participation Index, 0–1 (best)

	Rank (out of 139)	Value (1–7)
Networked Readiness Index	,	, ,
Networked Readiness Index 2015 (out of 143)	69.	4.0
Networked Readiness Index 2014 (out of 148)	79.	3.9
Networked Readiness Index 2013 (out of 144)		
A. Environment subindex	79.	3.9
1st pillar: Political and regulatory environment	77.	3.7
2nd pillar: Business and innovation environment	83.	4.1
B. Readiness subindex	84.	4.6
3rd pillar: Infrastructure	84.	3.7
4th pillar: Affordability	54.	5.7
5th pillar: Skills	92.	4.5
C. Usage subindex	74.	3.8
6th pillar: Individual usage	84.	3.6
7th pillar: Business usage	66.	3.6
8th pillar: Government usage	52.	4.2
D. Impact subindex	70.	3.7
9th pillar: Economic impacts	64.	3.3
10th pillar: Social impacts	71.	4.1



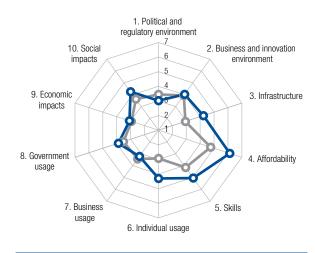
## The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*
1.02	Laws relating to ICTs*6565
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*1043.1
1.05	Efficiency of legal system in challenging regs*1023.0
1.06	Intellectual property protection*76
1.07	Software piracy rate, % software installed4654
1.08	No. procedures to enforce a contract6837
1.09	No. days to enforce a contract21389
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*585.0
2.02	Venture capital availability*
2.03	Total tax rate, % profits115 51.7
2.04	No. days to start a business
2.05	No. procedures to start a business
2.06	Intensity of local competition*595959
2.07	Tertiary education gross enrollment rate, %81 29.2
2.08	Quality of management schools*684.2
2.09	Gov't procurement of advanced tech*883.1
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita75 2400.8
3.02	Mobile network coverage, % pop37 99.9
3.03	Int'l Internet bandwidth, kb/s per user88 20.9
3.04	Secure Internet servers/million pop74 34.1
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min30 0.12
4.02	Fixed broadband Internet tariffs, PPP \$/month94 43.50
4.03	Internet & telephony competition, 0-2 (best)1 2.00
	5th pillar: Skills
5.01	Quality of education system*1172.8
5.02	Quality of math & science education*126
5.03	Secondary education gross enrollment rate, %81 87.0
5.04	Adult literacy rate, %

	INDICATOR RANK/139 VALUE	
	6th pillar: Individual usage	
6.01	Mobile phone subscriptions/100 pop111 82.2	
6.02	Individuals using Internet, %	
6.03	Households w/ personal computer, %78 38.3	
6.04	Households w/ Internet access, %7834.4	
6.05	Fixed broadband Internet subs/100 pop66 10.5	
6.06	Mobile broadband subs/100 pop72 41.1	
6.07	Use of virtual social networks*91	
	7th pillar: Business usage	
7.01	Firm-level technology absorption*	
7.02	Capacity for innovation*	
7.03	PCT patents, applications/million pop58 2.0	
7.04	ICT use for business-to-business transactions*61 4.8	
7.05	Business-to-consumer Internet use*734.3	
7.06	Extent of staff training*793.9	
	8th pillar: Government usage	
8.01	Importance of ICTs to gov't vision*713.9	
8.02	Government Online Service Index, 0-1 (best)35 0.66	
8.03	Gov't success in ICT promotion*823.8	
	9th pillar: Economic impacts	
9.01	Impact of ICTs on business models*54	
9.02	ICT PCT patents, applications/million pop67 0.3	
9.03	Impact of ICTs on organizational models*55 4.4	
9.04	Knowledge-intensive jobs, % workforce74 19.5	
	10th pillar: Social impacts	
10.01	Impact of ICTs on access to basic services*81 4.0	
10.02	Internet access in schools*903.9	
10.03	ICT use & gov't efficiency*763.9	
10.04	E-Participation Index, 0–1 (best)45 0.61	

## Moldova

Rank Value (out of 139) (1-7)Networked Readiness Index.....71..4.0 A. Environment subindex......111 ..... 3.5 B. Readiness subindex ...... 52 .... 5.1 



- Moldova -O- Lower-middle-income group average

### The Networked Readiness Index in detail

C. Usage subindex......76..... 76..... 3.8

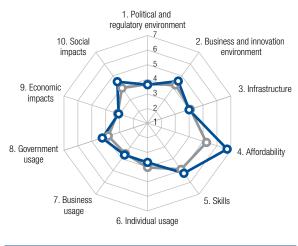
D. Impact subindex .......71 ..... 3.7

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*1132.9
1.02	Laws relating to ICTs*703.9
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*133 2.5
1.05	Efficiency of legal system in challenging regs*1352.3
1.06	Intellectual property protection*1163.1
1.07	Software piracy rate, % software installed10290
1.08	No. procedures to enforce a contract2231
1.09	No. days to enforce a contract82 585
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*924.4
2.02	Venture capital availability*
2.03	Total tax rate, % profits80 40.2
2.04	No. days to start a business4
2.05	No. procedures to start a business
2.06	Intensity of local competition*1034.6
2.07	Tertiary education gross enrollment rate, %63 41.3
2.08	Quality of management schools*1183.3
2.09	Gov't procurement of advanced tech*1332.5
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita94 1262.0
3.02	Mobile network coverage, % pop6799.0
3.03	Int'l Internet bandwidth, kb/s per user17 152.4
3.04	Secure Internet servers/million pop65 48.4
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min61 0.23
4.02	Fixed broadband Internet tariffs, PPP \$/month38 25.37
4.03	Internet & telephony competition, 0-2 (best)1 2.00
	5th pillar: Skills
5.01	Quality of education system*9797
5.02	Quality of math & science education*803.9
5.03	Secondary education gross enrollment rate, %79 88.3
5.04	Adult literacy rate, %

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop80 108.0
6.02	Individuals using Internet, %7446.6
6.03	Households w/ personal computer, %63 52.4
6.04	Households w/ Internet access, %6847.5
6.05	Fixed broadband Internet subs/100 pop54 14.7
6.06	Mobile broadband subs/100 pop61 49.4
6.07	Use of virtual social networks*80 5.5
	7th pillar: Business usage
7.01	Firm-level technology absorption* 109 4.1
7.02	Capacity for innovation*1153.4
7.03	PCT patents, applications/million pop7676
7.04	ICT use for business-to-business transactions*101 4.2
7.05	Business-to-consumer Internet use*824.1
7.06	Extent of staff training*1203.3
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*883.6
8.02	Government Online Service Index, 0-1 (best)60 0.53
8.03	Gov't success in ICT promotion*793.9
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*1123.8
9.02	ICT PCT patents, applications/million pop103 0.0
9.03	Impact of ICTs on organizational models*104 3.6
9.04	Knowledge-intensive jobs, % workforce47 28.7
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*853.9
10.02	Internet access in schools*
10.03	ICT use & gov't efficiency*823.8
10.04	E-Participation Index, 0–1 (best)4040

# Mongolia

	Rank (out of 139)	
Networked Readiness Index	57.	.4.3
Networked Readiness Index 2015 (out of 143)	61	4.2
Networked Readiness Index 2014 (out of 148)	61	4.1
Networked Readiness Index 2013 (out of 144)		
A. Environment subindex	58	4.1
1st pillar: Political and regulatory environment	81	3.6
2nd pillar: Business and innovation environment	52.	4.6
B. Readiness subindex	44	5.3
3rd pillar: Infrastructure	79.	4.0
4th pillar: Affordability	4	6.7
5th pillar: Skills	62.	5.2
C. Usage subindex	71	3.9
6th pillar: Individual usage	82.	3.7
7th pillar: Business usage	61	3.7
8th pillar: Government usage	51	4.2
D. Impact subindex	60	3.8
9th pillar: Economic impacts	82.	3.1
10th pillar: Social impacts	49	4.5



-O- Upper-middle-income group average - Mongolia

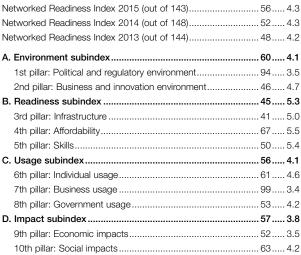
## The Networked Readiness Index in detail

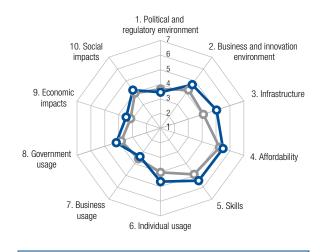
	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*
1.02	Laws relating to ICTs*903.6
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*86 3.4
1.05	Efficiency of legal system in challenging regs*983.0
1.06	Intellectual property protection*1093.2
1.07	Software piracy rate, % software installedn/an/a
1.08	No. procedures to enforce a contract27
1.09	No. days to enforce a contract18374
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*884.4
2.02	Venture capital availability*1361.8
2.03	Total tax rate, % profits2224.4
2.04	No. days to start a business
2.05	No. procedures to start a business415
2.06	Intensity of local competition*785.0
2.07	Tertiary education gross enrollment rate, %34 64.3
2.08	Quality of management schools*1323.0
2.09	Gov't procurement of advanced tech*793.2
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita83 1755.8
3.02	Mobile network coverage, % pop115 91.3
3.03	Int'l Internet bandwidth, kb/s per user34 90.0
3.04	Secure Internet servers/million pop
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min31 0.12
4.02	Fixed broadband Internet tariffs, PPP \$/month19 20.69
4.03	Internet & telephony competition, 0–2 (best)n/a n/a
	5th pillar: Skills
5.01	Quality of education system*1113.0
5.02	Quality of math & science education*344.7
5.03	Secondary education gross enrollment rate, %71 90.7
5.04	Adult literacy rate, %

	INDICATOR	RANK/139	VALUE
	6th pillar: Individual usage		
6.01	Mobile phone subscriptions/100 pop	90	105.1
6.02	Individuals using Internet, %	99	27.0
6.03	Households w/ personal computer, %	81	35.8
6.04	Households w/ Internet access, %	83	29.0
6.05	Fixed broadband Internet subs/100 pop.	77	6.8
6.06	Mobile broadband subs/100 pop	49	57.6
6.07	Use of virtual social networks*	56	5.7
	7th pillar: Business usage		
7.01	Firm-level technology absorption*	64	4.7
7.02	Capacity for innovation*	64	4.0
7.03	PCT patents, applications/million pop	73	0.7
7.04	ICT use for business-to-business transac	tions*43	5.1
7.05	Business-to-consumer Internet use*	69	4.5
7.06	Extent of staff training*	80	3.9
	8th pillar: Government usage		
8.01	Importance of ICTs to gov't vision*		
8.02	Government Online Service Index, 0-1 (b	est)43	0.61
8.03	Gov't success in ICT promotion*	56	4.2
	9th pillar: Economic impacts		
9.01	Impact of ICTs on business models*	85	4.2
9.02	ICT PCT patents, applications/million pop	)57	0.5
9.03	Impact of ICTs on organizational models*	105	3.5
9.04	Knowledge-intensive jobs, % workforce	55	25.0
	10th pillar: Social impacts		
10.01	Impact of ICTs on access to basic service	es*65	4.3
10.02	Internet access in schools*	51	4.7
10.03	ICT use & gov't efficiency*	72	4.0
10.04	E-Participation Index, 0-1 (best)	30	0.69

# Montenegro

Rank Value (out of 139) (1-7)Networked Readiness Index......51...4.3





- Montenegro -O- Upper-middle-income group average

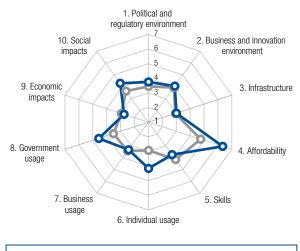
### The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*59
1.02	Laws relating to ICTs*55 4.1
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*75 3.5
1.05	Efficiency of legal system in challenging regs*843.3
1.06	Intellectual property protection*853.7
1.07	Software piracy rate, % software installed8078
1.08	No. procedures to enforce a contract13449
1.09	No. days to enforce a contract70 545
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*
2.02	Venture capital availability*
2.03	Total tax rate, % profits
2.04	No. days to start a business57
2.05	No. procedures to start a business546
2.06	Intensity of local competition*1304.2
2.07	Tertiary education gross enrollment rate, %48 55.3
2.08	Quality of management schools*54
2.09	Gov't procurement of advanced tech*
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita32 6350.5
3.02	Mobile network coverage, % pop59 99.5
3.03	Int'l Internet bandwidth, kb/s per user37 77.0
3.04	Secure Internet servers/million pop61 56.3
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min70 0.26
4.02	Fixed broadband Internet tariffs, PPP \$/month79 36.60
4.03	Internet & telephony competition, 0–2 (best)1 2.00
	5th pillar: Skills
5.01	Quality of education system*58
5.02	Quality of math & science education*394.6
5.03	Secondary education gross enrollment rate, %72 90.3
5.04	Adult literacy rate, %

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop9 163.0
6.02	Individuals using Internet, %54 61.0
6.03	Households w/ personal computer, %60 54.7
6.04	Households w/ Internet access, %5656.6
6.05	Fixed broadband Internet subs/100 pop51 16.7
6.06	Mobile broadband subs/100 pop83 31.0
6.07	Use of virtual social networks*515.8
	7th pillar: Business usage
7.01	Firm-level technology absorption*
7.02	Capacity for innovation*1003.6
7.03	PCT patents, applications/million pop533.2
7.04	ICT use for business-to-business transactions*90 4.4
7.05	Business-to-consumer Internet use*844.1
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*51
8.02	Government Online Service Index, 0-1 (best)60 0.53
8.03	Gov't success in ICT promotion*
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*804.3
9.02	ICT PCT patents, applications/million pop53 0.8
9.03	Impact of ICTs on organizational models*96 3.7
9.04	Knowledge-intensive jobs, % workforce29 37.2
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*943.9
10.02	Internet access in schools*694.3
10.03	ICT use & gov't efficiency*5454
10.04	E-Participation Index, 0–1 (best)49 0.59

## Morocco

Rank (out of 139)	
78.	. 3.9
78.	3.9
99.	3.6
89.	3.6
77.	3.9
70.	3.8
87.	4.1
94.	4.3
102.	3.0
20.	6.3
110.	3.7
60.	4.0
67.	4.2
105.	3.3
41.	4.6
80.	3.5
110.	2.8
	(out of 139) 78. 78. 99. 89. 77. 70. 87. 94. 102. 60. 67. 105.



- Morocco -O- Lower-middle-income group average

## The Networked Readiness Index in detail

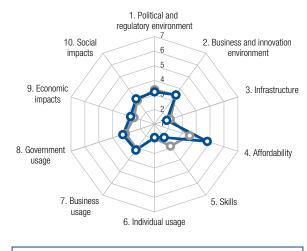
	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*
1.02	Laws relating to ICTs*783.7
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*72 3.6
1.05	Efficiency of legal system in challenging regs*64 3.5
1.06	Intellectual property protection*614.0
1.07	Software piracy rate, % software installed6466
1.08	No. procedures to enforce a contract9494
1.09	No. days to enforce a contract58 510
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*515.1
2.02	Venture capital availability*
2.03	Total tax rate, % profits107 49.1
2.04	No. days to start a business57
2.05	No. procedures to start a business
2.06	Intensity of local competition*735.0
2.07	Tertiary education gross enrollment rate, %88 24.6
2.08	Quality of management schools*724.1
2.09	Gov't procurement of advanced tech*963.0
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita101 834.9
3.02	Mobile network coverage, % pop64 99.2
3.03	Int'l Internet bandwidth, kb/s per user101 10.8
3.04	Secure Internet servers/million pop 106 4.9
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min37 0.14
4.02	Fixed broadband Internet tariffs, PPP \$/month45 27.65
4.03	Internet & telephony competition, 0-2 (best)1 2.00
	5th pillar: Skills
5.01	Quality of education system*1212.8
5.02	Quality of math & science education*744.0
5.03	Secondary education gross enrollment rate, % 102 69.1
5.04	Adult literacy rate, %

	INDICATOR RA	NK/139	VALUE
	6th pillar: Individual usage		
6.01	Mobile phone subscriptions/100 pop	42	131.7
6.02	Individuals using Internet, %	60	56.8
6.03	Households w/ personal computer, %	61	52.5
6.04	Households w/ Internet access, %	63	50.4
6.05	Fixed broadband Internet subs/100 pop	94	3.0
6.06	Mobile broadband subs/100 pop	93	26.8
6.07	Use of virtual social networks*	77	5.5
	7th pillar: Business usage		
7.01	Firm-level technology absorption*	73	4.5
7.02	Capacity for innovation*	108	3.5
7.03	PCT patents, applications/million pop	65	1.5
7.04	ICT use for business-to-business transaction	ns*104	4.2
7.05	Business-to-consumer Internet use*	86	4.1
7.06	Extent of staff training*	119	3.4
	8th pillar: Government usage		
8.01	Importance of ICTs to gov't vision*	50	4.3
8.02	Government Online Service Index, 0-1 (best)	)30	0.69
8.03	Gov't success in ICT promotion*	49	4.3
	9th pillar: Economic impacts		
9.01	Impact of ICTs on business models*	63	4.5
9.02	ICT PCT patents, applications/million pop	63	0.4
9.03	Impact of ICTs on organizational models*	86	3.8
9.04	Knowledge-intensive jobs, % workforce	100	6.8
	10th pillar: Social impacts		
10.01	Impact of ICTs on access to basic services*	95	3.8
10.02	Internet access in schools*	110	3.5
10.03	ICT use & gov't efficiency*	65	4.0
10.04	E-Participation Index, 0-1 (best)	17	0.80

# Mozambique

	Rank (out of 139)	
Networked Readiness Index	123.	.3.0
Networked Readiness Index 2015 (out of 143)	129.	2.9
Networked Readiness Index 2014 (out of 148)	137.	2.8
Networked Readiness Index 2013 (out of 144)	133.	2.8
A. Environment subindex	120.	3.3
1st pillar: Political and regulatory environment	112.	3.2
2nd pillar: Business and innovation environment	121.	3.5
B. Readiness subindex	125.	2.9
3rd pillar: Infrastructure	131 .	1.9
4th pillar: Affordability	90.	4.8
5th pillar: Skills	136.	2.1
C. Usage subindex	124.	2.8
6th pillar: Individual usage	128.	1.9
7th pillar: Business usage	114.	3.2
8th pillar: Government usage	109.	3.3
D Impact subindex	116	29

10th pillar: Social impacts......117.....3.1



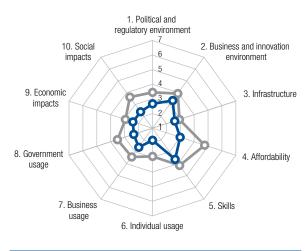
-O- Low-income group average - Mozambique

### The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*1003.2
1.02	Laws relating to ICTs*1193.0
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*943.3
1.05	Efficiency of legal system in challenging regs*111 2.9
1.06	Intellectual property protection*1253.0
1.07	Software piracy rate, % software installedn/an/a
1.08	No. procedures to enforce a contract
1.09	No. days to enforce a contract122950
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*1183.9
2.02	Venture capital availability*116
2.03	Total tax rate, % profits65 36.1
2.04	No. days to start a business97
2.05	No. procedures to start a business11410
2.06	Intensity of local competition*1084.6
2.07	Tertiary education gross enrollment rate, %126 6.0
2.08	Quality of management schools*1352.8
2.09	Gov't procurement of advanced tech*73 3.3
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita110 562.8
3.02	Mobile network coverage, % pop13072.0
3.03	Int'l Internet bandwidth, kb/s per user1049.2
3.04	Secure Internet servers/million pop1241.8
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min67 0.25
4.02	Fixed broadband Internet tariffs, PPP \$/month86 39.98
4.03	Internet & telephony competition, 0-2 (best) 116 1.17
	5th pillar: Skills
5.01	Quality of education system*118
5.02	Quality of math & science education*1322.5
5.03	Secondary education gross enrollment rate, % 137 24.5
5.04	Adult literacy rate, %

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop127 69.8
6.02	Individuals using Internet, %1295.9
6.03	Households w/ personal computer, %1227.3
6.04	Households w/ Internet access, %1236.2
6.05	Fixed broadband Internet subs/100 pop129 0.1
6.06	Mobile broadband subs/100 pop1293.0
6.07	Use of virtual social networks*113 4.8
	7th pillar: Business usage
7.01	Firm-level technology absorption*
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop121 0.0
7.04	ICT use for business-to-business transactions*110 4.1
7.05	Business-to-consumer Internet use*1113.7
7.06	Extent of staff training*1243.3
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*933.6
8.02	Government Online Service Index, 0-1 (best)95 0.31
8.03	Gov't success in ICT promotion*1143.4
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*1043.9
9.02	ICT PCT patents, applications/million pop103 0.0
9.03	Impact of ICTs on organizational models*125 3.2
9.04	Knowledge-intensive jobs, % workforcen/an/a
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*131 3.0
10.02	Internet access in schools*
10.03	ICT use & gov't efficiency*
10.04	E-Participation Index, 0-1 (best)89 0.33

	Rank (out of 139)	
Networked Readiness Index	,	` ′
Networked Readiness Index 2015 (out of 143)	139.	2.5
Networked Readiness Index 2014 (out of 148)	146.	2.3
Networked Readiness Index 2013 (out of 144)	n/a.	n/a
A. Environment subindex	133.	3.0
1st pillar: Political and regulatory environment	134.	2.7
2nd pillar: Business and innovation environment	127 .	3.3
3. Readiness subindex	118.	3.1
3rd pillar: Infrastructure	115.	2.6
4th pillar: Affordability	122.	3.0
5th pillar: Skills	113.	3.6
C. Usage subindex	137.	2.3
6th pillar: Individual usage	131 .	1.8
7th pillar: Business usage	138.	2.6
8th pillar: Government usage	137 .	2.3
D. Impact subindex	135.	2.4
9th pillar: Economic impacts	129.	2.4



- Myanmar -O- Lower-middle-income group average

## The Networked Readiness Index in detail

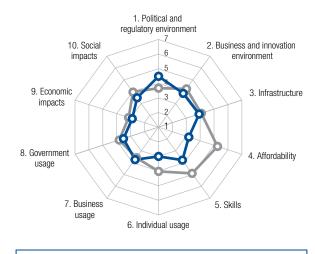
	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*1093.0
1.02	Laws relating to ICTs*
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*125 2.7
1.05	Efficiency of legal system in challenging regs*1262.6
1.06	Intellectual property protection*1332.8
1.07	Software piracy rate, % software installedn/an/a
1.08	No. procedures to enforce a contract12545
1.09	No. days to enforce a contract1301160
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*1392.7
2.02	Venture capital availability*1381.8
2.03	Total tax rate, % profits4331.4
2.04	No. days to start a business76
2.05	No. procedures to start a business1201
2.06	Intensity of local competition*1184.4
2.07	Tertiary education gross enrollment rate, %106 13.5
2.08	Quality of management schools*1362.8
2.09	Gov't procurement of advanced tech*1172.8
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita121 224.4
3.02	Mobile network coverage, % pop12973.0
3.03	Int'l Internet bandwidth, kb/s per user77 28.7
3.04	Secure Internet servers/million pop
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min24 0.11
4.02	Fixed broadband Internet tariffs, PPP $\mbox{\sc s/month}\ 127\\ 136.43$
4.03	Internet & telephony competition, 0–2 (best) 135 0.00
	5th pillar: Skills
5.01	Quality of education system*1272.5
5.02	Quality of math & science education*1272.8
5.03	Secondary education gross enrollment rate, % 119 51.3
5.04	Adult literacy rate, %6493.1

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop133 54.0
6.02	Individuals using Internet, %1372.1
6.03	Households w/ personal computer, %1333.4
6.04	Households w/ Internet access, %1343.0
6.05	Fixed broadband Internet subs/100 pop118 0.3
6.06	Mobile broadband subs/100 pop103 14.9
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*
7.02	Capacity for innovation*1362.9
7.03	PCT patents, applications/million pop119 0.0
7.04	ICT use for business-to-business transactions*137 3.3
7.05	Business-to-consumer Internet use*1273.3
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*1312.9
8.02	Government Online Service Index, 0-1 (best)135 0.02
8.03	Gov't success in ICT promotion*1313.0
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*1333.2
9.02	ICT PCT patents, applications/million pop102 0.0
9.03	Impact of ICTs on organizational models* 130 3.0
9.04	Knowledge-intensive jobs, % workforcen/an/a
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*132 3.0
10.02	Internet access in schools*
10.03	ICT use & gov't efficiency*
10.04	E-Participation Index, 0-1 (best)132 0.08

## Namibia

Rank Value

	(out of 139)	(1-7)	
Networked Readiness Index	99.	.3.6	
Networked Readiness Index 2015 (out of 143)	102	3.5	
Networked Readiness Index 2014 (out of 148)			
Networked Readiness Index 2013 (out of 144)	111	3.3	
A. Environment subindex	53	4.2	
1st pillar: Political and regulatory environment	31	4.5	
2nd pillar: Business and innovation environment	103	3.9	
B. Readiness subindex	110	3.6	
3rd pillar: Infrastructure	81	3.9	
4th pillar: Affordability	119	3.2	
5th pillar: Skills	109	3.8	
C. Usage subindex	94	3.4	
6th pillar: Individual usage	98	3.0	
7th pillar: Business usage	57	3.7	
8th pillar: Government usage	92	3.5	
D. Impact subindex	101	3.2	
9th pillar: Economic impacts	98.	2.9	
10th pillar: Social impacts	100.	3.5	



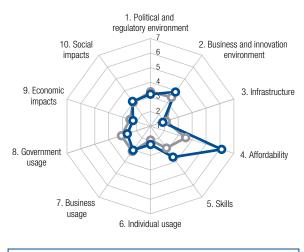
Namibia - Upper-middle-income group average

## The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*
1.02	Laws relating to ICTs*863.6
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*31 4.5
1.05	Efficiency of legal system in challenging regs*294.4
1.06	Intellectual property protection*364.6
1.07	Software piracy rate, % software installedn/an/a
1.08	No. procedures to enforce a contract3433
1.09	No. days to enforce a contract45460
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*48 5.1
2.02	Venture capital availability*
2.03	Total tax rate, % profits
2.04	No. days to start a business
2.05	No. procedures to start a business11410
2.06	Intensity of local competition*100 4.6
2.07	Tertiary education gross enrollment rate, %117 9.3
2.08	Quality of management schools*1143.5
2.09	Gov't procurement of advanced tech*64
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita109 567.2
3.02	Mobile network coverage, % pop 100.0
3.03	Int'l Internet bandwidth, kb/s per user68 34.5
3.04	Secure Internet servers/million pop82 22.5
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min69 0.25
4.02	Fixed broadband Internet tariffs, PPP \$/month 121 84.64
4.03	Internet & telephony competition, 0–2 (best) 104 1.38
	5th pillar: Skills
5.01	Quality of education system*9696
5.02	Quality of math & science education*1212.9
5.03	Secondary education gross enrollment rate, $\%10964.8$
5.04	Adult literacy rate, %

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop70 113.8
6.02	Individuals using Internet, %11614.8
6.03	Households w/ personal computer, %104 16.5
6.04	Households w/ Internet access, %100 17.3
6.05	Fixed broadband Internet subs/100 pop1001.8
6.06	Mobile broadband subs/100 pop78 34.2
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*
7.02	Capacity for innovation*713.9
7.03	PCT patents, applications/million pop9191
7.04	ICT use for business-to-business transactions*49 5.0
7.05	Business-to-consumer Internet use*874.1
7.06	Extent of staff training*404.3
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*69
8.02	Government Online Service Index, 0-1 (best)93 0.32
8.03	Gov't success in ICT promotion*933.7
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*844.2
9.02	ICT PCT patents, applications/million pop103 0.0
9.03	Impact of ICTs on organizational models*813.9
9.04	Knowledge-intensive jobs, % workforce89 14.6
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*92 3.9
10.02	Internet access in schools*1023.5
10.03	ICT use & gov't efficiency*97
10.04	E-Participation Index, 0-1 (best)89 0.33

	Rank (out of 139)	
Networked Readiness Index	118.	. 3.2
Networked Readiness Index 2015 (out of 143)	118.	3.2
Networked Readiness Index 2014 (out of 148)	123.	3.1
Networked Readiness Index 2013 (out of 144)	126.	2.9
A. Environment subindex	110.	3.5
1st pillar: Political and regulatory environment	114.	3.2
2nd pillar: Business and innovation environment	99.	3.9
B. Readiness subindex	106.	3.9
3rd pillar: Infrastructure	130.	1.9
4th pillar: Affordability	30.	6.1
5th pillar: Skills	115.	3.6
C. Usage subindex	129.	2.6
6th pillar: Individual usage	117.	2.2
7th pillar: Business usage	128.	3.0
8th pillar: Government usage	129.	2.7
D. Impact subindex	128.	2.7
9th pillar: Economic impacts	136.	2.3



- Nepal - Low-income group average

## The Networked Readiness Index in detail

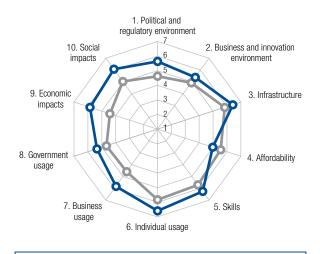
	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*1113.0
1.02	Laws relating to ICTs*
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*1063.1
1.05	Efficiency of legal system in challenging regs*953.1
1.06	Intellectual property protection*1153.1
1.07	Software piracy rate, % software installedn/an/a
1.08	No. procedures to enforce a contract8939
1.09	No. days to enforce a contract119910
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*1253.7
2.02	Venture capital availability*
2.03	Total tax rate, % profits35 29.5
2.04	No. days to start a business9217
2.05	No. procedures to start a business747
2.06	Intensity of local competition*824.9
2.07	Tertiary education gross enrollment rate, %102 15.8
2.08	Quality of management schools*1073.6
2.09	Gov't procurement of advanced tech*1072.9
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita125 131.0
3.02	Mobile network coverage, % pop126 80.0
3.03	Int'l Internet bandwidth, kb/s per user128 3.1
3.04	Secure Internet servers/million pop 114 3.0
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min15 0.08
4.02	Fixed broadband Internet tariffs, PPP \$/month29 22.80
4.03	Internet & telephony competition, 0-2 (best) 109 1.29
	5th pillar: Skills
5.01	Quality of education system*69
5.02	Quality of math & science education*883.7
5.03	Secondary education gross enrollment rate, % 108 67.2
5.04	Adult literacy rate, %

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop113 81.9
6.02	Individuals using Internet, %11515.4
6.03	Households w/ personal computer, %119 8.2
6.04	Households w/ Internet access, %1275.6
6.05	Fixed broadband Internet subs/100 pop109 0.9
6.06	Mobile broadband subs/100 pop101 17.4
6.07	Use of virtual social networks*106 4.9
	7th pillar: Business usage
7.01	Firm-level technology absorption*123 3.9
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop117 0.0
7.04	ICT use for business-to-business transactions*125 3.8
7.05	Business-to-consumer Internet use*1153.6
7.06	Extent of staff training*1253.3
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*1263.0
8.02	Government Online Service Index, 0-1 (best)118 0.16
8.03	Gov't success in ICT promotion*1303.0
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*1323.4
9.02	ICT PCT patents, applications/million pop103 0.0
9.03	Impact of ICTs on organizational models*1213.3
9.04	Knowledge-intensive jobs, % workforce103 4.3
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*116 3.4
10.02	Internet access in schools* 109 3.5
10.03	ICT use & gov't efficiency*1352.7
10.04	E-Participation Index, 0-1 (best)101 0.29

# Netherlands

Rank Value

	(out of 139)	(1-7)
Networked Readiness Index	6.	.5.8
Networked Readiness Index 2015 (out of 143)	4.	5.8
Networked Readiness Index 2014 (out of 148)	4.	5.8
Networked Readiness Index 2013 (out of 144)	4	5.8
A. Environment subindex	8.	5.5
1st pillar: Political and regulatory environment	8	5.6
2nd pillar: Business and innovation environment	10	5.4
B. Readiness subindex	23	5.9
3rd pillar: Infrastructure	18.	6.4
4th pillar: Affordability	83	5.0
5th pillar: Skills	6	6.2
C. Usage subindex	3.	5.9
6th pillar: Individual usage	8	6.6
7th pillar: Business usage	7.	5.8
8th pillar: Government usage	14	5.4
D. Impact subindex	2.	6.0
9th pillar: Economic impacts	6.	5.8
10th pillar: Social impacts	3.	6.1



- Netherlands

-O- High-income group average

## The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*14
1.02	Laws relating to ICTs*
1.03	Judicial independence* 7 6.3
1.04	Efficiency of legal system in settling disputes*10 5.5
1.05	Efficiency of legal system in challenging regs*6 5.5
1.06	Intellectual property protection*8
1.07	Software piracy rate, % software installed1425
1.08	No. procedures to enforce a contract
1.09	No. days to enforce a contract62514
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*10
2.02	Venture capital availability*24
2.03	Total tax rate, % profits85 41.0
2.04	No. days to start a business4
2.05	No. procedures to start a business4
2.06	Intensity of local competition*115.9
2.07	Tertiary education gross enrollment rate, %1878.5
2.08	Quality of management schools*8 5.7
2.09	Gov't procurement of advanced tech*213.9
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita34 6002.9
3.02	Mobile network coverage, % pop 1 100.0
3.03	Int'l Internet bandwidth, kb/s per user10 281.1
3.04	Secure Internet servers/million pop4 2635.1
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min105 0.36
4.02	Fixed broadband Internet tariffs, PPP $\mbox{\$/month}85 39.38$
4.03	Internet & telephony competition, 0–2 (best)1 2.00
	5th pillar: Skills
5.01	Quality of education system*8 5.4
5.02	Quality of math & science education*7
5.03	Secondary education gross enrollment rate, $\%  5   130.7$
5.04	Adult literacy rate, %n/an/a <sup>1</sup>

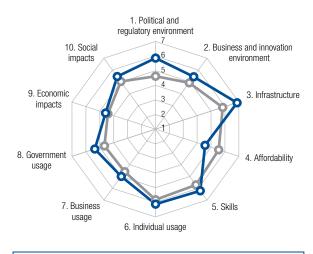
	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop62 116.4
6.02	Individuals using Internet, %5 93.2
6.03	Households w/ personal computer, %
6.04	Households w/ Internet access, %5 95.8
6.05	Fixed broadband Internet subs/100 pop3 40.8
6.06	Mobile broadband subs/100 pop29 69.2
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop9 207.2
7.04	ICT use for business-to-business transactions*6 6.0
7.05	Business-to-consumer Internet use*
7.06	Extent of staff training*99
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*314.6
8.02	Government Online Service Index, 0-1 (best)8 0.93
8.03	Gov't success in ICT promotion*1919
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*4 5.8
9.02	ICT PCT patents, applications/million pop8 59.1
9.03	Impact of ICTs on organizational models*4 5.7
9.04	Knowledge-intensive jobs, % workforce9 46.4
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*2 6.2
10.02	Internet access in schools*5
10.03	ICT use & gov't efficiency*
10.04	E-Participation Index, 0–1 (best)1 1.00
Note:	Indicators followed by an asterisk (*) are measured on a 1-to-7 (best) scale. For further details and explanation, please refer to the section "How to Read the

Country/Economy Profiles" on page 53.

1 See the "Technical Notes and Sources" section.

# New Zealand

	Rank (out of 139)	
Networked Readiness Index	,	, ,
Networked Readiness Index 2015 (out of 143)	17	5.5
Networked Readiness Index 2014 (out of 148)	20	5.3
Networked Readiness Index 2013 (out of 144)	20.	5.2
A. Environment subindex	2	5.6
1st pillar: Political and regulatory environment		
2nd pillar: Business and innovation environment	6.	5.4
3. Readiness subindex	24	5.9
3rd pillar: Infrastructure	10	6.8
4th pillar: Affordability	97	4.6
5th pillar: Skills	7.	6.2
C. Usage subindex	17	5.5
6th pillar: Individual usage	20	6.1
7th pillar: Business usage	20	5.0
8th pillar: Government usage	13.	5.4
D. Impact subindex		
Oth nillar: Economic impacts	25	4.6



New Zealand - High-income group average

### The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*2
1.02	Laws relating to ICTs*
1.03	Judicial independence* 1 6.7
1.04	Efficiency of legal system in settling disputes*5 5.7
1.05	Efficiency of legal system in challenging regs*5.
1.06	Intellectual property protection*5
1.07	Software piracy rate, % software installed320
1.08	No. procedures to enforce a contract1830
1.09	No. days to enforce a contract2 216
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*25
2.02	Venture capital availability*
2.03	Total tax rate, % profits5634.3
2.04	No. days to start a business1
2.05	No. procedures to start a business1
2.06	Intensity of local competition*16
2.07	Tertiary education gross enrollment rate, %1679.7
2.08	Quality of management schools*235.2
2.09	Gov't procurement of advanced tech*693.3
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita16 9737.7
3.02	Mobile network coverage, % pop97 97.0
3.03	Int'l Internet bandwidth, kb/s per user30 95.1
3.04	Secure Internet servers/million pop17 1211.2
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min96 0.33
4.02	Fixed broadband Internet tariffs, PPP \$/month95 44.27
4.03	Internet & telephony competition, 0–2 (best) 100 1.53
	5th pillar: Skills
5.01	Quality of education system*7
5.02	Quality of math & science education*10
5.03	Secondary education gross enrollment rate, %12 117.2
5.04	Adult literacy rate, %n/an/an/a

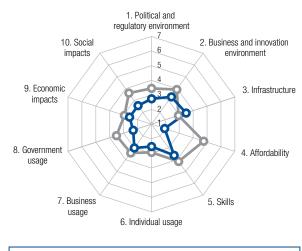
	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop74 112.1
6.02	Individuals using Internet, %17 85.5
6.03	Households w/ personal computer, %3279.8
6.04	Households w/ Internet access, %2879.8
6.05	Fixed broadband Internet subs/100 pop19 31.0
6.06	Mobile broadband subs/100 pop16 92.7
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*
7.02	Capacity for innovation*15
7.03	PCT patents, applications/million pop2178.3
7.04	ICT use for business-to-business transactions*24 5.6
7.05	Business-to-consumer Internet use*185.6
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*10
8.02	Government Online Service Index, 0-1 (best)15 0.84
8.03	Gov't success in ICT promotion*244.8
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models* 19 5.4
9.02	ICT PCT patents, applications/million pop23 16.1
9.03	Impact of ICTs on organizational models*23 5.1
9.04	Knowledge-intensive jobs, % workforce18 42.9
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*30 5.3
10.02	Internet access in schools* 14 5.9
10.03	ICT use & gov't efficiency*
10.04	E-Participation Index, 0–1 (best)19 0.78

Note: Indicators followed by an asterisk (\*) are measured on a 1-to-7 (best) scale. For further details and explanation, please refer to the section "How to Read the Country/Economy Profiles" on page 53.

<sup>1</sup> See the "Technical Notes and Sources" section.

# Nicaragua

Rank Value (out of 139) (1-7)Networked Readiness Index......131...2.8 A. Environment subindex......132.....3.0 C. Usage subindex......131..... 2.6 



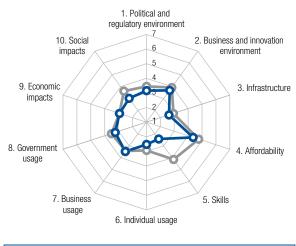
- Nicaragua -O- Lower-middle-income group average

### The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*
1.02	Laws relating to ICTs*
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*117 2.9
1.05	Efficiency of legal system in challenging regs*137 2.1
1.06	Intellectual property protection*1273.0
1.07	Software piracy rate, % software installed9082
1.08	No. procedures to enforce a contract6937
1.09	No. days to enforce a contract64 519
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*1104.0
2.02	Venture capital availability*
2.03	Total tax rate, % profits12863.9
2.04	No. days to start a business76
2.05	No. procedures to start a business
2.06	Intensity of local competition*96964.7
2.07	Tertiary education gross enrollment rate, %100 17.2
2.08	Quality of management schools*1043.7
2.09	Gov't procurement of advanced tech*1362.4
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita104 700.2
3.02	Mobile network coverage, % pop 1 100.0
3.03	Int'l Internet bandwidth, kb/s per user86 23.0
3.04	Secure Internet servers/million pop 94 11.3
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min138 1.16
4.02	Fixed broadband Internet tariffs, PPP \$/month 109 60.11
4.03	Internet & telephony competition, 0–2 (best)71 1.88
	5th pillar: Skills
5.01	Quality of education system*1362.3
5.02	Quality of math & science education*1352.3
5.03	Secondary education gross enrollment rate, $\%99$ 74.2
5.04	Adult literacy rate, %8082.8

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop67 114.6
6.02	Individuals using Internet, %110 17.6
6.03	Households w/ personal computer, %11111.1
6.04	Households w/ Internet access, %11111.6
6.05	Fixed broadband Internet subs/100 pop972.5
6.06	Mobile broadband subs/100 pop1321.4
6.07	Use of virtual social networks*125 4.5
	7th pillar: Business usage
7.01	Firm-level technology absorption*124 3.8
7.02	Capacity for innovation*1343.0
7.03	PCT patents, applications/million pop103 0.1
7.04	ICT use for business-to-business transactions*117 4.0
7.05	Business-to-consumer Internet use*
7.06	Extent of staff training*1093.5
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*1352.7
8.02	Government Online Service Index, 0-1 (best)128 0.09
8.03	Gov't success in ICT promotion*1362.7
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models* 124 3.6
9.02	ICT PCT patents, applications/million pop84 0.1
9.03	Impact of ICTs on organizational models* 127 3.2
9.04	Knowledge-intensive jobs, % workforce87 14.8
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*126 3.2
10.02	Internet access in schools* 129 2.7
10.03	ICT use & gov't efficiency*1302.8
10.04	E-Participation Index, 0-1 (best)130 0.10

	Rank (out of 139)	
Networked Readiness Index	,	, ,
Networked Readiness Index 2015 (out of 143)	119.	3.2
Networked Readiness Index 2014 (out of 148)		
Networked Readiness Index 2013 (out of 144)		
A. Environment subindex	116.	3.4
1st pillar: Political and regulatory environment	117.	3.2
2nd pillar: Business and innovation environment	111.	3.7
B. Readiness subindex	117.	3.1
3rd pillar: Infrastructure	113.	2.6
4th pillar: Affordability	100.	4.3
5th pillar: Skills	134.	2.4
C. Usage subindex	109.	3.1
6th pillar: Individual usage	112.	2.5
7th pillar: Business usage	86.	3.5
8th pillar: Government usage	112.	3.3
D. Impact subindex	114.	3.0
9th pillar: Economic impacts	90.	2.9
10th pillar: Social impacts	123.	3.0



- Nigeria -O- Lower-middle-income group average

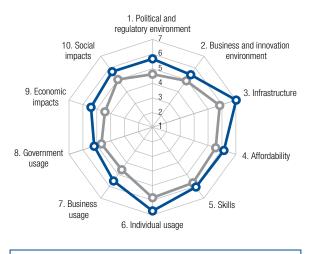
## The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*1033.1
1.02	Laws relating to ICTs*
1.03	Judicial independence*96963.3
1.04	Efficiency of legal system in settling disputes*83 3.4
1.05	Efficiency of legal system in challenging regs*91 3.2
1.06	Intellectual property protection*1193.1
1.07	Software piracy rate, % software installed8781
1.08	No. procedures to enforce a contract10740
1.09	No. days to enforce a contract57 510
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*994.2
2.02	Venture capital availability*
2.03	Total tax rate, % profits55 33.3
2.04	No. days to start a business
2.05	No. procedures to start a business
2.06	Intensity of local competition*605.2
2.07	Tertiary education gross enrollment rate, %114 10.4
2.08	Quality of management schools*1023.7
2.09	Gov't procurement of advanced tech*116
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita123 167.6
3.02	Mobile network coverage, % pop63 99.4
3.03	Int'l Internet bandwidth, kb/s per user1273.1
3.04	Secure Internet servers/million pop1182.3
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min33 0.13
4.02	Fixed broadband Internet tariffs, PPP \$/month 113 70.87
4.03	Internet & telephony competition, 0–2 (best)1 2.00
	5th pillar: Skills
5.01	Quality of education system*1242.7
5.02	Quality of math & science education*1312.6
5.03	Secondary education gross enrollment rate, % 122 43.8
5.04	Adult literacy rate, %

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop118 77.8
6.02	Individuals using Internet, %8442.7
6.03	Households w/ personal computer, %1169.1
6.04	Households w/ Internet access, %114 8.5
6.05	Fixed broadband Internet subs/100 pop137 0.0
6.06	Mobile broadband subs/100 pop110 11.7
6.07	Use of virtual social networks*85 5.4
	7th pillar: Business usage
7.01	Firm-level technology absorption*91
7.02	Capacity for innovation*823.8
7.03	PCT patents, applications/million pop111 0.0
7.04	ICT use for business-to-business transactions*91 4.4
7.05	Business-to-consumer Internet use*924.0
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*1043.4
8.02	Government Online Service Index, 0-1 (best)98 0.31
8.03	Gov't success in ICT promotion*1033.5
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*
9.02	ICT PCT patents, applications/million pop98 0.0
9.03	Impact of ICTs on organizational models*1013.6
9.04	Knowledge-intensive jobs, % workforcen/an/a
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*123 3.2
10.02	Internet access in schools* 124 3.0
10.03	ICT use & gov't efficiency*1282.9
10.04	E-Participation Index, 0-1 (best)89 0.33

Rank Value

	(out of 139)	(1–7)
Networked Readiness Index	4.	.5.8
Networked Readiness Index 2015 (out of 143)	5.	5.8
Networked Readiness Index 2014 (out of 148)	5.	5.7
Networked Readiness Index 2013 (out of 144)	5.	5.7
A. Environment subindex	6.	5.5
1st pillar: Political and regulatory environment	6.	5.7
2nd pillar: Business and innovation environment	7.	5.4
B. Readiness subindex	4.	6.4
3rd pillar: Infrastructure	1.	7.0
4th pillar: Affordability	28.	6.1
5th pillar: Skills	12.	6.0
C. Usage subindex	9.	5.8
6th pillar: Individual usage	3.	6.7
7th pillar: Business usage	11.	5.5
8th pillar: Government usage	18.	5.2
D. Impact subindex	9.	5.6
9th pillar: Economic impacts	8.	5.4
10th pillar: Social impacts	8.	5.7



-O- Norway -O- High-income group average

## The Networked Readiness Index in detail

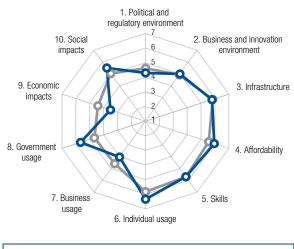
	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*7
1.02	Laws relating to ICTs* 7 5.5
1.03	Judicial independence* 3 6.5
1.04	Efficiency of legal system in settling disputes*7 5.6
1.05	Efficiency of legal system in challenging regs*7
1.06	Intellectual property protection*17
1.07	Software piracy rate, % software installed1425
1.08	No. procedures to enforce a contract4234
1.09	No. days to enforce a contract7 280
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*
2.02	Venture capital availability*
2.03	Total tax rate, % profits7639.5
2.04	No. days to start a business
2.05	No. procedures to start a business
2.06	Intensity of local competition*5050
2.07	Tertiary education gross enrollment rate, %2176.1
2.08	Quality of management schools*15
2.09	Gov't procurement of advanced tech*16
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita2 . 26319.9
3.02	Mobile network coverage, % pop 1 100.0
3.03	Int'l Internet bandwidth, kb/s per user15 203.9
3.04	Secure Internet servers/million pop
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min23 0.10
4.02	Fixed broadband Internet tariffs, PPP \$/month71 34.80
4.03	Internet & telephony competition, 0–2 (best)1 2.00
	5th pillar: Skills
5.01	Quality of education system*115.3
5.02	Quality of math & science education*244.9
5.03	Secondary education gross enrollment rate, $\%14 113.0$
5.04	Adult literacy rate, %n/an/an/a

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop63 116.1
6.02	Individuals using Internet, %2 96.3
6.03	Households w/ personal computer, %
6.04	Households w/ Internet access, %993.1
6.05	Fixed broadband Internet subs/100 pop5 38.8
6.06	Mobile broadband subs/100 pop18 88.8
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop12 139.4
7.04	ICT use for business-to-business transactions*7 5.9
7.05	Business-to-consumer Internet use*
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*15
8.02	Government Online Service Index, 0-1 (best)21 0.76
8.03	Gov't success in ICT promotion*135.1
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*13
9.02	ICT PCT patents, applications/million pop1436.8
9.03	Impact of ICTs on organizational models*6 5.6
9.04	Knowledge-intensive jobs, % workforce4 50.7
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*6
10.02	Internet access in schools*
10.03	ICT use & gov't efficiency*99
10.04	E-Participation Index, 0–1 (best)
Note:	Indicators followed by an asterisk (*) are measured on a 1-to-7 (best) scale. For further details and explanation, please refer to the section "How to Read the

Country/Economy Profiles" on page 53.

1 See the "Technical Notes and Sources" section.

	Rank (out of 139)	Value
	,	. ,
Networked Readiness Index	52.	4.3
Networked Readiness Index 2015 (out of 143)	42.	4.5
Networked Readiness Index 2014 (out of 148)	40.	4.6
Networked Readiness Index 2013 (out of 144)	40.	4.5
A. Environment subindex	52.	4.2
1st pillar: Political and regulatory environment	53.	4.0
2nd pillar: Business and innovation environment	58.	4.4
B. Readiness subindex	70.	4.8
3rd pillar: Infrastructure	46.	4.9
4th pillar: Affordability	96.	4.6
5th pillar: Skills	76.	5.0
C. Usage subindex	36.	4.5
6th pillar: Individual usage	39.	5.3
7th pillar: Business usage	94.	3.4
8th pillar: Government usage	34.	4.7
D. Impact subindex	66.	3.7
9th pillar: Economic impacts	95.	2.9
10th pillar: Capial impacts	16	16



**—** Oman -O- High-income group average

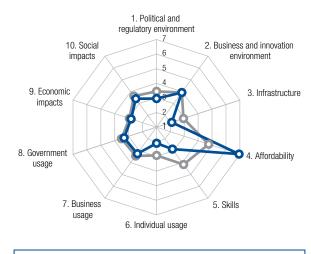
## The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*434.2
1.02	Laws relating to ICTs*54
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*40 4.3
1.05	Efficiency of legal system in challenging regs*533.7
1.06	Intellectual property protection*404.4
1.07	Software piracy rate, % software installed5360
1.08	No. procedures to enforce a contract13951
1.09	No. days to enforce a contract88598
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*65
2.02	Venture capital availability*
2.03	Total tax rate, % profits
2.04	No. days to start a business
2.05	No. procedures to start a business415
2.06	Intensity of local competition*954.7
2.07	Tertiary education gross enrollment rate, %83 28.6
2.08	Quality of management schools*1283.1
2.09	Gov't procurement of advanced tech*
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita31 6716.3
3.02	Mobile network coverage, % pop6799.0
3.03	Int'l Internet bandwidth, kb/s per user70 33.7
3.04	Secure Internet servers/million pop5679.3
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min81 0.29
4.02	Fixed broadband Internet tariffs, PPP \$/month 103 51.96
4.03	Internet & telephony competition, 0–2 (best)80 1.86
	5th pillar: Skills
5.01	Quality of education system*1063.1
5.02	Quality of math & science education*1023.3
5.03	Secondary education gross enrollment rate, %45 99.6
5.04	Adult literacy rate, %51 94.8

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop15 157.8
6.02	Individuals using Internet, %4170.2
6.03	Households w/ personal computer, %1884.0
6.04	Households w/ Internet access, %1986.2
6.05	Fixed broadband Internet subs/100 pop864.5
6.06	Mobile broadband subs/100 pop26 73.7
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop820.4
7.04	ICT use for business-to-business transactions*103 4.2
7.05	Business-to-consumer Internet use*
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*394.5
8.02	Government Online Service Index, 0-1 (best)26 0.73
8.03	Gov't success in ICT promotion*4444
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*884.1
9.02	ICT PCT patents, applications/million pop78 0.1
9.03	Impact of ICTs on organizational models*99 3.6
9.04	Knowledge-intensive jobs, % workforcen/an/a
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*50 4.6
10.02	Internet access in schools*843.9
10.03	ICT use & gov't efficiency*4645
10.04	E-Participation Index, 0–1 (best)24 0.71

Rank Value

	(out of 139)	(1-7)
Networked Readiness Index	110.	.3.4
Networked Readiness Index 2015 (out of 143)	112.	3.3
Networked Readiness Index 2014 (out of 148)	111.	3.3
Networked Readiness Index 2013 (out of 144)	105.	3.3
A. Environment subindex	115.	3.4
1st pillar: Political and regulatory environment	128.	3.0
2nd pillar: Business and innovation environment	98.	3.9
B. Readiness subindex	104.	4.0
3rd pillar: Infrastructure	126.	2.1
4th pillar: Affordability	1.	6.9
5th pillar: Skills	127.	2.8
C. Usage subindex	118.	2.9
6th pillar: Individual usage	123.	2.1
7th pillar: Business usage	110.	3.2
8th pillar: Government usage	103.	3.3
D. Impact subindex	105.	3.1
9th pillar: Economic impacts	105.	2.8
10th pillar: Social impacts	106.	3.4



- Pakistan -O- Lower-middle-income group average

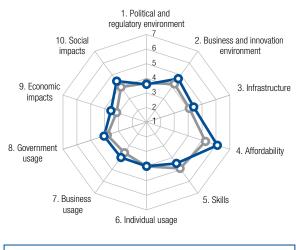
## The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*95
1.02	Laws relating to ICTs*
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*107 3.1
1.05	Efficiency of legal system in challenging regs*101 3.0
1.06	Intellectual property protection*1123.2
1.07	Software piracy rate, % software installed9695
1.08	No. procedures to enforce a contract128
1.09	No. days to enforce a contract
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*
2.02	Venture capital availability*
2.03	Total tax rate, % profits
2.04	No. days to start a business9797
2.05	No. procedures to start a business11410
2.06	Intensity of local competition*984.7
2.07	Tertiary education gross enrollment rate, %115 10.4
2.08	Quality of management schools*704.1
2.09	Gov't procurement of advanced tech*52
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita111 539.7
3.02	Mobile network coverage, % pop125 81.5
3.03	Int'l Internet bandwidth, kb/s per user1155.7
3.04	Secure Internet servers/million pop
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min10 0.06
4.02	Fixed broadband Internet tariffs, PPP \$/month15 18.04
4.03	Internet & telephony competition, 0–2 (best)1 2.00
	5th pillar: Skills
5.01	Quality of education system*753.6
5.02	Quality of math & science education*893.6
5.03	Secondary education gross enrollment rate, % 124 41.6
5.04	Adult literacy rate, %

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop123 73.3
6.02	Individuals using Internet, %119 13.8
6.03	Households w/ personal computer, %105 15.9
6.04	Households w/ Internet access, %106 13.2
6.05	Fixed broadband Internet subs/100 pop1071.1
6.06	Mobile broadband subs/100 pop125 5.1
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*824.4
7.02	Capacity for innovation*95
7.03	PCT patents, applications/million pop1100.0
7.04	ICT use for business-to-business transactions*126 3.8
7.05	Business-to-consumer Internet use*1123.7
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*99
8.02	Government Online Service Index, 0-1 (best)93 0.32
8.03	Gov't success in ICT promotion*1003.6
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*904.1
9.02	ICT PCT patents, applications/million pop94 0.0
9.03	Impact of ICTs on organizational models*1243.3
9.04	Knowledge-intensive jobs, % workforce73 19.5
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*102 3.7
10.02	Internet access in schools*1033.5
10.03	ICT use & gov't efficiency*1083.4
10.04	E-Participation Index, 0–1 (best)

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	Rank (out of 139)	
Networked Readiness Index	,	, ,
Networked Readiness Index 2015 (out of 143)	51.	4.4
Networked Readiness Index 2014 (out of 148)	43.	4.4
Networked Readiness Index 2013 (out of 144)		
A. Environment subindex	55.	4.1
1st pillar: Political and regulatory environment	85.	3.6
2nd pillar: Business and innovation environment	45.	4.7
B. Readiness subindex	61 .	5.0
3rd pillar: Infrastructure	63.	4.4
4th pillar: Affordability	33.	6.1
5th pillar: Skills	93.	4.5
C. Usage subindex	61 .	4.0
6th pillar: Individual usage	72.	4.0
7th pillar: Business usage	39.	4.0
8th pillar: Government usage	60.	4.1
D. Impact subindex	45.	4.0
9th pillar: Economic impacts	45.	3.6
10th pillar: Social impacts	51.	4.5



Panama -O- Upper-middle-income group average

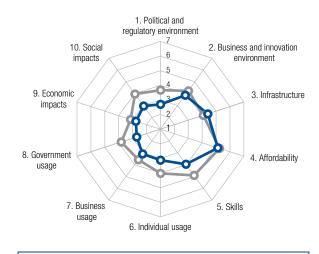
## The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*1172.9
1.02	Laws relating to ICTs*424.4
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*953.3
1.05	Efficiency of legal system in challenging regs*87 3.2
1.06	Intellectual property protection*374.5
1.07	Software piracy rate, % software installed7272
1.08	No. procedures to enforce a contract27
1.09	No. days to enforce a contract103 686
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*355.5
2.02	Venture capital availability*
2.03	Total tax rate, % profits70 37.2
2.04	No. days to start a business
2.05	No. procedures to start a business415
2.06	Intensity of local competition*5252
2.07	Tertiary education gross enrollment rate, %68 38.7
2.08	Quality of management schools*893.9
2.09	Gov't procurement of advanced tech*184.0
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita76 2353.8
3.02	Mobile network coverage, % pop 101 96.0
3.03	Int'l Internet bandwidth, kb/s per user41 72.7
3.04	Secure Internet servers/million pop49 116.6
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min59 0.23
4.02	Fixed broadband Internet tariffs, PPP \$/month42 26.21
4.03	Internet & telephony competition, 0-2 (best)1 2.00
	5th pillar: Skills
5.01	Quality of education system*943.3
5.02	Quality of math & science education*1143.1
5.03	Secondary education gross enrollment rate, %96 75.5
5.04	Adult literacy rate, %

	INDICATOR	RANK/139	VALUE
	6th pillar: Individual usage		
6.01	Mobile phone subscriptions/100 pop	14	158.1
6.02	Individuals using Internet, %	77	44.9
6.03	Households w/ personal computer, %	79	38.2
6.04	Households w/ Internet access, %	73	41.6
6.05	Fixed broadband Internet subs/100 pop.	75	7.9
6.06	Mobile broadband subs/100 pop	87	29.5
6.07	Use of virtual social networks*	39	5.9
	7th pillar: Business usage		
7.01	Firm-level technology absorption*	34	5.3
7.02	Capacity for innovation*	48	4.2
7.03	PCT patents, applications/million pop	62	1.7
7.04	ICT use for business-to-business transact	tions*42	5.1
7.05	Business-to-consumer Internet use*	43	4.9
7.06	Extent of staff training*	45	4.2
	8th pillar: Government usage		
8.01	Importance of ICTs to gov't vision*		
8.02	Government Online Service Index, 0-1 (b	est)85	0.37
8.03	Gov't success in ICT promotion*	42	4.4
	9th pillar: Economic impacts		
9.01	Impact of ICTs on business models*	34	5.0
9.02	ICT PCT patents, applications/million pop	50	1.3
9.03	Impact of ICTs on organizational models*	38	4.6
9.04	Knowledge-intensive jobs, % workforce	59	24.0
	10th pillar: Social impacts		
10.01	Impact of ICTs on access to basic service	es*45	4.8
10.02	Internet access in schools*	52	4.7
10.03	ICT use & gov't efficiency*	45	4.5
10.04	E-Participation Index, 0-1 (best)	64	0.49

Rank Value

	(out of 139)	(1-7)
Networked Readiness Index	105.	.3.4
Networked Readiness Index 2015 (out of 143)	105.	3.4
Networked Readiness Index 2014 (out of 148)	102.	3.5
Networked Readiness Index 2013 (out of 144)	104	3.4
A. Environment subindex	125.	3.3
1st pillar: Political and regulatory environment	133.	2.7
2nd pillar: Business and innovation environment	101.	3.9
B. Readiness subindex	86.	4.5
3rd pillar: Infrastructure	62.	4.4
4th pillar: Affordability	79.	5.1
5th pillar: Skills	105.	3.9
C. Usage subindex	112.	3.0
6th pillar: Individual usage	96.	3.1
7th pillar: Business usage	121.	3.1
8th pillar: Government usage	128.	2.7
D. Impact subindex	118.	2.9
9th pillar: Economic impacts	109.	2.8
10th pillar: Social impacts	125.	3.0



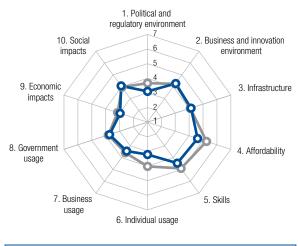
- Upper-middle-income group average - Paraguay

## The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*
1.02	Laws relating to ICTs*
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*134 2.4
1.05	Efficiency of legal system in challenging regs*122 2.6
1.06	Intellectual property protection*1223.0
1.07	Software piracy rate, % software installed9484
1.08	No. procedures to enforce a contract7638
1.09	No. days to enforce a contract85591
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*1094.0
2.02	Venture capital availability*
2.03	Total tax rate, % profits60 35.0
2.04	No. days to start a business12335
2.05	No. procedures to start a business747
2.06	Intensity of local competition*79
2.07	Tertiary education gross enrollment rate, %74 35.1
2.08	Quality of management schools*1333.0
2.09	Gov't procurement of advanced tech*1212.7
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita18 9338.7
3.02	Mobile network coverage, % pop55 99.7
3.03	Int'l Internet bandwidth, kb/s per user97 12.6
3.04	Secure Internet servers/million pop7924.1
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min95 0.33
4.02	Fixed broadband Internet tariffs, PPP $\mbox{\sc prop}$ /month82 38.65
4.03	Internet & telephony competition, 0–2 (best)1 2.00
	5th pillar: Skills
5.01	Quality of education system*1392.1
5.02	Quality of math & science education*1382.1
5.03	Secondary education gross enrollment rate, %95 76.6
5.04	Adult literacy rate, %4695.6

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop86 105.6
6.02	Individuals using Internet, %828243.0
6.03	Households w/ personal computer, %8831.9
6.04	Households w/ Internet access, %9224.6
6.05	Fixed broadband Internet subs/100 pop982.4
6.06	Mobile broadband subs/100 pop126 4.9
6.07	Use of virtual social networks* 102 5.0
	7th pillar: Business usage
7.01	Firm-level technology absorption* 114 4.1
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop1210.0
7.04	ICT use for business-to-business transactions*131 3.7 $$
7.05	Business-to-consumer Internet use*116
7.06	Extent of staff training*1143.4
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*1322.9
8.02	Government Online Service Index, 0-1 (best)111 0.23
8.03	Gov't success in ICT promotion*1342.8
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*994.0
9.02	ICT PCT patents, applications/million pop103 0.0
9.03	Impact of ICTs on organizational models*1263.2
9.04	Knowledge-intensive jobs, % workforce77 18.1
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services* 119 3.4
10.02	Internet access in schools* 125 2.9
10.03	ICT use & gov't efficiency*1223.0
	E-Participation Index, 0-1 (best)105 0.25

	Rank (out of 139)	
Networked Readiness Index	,	, ,
Networked Readiness Index 2015 (out of 143)	90.	3.7
Networked Readiness Index 2014 (out of 148)	90.	3.7
Networked Readiness Index 2013 (out of 144)	103.	3.4
A. Environment subindex	97.	3.7
1st pillar: Political and regulatory environment	118.	3.1
2nd pillar: Business and innovation environment	70.	4.3
B. Readiness subindex	89.	4.4
3rd pillar: Infrastructure	72.	4.1
4th pillar: Affordability	95.	4.6
5th pillar: Skills	94.	4.5
C. Usage subindex	92.	3.5
6th pillar: Individual usage	93.	3.2
7th pillar: Business usage	91.	3.4
8th pillar: Government usage	74.	3.7
D. Impact subindex	81 .	3.5
9th pillar: Economic impacts	88.	3.0



--- Peru -O- Upper-middle-income group average

## The Networked Readiness Index in detail

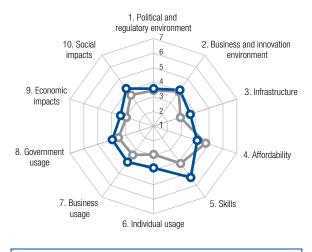
	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*
1.02	Laws relating to ICTs*9595
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*129 2.6
1.05	Efficiency of legal system in challenging regs*1182.7
1.06	Intellectual property protection*1043.3
1.07	Software piracy rate, % software installed6165
1.08	No. procedures to enforce a contract10841
1.09	No. days to enforce a contract37426
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*844.5
2.02	Venture capital availability*
2.03	Total tax rate, % profits63 35.9
2.04	No. days to start a business
2.05	No. procedures to start a business
2.06	Intensity of local competition*585.2
2.07	Tertiary education gross enrollment rate, %64 40.5
2.08	Quality of management schools*714.1
2.09	Gov't procurement of advanced tech*1222.7
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita91 1419.0
3.02	Mobile network coverage, % pop 1 100.0
3.03	Int'l Internet bandwidth, kb/s per user66 36.4
3.04	Secure Internet servers/million pop
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min90 0.32
4.02	Fixed broadband Internet tariffs, PPP \$/month 102 51.00
4.03	Internet & telephony competition, 0–2 (best)1 2.00
	5th pillar: Skills
5.01	Quality of education system*1292.5
5.02	Quality of math & science education*1362.2
5.03	Secondary education gross enrollment rate, %63 95.6
5.04	Adult literacy rate, %

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop93 103.6
6.02	Individuals using Internet, %88 40.2
6.03	Households w/ personal computer, %86 32.3
6.04	Households w/ Internet access, %9423.5
6.05	Fixed broadband Internet subs/100 pop805.7
6.06	Mobile broadband subs/100 pop106 13.7
6.07	Use of virtual social networks* 103 5.0
	7th pillar: Business usage
7.01	Firm-level technology absorption*
7.02	Capacity for innovation*1053.6
7.03	PCT patents, applications/million pop78 0.5
7.04	ICT use for business-to-business transactions*77 4.6
7.05	Business-to-consumer Internet use*814.2
7.06	Extent of staff training*923.7
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*1203.1
8.02	Government Online Service Index, 0-1 (best)41 0.63
8.03	Gov't success in ICT promotion*1183.3
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*
9.02	ICT PCT patents, applications/million pop83 0.1
9.03	Impact of ICTs on organizational models*833.9
9.04	Knowledge-intensive jobs, % workforce86 15.0
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*83 4.0
10.02	Internet access in schools*953.7
10.03	ICT use & gov't efficiency*1113.4
10.04	E-Participation Index, 0–1 (best)24 0.71

# Philippines

Rank Value

	(out of 139)	(1-7)
Networked Readiness Index	77.	. 4.0
Networked Readiness Index 2015 (out of 143)	76.	4.0
Networked Readiness Index 2014 (out of 148)	78	3.9
Networked Readiness Index 2013 (out of 144)	86	3.7
A. Environment subindex	89	3.8
1st pillar: Political and regulatory environment	87	3.6
2nd pillar: Business and innovation environment	85	4.1
B. Readiness subindex	92	4.4
3rd pillar: Infrastructure	87	3.6
4th pillar: Affordability	107	4.1
5th pillar: Skills	54	5.3
C. Usage subindex	66	3.9
6th pillar: Individual usage	79.	3.8
7th pillar: Business usage	36	4.0
8th pillar: Government usage	63	4.0
D. Impact subindex	62	3.8
9th pillar: Economic impacts		
10th nillar: Social impacts	66	42



- Philippines -O- Lower-middle-income group average

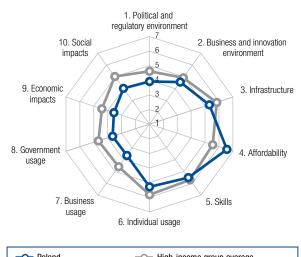
### The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*
1.02	Laws relating to ICTs*81
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*87 3.3
1.05	Efficiency of legal system in challenging regs*803.3
1.06	Intellectual property protection*713.9
1.07	Software piracy rate, % software installed6769
1.08	No. procedures to enforce a contract6937
1.09	No. days to enforce a contract116842
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*
2.02	Venture capital availability*393.1
2.03	Total tax rate, % profits9242.9
2.04	No. days to start a business11429
2.05	No. procedures to start a business13816
2.06	Intensity of local competition*5652
2.07	Tertiary education gross enrollment rate, %73 35.8
2.08	Quality of management schools*40 4.7
2.09	Gov't procurement of advanced tech*
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita103 771.4
3.02	Mobile network coverage, % pop67 99.0
3.03	Int'l Internet bandwidth, kb/s per user79 27.7
3.04	Secure Internet servers/million pop96 10.9
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min110 0.40
4.02	Fixed broadband Internet tariffs, PPP \$/month 104 54.59
4.03	Internet & telephony competition, 0–2 (best)1 2.00
	5th pillar: Skills
5.01	Quality of education system*314.5
5.02	Quality of math & science education*674.1
5.03	Secondary education gross enrollment rate, $\%7888.4$
5.04	Adult literacy rate, %

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop75 111.2
6.02	Individuals using Internet, %8939.7
6.03	Households w/ personal computer, %99 20.5
6.04	Households w/ Internet access, %86 26.9
6.05	Fixed broadband Internet subs/100 pop38 23.2
6.06	Mobile broadband subs/100 pop91 28.0
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop83 0.3
7.04	ICT use for business-to-business transactions*58 4.8
7.05	Business-to-consumer Internet use*51
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*634.0
8.02	Government Online Service Index, 0-1 (best)66 0.48
8.03	Gov't success in ICT promotion*704.0
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*
9.02	ICT PCT patents, applications/million pop81 0.1
9.03	Impact of ICTs on organizational models*474.4
9.04	Knowledge-intensive jobs, % workforce61 23.5
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*84 3.9
10.02	Internet access in schools*
10.03	ICT use & gov't efficiency*
10.04	E-Participation Index, 0–1 (best)51 0.57

## Poland

	Rank (out of 139)	
Networked Readiness Index	42.	.4.5
Networked Readiness Index 2015 (out of 143)	50.	4.4
Networked Readiness Index 2014 (out of 148)		
Networked Readiness Index 2013 (out of 144)		
A. Environment subindex	48.	4.2
1st pillar: Political and regulatory environment	57.	3.9
2nd pillar: Business and innovation environment	53.	4.6
B. Readiness subindex	28.	5.8
3rd pillar: Infrastructure	35.	5.3
4th pillar: Affordability	11.	6.6
5th pillar: Skills	40.	5.5
C. Usage subindex	49.	4.2
6th pillar: Individual usage	42.	5.3
7th pillar: Business usage	64.	3.6
8th pillar: Government usage	82.	3.6
D. Impact subindex	59.	3.8
9th pillar: Economic impacts	44.	3.6
10th pillar: Social impacts	74.	4.0



- Poland - High-income group average

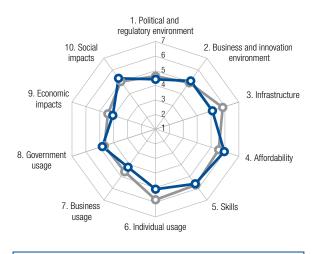
## The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*92
1.02	Laws relating to ICTs*6868
1.03	Judicial independence*5454
1.04	Efficiency of legal system in settling disputes*70 3.7
1.05	Efficiency of legal system in challenging regs*97 3.1
1.06	Intellectual property protection*65
1.07	Software piracy rate, % software installed4051
1.08	No. procedures to enforce a contract3433
1.09	No. days to enforce a contract102 685
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*
2.02	Venture capital availability*9696
2.03	Total tax rate, % profits8181
2.04	No. days to start a business11730
2.05	No. procedures to start a business224
2.06	Intensity of local competition*485.3
2.07	Tertiary education gross enrollment rate, %2671.2
2.08	Quality of management schools*754.1
2.09	Gov't procurement of advanced tech*9191
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita50 4311.2
3.02	Mobile network coverage, % pop37 99.9
3.03	Int'l Internet bandwidth, kb/s per user33 90.4
3.04	Secure Internet servers/million pop30 429.7
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min45 0.16
4.02	Fixed broadband Internet tariffs, PPP \$/month25 21.33
4.03	Internet & telephony competition, 0–2 (best)1 2.00
	5th pillar: Skills
5.01	Quality of education system*733.6
5.02	Quality of math & science education*514.4
5.03	Secondary education gross enrollment rate, %22 108.7
5.04	Adult literacy rate, %

	INDICATOR F	RANK/139	VALUE
	6th pillar: Individual usage		
6.01	Mobile phone subscriptions/100 pop	22	148.9
6.02	Individuals using Internet, %	46	66.6
6.03	Households w/ personal computer, %	37	77.7
6.04	Households w/ Internet access, %	36	74.8
6.05	Fixed broadband Internet subs/100 pop	46	18.9
6.06	Mobile broadband subs/100 pop	51	55.7
6.07	Use of virtual social networks*	96	5.2
	7th pillar: Business usage		
7.01	Firm-level technology absorption*	101	4.2
7.02	Capacity for innovation*	72	3.9
7.03	PCT patents, applications/million pop	38	9.6
7.04	ICT use for business-to-business transaction	ons*83	4.5
7.05	Business-to-consumer Internet use*	41	5.0
7.06	Extent of staff training*	65	4.0
	8th pillar: Government usage		
8.01	Importance of ICTs to gov't vision*		
8.02	Government Online Service Index, 0-1 (bes	st)57	0.54
8.03	Gov't success in ICT promotion*	110	3.4
	9th pillar: Economic impacts		
9.01	Impact of ICTs on business models*	83	4.2
9.02	ICT PCT patents, applications/million pop.	45	1.8
9.03	Impact of ICTs on organizational models*	74	4.0
9.04	Knowledge-intensive jobs, % workforce	30	36.8
	10th pillar: Social impacts		
10.01	Impact of ICTs on access to basic services	*86	3.9
10.02	Internet access in schools*	46	4.8
10.03	ICT use & gov't efficiency*		
10.04	E-Participation Index, 0-1 (best)	64	0.49

Rank Value

(out of 139)	(1–7)
Networked Readiness Index30.	.4.9
Networked Readiness Index 2015 (out of 143)28.	4.9
Networked Readiness Index 2014 (out of 148)33.	4.7
Networked Readiness Index 2013 (out of 144)33.	4.7
A. Environment subindex30.	4.7
1st pillar: Political and regulatory environment	4.4
2nd pillar: Business and innovation environment24.	5.1
B. Readiness subindex33.	5.5
3rd pillar: Infrastructure	5.1
4th pillar: Affordability41.	5.9
5th pillar: Skills34.	5.6
C. Usage subindex34.	4.7
6th pillar: Individual usage45.	5.1
7th pillar: Business usage33.	4.2
8th pillar: Government usage	4.8
D. Impact subindex	4.7
9th pillar: Economic impacts31.	4.1
10th pillar: Social impacts24.	5.3



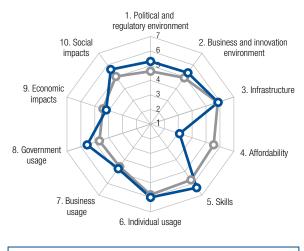
-O- Portugal -O- High-income group average

## The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*61
1.02	Laws relating to ICTs*235.0
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*113 3.0
1.05	Efficiency of legal system in challenging regs*71 3.4
1.06	Intellectual property protection*324.7
1.07	Software piracy rate, % software installed2840
1.08	No. procedures to enforce a contract4234
1.09	No. days to enforce a contract71547
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*18
2.02	Venture capital availability*61
2.03	Total tax rate, % profits85 41.0
2.04	No. days to start a business
2.05	No. procedures to start a business3
2.06	Intensity of local competition*5454
2.07	Tertiary education gross enrollment rate, %31 66.2
2.08	Quality of management schools*26
2.09	Gov't procurement of advanced tech*
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita45 4832.4
3.02	Mobile network coverage, % pop67 99.0
3.03	Int'l Internet bandwidth, kb/s per user13 218.9
3.04	Secure Internet servers/million pop36 262.9
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min34 0.14
4.02	Fixed broadband Internet tariffs, PPP \$/month78 36.56
4.03	Internet & telephony competition, 0–2 (best)1 2.00
	5th pillar: Skills
5.01	Quality of education system*4043
5.02	Quality of math & science education*4545
5.03	Secondary education gross enrollment rate, %11 119.7
5.04	Adult literacy rate, %

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop72 112.1
6.02	Individuals using Internet, %4964.6
6.03	Households w/ personal computer, %46 69.4
6.04	Households w/ Internet access, %49 64.9
6.05	Fixed broadband Internet subs/100 pop33 25.7
6.06	Mobile broadband subs/100 pop66 44.8
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*215.6
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop34 13.9
7.04	ICT use for business-to-business transactions*29 5.5
7.05	Business-to-consumer Internet use*335.2
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*254.7
8.02	Government Online Service Index, 0-1 (best)39 0.64
8.03	Gov't success in ICT promotion*17
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*16
9.02	ICT PCT patents, applications/million pop373.0
9.03	Impact of ICTs on organizational models*274.9
9.04	Knowledge-intensive jobs, % workforce37 34.8
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*23 5.6
10.02	Internet access in schools*
10.03	ICT use & gov't efficiency*
10.04	E-Participation Index, 0-1 (best)33 0.65

	Rank (out of 139)	
Networked Readiness Index	27.	.5.2
Networked Readiness Index 2015 (out of 143)	27.	5.1
Networked Readiness Index 2014 (out of 148)	23.	5.2
Networked Readiness Index 2013 (out of 144)		
A. Environment subindex	15.	5.3
1st pillar: Political and regulatory environment	18.	5.3
2nd pillar: Business and innovation environment	15.	5.3
B. Readiness subindex	54.	5.1
3rd pillar: Infrastructure	29.	5.8
4th pillar: Affordability	120.	3.1
5th pillar: Skills	5.	6.4
C. Usage subindex	19.	5.4
6th pillar: Individual usage	23.	6.0
7th pillar: Business usage	25.	4.8
8th pillar: Government usage	5.	5.5
D. Impact subindex	27.	4.9
9th pillar: Economic impacts	28.	4.2



-O- Qatar -O- High-income group average

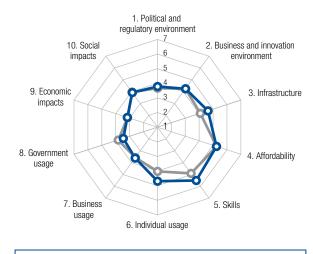
## The Networked Readiness Index in detail

	INDICATOR RANK/139 VALU
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*
1.02	Laws relating to ICTs*
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*4 5.7
1.05	Efficiency of legal system in challenging regs*25.
1.06	Intellectual property protection*11
1.07	Software piracy rate, % software installed3749
1.08	No. procedures to enforce a contract11843
1.09	No. days to enforce a contract75570
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*206.
2.02	Venture capital availability*
2.03	Total tax rate, % profits11
2.04	No. days to start a business54
2.05	No. procedures to start a business92
2.06	Intensity of local competition*25
2.07	Tertiary education gross enrollment rate, %103 15.8
2.08	Quality of management schools*7
2.09	Gov't procurement of advanced tech* 5.6
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita6 . 16498.
3.02	Mobile network coverage, % pop 100.0
3.03	Int'l Internet bandwidth, kb/s per user44 67.5
3.04	Secure Internet servers/million pop3939231.6
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min57 0.22
4.02	Fixed broadband Internet tariffs, PPP \$/month 123 93.0
4.03	Internet & telephony competition, 0-2 (best) 125 0.93
	5th pillar: Skills
5.01	Quality of education system*2 5.9
5.02	Quality of math & science education*55
5.03	Secondary education gross enrollment rate, %20 109.
5.04	Adult literacy rate, %

	INDICATOR	RANK/139	VALUE
	6th pillar: Individual usage		
6.01	Mobile phone subscriptions/100 pop	29	145.8
6.02	Individuals using Internet, %	9	91.5
6.03	Households w/ personal computer, %	3	97.2
6.04	Households w/ Internet access, %	2	98.0
6.05	Fixed broadband Internet subs/100 pop	69	9.9
6.06	Mobile broadband subs/100 pop	27	73.0
6.07	Use of virtual social networks*	12	6.3
	7th pillar: Business usage		
7.01	Firm-level technology absorption*	12	5.8
7.02	Capacity for innovation*	12	5.3
7.03	PCT patents, applications/million pop	27	21.6
7.04	ICT use for business-to-business transact	ions*9	5.9
7.05	Business-to-consumer Internet use*		
7.06	Extent of staff training*	5	5.4
	8th pillar: Government usage		
8.01	Importance of ICTs to gov't vision*	3	5.9
8.02	Government Online Service Index, 0-1 (be	est)37	0.65
8.03	Gov't success in ICT promotion*	4	5.8
	9th pillar: Economic impacts		
9.01	Impact of ICTs on business models*	3	5.8
9.02	ICT PCT patents, applications/million pop	21	17.1
9.03	Impact of ICTs on organizational models*	7	5.6
9.04	Knowledge-intensive jobs, % workforce	76	18.2
	10th pillar: Social impacts		
10.01	Impact of ICTs on access to basic service	es*8	6.0
10.02	Internet access in schools*	18	5.9
10.03	ICT use & gov't efficiency*	3	6.0
10.04	E-Participation Index, 0-1 (best)	45	0.61

Rank Value

	(out of 139)	(1-7)
Networked Readiness Index	66.	.4.1
Networked Readiness Index 2015 (out of 143)	63.	4.2
Networked Readiness Index 2014 (out of 148)	75.	3.9
Networked Readiness Index 2013 (out of 144)	75.	3.9
A. Environment subindex	65.	4.0
1st pillar: Political and regulatory environment	66.	3.8
2nd pillar: Business and innovation environment	71.	4.2
B. Readiness subindex	53.	5.1
3rd pillar: Infrastructure	55.	4.6
4th pillar: Affordability	73.	5.2
5th pillar: Skills	41.	5.5
C. Usage subindex	68.	3.9
6th pillar: Individual usage	60.	4.7
7th pillar: Business usage	68.	3.6
8th pillar: Government usage	96.	3.5
D. Impact subindex	77.	3.6
9th pillar: Economic impacts	72.	3.2
10th pillar: Social impacts	79.	3.9



- Romania - Upper-middle-income group average

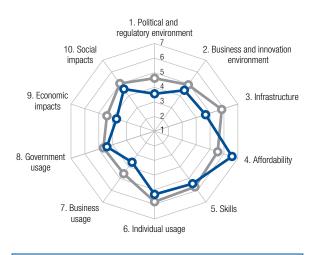
## The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*1063.1
1.02	Laws relating to ICTs*60 4.1
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*91 3.3
1.05	Efficiency of legal system in challenging regs*833.3
1.06	Intellectual property protection*72
1.07	Software piracy rate, % software installed5662
1.08	No. procedures to enforce a contract4234
1.09	No. days to enforce a contract61 512
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*714.6
2.02	Venture capital availability*1032.4
2.03	Total tax rate, % profits8942.0
2.04	No. days to start a business8
2.05	No. procedures to start a business415
2.06	Intensity of local competition*1124.5
2.07	Tertiary education gross enrollment rate, %52 52.2
2.08	Quality of management schools*943.9
2.09	Gov't procurement of advanced tech*1042.9
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita67 2929.2
3.02	Mobile network coverage, % pop37 99.9
3.03	Int'l Internet bandwidth, kb/s per user24 117.3
3.04	Secure Internet servers/million pop48 125.1
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min128 0.57
4.02	Fixed broadband Internet tariffs, PPP \$/month13 16.81
4.03	Internet & telephony competition, 0–2 (best)1 2.00
	5th pillar: Skills
5.01	Quality of education system*903.3
5.02	Quality of math & science education*264.8
5.03	Secondary education gross enrollment rate, %56 97.9
5.04	Adult literacy rate, %

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop85 105.9
6.02	Individuals using Internet, %64 54.1
6.03	Households w/ personal computer, %53 63.8
6.04	Households w/ Internet access, %50 60.5
6.05	Fixed broadband Internet subs/100 pop47 18.5
6.06	Mobile broadband subs/100 pop60 49.4
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*80 4.4
7.02	Capacity for innovation*634.0
7.03	PCT patents, applications/million pop52
7.04	ICT use for business-to-business transactions*81 4.5
7.05	Business-to-consumer Internet use*
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*1053.3
8.02	Government Online Service Index, 0-1 (best)73 0.44
8.03	Gov't success in ICT promotion*1133.4
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*
9.02	ICT PCT patents, applications/million pop49 1.4
9.03	Impact of ICTs on organizational models*714.1
9.04	Knowledge-intensive jobs, % workforce66 21.5
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*983.8
10.02	Internet access in schools*4848
10.03	ICT use & gov't efficiency*1133.4
10.04	E-Participation Index, 0-1 (best)70 0.47

# Russian Federation

	Rank (out of 139)	Value (1–7)
Networked Readiness Index	41.	. 4.5
Networked Readiness Index 2015 (out of 143)	41.	4.5
Networked Readiness Index 2014 (out of 148)	50.	4.3
Networked Readiness Index 2013 (out of 144)	54.	4.1
A. Environment subindex	67.	4.0
1st pillar: Political and regulatory environment	88.	3.6
2nd pillar: Business and innovation environment	57.	4.5
B. Readiness subindex	32.	5.5
3rd pillar: Infrastructure	52.	4.7
4th pillar: Affordability	10.	6.6
5th pillar: Skills	48.	5.4
C. Usage subindex	40.	4.5
6th pillar: Individual usage	40.	5.3
7th pillar: Business usage	67.	3.6
8th pillar: Government usage		
D. Impact subindex	41 .	4.1
9th pillar: Economic impacts		
10th pillar: Social impacts		



- Russian Federation - High-income group average

### The Networked Readiness Index in detail

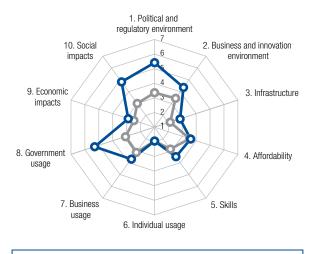
	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*81
1.02	Laws relating to ICTs*75
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*101 3.2
1.05	Efficiency of legal system in challenging regs*109 2.9
1.06	Intellectual property protection*1233.0
1.07	Software piracy rate, % software installed5662
1.08	No. procedures to enforce a contract4835
1.09	No. days to enforce a contract10307
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*1004.2
2.02	Venture capital availability*
2.03	Total tax rate, % profits
2.04	No. days to start a business6511
2.05	No. procedures to start a business404
2.06	Intensity of local competition*775.0
2.07	Tertiary education gross enrollment rate, %1978.0
2.08	Quality of management schools*1003.7
2.09	Gov't procurement of advanced tech*673.3
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita28 7369.6
3.02	Mobile network coverage, % pop 104 95.0
3.03	Int'l Internet bandwidth, kb/s per user75 29.9
3.04	Secure Internet servers/million pop55 84.4
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min2 0.03
4.02	Fixed broadband Internet tariffs, PPP \$/month10 15.73
4.03	Internet & telephony competition, 0–2 (best)101 1.50
	5th pillar: Skills
5.01	Quality of education system*823.5
5.02	Quality of math & science education*584.3
5.03	Secondary education gross enrollment rate, %53 98.8
5.04	Adult literacy rate, %

	INDICATOR	RANK/139	VALUE
	6th pillar: Individual usage		
6.01	Mobile phone subscriptions/100 pop	16	155.1
6.02	Individuals using Internet, %	40	70.5
6.03	Households w/ personal computer, %	43	71.0
6.04	Households w/ Internet access, %	41	69.9
6.05	Fixed broadband Internet subs/100 pop	49	17.5
6.06	Mobile broadband subs/100 pop	38	65.8
6.07	Use of virtual social networks*	66	5.6
	7th pillar: Business usage		
7.01	Firm-level technology absorption*	98	4.2
7.02	Capacity for innovation*	84	3.8
7.03	PCT patents, applications/million pop	41	7.9
7.04	ICT use for business-to-business transact	tions*60	4.8
7.05	Business-to-consumer Internet use*	35	5.1
7.06	Extent of staff training*	83	3.8
	8th pillar: Government usage		
8.01	Importance of ICTs to gov't vision*	76	3.8
8.02	Government Online Service Index, 0-1 (be	est)27	0.71
8.03	Gov't success in ICT promotion*	54	4.2
	9th pillar: Economic impacts		
9.01	Impact of ICTs on business models*	97	4.0
9.02	ICT PCT patents, applications/million pop		
9.03	Impact of ICTs on organizational models*	75	4.0
9.04	Knowledge-intensive jobs, % workforce	14	44.2
	10th pillar: Social impacts		
10.01	Impact of ICTs on access to basic service		
10.02	Internet access in schools*		
10.03	ICT use & gov't efficiency*		
10.04	E-Participation Index, 0-1 (best)	30	0.69

## Rwanda

Rank Value

	(out of 139)	(1-7)
Networked Readiness Index	80.	.3.9
Networked Readiness Index 2015 (out of 143)	83.	3.9
Networked Readiness Index 2014 (out of 148)	85.	3.8
Networked Readiness Index 2013 (out of 144)	88.	3.7
A. Environment subindex	27 .	4.9
1st pillar: Political and regulatory environment	12.	5.4
2nd pillar: Business and innovation environment	63.	4.4
B. Readiness subindex	115.	3.3
3rd pillar: Infrastructure	106.	2.8
4th pillar: Affordability	114.	3.6
5th pillar: Skills	117.	3.5
C. Usage subindex	83.	3.6
6th pillar: Individual usage	127.	1.9
7th pillar: Business usage	60.	3.7
8th pillar: Government usage	16.	5.3
D. Impact subindex	55.	3.9
9th pillar: Economic impacts	99.	2.9
10th pillar: Social impacts	38.	4.8



-O- Low-income group average - Rwanda

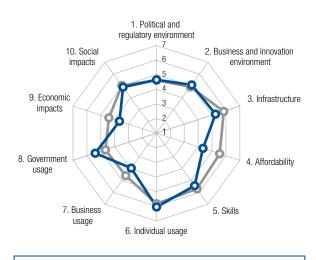
## The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*
1.02	Laws relating to ICTs*
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*12 5.4
1.05	Efficiency of legal system in challenging regs*185.0
1.06	Intellectual property protection*285.1
1.07	Software piracy rate, % software installedn/an/a
1.08	No. procedures to enforce a contract
1.09	No. days to enforce a contract4 230
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*45
2.02	Venture capital availability*303.4
2.03	Total tax rate, % profits
2.04	No. days to start a business
2.05	No. procedures to start a business747
2.06	Intensity of local competition*705.0
2.07	Tertiary education gross enrollment rate, %1207.5
2.08	Quality of management schools*
2.09	Gov't procurement of advanced tech* 4.6
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita136 28.7
3.02	Mobile network coverage, % pop
3.03	Int'l Internet bandwidth, kb/s per user105 8.9
3.04	Secure Internet servers/million pop
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min55 0.20
4.02	Fixed broadband Internet tariffs, PPP \$/month 136 . 1040.24
4.03	Internet & telephony competition, 0–2 (best)68 1.93
	5th pillar: Skills
5.01	Quality of education system*454.2
5.02	Quality of math & science education*594.3
5.03	Secondary education gross enrollment rate, % 125 40.2
5.04	Adult literacy rate, %969670.5

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop131 64.0
6.02	Individuals using Internet, %12410.6
6.03	Households w/ personal computer, %134 3.4
6.04	Households w/ Internet access, %
6.05	Fixed broadband Internet subs/100 pop134 0.0
6.06	Mobile broadband subs/100 pop112 11.1
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop115 0.0
7.04	ICT use for business-to-business transactions*59 4.8
7.05	Business-to-consumer Internet use*
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*4 5.8
8.02	Government Online Service Index, 0-1 (best)63 0.51
8.03	Gov't success in ICT promotion*
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*
9.02	ICT PCT patents, applications/million pop103 0.0
9.03	Impact of ICTs on organizational models*674.2
9.04	Knowledge-intensive jobs, % workforce1073.8
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*315.3
10.02	Internet access in schools*
10.03	ICT use & gov't efficiency*
10.04	E-Participation Index, 0-1 (best)63 0.51

# Saudi Arabia

	Rank (out of 139)	
Networked Readiness Index	33.	. 4.8
Networked Readiness Index 2015 (out of 143)	35.	4.7
Networked Readiness Index 2014 (out of 148)	32.	4.8
Networked Readiness Index 2013 (out of 144)	31 .	4.8
A. Environment subindex	28.	4.9
1st pillar: Political and regulatory environment	29.	4.6
2nd pillar: Business and innovation environment	25.	5.1
B. Readiness subindex	60.	5.0
3rd pillar: Infrastructure	36.	5.2
4th pillar: Affordability	101 .	4.3
5th pillar: Skills	49.	5.4
C. Usage subindex	29.	5.1
6th pillar: Individual usage	21.	6.0
7th pillar: Business usage	42.	3.9
8th pillar: Government usage	11.	5.4
D. Impact subindex	38.	4.3
9th pillar: Economic impacts	40.	3.7
4011 111 0 1111	00	4.0



Saudi Arabia - High-income group average

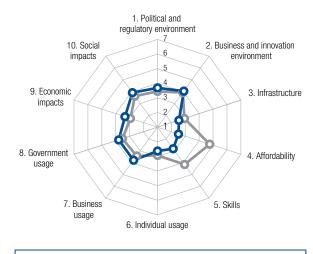
## The Networked Readiness Index in detail

	INDICATOR RAN	K/139	VALUE
	1st pillar: Political and regulatory enviror	nment	
1.01	Effectiveness of law-making bodies*	20	4.8
1.02	Laws relating to ICTs*	30	4.7
1.03	Judicial independence*	25	5.3
1.04	Efficiency of legal system in settling disputes*.	27	4.7
1.05	Efficiency of legal system in challenging regs*.	26	4.4
1.06	Intellectual property protection*	30	5.0
1.07	Software piracy rate, % software installed	38	50
1.08	No. procedures to enforce a contract	94	40
1.09	No. days to enforce a contract	79	575
	2nd pillar: Business and innovation envir	ronmei	nt
2.01	Availability of latest technologies*	39	5.4
2.02	Venture capital availability*	27	3.5
2.03	Total tax rate, % profits	6	15.0
2.04	No. days to start a business	97	19
2.05	No. procedures to start a business	.125	12
2.06	Intensity of local competition*	40	5.4
2.07	Tertiary education gross enrollment rate, %	42	61.1
2.08	Quality of management schools*	62	4.3
2.09	Gov't procurement of advanced tech*	7	4.5
	3rd pillar: Infrastructure		
3.01	Electricity production, kWh/capita	17	9404.2
3.02	Mobile network coverage, % pop	62	99.4
3.03	Int'l Internet bandwidth, kb/s per user	69	34.0
3.04	Secure Internet servers/million pop	67	45.9
	4th pillar: Affordability		
4.01	Prepaid mobile cellular tariffs, PPP \$/min	89	0.32
4.02	Fixed broadband Internet tariffs, PPP \$/month	106	56.74
4.03	Internet & telephony competition, 0-2 (best)	1	2.00
	5th pillar: Skills		
5.01	Quality of education system*	47	4.1
5.02	Quality of math & science education*		
5.03	Secondary education gross enrollment rate, %	524	108.3
5.04	Adult literacy rate, %	53	94.7

	INDICATOR R/	ANK/139	VALUE
	6th pillar: Individual usage		
6.01	Mobile phone subscriptions/100 pop	3	179.6
6.02	Individuals using Internet, %	50	63.7
6.03	Households w/ personal computer, %	31	80.0
6.04	Households w/ Internet access, %	7	94.0
6.05	Fixed broadband Internet subs/100 pop	37	23.4
6.06	Mobile broadband subs/100 pop	15	99.0
6.07	Use of virtual social networks*	31	6.0
	7th pillar: Business usage		
7.01	Firm-level technology absorption*	30	5.4
7.02	Capacity for innovation*	57	4.1
7.03	PCT patents, applications/million pop	47	5.9
7.04	ICT use for business-to-business transaction	ns*36	5.3
7.05	Business-to-consumer Internet use*	66	4.5
7.06	Extent of staff training*	53	4.1
	8th pillar: Government usage		
8.01	Importance of ICTs to gov't vision*	7	5.3
8.02	Government Online Service Index, 0-1 (best	t)18	0.77
8.03	Gov't success in ICT promotion*	9	5.3
	9th pillar: Economic impacts		
9.01	Impact of ICTs on business models*	33	5.0
9.02	ICT PCT patents, applications/million pop.	48	1.5
9.03	Impact of ICTs on organizational models*	41	4.6
9.04	Knowledge-intensive jobs, % workforce	48	28.1
	10th pillar: Social impacts		
10.01	Impact of ICTs on access to basic services*	33	5.2
10.02	Internet access in schools*	63	4.4
10.03			
10.04	E-Participation Index, 0-1 (best)	51	0.57

Rank Value

	(out of 139)	(1-7)
Networked Readiness Index	107.	.3.4
Networked Readiness Index 2015 (out of 143)	106	3.3
Networked Readiness Index 2014 (out of 148)	114	3.3
Networked Readiness Index 2013 (out of 144)	107.	3.3
A. Environment subindex	80	3.9
1st pillar: Political and regulatory environment	76	3.7
2nd pillar: Business and innovation environment	88.	4.0
B. Readiness subindex	129.	2.6
3rd pillar: Infrastructure	118.	2.5
4th pillar: Affordability	130	2.5
5th pillar: Skills	128	2.8
C. Usage subindex	95	3.4
6th pillar: Individual usage	106	2.6
7th pillar: Business usage	53	3.8
8th pillar: Government usage	68	3.8
D. Impact subindex	72	3.6
9th pillar: Economic impacts	63	3.3
10th pillar: Social impacts	81	3.9



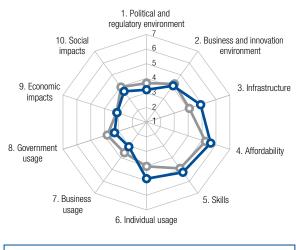
--- Senegal -O- Lower-middle-income group average

## The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*39
1.02	Laws relating to ICTs*733.9
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*384.3
1.05	Efficiency of legal system in challenging regs*40 4.1
1.06	Intellectual property protection*683.9
1.07	Software piracy rate, % software installed7977
1.08	No. procedures to enforce a contract11843
1.09	No. days to enforce a contract110740
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*
2.02	Venture capital availability*50
2.03	Total tax rate, % profits
2.04	No. days to start a business6
2.05	No. procedures to start a business
2.06	Intensity of local competition*804.9
2.07	Tertiary education gross enrollment rate, %1217.4
2.08	Quality of management schools*
2.09	Gov't procurement of advanced tech*35
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita119 261.0
3.02	Mobile network coverage, % pop 114 91.6
3.03	Int'l Internet bandwidth, kb/s per user106 8.3
3.04	Secure Internet servers/million pop
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min124 0.50
4.02	Fixed broadband Internet tariffs, PPP \$/month 118 79.60
4.03	Internet & telephony competition, 0–2 (best)93 1.71
	5th pillar: Skills
5.01	Quality of education system*63
5.02	Quality of math & science education*823.9
5.03	Secondary education gross enrollment rate, % 127 40.1
5.04	Adult literacy rate, %

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop98 98.8
6.02	Individuals using Internet, %109 17.7
6.03	Households w/ personal computer, %110 11.6
6.04	Households w/ Internet access, % 107 12.6
6.05	Fixed broadband Internet subs/100 pop110 0.7
6.06	Mobile broadband subs/100 pop96 23.7
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*42 5.0
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop121 0.0
7.04	ICT use for business-to-business transactions*76 4.6
7.05	Business-to-consumer Internet use*
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*58 4.1
8.02	Government Online Service Index, 0-1 (best)98 0.31
8.03	Gov't success in ICT promotion*414.
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models* 4.6
9.02	ICT PCT patents, applications/million pop103 0.0
9.03	Impact of ICTs on organizational models*53 4.4
9.04	Knowledge-intensive jobs, % workforcen/an/a
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*72 4.1
10.02	Internet access in schools*
10.03	ICT use & gov't efficiency*
10.04	E-Participation Index, 0–1 (best)86 0.35

	Rank (out of 139)	
Networked Readiness Index	75.	.4.0
Networked Readiness Index 2015 (out of 143)	77.	4.0
Networked Readiness Index 2014 (out of 148)	80.	3.9
Networked Readiness Index 2013 (out of 144)	87 .	3.7
A. Environment subindex	103.	3.7
1st pillar: Political and regulatory environment	110.	3.2
2nd pillar: Business and innovation environment	82.	4.1
B. Readiness subindex	48.	5.2
3rd pillar: Infrastructure	45.	4.9
4th pillar: Affordability	56.	5.6
5th pillar: Skills	61.	5.2
C. Usage subindex	79.	3.7
6th pillar: Individual usage	54.	4.9
7th pillar: Business usage	125.	3.1
8th pillar: Government usage	106.	3.3
D. Impact subindex	89.	3.4
9th pillar: Economic impacts	79.	3.1
10th pillar: Social impacts	93.	3.6



- Serbia -O- Upper-middle-income group average

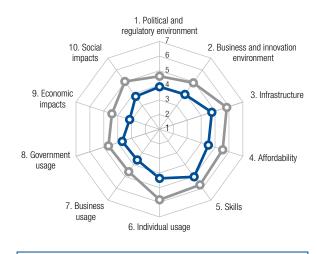
## The Networked Readiness Index in detail

1st pillar: Political and regulatory environment  1.01 Effectiveness of law-making bodies*	3.6 2.6 2.7 2.6
1.02 Laws relating to ICTs*	3.6 2.6 2.7 2.6
1.03 Judicial independence*	2.6 2.7 2.6
1.04 Efficiency of legal system in settling disputes*124	2.7 2.6
	2.6
1.05 Efficiency of legal system in challenging regs*127	
	0.0
1.06 Intellectual property protection*128	3.0
1.07 Software piracy rate, % software installed67	69
1.08 No. procedures to enforce a contract58	36
1.09 No. days to enforce a contract98	635
2nd pillar: Business and innovation environment	
2.01 Availability of latest technologies*107	4.0
2.02 Venture capital availability*	1.9
2.03 Total tax rate, % profits	. 39.7
2.04 No. days to start a business72	12
2.05 No. procedures to start a business54	6
2.06 Intensity of local competition*124	4.3
2.07 Tertiary education gross enrollment rate, %44	. 58.1
2.08 Quality of management schools*116	3.4
2.09 Gov't procurement of advanced tech*109	2.8
3rd pillar: Infrastructure	
3.01 Electricity production, kWh/capita40 54	475.5
3.02 Mobile network coverage, % pop54	. 99.8
3.03 Int'l Internet bandwidth, kb/s per user26 26	112.4
3.04 Secure Internet servers/million pop69	. 43.8
4th pillar: Affordability	
4.01 Prepaid mobile cellular tariffs, PPP \$/min64	. 0.23
4.02 Fixed broadband Internet tariffs, PPP \$/month763	36.05
4.03 Internet & telephony competition, 0-2 (best)1	. 2.00
5th pillar: Skills	
5.01 Quality of education system*110	3.1
5.02 Quality of math & science education*48	
5.03 Secondary education gross enrollment rate, %64	. 94.3
5.04 Adult literacy rate, %	. 98.1

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop53 122.1
6.02	Individuals using Internet, %6553.5
6.03	Households w/ personal computer, %50 65.6
6.04	Households w/ Internet access, %6251.8
6.05	Fixed broadband Internet subs/100 pop53 15.6
6.06	Mobile broadband subs/100 pop36 66.4
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption* 127 3.8
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop49
7.04	ICT use for business-to-business transactions*86 4.5
7.05	Business-to-consumer Internet use*974.0
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*1143.2
8.02	Government Online Service Index, 0-1 (best)81 0.39
8.03	Gov't success in ICT promotion*1173.3
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*1073.9
9.02	ICT PCT patents, applications/million pop44 1.9
9.03	Impact of ICTs on organizational models*114 3.4
9.04	Knowledge-intensive jobs, % workforce46 29.1
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*107 3.6
10.02	Internet access in schools*893.9
10.03	ICT use & gov't efficiency*99
10.04	E-Participation Index, 0-1 (best)78 0.41

Rank Value

	(out of 139)	(1-7)
Networked Readiness Index	74.	. 4.0
Networked Readiness Index 2015 (out of 143)	74	4.0
Networked Readiness Index 2014 (out of 148)	66	4.0
Networked Readiness Index 2013 (out of 144)	79	3.8
A. Environment subindex	76	3.9
1st pillar: Political and regulatory environment	59	3.9
2nd pillar: Business and innovation environment	97	3.9
B. Readiness subindex	74	4.8
3rd pillar: Infrastructure	49	4.7
4th pillar: Affordability	98	4.5
5th pillar: Skills	74	5.0
C. Usage subindex	70	3.9
6th pillar: Individual usage	62	4.3
7th pillar: Business usage	70	3.6
8th pillar: Government usage	79	3.7
D. Impact subindex	82	3.5
9th pillar: Economic impacts	73	3.2
10th pillar: Social impacts	86	3.8



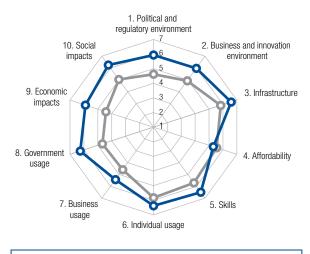
- Seychelles - High-income group average

## The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*54
1.02	Laws relating to ICTs*69
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*49 4.0
1.05	Efficiency of legal system in challenging regs*75 3.4
1.06	Intellectual property protection*75
1.07	Software piracy rate, % software installedn/an/a
1.08	No. procedures to enforce a contract5836
1.09	No. days to enforce a contract120915
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*
2.02	Venture capital availability*67
2.03	Total tax rate, % profits393939
2.04	No. days to start a business12232
2.05	No. procedures to start a business1059
2.06	Intensity of local competition*1284.2
2.07	Tertiary education gross enrollment rate, %1246.5
2.08	Quality of management schools*604.3
2.09	Gov't procurement of advanced tech*403.7
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita57 3578.6
3.02	Mobile network coverage, % pop90 98.0
3.03	Int'l Internet bandwidth, kb/s per user76 28.9
3.04	Secure Internet servers/million pop29 469.8
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min122 0.49
	Fixed broadband Internet tariffs, PPP \$/month43 26.80
4.02	The broader a morner tarme, TTT with the min 20.00
4.02 4.03	Internet & telephony competition, 0–2 (best)121 1.08
	Internet & telephony competition, 0–2 (best)121 1.08  5th pillar: Skills  Quality of education system*
4.03	Internet & telephony competition, 0–2 (best)121 1.08  5th pillar: Skills  Quality of education system*
4.03 5.01	Internet & telephony competition, 0–2 (best) 121 1.08  5th pillar: Skills  Quality of education system*

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop10 162.2
6.02	Individuals using Internet, %6354.3
6.03	Households w/ personal computer, %56 61.8
6.04	Households w/ Internet access, %5855.0
6.05	Fixed broadband Internet subs/100 pop60 12.7
6.06	Mobile broadband subs/100 pop109 12.7
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*61
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop485.6
7.04	ICT use for business-to-business transactions*98 4.3
7.05	Business-to-consumer Internet use*964.0
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*604.0
8.02	Government Online Service Index, 0-1 (best)91 0.33
8.03	Gov't success in ICT promotion*654.1
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*1103.9
9.02	ICT PCT patents, applications/million pop32 5.6
9.03	Impact of ICTs on organizational models*1023.6
9.04	Knowledge-intensive jobs, % workforce52 26.3
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*80 4.0
10.02	Internet access in schools*
10.03	ICT use & gov't efficiency*514.3
10.04	E-Participation Index, 0–1 (best)105 0.25

	Rank (out of 139)	
Networked Readiness Index	1.	. ,
Networked Readiness Index 2015 (out of 143)	1.	6.0
Networked Readiness Index 2014 (out of 148)	2.	6.0
Networked Readiness Index 2013 (out of 144)	2.	6.0
A. Environment subindex	1.	6.0
1st pillar: Political and regulatory environment	2.	5.9
2nd pillar: Business and innovation environment	1.	6.0
B. Readiness subindex	16.	6.1
3rd pillar: Infrastructure	15.	6.6
4th pillar: Affordability	72.	5.3
5th pillar: Skills	1.	6.5
C. Usage subindex	1.	6.0
6th pillar: Individual usage	12.	6.4
7th pillar: Business usage	14.	5.4
8th pillar: Government usage	1.	6.3
D. Impact subindex	1.	6.1
9th pillar: Economic impacts	5.	5.9
10th pillar: Social impacts		



- Singapore - High-income group average

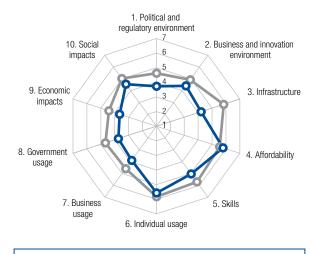
## The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*
1.02	Laws relating to ICTs*5
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*1 6.2
1.05	Efficiency of legal system in challenging regs*10 5.2
1.06	Intellectual property protection*4 6.2
1.07	Software piracy rate, % software installed1832
1.08	No. procedures to enforce a contract
1.09	No. days to enforce a contract150
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*13 6.2
2.02	Venture capital availability*
2.03	Total tax rate, % profits9 18.4
2.04	No. days to start a business
2.05	No. procedures to start a business11
2.06	Intensity of local competition*215.6
2.07	Tertiary education gross enrollment rate, %10 82.7
2.08	Quality of management schools*4 5.9
2.09	Gov't procurement of advanced tech*
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita19 8883.5
3.02	Mobile network coverage, % pop1 100.0
3.03	Int'l Internet bandwidth, kb/s per user4 616.5
3.04	Secure Internet servers/million pop22 822.3
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min51 0.19
4.02	Fixed broadband Internet tariffs, PPP \$/month99 46.31
4.03	Internet & telephony competition, 0–2 (best)1 2.00
	5th pillar: Skills
5.01	Quality of education system*3 5.8
5.02	Quality of math & science education*1 6.4
5.03	Secondary education gross enrollment rate, %27 107.6
5.04	Adult literacy rate, %

	INDICATOR R/	ANK/139	VALUE
	6th pillar: Individual usage		
6.01	Mobile phone subscriptions/100 pop	28	146.9
6.02	Individuals using Internet, %	24	82.0
6.03	Households w/ personal computer, %	12	88.0
6.04	Households w/ Internet access, %	16	88.0
6.05	Fixed broadband Internet subs/100 pop	30	26.7
6.06	Mobile broadband subs/100 pop	1	141.7
6.07	Use of virtual social networks*	8	6.4
	7th pillar: Business usage		
7.01	Firm-level technology absorption*	16	5.7
7.02	Capacity for innovation*	19	5.1
7.03	PCT patents, applications/million pop	13	138.4
7.04	ICT use for business-to-business transaction	ns*13	5.8
7.05	Business-to-consumer Internet use*		
7.06	Extent of staff training*	4	5.4
	8th pillar: Government usage		
8.01	Importance of ICTs to gov't vision*	2	5.9
8.02	Government Online Service Index, 0-1 (best	t)2	0.99
8.03	Gov't success in ICT promotion*	3	5.9
	9th pillar: Economic impacts		
9.01	Impact of ICTs on business models*	6	5.8
9.02	ICT PCT patents, applications/million pop.	9	55.8
9.03	Impact of ICTs on organizational models*	11	5.5
9.04	Knowledge-intensive jobs, % workforce	2	52.7
	10th pillar: Social impacts		
10.01	Impact of ICTs on access to basic services*	1	6.2
10.02	Internet access in schools*	2	6.3
10.03	ICT use & gov't efficiency*	2	6.1
10.04	E-Participation Index, 0-1 (best)	10	0.90

# Slovak Republic

	Rank (out of 139)	·
National Dan Branchist	,	, ,
Networked Readiness Index	47.	.4.4
Networked Readiness Index 2015 (out of 143)	59.	4.2
Networked Readiness Index 2014 (out of 148)	59	4.1
Networked Readiness Index 2013 (out of 144)	61	4.0
A. Environment subindex	61	4.1
1st pillar: Political and regulatory environment	74	3.7
2nd pillar: Business and innovation environment	60	4.4
B. Readiness subindex	59	5.0
3rd pillar: Infrastructure	70	4.2
4th pillar: Affordability	51	5.8
5th pillar: Skills	72	5.0
C. Usage subindex	45	4.4
6th pillar: Individual usage	34	5.6
7th pillar: Business usage	48.	3.9
8th pillar: Government usage	73.	3.7
D. Impact subindex	44	4.1
9th pillar: Economic impacts	41	3.6



- Slovak Republic

- High-income group average

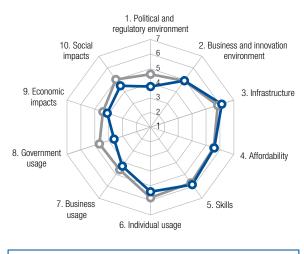
#### The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*94
1.02	Laws relating to ICTs*4643
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*137 2.2
1.05	Efficiency of legal system in challenging regs*131 2.4
1.06	Intellectual property protection*56
1.07	Software piracy rate, % software installed2437
1.08	No. procedures to enforce a contract3433
1.09	No. days to enforce a contract105705
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*
2.02	Venture capital availability*
2.03	Total tax rate, % profits
2.04	No. days to start a business7012
2.05	No. procedures to start a business546
2.06	Intensity of local competition*275.5
2.07	Tertiary education gross enrollment rate, %49 54.4
2.08	Quality of management schools*953.8
2.09	Gov't procurement of advanced tech*
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita43 5267.3
3.02	Mobile network coverage, % pop 100.0
3.03	Int'l Internet bandwidth, kb/s per user99 11.5
3.04	Secure Internet servers/million pop32 321.3
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min66 0.24
4.02	Fixed broadband Internet tariffs, PPP \$/month55 29.80
4.03	Internet & telephony competition, 0–2 (best)73 1.88
	5th pillar: Skills
5.01	Quality of education system*1202.8
5.02	Quality of math & science education*76
5.03	Secondary education gross enrollment rate, %68 91.8
5.04	Adult literacy rate, %

	INDICATOR	RANK/139	VALUE
	6th pillar: Individual usage		
6.01	Mobile phone subscriptions/100 pop	60	116.9
6.02	Individuals using Internet, %	26	80.0
6.03	Households w/ personal computer, %	30	80.5
6.04	Households w/ Internet access, %	30	78.4
6.05	Fixed broadband Internet subs/100 pop	41	21.8
6.06	Mobile broadband subs/100 pop	45	59.5
6.07	Use of virtual social networks*	58	5.7
	7th pillar: Business usage		
7.01	Firm-level technology absorption*	55	4.8
7.02	Capacity for innovation*	77	3.8
7.03	PCT patents, applications/million pop	36	10.3
7.04	ICT use for business-to-business transact		
7.05	Business-to-consumer Internet use*	16	5.7
7.06	Extent of staff training*	82	3.9
	8th pillar: Government usage		
8.01	Importance of ICTs to gov't vision*		
8.02	Government Online Service Index, 0-1 (be		
8.03	Gov't success in ICT promotion*	88	3.8
	9th pillar: Economic impacts		
9.01	Impact of ICTs on business models*	57	4.6
9.02	ICT PCT patents, applications/million pop	42	2.2
9.03	Impact of ICTs on organizational models*	44	4.5
9.04	Knowledge-intensive jobs, % workforce	42	31.9
	10th pillar: Social impacts		
10.01	Impact of ICTs on access to basic service	s*59	4.3
10.02	Internet access in schools*	32	5.3
10.03	ICT use & gov't efficiency*	80	3.8
10.04	E-Participation Index, 0-1 (best)	40	0.63

# Slovenia

	Rank	
	(out of 139)	(1–7)
Networked Readiness Index	37.	. 4.7
Networked Readiness Index 2015 (out of 143)	37.	4.6
Networked Readiness Index 2014 (out of 148)	36.	4.6
Networked Readiness Index 2013 (out of 144)	37.	4.5
A. Environment subindex	45.	4.4
1st pillar: Political and regulatory environment	67.	3.8
2nd pillar: Business and innovation environment	34.	4.9
3. Readiness subindex	25.	5.8
3rd pillar: Infrastructure	24.	6.1
4th pillar: Affordability	60.	5.6
5th pillar: Skills	21.	5.8
C. Usage subindex	42.	4.4
6th pillar: Individual usage	38.	5.4
7th pillar: Business usage	30.	4.3
8th pillar: Government usage	86.	3.6
D. Impact subindex	37.	4.3
9th pillar: Economic impacts	29.	4.1



Slovenia - High-income group average

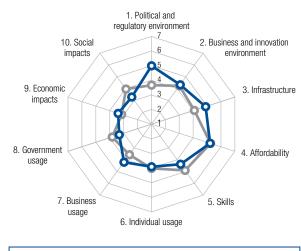
## The Networked Readiness Index in detail

1st pillar: Political and regulatory environment           1.01         Effectiveness of law-making bodies*		INDICATOR RANK/139 VALUE
1.02       Laws relating to ICTs*       .35       .46         1.03       Judicial independence*       .85       .35         1.04       Efficiency of legal system in settling disputes*114       .29         1.05       Efficiency of legal system in challenging regs*105       .30         1.06       Intellectual property protection*       .39       .45         1.07       Software piracy rate, % software installed       .31       .45         1.08       No. procedures to enforce a contract       .27       .32         1.09       No. days to enforce a contract       .27       .32         1.09       No. days to enforce a contract       .130       .1160         2nd pillar: Business and innovation environment         2.01       Availability of latest technologies*       .38       .5.5         2.02       Venture capital availability*       .104       .2.4         2.03       Total tax rate, % profits       .42       .31.0         2.04       No. days to start a business       .34       .6         2.05       No. procedures to start a business       .34       .6         2.05       No. procedures to start a business       .34       .6         2.07       Tertiary education gross enrollment rate, % </td <td></td> <td>1st pillar: Political and regulatory environment</td>		1st pillar: Political and regulatory environment
1.03       Judicial independence*       .85       3.5         1.04       Efficiency of legal system in settling disputes*114       2.9         1.05       Efficiency of legal system in challenging regs*105       .30         1.06       Intellectual property protection*	1.01	Effectiveness of law-making bodies*1162.9
1.04       Efficiency of legal system in settling disputes*114	1.02	Laws relating to ICTs*
1.05       Efficiency of legal system in challenging regs*105	1.03	Judicial independence*
1.06       Intellectual property protection*       .39       .4.5         1.07       Software piracy rate, % software installed       .31       .45         1.08       No. procedures to enforce a contract       .27       .32         1.09       No. days to enforce a contract       .130       .1160 <b>2nd pillar: Business and innovation environment</b> 2.01       Availability of latest technologies*       .38       .5.5         2.02       Venture capital availability*       .104       .2.4         2.03       Total tax rate, % profits       .42       .31.0         2.04       No. days to start a business       .34       .6         2.05       No. procedures to start a business       .3       .2         2.06       Intensity of local competition*       .64       .5.1         2.07       Tertiary education gross enrollment rate, %       .7       .85.2         2.08       Quality of management schools*       .47       .4.5         2.09       Gov't procurement of advanced tech*       .119       .2.7 <b>3rd pillar: Infrastructure</b> 3.01       Electricity production, kWh/capita       .25       .7666.7         3.02       Mobile network coverage, % pop.	1.04	Efficiency of legal system in settling disputes*114 2.9
1.07       Software piracy rate, % software installed       .31       .45         1.08       No. procedures to enforce a contract       .27       .32         1.09       No. days to enforce a contract       .130       .1160         2nd pillar: Business and innovation environment         2.01       Availability of latest technologies*       .38       .55         2.02       Venture capital availability*       .104       .24         2.03       Total tax rate, % profits       .42       .31.0         2.04       No. days to start a business       .34       .6         2.05       No. procedures to start a business       .3       .2         2.06       Intensity of local competition*       .64       .5.1         2.07       Tertiary education gross enrollment rate, %       .7       .85.2         2.08       Quality of management schools*       .47       .4.5         2.09       Gov't procurement of advanced tech*       .119       .2.7         3rd pillar: Infrastructure         3.01       Electricity production, kWh/capita       .25       .7666.7         3.02       Mobile network coverage, % pop       .55       .99.7         3.03       Int'l Internet bandwidth, kb/s per user	1.05	Efficiency of legal system in challenging regs*1053.0
1.08       No. procedures to enforce a contract	1.06	Intellectual property protection*394.5
1.09       No. days to enforce a contract       130       1160         2nd pillar: Business and innovation environment         2.01       Availability of latest technologies*       38       5.5         2.02       Venture capital availability*       104       2.4         2.03       Total tax rate, % profits       42       31.0         2.04       No. days to start a business       34       6         2.05       No. procedures to start a business       3       2         2.06       Intensity of local competition*       64       5.1         2.07       Tertiary education gross enrollment rate, %       7       85.2         2.08       Quality of management schools*       47       4.5         2.09       Gov't procurement of advanced tech*       119       2.7         3rd pillar: Infrastructure         3.01       Electricity production, kWh/capita       25       7666.7         3.02       Mobile network coverage, % pop       55       99.7         3.03       Int'I Internet bandwidth, kb/s per user       23       121.1         3.04       Secure Internet servers/million pop       27       648.3         4th pillar: Affordability         4.01       Prepaid mobile cellular t	1.07	Software piracy rate, % software installed3145
2nd pillar: Business and innovation environment           2.01         Availability of latest technologies*	1.08	No. procedures to enforce a contract2732
2.01       Availability of latest technologies*       .38       .5.5         2.02       Venture capital availability*       .104       .2.4         2.03       Total tax rate, % profits       .42       .31.0         2.04       No. days to start a business       .34       .6         2.05       No. procedures to start a business       .3       .2         2.06       Intensity of local competition*       .64       .5.1         2.07       Tertiary education gross enrollment rate, %       .7       .85.2         2.08       Quality of management schools*       .47       .4.5         2.09       Gov't procurement of advanced tech*       .119       .2.7         3rd pillar: Infrastructure         3.01       Electricity production, kWh/capita       .25       .7666.7         3.02       Mobile network coverage, % pop       .55       .99.7         3.03       Int'I Internet bandwidth, kb/s per user       .23       .121.1         3.04       Secure Internet servers/million pop       .27       .648.3         4th pillar: Affordability         4.01       Prepaid mobile cellular tariffs, PPP \$/month       .64       .31.46         4.03       Internet & telephony competition, 0-2 (best)       .1 <td>1.09</td> <td>No. days to enforce a contract130 1160</td>	1.09	No. days to enforce a contract130 1160
2.02       Venture capital availability*       104       2.4         2.03       Total tax rate, % profits       42       31.0         2.04       No. days to start a business       34       6         2.05       No. procedures to start a business       3       2         2.06       Intensity of local competition*       64       5.1         2.07       Tertiary education gross enrollment rate, %       7       85.2         2.08       Quality of management schools*       47       4.5         2.09       Gov't procurement of advanced tech*       119       2.7         3rd pillar: Infrastructure         3.01       Electricity production, kWh/capita       25       7666.7         3.02       Mobile network coverage, % pop.       55       99.7         3.03       Int'l Internet bandwidth, kb/s per user       23       121.1         3.04       Secure Internet servers/million pop       27       648.3         4th pillar: Affordability         4.01       Prepaid mobile cellular tariffs, PPP \$/month       .64       31.46         4.03       Internet & telephony competition, 0-2 (best)       1       2.00         5th pillar: Skills         5.01       Quality of math &		2nd pillar: Business and innovation environment
2.03       Total tax rate, % profits       42       31.0         2.04       No. days to start a business       34       6         2.05       No. procedures to start a business       3       2         2.06       Intensity of local competition*       64       5.1         2.07       Tertiary education gross enrollment rate, %       7       85.2         2.08       Quality of management schools*       47       4.5         2.09       Gov't procurement of advanced tech*       119       2.7         3rd pillar: Infrastructure         3.01       Electricity production, kWh/capita       25       7666.7         3.02       Mobile network coverage, % pop       55       99.7         3.03       Int'l Internet bandwidth, kb/s per user       23       121.1         3.04       Secure Internet servers/million pop       27       648.3         4th pillar: Affordability         4.01       Prepaid mobile cellular tariffs, PPP \$/min       85       0.30         4.02       Fixed broadband Internet tariffs, PPP \$/month       .64       .31.46         4.03       Internet & telephony competition, 0-2 (best)       .1       2.00         5th pillar: Skills         5.01       Qua	2.01	
2.04       No. days to start a business       .34       .6         2.05       No. procedures to start a business       .3       .2         2.06       Intensity of local competition*       .64       .5.1         2.07       Tertiary education gross enrollment rate, %       .7       .85.2         2.08       Quality of management schools*       .47       .4.5         2.09       Gov't procurement of advanced tech*       .119       .2.7         3rd pillar: Infrastructure         3.01       Electricity production, kWh/capita       .25       .7666.7         3.02       Mobile network coverage, % pop       .55       .99.7         3.03       Int'l Internet bandwidth, kb/s per user       .23       .121.1         3.04       Secure Internet servers/million pop       .27       .648.3         4th pillar: Affordability         4.01       Prepaid mobile cellular tariffs, PPP \$/min       .85       .0.30         4.02       Fixed broadband Internet tariffs, PPP \$/month       .64       .31.46         4.03       Internet & telephony competition, 0-2 (best)       .1       .2.00         5th pillar: Skills         5.01       Quality of math & science education*       .13       .5.3     <	2.02	Venture capital availability*1042.4
2.05       No. procedures to start a business	2.03	Total tax rate, % profits4231.0
2.06       Intensity of local competition*	2.04	,
2.07       Tertiary education gross enrollment rate, %	2.05	No. procedures to start a business
2.08       Quality of management schools*	2.06	
2.09       Gov't procurement of advanced tech*       119       2.7         3rd pillar: Infrastructure         3.01       Electricity production, kWh/capita       25       7666.7         3.02       Mobile network coverage, % pop.       55       99.7         3.03       Int'l Internet bandwidth, kb/s per user       23       121.1         3.04       Secure Internet servers/million pop.       27       648.3         4th pillar: Affordability         4.01       Prepaid mobile cellular tariffs, PPP \$/min.       85       0.30         4.02       Fixed broadband Internet tariffs, PPP \$/month .64       31.46         4.03       Internet & telephony competition, 0-2 (best)       1       2.00         5th pillar: Skills         5.01       Quality of education system*       50       4.1         5.02       Quality of math & science education*       13       5.3         5.03       Secondary education gross enrollment rate, % .16       110.9	2.07	
3rd pillar: Infrastructure  3.01 Electricity production, kWh/capita	2.08	, ,
3.01 Electricity production, kWh/capita	2.09	Gov't procurement of advanced tech*1192.7
3.02       Mobile network coverage, % pop.       .55       .99.7         3.03       Int'l Internet bandwidth, kb/s per user.       .23       .121.1         3.04       Secure Internet servers/million pop.       .27       .648.3         4th pillar: Affordability         4.01       Prepaid mobile cellular tariffs, PPP \$/min.       .85       .0.30         4.02       Fixed broadband Internet tariffs, PPP \$/month .64       .31.46         4.03       Internet & telephony competition, 0-2 (best)       .1       .2.00         5th pillar: Skills         5.01       Quality of education system*       .50       .4.1         5.02       Quality of math & science education*       .13       .5.3         5.03       Secondary education gross enrollment rate, % .16       .110.9		•
3.03       Int'l Internet bandwidth, kb/s per user	3.01	
3.04         Secure Internet servers/million pop.	3.02	3
4th pillar: Affordability         4.01       Prepaid mobile cellular tariffs, PPP \$/min		
4.01       Prepaid mobile cellular tariffs, PPP \$/min	3.04	Secure Internet servers/million pop27 648.3
4.02       Fixed broadband Internet tariffs, PPP \$/month64		4th pillar: Affordability
4.03       Internet & telephony competition, 0–2 (best)1	4.01	·
5th pillar: Skills 5.01 Quality of education system*		
5.01 Quality of education system*	4.03	Internet & telephony competition, 0–2 (best)1 2.00
<ul><li>5.02 Quality of math &amp; science education*</li></ul>		•
5.03 Secondary education gross enrollment rate, %16 110.9	5.01	
,	5.02	
5.04 Adult literacy rate, %	5.03	Secondary education gross enrollment rate, %16 110.9
	5.04	Adult literacy rate, %

	INDICATOR	RANK/139	VALUE
	6th pillar: Individual usage		
6.01	Mobile phone subscriptions/100 pop	73	112.1
6.02	Individuals using Internet, %	38	71.6
6.03	Households w/ personal computer, %	33	79.8
6.04	Households w/ Internet access, %	33	76.8
6.05	Fixed broadband Internet subs/100 pop	32	26.6
6.06	Mobile broadband subs/100 pop	64	46.7
6.07	Use of virtual social networks*	48	5.8
	7th pillar: Business usage		
7.01	Firm-level technology absorption*	49	4.9
7.02	Capacity for innovation*	41	4.4
7.03	PCT patents, applications/million pop	23	66.7
7.04	ICT use for business-to-business transact	tions*40	5.2
7.05	Business-to-consumer Internet use*	48	4.8
7.06	Extent of staff training*	58	4.0
	8th pillar: Government usage		
8.01	Importance of ICTs to gov't vision*	97	3.5
8.02	Government Online Service Index, 0-1 (be	est)76	0.43
8.03	Gov't success in ICT promotion*	84	3.8
	9th pillar: Economic impacts		
9.01	Impact of ICTs on business models*	61	4.5
9.02	ICT PCT patents, applications/million pop		
9.03	Impact of ICTs on organizational models*	46	4.4
9.04	Knowledge-intensive jobs, % workforce	21	41.7
	10th pillar: Social impacts		
10.01	Impact of ICTs on access to basic service	es*39	5.0
10.02	Internet access in schools*	21	5.7
10.03	ICT use & gov't efficiency*		
10.04	E-Participation Index, 0-1 (best)	81	0.39

# South Africa

	Rank	
	(out of 139)	(1–7)
Networked Readiness Index	65.	4.2
Networked Readiness Index 2015 (out of 143)	75.	4.0
Networked Readiness Index 2014 (out of 148)	70.	4.0
Networked Readiness Index 2013 (out of 144)	70.	3.9
A. Environment subindex	33.	4.7
1st pillar: Political and regulatory environment	26.	5.0
2nd pillar: Business and innovation environment	65.	4.3
B. Readiness subindex	69.	4.8
3rd pillar: Infrastructure	44.	4.9
4th pillar: Affordability	74.	5.2
5th pillar: Skills	95.	4.4
C. Usage subindex		
6th pillar: Individual usage	77.	3.9
7th pillar: Business usage	32.	4.2
8th pillar: Government usage	105.	3.3
D. Impact subindex	93.	3.4
9th pillar: Economic impacts	57.	3.4
	440	0.0



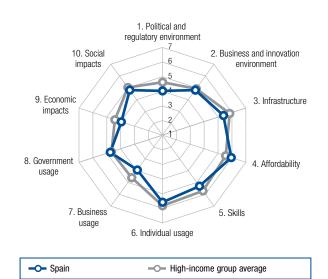
South Africa - Upper-middle-income group average

#### The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*
1.02	Laws relating to ICTs*4343
1.03	Judicial independence*24
1.04	Efficiency of legal system in settling disputes*14 5.3
1.05	Efficiency of legal system in challenging regs*175.0
1.06	Intellectual property protection*245.4
1.07	Software piracy rate, % software installed2034
1.08	No. procedures to enforce a contract1429
1.09	No. days to enforce a contract89600
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*41 5.3
2.02	Venture capital availability*47
2.03	Total tax rate, % profits
2.04	No. days to start a business46
2.05	No. procedures to start a business
2.06	Intensity of local competition*435.4
2.07	Tertiary education gross enrollment rate, %96 19.7
2.08	Quality of management schools*245.2
2.09	Gov't procurement of advanced tech*1182.8
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita47 4763.1
3.02	Mobile network coverage, % pop37 99.9
3.03	Int'l Internet bandwidth, kb/s per user18 149.5
3.04	Secure Internet servers/million pop50 115.6
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min58 0.22
4.02	Fixed broadband Internet tariffs, PPP \$/month61 30.60
4.03	Internet & telephony competition, 0-2 (best) 122 1.07
	5th pillar: Skills
5.01	Quality of education system*1372.2
5.02	Quality of math & science education*1392.0
5.03	Secondary education gross enrollment rate, $\%5498.2$
5.04	Adult literacy rate, %

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop20 149.2
6.02	Individuals using Internet, %7149.0
6.03	Households w/ personal computer, %90 28.1
6.04	Households w/ Internet access, %7637.3
6.05	Fixed broadband Internet subs/100 pop933.2
6.06	Mobile broadband subs/100 pop63 46.7
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*28
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop46 6.3
7.04	ICT use for business-to-business transactions*35 5.3
7.05	Business-to-consumer Internet use*
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*1163.2
8.02	Government Online Service Index, 0-1 (best)83 0.39
8.03	Gov't success in ICT promotion*1113.4
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*60
9.02	ICT PCT patents, applications/million pop47 1.7
9.03	Impact of ICTs on organizational models*54 4.4
9.04	Knowledge-intensive jobs, % workforce57 24.8
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*97 3.8
10.02	Internet access in schools*1193.2
10.03	ICT use & gov't efficiency*1173.2
10.04	E-Participation Index, 0–1 (best)89 0.33

	Rank (out of 139)	
	,	` '
Networked Readiness Index	35.	. 4.8
Networked Readiness Index 2015 (out of 143)	34	4.7
Networked Readiness Index 2014 (out of 148)	34	4.7
Networked Readiness Index 2013 (out of 144)	38	4.5
A. Environment subindex	41	4.4
1st pillar: Political and regulatory environment	47 .	4.0
2nd pillar: Business and innovation environment	37	4.8
B. Readiness subindex	34	5.5
3rd pillar: Infrastructure	34	5.4
4th pillar: Affordability	42	5.9
5th pillar: Skills	57	5.3
C. Usage subindex	32	4.8
6th pillar: Individual usage	33	5.6
7th pillar: Business usage	43	3.9
8th pillar: Government usage	32	4.7
D. Impact subindex	34	4.4
9th pillar: Economic impacts	35	4.0
10th pillar: Social impacts	39	4.8



## The Networked Readiness Index in detail

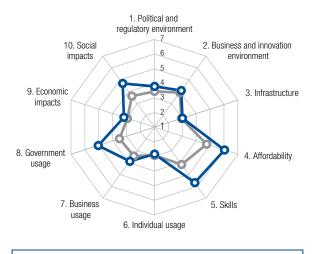
	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*484.1
1.02	Laws relating to ICTs*
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*88 3.3
1.05	Efficiency of legal system in challenging regs*653.5
1.06	Intellectual property protection*624.0
1.07	Software piracy rate, % software installed3145
1.08	No. procedures to enforce a contract9440
1.09	No. days to enforce a contract58 510
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*345.5
2.02	Venture capital availability*
2.03	Total tax rate, % profits111 50.0
2.04	No. days to start a business8114
2.05	No. procedures to start a business74
2.06	Intensity of local competition*195.6
2.07	Tertiary education gross enrollment rate, %5 87.1
2.08	Quality of management schools*6
2.09	Gov't procurement of advanced tech*843.2
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita35 5990.4
3.02	Mobile network coverage, % pop49 99.8
3.03	Int'l Internet bandwidth, kb/s per user27 111.5
3.04	Secure Internet servers/million pop
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min39 0.15
4.02	Fixed broadband Internet tariffs, PPP \$/month75 35.63
4.03	Internet & telephony competition, 0–2 (best)1 2.00
	5th pillar: Skills
5.01	Quality of education system*853.4
5.02	Quality of math & science education*843.8
5.03	Secondary education gross enrollment rate, %4 131.1
5.04	Adult literacy rate, %

	INDICATOR	RANK/139	VALUE
	6th pillar: Individual usage		
6.01	Mobile phone subscriptions/100 pop	81	107.8
6.02	Individuals using Internet, %	30	76.2
6.03	Households w/ personal computer, %	39	74.0
6.04	Households w/ Internet access, %	37	74.4
6.05	Fixed broadband Internet subs/100 pop	27	27.3
6.06	Mobile broadband subs/100 pop	25	77.3
6.07	Use of virtual social networks*	69	5.6
	7th pillar: Business usage		
7.01	Firm-level technology absorption*	50	4.9
7.02	Capacity for innovation*	55	4.1
7.03	PCT patents, applications/million pop	25	37.4
7.04	ICT use for business-to-business transacti	ions*50	5.0
7.05	Business-to-consumer Internet use*	45	4.9
7.06	Extent of staff training*	104	3.6
	8th pillar: Government usage		
8.01	Importance of ICTs to gov't vision*	80	3.7
8.02	Government Online Service Index, 0-1 (be	est)4	0.94
8.03	Gov't success in ICT promotion*	80	3.9
	9th pillar: Economic impacts		
9.01	Impact of ICTs on business models*	30	5.1
9.02	ICT PCT patents, applications/million pop.	28	9.4
9.03	Impact of ICTs on organizational models* .	45	4.5
9.04	Knowledge-intensive jobs, % workforce	40	33.1
	10th pillar: Social impacts		
10.01	Impact of ICTs on access to basic services		
10.02	Internet access in schools*		
10.03	ICT use & gov't efficiency*		
10.04	E-Participation Index, 0-1 (best)	19	0.78

# Sri Lanka

Rank Value

	(out of 139)	(1-7)
Networked Readiness Index	63.	.4.2
Networked Readiness Index 2015 (out of 143)	65	4.1
Networked Readiness Index 2014 (out of 148)	76	3.9
Networked Readiness Index 2013 (out of 144)	69	3.9
A. Environment subindex	73	3.9
1st pillar: Political and regulatory environment	64	3.8
2nd pillar: Business and innovation environment	81	4.1
B. Readiness subindex		
3rd pillar: Infrastructure	103.	3.0
4th pillar: Affordability	35	6.0
5th pillar: Skills	32	5.7
C. Usage subindex	67	3.9
6th pillar: Individual usage	102	2.8
7th pillar: Business usage	49	3.9
8th pillar: Government usage	20	5.0
D. Impact subindex	49	4.0
9th pillar: Economic impacts	70	3.2
10th pillar: Social impacts	42	4.7



- Sri Lanka -O- Lower-middle-income group average

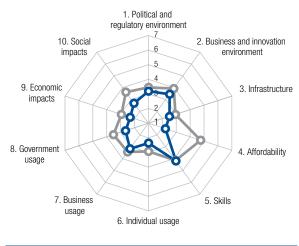
## The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*
1.02	Laws relating to ICTs*52
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*26 4.7
1.05	Efficiency of legal system in challenging regs*51 3.7
1.06	Intellectual property protection*424.4
1.07	Software piracy rate, % software installed9283
1.08	No. procedures to enforce a contract9494
1.09	No. days to enforce a contract1341318
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*614.9
2.02	Venture capital availability*60
2.03	Total tax rate, % profits
2.04	No. days to start a business57
2.05	No. procedures to start a business928
2.06	Intensity of local competition*175.7
2.07	Tertiary education gross enrollment rate, %95 20.7
2.08	Quality of management schools*
2.09	Gov't procurement of advanced tech*
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita108 587.0
3.02	Mobile network coverage, % pop90 98.0
3.03	Int'l Internet bandwidth, kb/s per user96 12.7
3.04	Secure Internet servers/million pop92 11.4
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min4 0.05
4.02	Fixed broadband Internet tariffs, PPP \$/month3 12.56
4.03	Internet & telephony competition, 0–2 (best)128 0.88
	5th pillar: Skills
5.01	Quality of education system*244.7
5.02	Quality of math & science education*254.8
5.03	Secondary education gross enrollment rate, %44 99.7
5.04	Adult literacy rate, %

	INDICATOR	RANK/139	VALUE
	6th pillar: Individual usage		
6.01	Mobile phone subscriptions/100 pop	94	103.2
6.02	Individuals using Internet, %	100	25.8
6.03	Households w/ personal computer, %	100	17.8
6.04	Households w/ Internet access, %	104	15.3
6.05	Fixed broadband Internet subs/100 pop	96	2.6
6.06	Mobile broadband subs/100 pop	108	13.0
6.07	Use of virtual social networks*	74	5.5
	7th pillar: Business usage		
7.01	Firm-level technology absorption*	51	4.9
7.02	Capacity for innovation*	36	4.5
7.03	PCT patents, applications/million pop	71	8.0
7.04	ICT use for business-to-business transact	ions*45	5.1
7.05	Business-to-consumer Internet use*	46	4.9
7.06	Extent of staff training*	63	4.0
	8th pillar: Government usage		
8.01	Importance of ICTs to gov't vision*	13	5.0
8.02	Government Online Service Index, 0-1 (be	est)37	0.65
8.03	Gov't success in ICT promotion*	10	5.2
	9th pillar: Economic impacts		
9.01	Impact of ICTs on business models*	53	4.7
9.02	ICT PCT patents, applications/million pop	72	0.2
9.03	Impact of ICTs on organizational models*	48	4.4
9.04	Knowledge-intensive jobs, % workforce	84	16.8
	10th pillar: Social impacts		
10.01	Impact of ICTs on access to basic service	s*37	5.0
10.02	Internet access in schools*		
10.03	ICT use & gov't efficiency*		
10.04	E-Participation Index, 0-1 (best)	33	0.65

## Swaziland

(1-7) (out of 139) Networked Readiness Index......129...2.9 A. Environment subindex......122.....3.3 B. Readiness subindex ......123 ..... 3.0 C. Usage subindex......127..... 2.7 



- Swaziland -O- Lower-middle-income group average

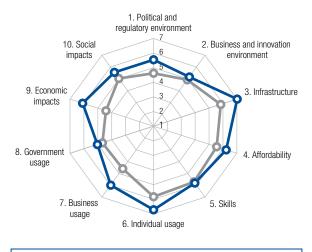
#### The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*86
1.02	Laws relating to ICTs*
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*78 3.5
1.05	Efficiency of legal system in challenging regs*923.1
1.06	Intellectual property protection*953.5
1.07	Software piracy rate, % software installedn/an/a
1.08	No. procedures to enforce a contract9440
1.09	No. days to enforce a contract
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*1223.9
2.02	Venture capital availability*1132.2
2.03	Total tax rate, % profits
2.04	No. days to start a business11730
2.05	No. procedures to start a business12512
2.06	Intensity of local competition*874.8
2.07	Tertiary education gross enrollment rate, %129 5.3
2.08	Quality of management schools*1223.3
2.09	Gov't procurement of advanced tech*993.0
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita115 345.1
3.02	Mobile network coverage, % pop100 96.8
3.03	Int'l Internet bandwidth, kb/s per user1351.7
3.04	Secure Internet servers/million pop 99 10.2
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min109 0.40
4.02	Fixed broadband Internet tariffs, PPP \$/month 128 137.77
4.03	Internet & telephony competition, 0-2 (best) 134 0.08
	5th pillar: Skills
5.01	Quality of education system*803.5
5.02	Quality of math & science education*863.7
5.03	Secondary education gross enrollment rate, % 111 63.0
5.04	Adult literacy rate, %

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop124 72.3
6.02	Individuals using Internet, %989827.1
6.03	Households w/ personal computer, %103 17.0
6.04	Households w/ Internet access, %9918.4
6.05	Fixed broadband Internet subs/100 pop115 0.4
6.06	Mobile broadband subs/100 pop118 8.0
6.07	Use of virtual social networks*119 4.8
	7th pillar: Business usage
7.01	Firm-level technology absorption*1193.9
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop93 0.2
7.04	ICT use for business-to-business transactions*118 3.9
7.05	Business-to-consumer Internet use*1353.0
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*1173.2
8.02	Government Online Service Index, 0-1 (best)124 0.13
8.03	Gov't success in ICT promotion*1322.9
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*1343.2
9.02	ICT PCT patents, applications/million pop103 0.0
9.03	Impact of ICTs on organizational models*136 2.8
9.04	Knowledge-intensive jobs, % workforcen/an/a
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*125 3.2
10.02	Internet access in schools*1312.6
10.03	ICT use & gov't efficiency*1243.0
10.04	E-Participation Index, 0-1 (best)123 0.16

Rank Value

(out of 139)	(1-7)
Networked Readiness Index3.	.5.8
Networked Readiness Index 2015 (out of 143)3.	5.8
Networked Readiness Index 2014 (out of 148)3.	5.9
Networked Readiness Index 2013 (out of 144)3.	5.9
A. Environment subindex12	5.3
1st pillar: Political and regulatory environment	5.5
2nd pillar: Business and innovation environment20	5.2
B. Readiness subindex7.	6.3
3rd pillar: Infrastructure3.	7.0
4th pillar: Affordability25	6.2
5th pillar: Skills25	5.8
C. Usage subindex4.	5.9
6th pillar: Individual usage4	6.7
7th pillar: Business usage2.	6.0
8th pillar: Government usage	5.0
D. Impact subindex3.	5.8
9th pillar: Economic impacts	6.1
10th pillar: Social impacts	5.6



- Sweden - High-income group average

## The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*9
1.02	Laws relating to ICTs*205.1
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*11 5.4
1.05	Efficiency of legal system in challenging regs*125.1
1.06	Intellectual property protection*16
1.07	Software piracy rate, % software installed7 23
1.08	No. procedures to enforce a contract2231
1.09	No. days to enforce a contract12321
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*4 6.5
2.02	Venture capital availability*
2.03	Total tax rate, % profits
2.04	No. days to start a business42
2.05	No. procedures to start a business113
2.06	Intensity of local competition*335.5
2.07	Tertiary education gross enrollment rate, %36 63.4
2.08	Quality of management schools*165.4
2.09	Gov't procurement of advanced tech*
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita7 . 15940.1
3.02	Mobile network coverage, % pop32 100.0
3.03	Int'l Internet bandwidth, kb/s per user5 527.4
3.04	Secure Internet servers/million pop11 1602.2
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min13 0.08
4.02	Fixed broadband Internet tariffs, PPP \$/month66 33.41
4.03	Internet & telephony competition, 0–2 (best)1 2.00
	5th pillar: Skills
5.01	Quality of education system*254.6
5.02	Quality of math & science education*434.5
5.03	Secondary education gross enrollment rate, %7 128.5
5.04	Adult literacy rate, %n/an/a

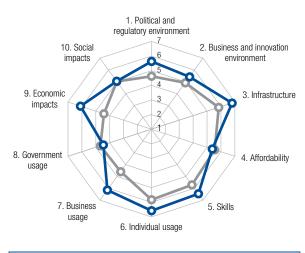
	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop48 127.8
6.02	Individuals using Internet, %6 92.5
6.03	Households w/ personal computer, % 93.4
6.04	Households w/ Internet access, %14 89.6
6.05	Fixed broadband Internet subs/100 pop14 34.1
6.06	Mobile broadband subs/100 pop7 116.3
6.07	Use of virtual social networks* 7 6.5
	7th pillar: Business usage
7.01	Firm-level technology absorption* 9 6.0
7.02	Capacity for innovation* 5.7
7.03	PCT patents, applications/million pop2 320.1
7.04	ICT use for business-to-business transactions*12 5.8
7.05	Business-to-consumer Internet use*4 6.0
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*204.8
8.02	Government Online Service Index, 0-1 (best)28 0.70
8.03	Gov't success in ICT promotion*145.1
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*99
9.02	ICT PCT patents, applications/million pop1 153.1
9.03	Impact of ICTs on organizational models*99
9.04	Knowledge-intensive jobs, % workforce5 49.4
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*5 6.0
10.02	Internet access in schools*
10.03	ICT use & gov't efficiency*
10.04	E-Participation Index, 0–1 (best)45 0.61
Noto:	Indicators followed by an asterisk (*) are measured on a 1-to-7 (best) scale. For

Note: Indicators followed by an asterisk (\*) are measured on a 1-to-7 (best) scale. For further details and explanation, please refer to the section "How to Read the Country/Economy Profiles" on page 53.

<sup>1</sup> See the "Technical Notes and Sources" section.

# Switzerland

	Rank (out of 139)	• 0.00
Networked Readiness Index	7.	.5.8
Networked Readiness Index 2015 (out of 143)	6	5.7
Networked Readiness Index 2014 (out of 148)	6.	5.6
Networked Readiness Index 2013 (out of 144)	6.	5.7
A. Environment subindex	7	5.5
1st pillar: Political and regulatory environment	7.	5.6
2nd pillar: Business and innovation environment	8.	5.4
B. Readiness subindex	9.	6.2
3rd pillar: Infrastructure	11	6.8
4th pillar: Affordability	70	5.4
5th pillar: Skills	3.	6.4
C. Usage subindex	12	5.7
6th pillar: Individual usage	9	6.6
7th pillar: Business usage	1	6.1
8th pillar: Government usage	43	4.5
D. Impact subindex	8	5.6
9th pillar: Economic impacts	2.	6.1
10th pillar: Social impacts	33.	5.0



- Switzerland - High-income group average

#### The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*15
1.02	Laws relating to ICTs*
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*8 5.6
1.05	Efficiency of legal system in challenging regs*3 5.6
1.06	Intellectual property protection*3 6.2
1.07	Software piracy rate, % software installed9 24
1.08	No. procedures to enforce a contract2732
1.09	No. days to enforce a contract22390
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*7
2.02	Venture capital availability*
2.03	Total tax rate, % profits
2.04	No. days to start a business57
2.05	No. procedures to start a business
2.06	Intensity of local competition*305.5
2.07	Tertiary education gross enrollment rate, %47 56.3
2.08	Quality of management schools* 1 6.3
2.09	Gov't procurement of advanced tech*17
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita21 8505.6
3.02	Mobile network coverage, % pop1 100.0
3.03	Int'l Internet bandwidth, kb/s per user8 352.2
3.04	Secure Internet servers/million pop2 2820.4
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min116 0.44
4.02	Fixed broadband Internet tariffs, PPP \$/month34 24.82
4.03	Internet & telephony competition, 0-2 (best)1 2.00
	5th pillar: Skills
5.01	Quality of education system*1 6.1
5.02	Quality of math & science education*4 5.9
5.03	Secondary education gross enrollment rate, %61 96.2
5.04	Adult literacy rate, %n/an/a <sup>1</sup>

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop37 136.7
6.02	Individuals using Internet, %1587.0
6.03	Households w/ personal computer, %16 87.6
6.04	Households w/ Internet access, %1090.6
6.05	Fixed broadband Internet subs/100 pop1 42.5
6.06	Mobile broadband subs/100 pop20 86.8
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*66
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop3 309.4
7.04	ICT use for business-to-business transactions*3 6.0
7.05	Business-to-consumer Internet use*14
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*344.5
8.02	Government Online Service Index, 0-1 (best)64 0.50
8.03	Gov't success in ICT promotion*234.8
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*
9.02	ICT PCT patents, applications/million pop6 74.6
9.03	Impact of ICTs on organizational models* 17 5.3
9.04	Knowledge-intensive jobs, % workforce3 52.1
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*3 6.1
10.02	Internet access in schools*165.9
10.03	ICT use & gov't efficiency*
10.04	E-Participation Index, 0–1 (best)85 0.37
Note:	Indicators followed by an asterisk (*) are measured on a 1-to-7 (best) scale. For further details and explanation, please refer to the section "How to Read the

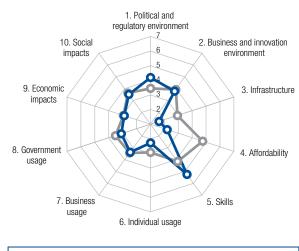
further details and explanation, please refer to the section "How to Read the Country/Economy Profiles" on page 53.

<sup>1</sup> See the "Technical Notes and Sources" section.

# Tajikistan

	Rank	
	(out of 139)	(1–7)
Networked Readiness Index	114.	. 3.3
Networked Readiness Index 2015 (out of 143)	117.	3.2
Networked Readiness Index 2014 (out of 148)	n/a.	n/a
Networked Readiness Index 2013 (out of 144)	112.	3.3
A. Environment subindex	70.	4.0
1st pillar: Political and regulatory environment	42.	4.2
2nd pillar: Business and innovation environment	105.	3.8
B. Readiness subindex	121 .	3.0
3rd pillar: Infrastructure	133.	1.6
4th pillar: Affordability	134.	2.2
5th pillar: Skills	60.	5.2
C. Usage subindex	116.	2.9
6th pillar: Individual usage	116.	2.3
7th pillar: Business usage	102.	3.4
8th pillar: Government usage	115.	3.1
D. Impact subindex	99.	3.2

10th pillar: Social impacts......96.....3.5



- Tajikistan -O- Lower-middle-income group average

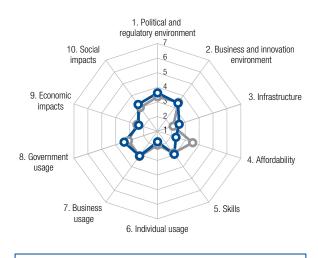
#### The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*
1.02	Laws relating to ICTs*8484
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*41 4.2
1.05	Efficiency of legal system in challenging regs*50 3.8
1.06	Intellectual property protection*594.1
1.07	Software piracy rate, % software installedn/an/a
1.08	No. procedures to enforce a contract4835
1.09	No. days to enforce a contract
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*94
2.02	Venture capital availability*3535
2.03	Total tax rate, % profits
2.04	No. days to start a business6711
2.05	No. procedures to start a business224
2.06	Intensity of local competition*1074.6
2.07	Tertiary education gross enrollment rate, %8726.4
2.08	Quality of management schools*784.0
2.09	Gov't procurement of advanced tech*273.9
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita80 2109.9
3.02	Mobile network coverage, % popn/an/a
3.03	Int'l Internet bandwidth, kb/s per user1243.9
3.04	Secure Internet servers/million pop1291.4
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min108 0.39
4.02	Fixed broadband Internet tariffs, PPP \$/month 135 814.09
4.03	Internet & telephony competition, 0–2 (best) 135 0.00
	5th pillar: Skills
5.01	Quality of education system*57
5.02	Quality of math & science education*734.0
5.03	Secondary education gross enrollment rate, %80 87.9
5.04	Adult literacy rate, %799.8

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop101 95.1
6.02	Individuals using Internet, %11117.5
6.03	Households w/ personal computer, %115 9.2
6.04	Households w/ Internet access, %1157.2
6.05	Fixed broadband Internet subs/100 pop1300.1
6.06	Mobile broadband subs/100 pop1149.5
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*116 4.0
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop121 0.0
7.04	ICT use for business-to-business transactions*111 4.0
7.05	Business-to-consumer Internet use*1063.8
7.06	Extent of staff training*8181
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*6665
8.02	Government Online Service Index, 0-1 (best)132 0.06
8.03	Gov't success in ICT promotion*
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*1033.9
9.02	ICT PCT patents, applications/million pop103 0.0
9.03	Impact of ICTs on organizational models*9494
9.04	Knowledge-intensive jobs, % workforcen/an/a
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*76 4.0
10.02	Internet access in schools*64
10.03	ICT use & gov't efficiency*
10.04	E-Participation Index, 0-1 (best)128 0.12

## Tanzania

		Value
	(out of 139)	(1–7)
Networked Readiness Index	126.	. 2.9
Networked Readiness Index 2015 (out of 143)	123.	3.0
Networked Readiness Index 2014 (out of 148)	125.	3.0
Networked Readiness Index 2013 (out of 144)	127 .	2.9
A. Environment subindex	112.	3.5
1st pillar: Political and regulatory environment	83.	3.6
2nd pillar: Business and innovation environment	125.	3.4
B. Readiness subindex	130.	2.6
3rd pillar: Infrastructure	117.	2.6
4th pillar: Affordability	131 .	2.3
5th pillar: Skills	125.	2.9
C. Usage subindex	126.	2.7
6th pillar: Individual usage	134.	1.7
7th pillar: Business usage	122.	3.1
8th pillar: Government usage	100.	3.4
D. Impact subindex	122.	2.8
9th pillar: Economic impacts	132.	2.4



Tanzania - Low-income group average

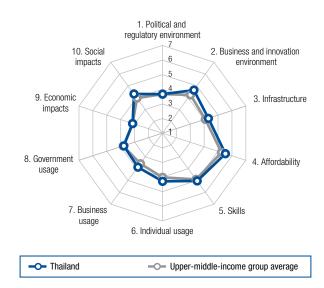
## The Networked Readiness Index in detail

1st pillar: Political and regulatory environment  1.01 Effectiveness of law-making bodies*	I	INDICATOR	RANK/139	VALUE
1.02       Laws relating to ICTs*       107       3         1.03       Judicial independence*       .89       3         1.04       Efficiency of legal system in settling disputes*       .65       3         1.05       Efficiency of legal system in settling disputes*       .65       3         1.06       Intellectual property protection*       .111       3         1.07       Software piracy rate, % software installed       .n/a       .r         1.08       No. procedures to enforce a contract       .76          1.09       No. days to enforce a contract       .63       .5         2nd pillar: Business and innovation environment         2.01       Availability of latest technologies*        .27         2.02       Venture capital availability*            2.03       Total tax rate, % profits            2.04       No. days to start a business            2.05       No. procedures to start a business            2.06       Intensity of local competition*            2.07       Tertiary education gross enrollment rate, %	1	1st pillar: Political and regulatory e	nvironmer	ıt
1.03 Judicial independence*	1 E	I Effectiveness of law-making bodies*	63	3.8
1.04 Efficiency of legal system in settling disputes*65	2 L	2 Laws relating to ICTs*	107	3.2
1.05 Efficiency of legal system in challenging regs*72	3 .	3 Judicial independence*	89	3.4
1.06 Intellectual property protection*	4 E	4 Efficiency of legal system in settling disp	utes*65	3.7
1.07       Software piracy rate, % software installed       n/a       n         1.08       No. procedures to enforce a contract       76       3         1.09       No. days to enforce a contract       63       5         2nd pillar: Business and innovation environment         2.01       Availability of latest technologies*       127       3         2.02       Venture capital availability*       99       2         2.03       Total tax rate, % profits       93       43         2.04       No. days to start a business       108       3         2.05       No. procedures to start a business       105       3         2.06       Intensity of local competition*       111       4         2.07       Tertiary education gross enrollment rate, %       134       3         2.08       Quality of management schools*       123       3         2.09       Gov't procurement of advanced tech*       76       3         3rd pillar: Infrastructure         3.01       Electricity production, kWh/capita       128       111         3.02       Mobile network coverage, % pop       104       95         3.03       Int'I Internet bandwidth, kb/s per user       113       6         3.04 </td <td>5 E</td> <td>5 Efficiency of legal system in challenging</td> <td>regs*72</td> <td>3.4</td>	5 E	5 Efficiency of legal system in challenging	regs*72	3.4
1.08 No. procedures to enforce a contract	6 I	3 Intellectual property protection*	111	3.2
1.09       No. days to enforce a contract       63       5         2nd pillar: Business and innovation environment         2.01       Availability of latest technologies*       127       3         2.02       Venture capital availability*       99       2         2.03       Total tax rate, % profits       93       43         2.04       No. days to start a business       108       3         2.05       No. procedures to start a business       105       3         2.06       Intensity of local competition*       111       4         2.07       Tertiary education gross enrollment rate, %       134       3         2.08       Quality of management schools*       123       3         2.09       Gov't procurement of advanced tech*       76       3         3rd pillar: Infrastructure         3.01       Electricity production, kWh/capita       128       111         3.02       Mobile network coverage, % pop       104       95         3.03       Int'I Internet bandwidth, kb/s per user       113       6         3.04       Secure Internet servers/million pop       128       1         4.01       Prepaid mobile cellular tariffs, PPP \$/month 114       72         4.03 <t< td=""><td>7 5</td><td>7 Software piracy rate, % software installe</td><td>edn/a</td><td>n/a</td></t<>	7 5	7 Software piracy rate, % software installe	edn/a	n/a
2nd pillar: Business and innovation environment  2.01 Availability of latest technologies*	1 8	No. procedures to enforce a contract	76	38
2.01       Availability of latest technologies*       .127       .3         2.02       Venture capital availability*       .99       .2         2.03       Total tax rate, % profits       .93       .43         2.04       No. days to start a business       .108       .3         2.05       No. procedures to start a business       .105          2.06       Intensity of local competition*       .111       .4         2.07       Tertiary education gross enrollment rate, %       .134       .3         2.08       Quality of management schools*       .123       .3         2.09       Gov't procurement of advanced tech*       .76       .3         3rd pillar: Infrastructure         3.01       Electricity production, kWh/capita       .128       .111         3.02       Mobile network coverage, % pop.       .104       .95         3.03       Int'l Internet bandwidth, kb/s per user       .113       .6         3.04       Secure Internet servers/million pop.       .128       .1         4th pillar: Affordability         4.01       Prepaid mobile cellular tariffs, PPP \$/month 114       .72         4.03       Internet & telephony competition, 0-2 (best)       .1       .2	1 0	No. days to enforce a contract	63	515
2.02       Venture capital availability*       .99       .2         2.03       Total tax rate, % profits       .93       .43         2.04       No. days to start a business       .108          2.05       No. procedures to start a business       .105          2.06       Intensity of local competition*       .111       .4         2.07       Tertiary education gross enrollment rate, %       .134       .3         2.08       Quality of management schools*       .123       .3         2.09       Gov't procurement of advanced tech*       .76       .3         3rd pillar: Infrastructure         3.01       Electricity production, kWh/capita       .128       .111         3.02       Mobile network coverage, % pop       .104       .95         3.03       Int'l Internet bandwidth, kb/s per user       .113       .6         3.04       Secure Internet servers/million pop       .128       .1         4th pillar: Affordability         4.01       Prepaid mobile cellular tariffs, PPP \$/min       .133       .0.1         4.02       Fixed broadband Internet tariffs, PPP \$/month 114       .72         4.03       Internet & telephony competition, 0-2 (best)	2	2nd pillar: Business and innovation	environm	ent
2.03       Total tax rate, % profits       93       43         2.04       No. days to start a business       108       3         2.05       No. procedures to start a business       105       3         2.06       Intensity of local competition*       111       4         2.07       Tertiary education gross enrollment rate, %       134       3         2.08       Quality of management schools*       123       3         2.09       Gov't procurement of advanced tech*       76       3         3rd pillar: Infrastructure         3.01       Electricity production, kWh/capita       128       111         3.02       Mobile network coverage, % pop       104       95         3.03       Int'l Internet bandwidth, kb/s per user       113       6         3.04       Secure Internet servers/million pop       128       1         4th pillar: Affordability         4.01       Prepaid mobile cellular tariffs, PPP \$/min       133       0.0         4.02       Fixed broadband Internet tariffs, PPP \$/month 114       72         4.03       Internet & telephony competition, 0-2 (best)       1       2.0         5th pillar: Skills         5.01       Quality of education system*	1 /	Availability of latest technologies*	127	3.7
2.04       No. days to start a business       108         2.05       No. procedures to start a business       105         2.06       Intensity of local competition*       111       4         2.07       Tertiary education gross enrollment rate, %       134       3         2.08       Quality of management schools*       123       3         2.09       Gov't procurement of advanced tech*       76       3         3rd pillar: Infrastructure         3.01       Electricity production, kWh/capita       128       111         3.02       Mobile network coverage, % pop       104       95         3.03       Int'l Internet bandwidth, kb/s per user       113       6         3.04       Secure Internet servers/million pop       128       1         4th pillar: Affordability         4.01       Prepaid mobile cellular tariffs, PPP \$/min       133       0.0         4.02       Fixed broadband Internet tariffs, PPP \$/month 114       72         4.03       Internet & telephony competition, 0-2 (best)       1       2.0         5th pillar: Skills         5.01       Quality of education system*       98       3	2 \	2 Venture capital availability*	99	2.4
2.05       No. procedures to start a business       105         2.06       Intensity of local competition*       111       4         2.07       Tertiary education gross enrollment rate, %       134       3         2.08       Quality of management schools*       123       3         2.09       Gov't procurement of advanced tech*       76       3         3rd pillar: Infrastructure         3.01       Electricity production, kWh/capita       128       111         3.02       Mobile network coverage, % pop       104       95         3.03       Int'l Internet bandwidth, kb/s per user       113       6         3.04       Secure Internet servers/million pop       128       1         4th pillar: Affordability         4.01       Prepaid mobile cellular tariffs, PPP \$/min       133       0.0         4.02       Fixed broadband Internet tariffs, PPP \$/month 114       72         4.03       Internet & telephony competition, 0-2 (best)       1       2.0         5th pillar: Skills         5.01       Quality of education system*       98       3	3 7	3 Total tax rate, % profits	93	43.9
2.06       Intensity of local competition*	4 1	No. days to start a business	108	26
2.07       Tertiary education gross enrollment rate, %	5 1	No. procedures to start a business	105	9
2.08       Quality of management schools*	6 I	Intensity of local competition*	111	4.5
2.09       Gov't procurement of advanced tech*	7 7	7 Tertiary education gross enrollment rate,	%134	3.6
3rd pillar: Infrastructure  3.01 Electricity production, kWh/capita	8 (	3 Quality of management schools*	123	3.2
3.01 Electricity production, kWh/capita	9 (	Gov't procurement of advanced tech*	76	3.3
3.02 Mobile network coverage, % pop	3	3rd pillar: Infrastructure		
3.03 Int'l Internet bandwidth, kb/s per user	1 E	Electricity production, kWh/capita	128	111.0
3.04 Secure Internet servers/million pop	2 1	2 Mobile network coverage, % pop	104	95.0
4th pillar: Affordability 4.01 Prepaid mobile cellular tariffs, PPP \$/min1330.0 4.02 Fixed broadband Internet tariffs, PPP \$/month 114 72. 4.03 Internet & telephony competition, 0–2 (best)12.0 5th pillar: Skills 5.01 Quality of education system*98	3 1	3 Int'l Internet bandwidth, kb/s per user	113	6.1
<ul> <li>4.01 Prepaid mobile cellular tariffs, PPP \$/min133 0.4</li> <li>4.02 Fixed broadband Internet tariffs, PPP \$/month 114 72.</li> <li>4.03 Internet &amp; telephony competition, 0–2 (best) 1</li></ul>	4 8	Secure Internet servers/million pop	128	1.5
<ul> <li>4.02 Fixed broadband Internet tariffs, PPP \$/month 114 72.</li> <li>4.03 Internet &amp; telephony competition, 0–2 (best) 1 2.0</li> <li>5th pillar: Skills</li> <li>5.01 Quality of education system*</li></ul>		4th pillar: Affordability		
4.03 Internet & telephony competition, 0–2 (best)1 2.0  5th pillar: Skills 5.01 Quality of education system*	1 F	I Prepaid mobile cellular tariffs, PPP \$/mir	n133	0.67
5th pillar: Skills 5.01 Quality of education system*98	2 F	2 Fixed broadband Internet tariffs, PPP \$/	month 114	72.15
5.01 Quality of education system*98	3 I	Internet & telephony competition, 0-2 (b	est)1	2.00
	5	5th pillar: Skills		
	1 (	I Quality of education system*	98	3.2
5.03 Secondary education gross enrollment rate, % 134 32	3 8	3 Secondary education gross enrollment r	ate, % 134	32.3
5.04 Adult literacy rate, %	4 /	4 Adult literacy rate, %	83	80.3

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop132 62.8
6.02	Individuals using Internet, %1334.9
6.03	Households w/ personal computer, %1323.8
6.04	Households w/ Internet access, %1304.1
6.05	Fixed broadband Internet subs/100 pop122 0.2
6.06	Mobile broadband subs/100 pop1283.0
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*129 3.8
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop120 0.0
7.04	ICT use for business-to-business transactions*112 4.0
7.05	Business-to-consumer Internet use*
7.06	Extent of staff training*1153.4
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*89
8.02	Government Online Service Index, 0-1 (best)102 0.30
8.03	Gov't success in ICT promotion*87
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*1113.8
9.02	ICT PCT patents, applications/million pop103 0.0
9.03	Impact of ICTs on organizational models*119 3.4
9.04	Knowledge-intensive jobs, % workforce1092.6
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*112 3.5
10.02	Internet access in schools*1272.8
10.03	ICT use & gov't efficiency*1093.4
10.04	E-Participation Index, 0-1 (best)81 0.39

## Thailand

Rank Value (out of 139) (1-7) Networked Readiness Index......62..4.2 Networked Readiness Index 2013 (out of 144)......74.....3.9 A. Environment subindex......54.....54..... 1st pillar: Political and regulatory environment......80.....3.7 C. Usage subindex.......63..... 4.0 



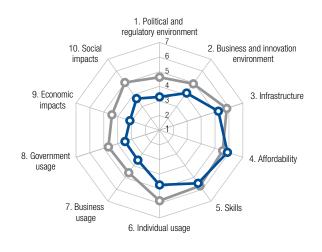
#### The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*
1.02	Laws relating to ICTs*8787
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*55 3.9
1.05	Efficiency of legal system in challenging regs*563.7
1.06	Intellectual property protection*1133.2
1.07	Software piracy rate, % software installed7071
1.08	No. procedures to enforce a contract5836
1.09	No. days to enforce a contract42440
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*704.7
2.02	Venture capital availability*
2.03	Total tax rate, % profits
2.04	No. days to start a business
2.05	No. procedures to start a business
2.06	Intensity of local competition*425.4
2.07	Tertiary education gross enrollment rate, %53 51.4
2.08	Quality of management schools*774.0
2.09	Gov't procurement of advanced tech*903.1
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita72 2456.7
3.02	Mobile network coverage, % pop 97 97.0
3.03	Int'l Internet bandwidth, kb/s per user48 54.8
3.04	Secure Internet servers/million pop81 23.3
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min16 0.09
4.02	Fixed broadband Internet tariffs, PPP \$/month89 42.47
4.03	Internet & telephony competition, 0–2 (best)97 1.63
	5th pillar: Skills
5.01	Quality of education system*743.6
5.02	Quality of math & science education*793.9
5.03	Secondary education gross enrollment rate, %82 86.2
5.04	Adult literacy rate, %

6th pillar: Individual usage           6.01         Mobile phone subscriptions/100 pop		INDICATOR	RANK/139	VALUE
6.02       Individuals using Internet, %		6th pillar: Individual usage		
6.03       Households w/ personal computer, %       83       33.9         6.04       Households w/ Internet access, %       80       33.8         6.05       Fixed broadband Internet subs/100 pop.       73       8.5         6.06       Mobile broadband subs/100 pop.       23       79.9         6.07       Use of virtual social networks*       13       6.3         7th pillar: Business usage         7.01       Firm-level technology absorption*       53       4.9         7.02       Capacity for innovation*       54       4.1         7.03       PCT patents, applications/million pop.       69       1.3         7.04       ICT use for business-to-business transactions*       52       5.0         7.05       Business-to-consumer Internet use*       39       5.1         7.06       Extent of staff training*       41       4.3         8th pillar: Government usage         8.01       Importance of ICTs to gov't vision*       72       3.9         8.02       Government Online Service Index, 0-1 (best)       73       0.44         8.03       Gov't success in ICT promotion*       85       3.8         9th pillar: Economic impacts         9.01       Impact	6.01	Mobile phone subscriptions/100 pop	30	144.4
6.04       Households w/ Internet access, %       80       33.8         6.05       Fixed broadband Internet subs/100 pop.       73       8.5         6.06       Mobile broadband subs/100 pop.       23       79.9         6.07       Use of virtual social networks*       13       6.3         7th pillar: Business usage         7.01       Firm-level technology absorption*       53       4.9         7.02       Capacity for innovation*       54       4.1         7.03       PCT patents, applications/million pop.       69       1.3         7.04       ICT use for business-to-business transactions*. 52       5.0         7.05       Business-to-consumer Internet use*       39       5.1         7.06       Extent of staff training*       41       4.3         8th pillar: Government usage         8.01       Importance of ICTs to gov't vision*       72       3.9         8.02       Government Online Service Index, 0–1 (best)       73       0.44         8.03       Gov't success in ICT promotion*       85       3.8         9th pillar: Economic impacts         9.01       Impact of ICTs on business models*       42       4.8         9.02       ICT PCT patents, appl	6.02	Individuals using Internet, %	93	34.9
6.05       Fixed broadband Internet subs/100 pop.       73       8.5         6.06       Mobile broadband subs/100 pop.       23       79.9         6.07       Use of virtual social networks*       13       6.3         7th pillar: Business usage         7.01       Firm-level technology absorption*       53       4.9         7.02       Capacity for innovation*       54       4.1         7.03       PCT patents, applications/million pop.       69       1.3         7.04       ICT use for business-to-business transactions*       52       5.0         7.05       Business-to-consumer Internet use*       39       5.1         7.06       Extent of staff training*       41       4.3         8th pillar: Government usage         8.01       Importance of ICTs to gov't vision*       72       3.9         8.02       Government Online Service Index, 0–1 (best)       73       0.44         8.03       Gov't success in ICT promotion*       85       3.8         9th pillar: Economic impacts         9.01       Impact of ICTs on business models*       42       4.8         9.02       ICT PCT patents, applications/million pop.       75       0.2         9.03 <t< td=""><td>6.03</td><td>Households w/ personal computer, %</td><td>83</td><td> 33.9</td></t<>	6.03	Households w/ personal computer, %	83	33.9
6.06       Mobile broadband subs/100 pop.       23       79.9         6.07       Use of virtual social networks*       13       6.3         7th pillar: Business usage         7.01       Firm-level technology absorption*       53       4.9         7.02       Capacity for innovation*       54       4.1         7.03       PCT patents, applications/million pop.       69       1.3         7.04       ICT use for business-to-business transactions*       52       5.0         7.05       Business-to-consumer Internet use*       39       5.1         7.06       Extent of staff training*       41       4.3         8th pillar: Government usage         8.01       Importance of ICTs to gov't vision*       72       3.9         8.02       Government Online Service Index, 0–1 (best)       73       0.44         8.03       Gov't success in ICT promotion*       85       3.8         9th pillar: Economic impacts         9.01       Impact of ICTs on business models*       42       4.8         9.02       ICT PCT patents, applications/million pop.       75       0.2         9.03       Impact of ICTs on organizational models*       50       4.4         9.04	6.04	Households w/ Internet access, %	80	33.8
7th pillar: Business usage           7.01         Firm-level technology absorption*	6.05	Fixed broadband Internet subs/100 pop	73	8.5
7th pillar: Business usage           7.01         Firm-level technology absorption*         53         4.9           7.02         Capacity for innovation*         54         4.1           7.03         PCT patents, applications/million pop.         69         1.3           7.04         ICT use for business-to-business transactions*.         52         5.0           7.05         Business-to-consumer Internet use*         39         5.1           7.06         Extent of staff training*         41         4.3           8th pillar: Government usage           8.01         Importance of ICTs to gov't vision*         72         3.9           8.02         Government Online Service Index, 0–1 (best)         73         0.44           8.03         Gov't success in ICT promotion*         85         3.8           9th pillar: Economic impacts           9.01         Impact of ICTs on business models*         42         4.8           9.02         ICT PCT patents, applications/million pop.         75         0.2           9.03         Impact of ICTs on organizational models*         50         4.4           9.04         Knowledge-intensive jobs, % workforce.         90         13.8           10th pillar: Soc	6.06	Mobile broadband subs/100 pop	23	79.9
7.01 Firm-level technology absorption*       53       4.9         7.02 Capacity for innovation*       54       4.1         7.03 PCT patents, applications/million pop.       69       1.3         7.04 ICT use for business-to-business transactions*.52       5.0         7.05 Business-to-consumer Internet use*       39       5.1         7.06 Extent of staff training*       41       4.3         8th pillar: Government usage         8.01 Importance of ICTs to gov't vision*       72       3.9         8.02 Government Online Service Index, 0–1 (best)       73       0.44         8.03 Gov't success in ICT promotion*       85       3.8         9th pillar: Economic impacts         9.01 Impact of ICTs on business models*       42       4.8         9.02 ICT PCT patents, applications/million pop.       75       0.2         9.03 Impact of ICTs on organizational models*       50       4.4         9.04 Knowledge-intensive jobs, % workforce       90       13.8         10th pillar: Social impacts         10.01 Impact of ICTs on access to basic services*       55       4.4         10.02 Internet access in schools*       54       4.6         10.03 ICT use & gov't efficiency*       70       4.0	6.07	Use of virtual social networks*	13	6.3
7.02       Capacity for innovation*       54       4.1         7.03       PCT patents, applications/million pop.       69       1.3         7.04       ICT use for business-to-business transactions*52       5.0         7.05       Business-to-consumer Internet use*       39       5.1         7.06       Extent of staff training*       41       4.3         8th pillar: Government usage         8.01       Importance of ICTs to gov't vision*       72       3.9         8.02       Government Online Service Index, 0–1 (best)       73       0.44         8.03       Gov't success in ICT promotion*       85       3.8         9th pillar: Economic impacts         9.01       Impact of ICTs on business models*       42       4.8         9.02       ICT PCT patents, applications/million pop.       75       0.2         9.03       Impact of ICTs on organizational models*       50       4.4         9.04       Knowledge-intensive jobs, % workforce       90       13.8         10th pillar: Social impacts         10.01       Impact of ICTs on access to basic services*       55       4.4         10.02       Internet access in schools*       54       4.6         10.03		7th pillar: Business usage		
7.03       PCT patents, applications/million pop.       69       1.3         7.04       ICT use for business-to-business transactions*52       5.0         7.05       Business-to-consumer Internet use*       39       5.1         7.06       Extent of staff training*       41       4.3         8th pillar: Government usage         8.01       Importance of ICTs to gov't vision*       72       3.9         8.02       Government Online Service Index, 0–1 (best)       73       0.44         8.03       Gov't success in ICT promotion*       85       3.8         9th pillar: Economic impacts         9.01       Impact of ICTs on business models*       42       4.8         9.02       ICT PCT patents, applications/million pop.       75       0.2         9.03       Impact of ICTs on organizational models*       50       4.4         9.04       Knowledge-intensive jobs, % workforce       90       13.8         10th pillar: Social impacts         10.01       Impact of ICTs on access to basic services*       55       4.4         10.02       Internet access in schools*       54       4.6         10.03       ICT use & gov't efficiency*       70       4.0	7.01	Firm-level technology absorption*	53	4.9
7.04         ICT use for business-to-business transactions*.52         5.0           7.05         Business-to-consumer Internet use*         39         5.1           7.06         Extent of staff training*         41         4.3           8th pillar: Government usage           8.01         Importance of ICTs to gov't vision*         72         3.9           8.02         Government Online Service Index, 0–1 (best)         73         0.44           8.03         Gov't success in ICT promotion*         85         3.8           9th pillar: Economic impacts         42         4.8           9.01         Impact of ICTs on business models*         42         4.8           9.02         ICT PCT patents, applications/million pop.         75         0.2           9.03         Impact of ICTs on organizational models*         50         4.4           9.04         Knowledge-intensive jobs, % workforce         90         13.8           10th pillar: Social impacts           10.01         Impact of ICTs on access to basic services*         55         4.4           10.02         Internet access in schools*         54         4.6           10.03         ICT use & gov't efficiency*         70         4.0	7.02	Capacity for innovation*	54	4.1
7.05       Business-to-consumer Internet use*       39       5.1         7.06       Extent of staff training*       41       4.3         8th pillar: Government usage         8.01       Importance of ICTs to gov't vision*       72       3.9         8.02       Government Online Service Index, 0–1 (best)       73       0.44         8.03       Gov't success in ICT promotion*       85       3.8         9th pillar: Economic impacts         9.01       Impact of ICTs on business models*       42       4.8         9.02       ICT PCT patents, applications/million pop.       75       0.2         9.03       Impact of ICTs on organizational models*       50       4.4         9.04       Knowledge-intensive jobs, % workforce       90       13.8         10th pillar: Social impacts         10.01       Impact of ICTs on access to basic services*       55       4.4         10.02       Internet access in schools*       54       4.6         10.03       ICT use & gov't efficiency*       70       4.0	7.03	PCT patents, applications/million pop	69	1.3
8th pillar: Government usage           8.01         Importance of ICTs to gov't vision*	7.04	ICT use for business-to-business transact	ions*52	5.0
8th pillar: Government usage           8.01         Importance of ICTs to gov't vision*	7.05	Business-to-consumer Internet use*	39	5.1
8.01       Importance of ICTs to gov't vision*       .72       3.9         8.02       Government Online Service Index, 0–1 (best)       .73       0.44         8.03       Gov't success in ICT promotion*       .85       3.8         9th pillar: Economic impacts         9.01       Impact of ICTs on business models*       .42       4.8         9.02       ICT PCT patents, applications/million pop.       .75       0.2         9.03       Impact of ICTs on organizational models*       .50       4.4         9.04       Knowledge-intensive jobs, % workforce       .90       13.8         10th pillar: Social impacts         10.01       Impact of ICTs on access to basic services*       .55       .4.4         10.02       Internet access in schools*       .54       .4.6         10.03       ICT use & gov't efficiency*       .70       .4.0	7.06	Extent of staff training*	41	4.3
8.02       Government Online Service Index, 0–1 (best)		8th pillar: Government usage		
8.03       Gov't success in ICT promotion*       85       3.8         9th pillar: Economic impacts         9.01       Impact of ICTs on business models*       42       4.8         9.02       ICT PCT patents, applications/million pop.       75       0.2         9.03       Impact of ICTs on organizational models*       50       4.4         9.04       Knowledge-intensive jobs, % workforce       90       13.8         10th pillar: Social impacts         10.01       Impact of ICTs on access to basic services*       55       4.4         10.02       Internet access in schools*       54       4.6         10.03       ICT use & gov't efficiency*       70       4.0	8.01	Importance of ICTs to gov't vision*	72	3.9
9th pillar: Economic impacts           9.01 Impact of ICTs on business models*	8.02	,	,	
9.01       Impact of ICTs on business models*       .42       .4.8         9.02       ICT PCT patents, applications/million pop.       .75       .0.2         9.03       Impact of ICTs on organizational models*       .50       .4.4         9.04       Knowledge-intensive jobs, % workforce.       .90       .13.8         10th pillar: Social impacts         10.01       Impact of ICTs on access to basic services*       .55       .4.4         10.02       Internet access in schools*       .54       .4.6         10.03       ICT use & gov't efficiency*       .70       .4.0	8.03	Gov't success in ICT promotion*	85	3.8
9.02       ICT PCT patents, applications/million pop.       .75       .0.2         9.03       Impact of ICTs on organizational models*       .50       .4.4         9.04       Knowledge-intensive jobs, % workforce.       .90       .13.8         10th pillar: Social impacts         10.01       Impact of ICTs on access to basic services*       .55       .4.4         10.02       Internet access in schools*       .54       .4.6         10.03       ICT use & gov't efficiency*       .70       .4.0		9th pillar: Economic impacts		
9.03 Impact of ICTs on organizational models*       50       4.4         9.04 Knowledge-intensive jobs, % workforce       90       13.8         10th pillar: Social impacts         10.01 Impact of ICTs on access to basic services*       55       4.4         10.02 Internet access in schools*       54       4.6         10.03 ICT use & gov't efficiency*       70       4.0	9.01	Impact of ICTs on business models*	42	4.8
9.04 Knowledge-intensive jobs, % workforce9013.8         10th pillar: Social impacts         10.01 Impact of ICTs on access to basic services*554.4         10.02 Internet access in schools*	9.02	ICT PCT patents, applications/million pop.	75	0.2
10th pillar: Social impacts           10.01 Impact of ICTs on access to basic services*	9.03	Impact of ICTs on organizational models* .	50	4.4
10.01       Impact of ICTs on access to basic services*	9.04	Knowledge-intensive jobs, % workforce	90	13.8
10.02 Internet access in schools*       54       4.6         10.03 ICT use & gov't efficiency*       70       4.0		10th pillar: Social impacts		
10.03 ICT use & gov't efficiency*	10.01	Impact of ICTs on access to basic service	s*55	4.4
· ·	10.02	Internet access in schools*	54	4.6
10.04 E-Participation Index, 0–1 (best)	10.03	ICT use & gov't efficiency*	70	4.0
	10.04	E-Participation Index, 0-1 (best)	54	0.55

## Trinidad and Tobago

(out of 139) (1-7) Networked Readiness Index......67..4.1 Networked Readiness Index 2015 (out of 143)......70.....4.0 Networked Readiness Index 2013 (out of 144)......72.....3.9 A. Environment subindex......96......96.....3.7 B. Readiness subindex ......35.....35.... C. Usage subindex......69..... 3.9 



- Trinidad and Tobago - High-income group average

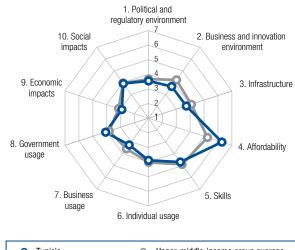
#### The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*
1.02	Laws relating to ICTs*1163.0
1.03	Judicial independence*514.3
1.04	Efficiency of legal system in settling disputes*97 3.2
1.05	Efficiency of legal system in challenging regs*94 3.1
1.06	Intellectual property protection*993.4
1.07	Software piracy rate, % software installedn/an/a
1.08	No. procedures to enforce a contract11342
1.09	No. days to enforce a contract1351340
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*59
2.02	Venture capital availability*
2.03	Total tax rate, % profits
2.04	No. days to start a business70
2.05	No. procedures to start a business74
2.06	Intensity of local competition*495.3
2.07	Tertiary education gross enrollment rate, %10912.0
2.08	Quality of management schools*
2.09	Gov't procurement of advanced tech*1052.9
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita30 7049.9
3.02	Mobile network coverage, % pop 1 100.0
3.03	Int'l Internet bandwidth, kb/s per user53 48.9
3.04	Secure Internet servers/million pop51 111.5
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min99 0.35
4.02	Fixed broadband Internet tariffs, PPP \$/month16 18.48
4.03	Internet & telephony competition, 0–2 (best)84 1.85
	5th pillar: Skills
5.01	Quality of education system*334.4
5.02	Quality of math & science education*354.7
5.03	Secondary education gross enrollment rate, %84 85.5
5.04	Adult literacy rate, %

	INDICATOR RANK/139 VALUE	
	6th pillar: Individual usage	
6.01	Mobile phone subscriptions/100 pop25 147.3	
6.02	Individuals using Internet, %47 65.1	
6.03	Households w/ personal computer, %52 64.0	
6.04	Households w/ Internet access, %6450.0	
6.05	Fixed broadband Internet subs/100 pop48 17.6	
6.06	Mobile broadband subs/100 pop88 28.3	
6.07	Use of virtual social networks*	
	7th pillar: Business usage	
7.01	Firm-level technology absorption*	
7.02	Capacity for innovation*1063.5	
7.03	PCT patents, applications/million pop810.4	
7.04	ICT use for business-to-business transactions*84 4.5	
7.05	Business-to-consumer Internet use*854.1	
7.06	Extent of staff training*	
	8th pillar: Government usage	
8.01	Importance of ICTs to gov't vision*793.7	
8.02	Government Online Service Index, 0-1 (best)91 0.33	
8.03	Gov't success in ICT promotion*9191	
	9th pillar: Economic impacts	
9.01	Impact of ICTs on business models*1093.9	
9.02	ICT PCT patents, applications/million pop103 0.0	
9.03	Impact of ICTs on organizational models*883.8	
9.04	Knowledge-intensive jobs, % workforce49 27.7	
	10th pillar: Social impacts	
10.01	Impact of ICTs on access to basic services*96 3.8	
10.02	Internet access in schools*	
10.03	ICT use & gov't efficiency*95	
10.04	E-Participation Index, 0–1 (best)98 0.31	

# Tunisia

	Rank (out of 139)	
Networked Readiness Index	,	, ,
Networked Readiness Index 2015 (out of 143)	81.	3.9
Networked Readiness Index 2014 (out of 148)	87.	3.8
Networked Readiness Index 2013 (out of 144)	n/a.	n/a
A. Environment subindex	109.	3.6
1st pillar: Political and regulatory environment	90.	3.5
2nd pillar: Business and innovation environment	112.	3.7
B. Readiness subindex	64.	4.9
3rd pillar: Infrastructure	82.	3.7
4th pillar: Affordability	24.	6.3
5th pillar: Skills	85.	4.7
C. Usage subindex	80.	3.7
6th pillar: Individual usage	78.	3.9
7th pillar: Business usage	107.	3.3
8th pillar: Government usage	55.	4.1
D. Impact subindex	84.	3.4
9th pillar: Economic impacts	93	29



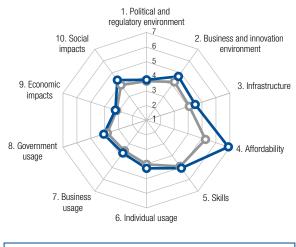
Tunisia - Upper-middle-income group average

## The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*72
1.02	Laws relating to ICTs*983.4
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*74 3.6
1.05	Efficiency of legal system in challenging regs*61 3.6
1.06	Intellectual property protection*903.5
1.07	Software piracy rate, % software installed7675
1.08	No. procedures to enforce a contract8939
1.09	No. days to enforce a contract73 565
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*834.5
2.02	Venture capital availability*
2.03	Total tax rate, % profits
2.04	No. days to start a business6711
2.05	No. procedures to start a business11410
2.06	Intensity of local competition*909.
2.07	Tertiary education gross enrollment rate, %76 34.6
2.08	Quality of management schools*69
2.09	Gov't procurement of advanced tech*1122.8
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita85 1688.4
3.02	Mobile network coverage, % pop67 99.0
3.03	Int'l Internet bandwidth, kb/s per user82 26.0
3.04	Secure Internet servers/million pop84 17.9
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min8 0.06
4.02	Fixed broadband Internet tariffs, PPP \$/month8 15.08
4.03	Internet & telephony competition, 0-2 (best)117 1.15
	5th pillar: Skills
5.01	Quality of education system*893.3
5.02	Quality of math & science education*534.4
5.03	Secondary education gross enrollment rate, %74 90.1
5.04	Adult literacy rate, %8281.8

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop47 128.5
6.02	Individuals using Internet, %7646.2
6.03	Households w/ personal computer, %84 33.1
6.04	Households w/ Internet access, %8528.8
6.05	Fixed broadband Internet subs/100 pop874.5
6.06	Mobile broadband subs/100 pop62 47.6
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*
7.02	Capacity for innovation*1093.5
7.03	PCT patents, applications/million pop75 0.7
7.04	ICT use for business-to-business transactions*116 4.0
7.05	Business-to-consumer Internet use*1253.4
7.06	Extent of staff training*1063.6
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*903.6
8.02	Government Online Service Index, 0-1 (best)39 0.64
8.03	Gov't success in ICT promotion*
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*91
9.02	ICT PCT patents, applications/million pop74 0.2
9.03	Impact of ICTs on organizational models*113 3.4
9.04	Knowledge-intensive jobs, % workforce68 20.9
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*100 3.8
10.02	Internet access in schools*1123.4
10.03	ICT use & gov't efficiency*923.6
10.04	E-Participation Index, 0-1 (best)33 0.65

	Rank (out of 139)	
Networked Readiness Index	,	, ,
Networked Readiness Index 2015 (out of 143)	48.	4.4
Networked Readiness Index 2014 (out of 148)		
Networked Readiness Index 2013 (out of 144)	45.	4.2
A. Environment subindex	49.	4.2
1st pillar: Political and regulatory environment	69.	3.8
2nd pillar: Business and innovation environment	43.	4.7
B. Readiness subindex	40.	5.5
3rd pillar: Infrastructure	59.	4.5
4th pillar: Affordability	2.	6.9
5th pillar: Skills	69.	5.0
C. Usage subindex	59.	4.0
6th pillar: Individual usage	65.	4.3
7th pillar: Business usage	56.	3.8
8th pillar: Government usage	57.	4.1
D. Impact subindex	58.	3.8
9th pillar: Economic impacts	67.	3.2
10th pillar: Social impacts	54.	4.4



Turkey -O- Upper-middle-income group average

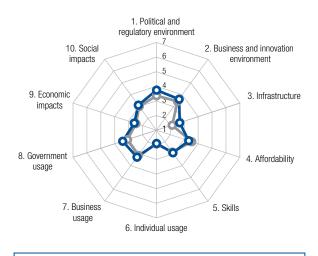
## The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*53 4.0
1.02	Laws relating to ICTs*4848
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*76 3.5
1.05	Efficiency of legal system in challenging regs*90 3.2
1.06	Intellectual property protection*823.7
1.07	Software piracy rate, % software installed5360
1.08	No. procedures to enforce a contract4835
1.09	No. days to enforce a contract80580
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*555.0
2.02	Venture capital availability*
2.03	Total tax rate, % profits84 40.9
2.04	No. days to start a business46
2.05	No. procedures to start a business928
2.06	Intensity of local competition*10
2.07	Tertiary education gross enrollment rate, %17 79.0
2.08	Quality of management schools*1063.7
2.09	Gov't procurement of advanced tech*393.
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita62 3201.6
3.02	Mobile network coverage, % pop9098.0
3.03	Int'l Internet bandwidth, kb/s per user61 42.9
3.04	Secure Internet servers/million pop 59 57.3
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min22 0.10
4.02	Fixed broadband Internet tariffs, PPP \$/month17 19.10
4.03	Internet & telephony competition, 0–2 (best)1 2.00
	5th pillar: Skills
5.01	Quality of education system*923.3
5.02	Quality of math & science education*1033.3
5.03	Secondary education gross enrollment rate, %13 114.6
5.04	Adult literacy rate, %

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop102 94.8
6.02	Individuals using Internet, %6751.0
6.03	Households w/ personal computer, %59 56.0
6.04	Households w/ Internet access, %51 60.2
6.05	Fixed broadband Internet subs/100 pop62 11.7
6.06	Mobile broadband subs/100 pop69 42.7
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*
7.02	Capacity for innovation*833.8
7.03	PCT patents, applications/million pop409.0
7.04	ICT use for business-to-business transactions*47 5.0
7.05	Business-to-consumer Internet use*
7.06	Extent of staff training*1023.6
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*733.9
8.02	Government Online Service Index, 0-1 (best)53 0.56
8.03	Gov't success in ICT promotion*734.0
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*52
9.02	ICT PCT patents, applications/million pop46 1.7
9.03	Impact of ICTs on organizational models*694.1
9.04	Knowledge-intensive jobs, % workforce72 19.7
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*46 4.7
10.02	Internet access in schools*
10.03	ICT use & gov't efficiency*4345
10.04	E-Participation Index, 0–1 (best)

Rank Value

	(out of 139) (1–7)
Networked Readiness Index	1213.1
Networked Readiness Index 2015 (out of 143)	116 3.2
Networked Readiness Index 2014 (out of 148)	115 3.3
Networked Readiness Index 2013 (out of 144)	110 3.3
A. Environment subindex	101 3.7
1st pillar: Political and regulatory environment	723.7
2nd pillar: Business and innovation environment	118 3.6
B. Readiness subindex	124 3.0
3rd pillar: Infrastructure	112 2.7
4th pillar: Affordability	117 3.3
5th pillar: Skills	126 2.9
C. Usage subindex	120 2.9
6th pillar: Individual usage	1291.9
7th pillar: Business usage	
8th pillar: Government usage	973.4
D. Impact subindex	120 2.9
9th pillar: Economic impacts	1202.6
10th pillar: Social impacts	118 3.1



- Uganda -O- Low-income group average

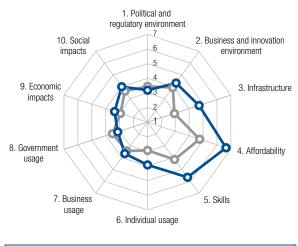
## The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*
1.02	Laws relating to ICTs*1003.4
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*62 3.8
1.05	Efficiency of legal system in challenging regs*59 3.6
1.06	Intellectual property protection*1023.3
1.07	Software piracy rate, % software installedn/an/a
1.08	No. procedures to enforce a contract7638
1.09	No. days to enforce a contract52 490
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*102 4.2
2.02	Venture capital availability*1002.4
2.03	Total tax rate, % profits66 36.5
2.04	No. days to start a business27
2.05	No. procedures to start a business13615
2.06	Intensity of local competition*515.3
2.07	Tertiary education gross enrollment rate, %1304.5
2.08	Quality of management schools*933.9
2.09	Gov't procurement of advanced tech*533.5
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita132 86.0
3.02	Mobile network coverage, % pop 100.0
3.03	Int'l Internet bandwidth, kb/s per user123 4.0
3.04	Secure Internet servers/million pop
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min82 0.29
4.02	Fixed broadband Internet tariffs, PPP \$/month 134 743.47
4.03	Internet & telephony competition, 0–2 (best)1 2.00
	5th pillar: Skills
5.01	Quality of education system*813.5
5.02	Quality of math & science education*1113.2
5.03	Secondary education gross enrollment rate, % 136 27.6
5.04	Adult literacy rate, %

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop134 52.4
6.02	Individuals using Internet, %10817.7
6.03	Households w/ personal computer, %127 5.8
6.04	Households w/ Internet access, %124 6.2
6.05	Fixed broadband Internet subs/100 pop117 0.3
6.06	Mobile broadband subs/100 pop104 14.7
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*110
7.02	Capacity for innovation*8686
7.03	PCT patents, applications/million pop116 0.0
7.04	ICT use for business-to-business transactions*93 4.3
7.05	Business-to-consumer Internet use* 121 3.5
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*
8.02	Government Online Service Index, 0-1 (best)120 0.15
8.03	Gov't success in ICT promotion*
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models* 4.3
9.02	ICT PCT patents, applications/million pop101 0.0
9.03	Impact of ICTs on organizational models*913.7
9.04	Knowledge-intensive jobs, % workforce1054.1
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*115 3.5
10.02	Internet access in schools*1183.2
10.03	ICT use & gov't efficiency*
10.04	E-Participation Index, 0-1 (best)126 0.14

## Ukraine

	Rank (out of 139)	
Networked Readiness Index	64.	. 4.2
Networked Readiness Index 2015 (out of 143)		
Networked Readiness Index 2014 (out of 148)	81.	3.9
Networked Readiness Index 2013 (out of 144)	73.	3.9
A. Environment subindex	94.	3.8
1st pillar: Political and regulatory environment	113.	3.2
2nd pillar: Business and innovation environment	67.	4.3
B. Readiness subindex	30.	5.7
3rd pillar: Infrastructure	51.	4.7
4th pillar: Affordability	6.	6.6
5th pillar: Skills	33.	5.6
C. Usage subindex	88.	3.6
6th pillar: Individual usage	76.	3.9
7th pillar: Business usage	63.	3.6
8th pillar: Government usage	114.	3.1
D. Impact subindex	69.	3.7
9th pillar: Economic impacts	59.	3.4



--- Ukraine -O- Lower-middle-income group average

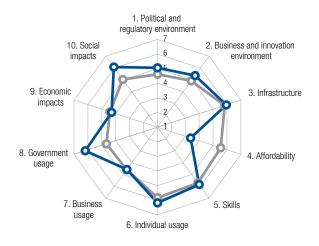
## The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*
1.02	Laws relating to ICTs*743.8
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*121 2.8
1.05	Efficiency of legal system in challenging regs*123 2.6
1.06	Intellectual property protection*1203.1
1.07	Software piracy rate, % software installed9283
1.08	No. procedures to enforce a contract1830
1.09	No. days to enforce a contract20 378
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*96
2.02	Venture capital availability*1022.4
2.03	Total tax rate, % profits118 52.2
2.04	No. days to start a business427
2.05	No. procedures to start a business224
2.06	Intensity of local competition*994.7
2.07	Tertiary education gross enrollment rate, %11 82.3
2.08	Quality of management schools*87
2.09	Gov't procurement of advanced tech*983.0
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita51 4258.2
3.02	Mobile network coverage, % pop37 99.9
3.03	Int'l Internet bandwidth, kb/s per user63 40.7
3.04	Secure Internet servers/million pop 68 45.5
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min48 0.17
4.02	Fixed broadband Internet tariffs, PPP \$/month 2 10.64
4.03	Internet & telephony competition, 0-2 (best)80 1.86
	5th pillar: Skills
5.01	Quality of education system*5454
5.02	Quality of math & science education*384.6
5.03	Secondary education gross enrollment rate, %51 99.2
5.04	Adult literacy rate, %

	INDICATOR RANK/139 V	/ALUE
	6th pillar: Individual usage	
6.01	Mobile phone subscriptions/100 pop31 1	44.1
6.02	Individuals using Internet, %80	43.4
6.03	Households w/ personal computer, %63	52.4
6.04	Households w/ Internet access, %72	43.0
6.05	Fixed broadband Internet subs/100 pop71	. 9.3
6.06	Mobile broadband subs/100 pop121	. 7.5
6.07	Use of virtual social networks*	. 5.5
	7th pillar: Business usage	
7.01	Firm-level technology absorption*100	. 4.2
7.02	Capacity for innovation*52	. 4.2
7.03	PCT patents, applications/million pop50	. 3.7
7.04	ICT use for business-to-business transactions*89	. 4.4
7.05	Business-to-consumer Internet use*36	. 5.1
7.06	Extent of staff training*74	3.9
	8th pillar: Government usage	
8.01	Importance of ICTs to gov't vision*122	
8.02	Government Online Service Index, 0-1 (best)105	
8.03	Gov't success in ICT promotion*94	. 3.7
	9th pillar: Economic impacts	
9.01	Impact of ICTs on business models*113	. 3.8
9.02	ICT PCT patents, applications/million pop51	. 1.1
9.03	Impact of ICTs on organizational models*72	. 4.1
9.04	Knowledge-intensive jobs, % workforce38	33.7
	10th pillar: Social impacts	
10.01	Impact of ICTs on access to basic services*74	
10.02		
10.03		
10.04	E-Participation Index, 0-1 (best)75	0.43

## United Arab Emirates

Rank Value (out of 139) (1-7)Networked Readiness Index......26...5.3 Networked Readiness Index 2014 (out of 148)......24.....5.2 A. Environment subindex......19.....5.2 1st pillar: Political and regulatory environment......25..... 5.1 B. Readiness subindex ......56.....5.0 C. Usage subindex......13.....5.6



United Arab Emirates

- High-income group average

#### The Networked Readiness Index in detail

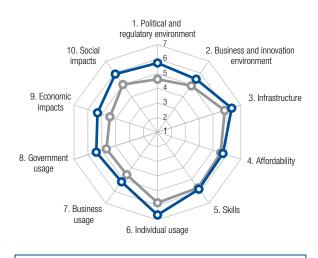
10th pillar: Social impacts......2....6.1

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*11
1.02	Laws relating to ICTs*45.7
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*18 5.2
1.05	Efficiency of legal system in challenging regs*21 4.7
1.06	Intellectual property protection*225.5
1.07	Software piracy rate, % software installed2236
1.08	No. procedures to enforce a contract
1.09	No. days to enforce a contract53 495
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*99
2.02	Venture capital availability*
2.03	Total tax rate, % profits7 15.9
2.04	No. days to start a business488
2.05	No. procedures to start a business546
2.06	Intensity of local competition*8 6.0
2.07	Tertiary education gross enrollment rate, %93 22.0
2.08	Quality of management schools*20
2.09	Gov't procurement of advanced tech*
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita10 . 11750.2
3.02	Mobile network coverage, % pop 100.0
3.03	Int'l Internet bandwidth, kb/s per user35 79.6
3.04	Secure Internet servers/million pop35 294.4
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min41 0.15
4.02	Fixed broadband Internet tariffs, PPP \$/month 120 83.40
4.03	Internet & telephony competition, 0–2 (best)122 1.07
	5th pillar: Skills
5.01	Quality of education system*12
5.02	Quality of math & science education*115.3
5.03	Secondary education gross enrollment rate, %67 92.3
5.04	Adult literacy rate, %

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop4 178.1
6.02	Individuals using Internet, %
6.03	Households w/ personal computer, %13 87.9
6.04	Households w/ Internet access, %11 90.1
6.05	Fixed broadband Internet subs/100 pop64 11.6
6.06	Mobile broadband subs/100 pop9 114.0
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop45 6.6
7.04	ICT use for business-to-business transactions*4 6.0
7.05	Business-to-consumer Internet use*
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*1
8.02	Government Online Service Index, 0-1 (best)12 0.88
8.03	Gov't success in ICT promotion*
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*
9.02	ICT PCT patents, applications/million pop40 2.4
9.03	Impact of ICTs on organizational models*10 5.5
9.04	Knowledge-intensive jobs, % workforce3236.1
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*4 6.1
10.02	Internet access in schools*99
10.03	ICT use & gov't efficiency*
10.04	E-Participation Index, 0–1 (best)

## United Kingdom

(out of 139) (1-7) Networked Readiness Index.....8..5.7 Networked Readiness Index 2014 (out of 148)......9....5.5 A. Environment subindex......3.....5.6 4th pillar: Affordability......53....5.7 C. Usage subindex......11.....5.7 



- United Kingdom - High-income group average

#### The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*55
1.02	Laws relating to ICTs*6
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*6 5.7
1.05	Efficiency of legal system in challenging regs*9 5.3
1.06	Intellectual property protection*7
1.07	Software piracy rate, % software installed9 24
1.08	No. procedures to enforce a contract1429
1.09	No. days to enforce a contract41 437
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*
2.02	Venture capital availability*14
2.03	Total tax rate, % profits
2.04	No. days to start a business
2.05	No. procedures to start a business
2.06	Intensity of local competition*3
2.07	Tertiary education gross enrollment rate, %46 56.9
2.08	Quality of management schools*3 5.9
2.09	Gov't procurement of advanced tech*343.8
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita39 5557.2
3.02	Mobile network coverage, % pop55 99.7
3.03	Int'l Internet bandwidth, kb/s per user7 429.8
3.04	Secure Internet servers/million pop15 1291.2
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min113 0.43
4.02	Fixed broadband Internet tariffs, PPP \$/month 6 14.12
4.03	Internet & telephony competition, 0–2 (best)73 1.88
	5th pillar: Skills
5.01	Quality of education system*214.7
5.02	Quality of math & science education*464.4
5.03	Secondary education gross enrollment rate, %9 124.4
5.04	Adult literacy rate, %n/an/a <sup>1</sup>

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop52 123.6
6.02	Individuals using Internet, %
6.03	Households w/ personal computer, %10 90.8
6.04	Households w/ Internet access, %12 89.9
6.05	Fixed broadband Internet subs/100 pop7 37.4
6.06	Mobile broadband subs/100 pop17 88.8
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*14 5.7
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop18 93.2
7.04	ICT use for business-to-business transactions*2 6.0
7.05	Business-to-consumer Internet use*
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*16
8.02	Government Online Service Index, 0-1 (best)11 0.90
8.03	Gov't success in ICT promotion*
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*2
9.02	ICT PCT patents, applications/million pop1731.1
9.03	Impact of ICTs on organizational models* 5.8
9.04	Knowledge-intensive jobs, % workforce
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*19 5.7
10.02	Internet access in schools*7
10.03	ICT use & gov't efficiency*155.1
10.04	E-Participation Index, 0–1 (best)4 0.96
Note:	Indicators followed by an asterisk (*) are measured on a 1-to-7 (best) scale. For

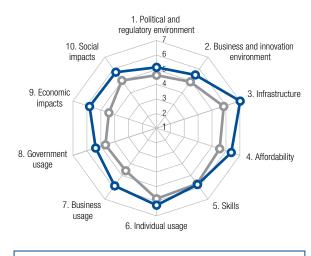
Indicators followed by an asterisk (\*) are measured on a 1-to-7 (best) scale. For further details and explanation, please refer to the section "How to Read the Country/Economy Profiles" on page 53.

See the "Technical Notes and Sources" section.

## **United States**

(out o	f 139)	(1–7)
Networked Readiness Index	5.	.5.8
Networked Readiness Index 2015 (out of 143)	7	5.6
Networked Readiness Index 2014 (out of 148)	7	5.6
Networked Readiness Index 2013 (out of 144)	9	5.6
A. Environment subindex	13	5.3
1st pillar: Political and regulatory environment	21	5.2
2nd pillar: Business and innovation environment	3	5.5
B. Readiness subindex	5	6.4
3rd pillar: Infrastructure	5	7.0
4th pillar: Affordability	17	6.4
5th pillar: Skills	27	5.8
C. Usage subindex	8	5.8
6th pillar: Individual usage	17	6.2
7th pillar: Business usage	4	5.9

10th pillar: Social impacts......7.....5.7



- United States

-O- High-income group average

#### The Networked Readiness Index in detail

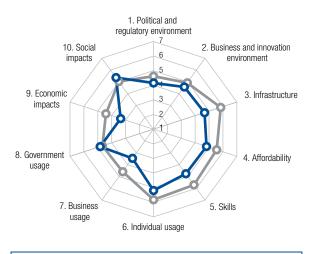
	INDICATOR RANK/139 VALUE	
1st pillar: Political and regulatory environment		
1.01	.01 Effectiveness of law-making bodies*	
1.02	Laws relating to ICTs*	
1.03	Judicial independence*	
1.04	Efficiency of legal system in settling disputes*25 4.9	
1.05	Efficiency of legal system in challenging regs*194.8	
1.06	Intellectual property protection*15	
1.07	Software piracy rate, % software installed1	
1.08	No. procedures to enforce a contract4134	
1.09	No. days to enforce a contract	
	2nd pillar: Business and innovation environment	
2.01	Availability of latest technologies*2	
2.02	Venture capital availability*	
2.03	Total tax rate, % profits	
2.04	No. days to start a business6	
2.05	No. procedures to start a business	
2.06	Intensity of local competition*4 6.0	
2.07	Tertiary education gross enrollment rate, %4 88.8	
2.08	Quality of management schools*9 5.7	
2.09	Gov't procurement of advanced tech*	
	3rd pillar: Infrastructure	
3.01	Electricity production, kWh/capita8 . 13544.8	
3.02	Mobile network coverage, % pop	
3.03	Int'l Internet bandwidth, kb/s per user42 71.0	
3.04	Secure Internet servers/million pop	
	4th pillar: Affordability	
4.01	Prepaid mobile cellular tariffs, PPP \$/min77 0.27	
4.02	Fixed broadband Internet tariffs, PPP \$/month11 16.32	
4.03	Internet & telephony competition, 0–2 (best)1 2.00	
	5th pillar: Skills	
5.01	Quality of education system*184.9	
5.02	Quality of math & science education*444.5	
5.03	Secondary education gross enrollment rate, %62 95.9	
5.04	Adult literacy rate, %n/an/a1	

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop79 110.2
6.02	Individuals using Internet, %
6.03	Households w/ personal computer, %2881.5
6.04	Households w/ Internet access, %2979.6
6.05	Fixed broadband Internet subs/100 pop18 31.1
6.06	Mobile broadband subs/100 pop14 102.7
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption*
7.02	Capacity for innovation*2
7.03	PCT patents, applications/million pop10 173.1
7.04	ICT use for business-to-business transactions*17 5.7
7.05	Business-to-consumer Internet use*
7.06	Extent of staff training*145.1
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*294.7
8.02	Government Online Service Index, 0-1 (best)4 0.94
8.03	Gov't success in ICT promotion*254.8
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*14
9.02	ICT PCT patents, applications/million pop7 69.8
9.03	Impact of ICTs on organizational models* 5.8
9.04	Knowledge-intensive jobs, % workforce26 38.0
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*155.7
10.02	Internet access in schools*
10.03	ICT use & gov't efficiency*
10.04	E-Participation Index, 0–1 (best)9 0.92

Note: Indicators followed by an asterisk (\*) are measured on a 1-to-7 (best) scale. For further details and explanation, please refer to the section "How to Read the Country/Economy Profiles" on page 53.

1 See the "Technical Notes and Sources" section.

	Rank (out of 139)	Value (1–7)
Networked Readiness Index	43.	.4.5
Networked Readiness Index 2015 (out of 143)	46.	4.5
Networked Readiness Index 2014 (out of 148)		
Networked Readiness Index 2013 (out of 144)	52.	4.2
A. Environment subindex	44.	4.4
1st pillar: Political and regulatory environment	44.	4.2
2nd pillar: Business and innovation environment	51.	4.6
B. Readiness subindex	76.	4.7
3rd pillar: Infrastructure	53.	4.7
4th pillar: Affordability	87.	4.8
5th pillar: Skills	83.	4.8
C. Usage subindex	38.	4.5
6th pillar: Individual usage	44.	5.2
7th pillar: Business usage	90.	3.4
8th pillar: Government usage	27.	4.8
D. Impact subindex	36.	4.4
9th pillar: Economic impacts	62.	3.4
10th pillar: Social impacts	22.	5.4



- Uruguay - High-income group average

## The Networked Readiness Index in detail

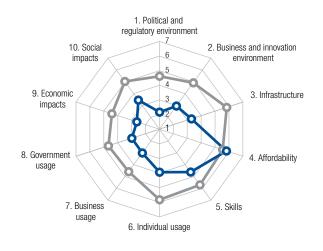
1.02       Laws relating to ICTs*       .64       .4.0         1.03       Judicial independence*       .20       .5.7         1.04       Efficiency of legal system in settling disputes*       .51       .4.0         1.05       Efficiency of legal system in challenging regs*       .35       .4.2         1.06       Intellectual property protection*       .38       .4.5         1.07       Software piracy rate, % software installed       .65       .68         1.08       No. procedures to enforce a contract       .94       .40         1.09       No. days to enforce a contract       .94       .40         1.09       No. days to enforce a contract       .94       .40         1.09       No. days to enforce a contract       .94       .40         2.01       Availability of latest technologies*       .69       .4.8         2.02       Venture capital availability*       .73       .2.7         2.03       Total tax rate, % profits       .88       .41       .7         2.04       No. days to start a business       .41       .7         2.05       No. procedures to start a business       .41       .7         2.06       Intensity of local competition*       .92       .4.7		INDICATOR RANK/139 VALUE
1.02       Laws relating to ICTs*       .64       .4.0         1.03       Judicial independence*       .20       .5.7         1.04       Efficiency of legal system in settling disputes*       .51       .4.0         1.05       Efficiency of legal system in challenging regs*       .35       .4.2         1.06       Intellectual property protection*       .38       .4.5         1.07       Software piracy rate, % software installed       .65       .68         1.08       No. procedures to enforce a contract       .94       .40         1.09       No. days to enforce a contract       .94       .40         1.09       No. days to enforce a contract       .94       .40         1.09       No. days to enforce a contract       .94       .40         1.09       No. days to enforce a contract       .94       .40         2.01       Availability of latest technologies*       .69       .4.8         2.02       Venture capital availability*       .73       .2.7         2.03       Total tax rate, % profits       .88       .41         2.04       No. days to start a business       .41       .7         2.05       No. procedures to start a business       .41       .7		1st pillar: Political and regulatory environment
1.03       Judicial independence*       20       5.7         1.04       Efficiency of legal system in settling disputes*       .51       .40         1.05       Efficiency of legal system in challenging regs*       .35       .4.2         1.06       Intellectual property protection*       .38       .4.5         1.07       Software piracy rate, % software installed       .65       .68         1.08       No. procedures to enforce a contract       .94       .40         1.09       No. days to enforce a contract       .94       .40         1.09       No. days to enforce a contract       .94       .40         1.09       No. days to enforce a contract       .94       .40         1.09       No. days to enforce a contract       .94       .40         1.00       Availability of latest technologies*       .69       .4.8         2.01       Availability of latest technologies*       .69       .4.8         2.02       Venture capital availability*       .73       .2.7         2.03       Total tax rate, % profits       .88       .41.8         2.04       No. days to start a business       .41       .7         2.05       No. procedures to start a business       .41       .5 <t< td=""><td>1.01</td><td>Effectiveness of law-making bodies*</td></t<>	1.01	Effectiveness of law-making bodies*
1.04       Efficiency of legal system in settling disputes*51	1.02	Laws relating to ICTs*644.0
1.05 Efficiency of legal system in challenging regs*35	1.03	Judicial independence*
1.06       Intellectual property protection*       .38       4.5         1.07       Software piracy rate, % software installed       .65       .68         1.08       No. procedures to enforce a contract       .94       .40         1.09       No. days to enforce a contract       .108       .725         2nd pillar: Business and innovation environment         2.01       Availability of latest technologies*       .69       4.8         2.02       Venture capital availability*       .73       2.7         2.03       Total tax rate, % profits       .88       41.8         2.04       No. days to start a business       .41       .7         2.05       No. procedures to start a business       .41       .7         2.06       Intensity of local competition*       .92       .4.7         2.07       Tertiary education gross enrollment rate, %       .37       .63.1         2.08       Quality of management schools*       .52       .4.4         2.09       Gov't procurement of advanced tech*       .81       .3.2         3rd pillar: Infrastructure         3.01       Electricity production, kWh/capita       .59       .3422.0         3.03       Int'l Internet bandwidth, kb/s per user	1.04	Efficiency of legal system in settling disputes*51 4.0
1.07       Software piracy rate, % software installed	1.05	Efficiency of legal system in challenging regs*354.2
1.08       No. procedures to enforce a contract       .94       .40         1.09       No. days to enforce a contract       .108       .725         2nd pillar: Business and innovation environment         2.01       Availability of latest technologies*       .69       .4.8         2.02       Venture capital availability*       .73       2.7         2.03       Total tax rate, % profits       .88       .41.8         2.04       No. days to start a business       .41       .7         2.05       No. procedures to start a business       .41       .5         2.06       Intensity of local competition*       .92       .4.7         2.07       Tertiary education gross enrollment rate, %       .37       .63.1         2.08       Quality of management schools*       .52       .4.4         2.09       Gov't procurement of advanced tech*       .81       .3.2         3rd pillar: Infrastructure         3.01       Electricity production, kWh/capita       .59       .3422.0         3.02       Mobile network coverage, % pop       .1       .100.0         3.04       Secure Internet servers/million pop       .53       .95.3         4th pillar: Affordability         4.	1.06	Intellectual property protection*384.5
1.09       No. days to enforce a contract       108       725         2nd pillar: Business and innovation environment         2.01       Availability of latest technologies*       69       4.8         2.02       Venture capital availability*       73       2.7         2.03       Total tax rate, % profits       88       41.8         2.04       No. days to start a business       41       7         2.05       No. procedures to start a business       41       5         2.06       Intensity of local competition*       92       4.7         2.07       Tertiary education gross enrollment rate, %       37       63.1         2.08       Quality of management schools*       52       4.4         2.09       Gov't procurement of advanced tech*       81       3.2         3rd pillar: Infrastructure         3.01       Electricity production, kWh/capita       59       3422.0         3.02       Mobile network coverage, % pop       1       100.0         3.03       Int'l Internet bandwidth, kb/s per user       45       60.7         3.04       Secure Internet servers/million pop       53       95.3         4th pillar: Affordability         4.01       Prep	1.07	Software piracy rate, % software installed6568
2nd pillar: Business and innovation environment           2.01         Availability of latest technologies*	1.08	No. procedures to enforce a contract9440
2.01       Availability of latest technologies*       69       4.8         2.02       Venture capital availability*       73       2.7         2.03       Total tax rate, % profits       88       41.8         2.04       No. days to start a business       41       7         2.05       No. procedures to start a business       41       5         2.06       Intensity of local competition*       92       4.7         2.07       Tertiary education gross enrollment rate, %       37       63.1         2.08       Quality of management schools*       52       4.4         2.09       Gov't procurement of advanced tech*       81       3.2         3rd pillar: Infrastructure         3.01       Electricity production, kWh/capita       59       3422.0         3.02       Mobile network coverage, % pop.       1       100.0         3.03       Int'l Internet bandwidth, kb/s per user       45       60.7         3.04       Secure Internet servers/million pop       53       95.3         4th pillar: Affordability         4.01       Prepaid mobile cellular tariffs, PPP \$/min       107       0.39         4.02       Fixed broadband Internet tariffs, PPP \$/min       107       0.39 <td>1.09</td> <td>No. days to enforce a contract108725</td>	1.09	No. days to enforce a contract108725
2.02       Venture capital availability*       .73       2.7         2.03       Total tax rate, % profits       .88       .41.8         2.04       No. days to start a business       .41       .7         2.05       No. procedures to start a business       .41       .5         2.06       Intensity of local competition*       .92       .4.7         2.07       Tertiary education gross enrollment rate, %       .37       .63.1         2.08       Quality of management schools*       .52       .4.4         2.09       Gov't procurement of advanced tech*       .81       .3.2         3rd pillar: Infrastructure         3.01       Electricity production, kWh/capita       .59       .3422.0         3.02       Mobile network coverage, % pop.       .1       .100.0         3.03       Int'l Internet bandwidth, kb/s per user       .45       .60.7         3.04       Secure Internet servers/million pop       .53       .95.3         4th pillar: Affordability         4.01       Prepaid mobile cellular tariffs, PPP \$/min       .107       0.39         4.02       Fixed broadband Internet tariffs, PPP \$/min       .107       0.39         4.03       Internet & telephony competition, 0-2 (best)		2nd pillar: Business and innovation environment
2.03       Total tax rate, % profits       88       41.8         2.04       No. days to start a business       41       7         2.05       No. procedures to start a business       41       5         2.06       Intensity of local competition*       92       4.7         2.07       Tertiary education gross enrollment rate, %       37       63.1         2.08       Quality of management schools*       52       4.4         2.09       Gov't procurement of advanced tech*       81       3.2         3rd pillar: Infrastructure         3.01       Electricity production, kWh/capita       59       3422.0         3.02       Mobile network coverage, % pop       1       100.0         3.03       Int'l Internet bandwidth, kb/s per user       45       60.7         3.04       Secure Internet servers/million pop       53       95.3         4th pillar: Affordability         4.01       Prepaid mobile cellular tariffs, PPP \$/min       107       0.39         4.02       Fixed broadband Internet tariffs, PPP \$/month       40       26.19         4.03       Internet & telephony competition, 0-2 (best)       124       1.00         5th pillar: Skills         5.01	2.01	Availability of latest technologies*69
2.04       No. days to start a business       41       .7         2.05       No. procedures to start a business       41       .5         2.06       Intensity of local competition*       .92       .4.7         2.07       Tertiary education gross enrollment rate, %       .37       .63.1         2.08       Quality of management schools*       .52       .4.4         2.09       Gov't procurement of advanced tech*       .81       .3.2         3rd pillar: Infrastructure         3.01       Electricity production, kWh/capita       .59       .3422.0         3.02       Mobile network coverage, % pop.       .1       .100.0         3.03       Int'I Internet bandwidth, kb/s per user       .45       .60.7         3.04       Secure Internet servers/million pop       .53       .95.3         4th pillar: Affordability         4.01       Prepaid mobile cellular tariffs, PPP \$/min       .107       0.39         4.02       Fixed broadband Internet tariffs, PPP \$/month       .40       .26.19         4.03       Internet & telephony competition, 0-2 (best)       .124       .1.00         5th pillar: Skills         5.01       Quality of education system*       .13       .3.0	2.02	Venture capital availability*
2.05       No. procedures to start a business       41       5         2.06       Intensity of local competition*       92       4.7         2.07       Tertiary education gross enrollment rate, %       37       63.1         2.08       Quality of management schools*       52       4.4         2.09       Gov't procurement of advanced tech*       81       3.2         3rd pillar: Infrastructure         3.01       Electricity production, kWh/capita       59       3422.0         3.02       Mobile network coverage, % pop       1       100.0         3.03       Int'l Internet bandwidth, kb/s per user       45       60.7         3.04       Secure Internet servers/million pop       53       95.3         4th pillar: Affordability         4.01       Prepaid mobile cellular tariffs, PPP \$/min       107       0.39         4.02       Fixed broadband Internet tariffs, PPP \$/month       40       26.19         4.03       Internet & telephony competition, 0-2 (best)       124       1.00         5th pillar: Skills         5.01       Quality of education system*       113       3.0         5.02       Quality of math & science education*       122       2.9 <t< td=""><td>2.03</td><td>Total tax rate, % profits8841.8</td></t<>	2.03	Total tax rate, % profits8841.8
2.06       Intensity of local competition*	2.04	No. days to start a business
2.07       Tertiary education gross enrollment rate, %	2.05	No. procedures to start a business415
2.08       Quality of management schools*	2.06	Intensity of local competition*924.7
2.09       Gov't procurement of advanced tech*       .81       .3.2         3rd pillar: Infrastructure         3.01       Electricity production, kWh/capita       .59       .3422.0         3.02       Mobile network coverage, % pop.       .1       .100.0         3.03       Int'l Internet bandwidth, kb/s per user       .45       .60.7         3.04       Secure Internet servers/million pop.       .53       .95.3         4th pillar: Affordability         4.01       Prepaid mobile cellular tariffs, PPP \$/min.       .107       .0.39         4.02       Fixed broadband Internet tariffs, PPP \$/month40       .26.19         4.03       Internet & telephony competition, 0-2 (best)       .124       .1.00         5th pillar: Skills         5.01       Quality of education system*       .113       .3.0         5.02       Quality of math & science education*       .122       .2.9         5.03       Secondary education gross enrollment rate, %73       .90.3	2.07	
3rd pillar: Infrastructure  3.01 Electricity production, kWh/capita	2.08	Quality of management schools*
3.01 Electricity production, kWh/capita	2.09	Gov't procurement of advanced tech*
3.02       Mobile network coverage, % pop.       1       100.00         3.03       Int'l Internet bandwidth, kb/s per user.       45       60.7         3.04       Secure Internet servers/million pop.       53       95.3         4th pillar: Affordability         4.01       Prepaid mobile cellular tariffs, PPP \$/min.       107       0.39         4.02       Fixed broadband Internet tariffs, PPP \$/month40       26.19         4.03       Internet & telephony competition, 0-2 (best)124       1.00         5th pillar: Skills         5.01       Quality of education system*       113       3.0         5.02       Quality of math & science education*       122       2.9         5.03       Secondary education gross enrollment rate, %73       90.3		•
3.03       Int'l Internet bandwidth, kb/s per user	3.01	
3.04       Secure Internet servers/million pop.	3.02	<b>3</b>
4th pillar: Affordability  4.01 Prepaid mobile cellular tariffs, PPP \$/min1070.39  4.02 Fixed broadband Internet tariffs, PPP \$/month4026.19  4.03 Internet & telephony competition, 0–2 (best)1241.00  5th pillar: Skills  5.01 Quality of education system*		
4.01       Prepaid mobile cellular tariffs, PPP \$/min	3.04	Secure Internet servers/million pop
4.02       Fixed broadband Internet tariffs, PPP \$/month40		4th pillar: Affordability
4.03       Internet & telephony competition, 0–2 (best)124 1.00         5th pillar: Skills         5.01       Quality of education system*	4.01	Prepaid mobile cellular tariffs, PPP \$/min107 0.39
5th pillar: Skills 5.01 Quality of education system*	4.02	Fixed broadband Internet tariffs, PPP \$/month40 26.19
5.01 Quality of education system*	4.03	Internet & telephony competition, 0–2 (best) 124 1.00
5.02 Quality of math & science education*		•
5.03 Secondary education gross enrollment rate, %73 90.3	5.01	
	5.02	Quality of math & science education*1222.9
5.04 Adult literacy rate, %	5.03	Secondary education gross enrollment rate, %73 90.3
	5.04	Adult literacy rate, %

	INDICATOR F	RANK/139	VALUE
	6th pillar: Individual usage		
6.01	Mobile phone subscriptions/100 pop	11	160.8
6.02	Individuals using Internet, %	53	61.5
6.03	Households w/ personal computer, %	48	67.4
6.04	Households w/ Internet access, %	54	57.4
6.05	Fixed broadband Internet subs/100 pop	35	24.6
6.06	Mobile broadband subs/100 pop	43	59.8
6.07	Use of virtual social networks*	64	5.7
	7th pillar: Business usage		
7.01	Firm-level technology absorption*	93	4.3
7.02	Capacity for innovation*	97	3.6
7.03	PCT patents, applications/million pop	54	2.9
7.04	ICT use for business-to-business transaction	ons*87	4.5
7.05	Business-to-consumer Internet use*	74	4.3
7.06	Extent of staff training*	85	3.8
	8th pillar: Government usage		
8.01	Importance of ICTs to gov't vision*	59	4.1
8.02	Government Online Service Index, 0-1 (bes	st)14	0.85
8.03	Gov't success in ICT promotion*	48	4.3
	9th pillar: Economic impacts		
9.01	Impact of ICTs on business models*	39	4.9
9.02	ICT PCT patents, applications/million pop.	56	0.6
9.03	Impact of ICTs on organizational models*	58	4.3
9.04	Knowledge-intensive jobs, % workforce	67	20.9
	10th pillar: Social impacts		
10.01	Impact of ICTs on access to basic services	s*44	4.8
10.02	Internet access in schools*	22	5.7
10.03	ICT use & gov't efficiency*		
10.04	E-Participation Index, 0-1 (best)	3	0.98

## Venezuela

Rank Value

	(out of 139)	(1-7)
Networked Readiness Index	108.	.3.4
Networked Readiness Index 2015 (out of 143)	103.	3.4
Networked Readiness Index 2014 (out of 148)	106.	3.4
Networked Readiness Index 2013 (out of 144)	108.	3.3
A. Environment subindex	139.	2.6
1st pillar: Political and regulatory environment	139.	2.2
2nd pillar: Business and innovation environment	136.	3.0
B. Readiness subindex	85.	4.6
3rd pillar: Infrastructure	89.	3.3
4th pillar: Affordability	50.	5.8
5th pillar: Skills	88.	4.6
C. Usage subindex	98.	3.3
6th pillar: Individual usage	74.	3.9
7th pillar: Business usage	131 .	3.0
8th pillar: Government usage	118.	3.0
D. Impact subindex	112.	3.0
9th pillar: Economic impacts	118.	2.6
10th pillar: Social impacts	102.	3.5



- Venezuela - High-income group average

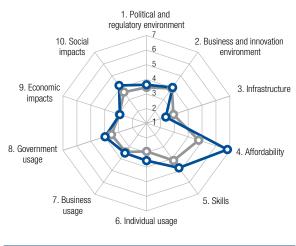
## The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*1391.4
1.02	Laws relating to ICTs*
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*139 1.5
1.05	Efficiency of legal system in challenging regs*139 1.3
1.06	Intellectual property protection*1391.7
1.07	Software piracy rate, % software installed10188
1.08	No. procedures to enforce a contract
1.09	No. days to enforce a contract91610
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*1343.3
2.02	Venture capital availability*
2.03	Total tax rate, % profits
2.04	No. days to start a business139144
2.05	No. procedures to start a business13917
2.06	Intensity of local competition*1392.7
2.07	Tertiary education gross enrollment rate, %20 77.0
2.08	Quality of management schools*674.3
2.09	Gov't procurement of advanced tech*1391.6
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita53 4067.9
3.02	Mobile network coverage, % pop116 90.0
3.03	Int'l Internet bandwidth, kb/s per user94 14.4
3.04	Secure Internet servers/million pop90 12.2
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min103 0.36
4.02	Fixed broadband Internet tariffs, PPP \$/month27 21.71
4.03	Internet & telephony competition, 0-2 (best)n/a n/a
	5th pillar: Skills
5.01	Quality of education system*1282.5
5.02	Quality of math & science education*1163.1
5.03	Secondary education gross enrollment rate, $\%6991.6$
5.04	Adult literacy rate, %4795.4

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop9799.0
6.02	Individuals using Internet, %5957.0
6.03	Households w/ personal computer, %76 43.7
6.04	Households w/ Internet access, %7934.2
6.05	Fixed broadband Internet subs/100 pop767.8
6.06	Mobile broadband subs/100 pop67 44.0
6.07	Use of virtual social networks*615.7
	7th pillar: Business usage
7.01	Firm-level technology absorption*122 3.9
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop86 0.3
7.04	ICT use for business-to-business transactions*129 3.7
7.05	Business-to-consumer Internet use*1053.9
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*1382.4
8.02	Government Online Service Index, 0-1 (best)55 0.55
8.03	Gov't success in ICT promotion*1392.3
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*1353.2
9.02	ICT PCT patents, applications/million pop89 0.0
9.03	Impact of ICTs on organizational models*120 3.4
9.04	Knowledge-intensive jobs, % workforce75 19.2
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*1213.3
10.02	Internet access in schools*1113.5
10.03	ICT use & gov't efficiency*1362.6
10.04	E-Participation Index, 0–1 (best)51 0.57

# Vietnam

	Rank	Value
	(out of 139)	(1-7)
Networked Readiness Index	79.	.3.9
Networked Readiness Index 2015 (out of 143)	85	3.9
Networked Readiness Index 2014 (out of 148)	84	3.8
Networked Readiness Index 2013 (out of 144)	84	3.7
A. Environment subindex	86	3.8
1st pillar: Political and regulatory environment	82.	3.6
2nd pillar: Business and innovation environment	91	4.0
B. Readiness subindex	82	4.6
B. Readiness subindex		
	121.	2.4
3rd pillar: Infrastructure		2.4 6.8
3rd pillar: Infrastructure	121382	2.4 6.8 4.8
3rd pillar: Infrastructure	12138281	2.4 6.8 4.8 <b>3.7</b>
3rd pillar: Infrastructure	1213828185	2.4 6.8 4.8 <b>3.7</b> 3.6
3rd pillar: Infrastructure	121	2.4 6.8 4.8 3.7 3.6 3.5
3rd pillar: Infrastructure		2.4 6.8 4.8 3.7 3.6 3.5



- Vietnam -O- Lower-middle-income group average

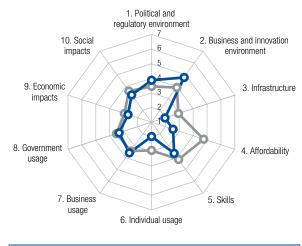
## The Networked Readiness Index in detail

	INDICATOR	RANK/139	VALUE
	1st pillar: Political and regulatory en	vironment	
1.01	Effectiveness of law-making bodies*	65	3.8
1.02	Laws relating to ICTs*	72	3.9
1.03	Judicial independence*	86	3.5
1.04	Efficiency of legal system in settling dispu	tes*69	3.7
1.05	Efficiency of legal system in challenging re	egs*79	3.4
1.06	Intellectual property protection*	88	3.6
1.07	Software piracy rate, % software installed	87	81
1.08	No. procedures to enforce a contract	58	36
1.09	No. days to enforce a contract	27	400
	2nd pillar: Business and innovation	environme	nt
2.01	Availability of latest technologies*	112	4.0
2.02	Venture capital availability*	46	3.0
2.03	Total tax rate, % profits	75	39.4
2.04	No. days to start a business	102	20
2.05	No. procedures to start a business	114	10
2.06	Intensity of local competition*	71	5.0
2.07	Tertiary education gross enrollment rate, 9	%78	30.5
2.08	Quality of management schools*	113	3.5
2.09	Gov't procurement of advanced tech*	28	3.9
	3rd pillar: Infrastructure		
3.01	Electricity production, kWh/capita	92	1416.0
3.02	Mobile network coverage, % pop	131	70.0
3.03	Int'l Internet bandwidth, kb/s per user	89	20.7
3.04	Secure Internet servers/million pop	91	11.9
	4th pillar: Affordability		
4.01	Prepaid mobile cellular tariffs, PPP \$/min.	42	0.15
4.02	Fixed broadband Internet tariffs, PPP \$/m	nonth1	2.59
4.03	Internet & telephony competition, 0-2 (be	st)1	2.00
	5th pillar: Skills		
5.01	Quality of education system*	78	3.5
5.02	Quality of math & science education*		
5.03	Secondary education gross enrollment ra	te, %97	75.2
5.04	Adult literacy rate, %	55	94.5

	INDICATOR	RANK/139	VALUE
	6th pillar: Individual usage		
6.01	Mobile phone subscriptions/100 pop	26	147.1
6.02	Individuals using Internet, %	73	48.3
6.03	Households w/ personal computer, %	98	20.5
6.04	Households w/ Internet access, %	98	18.6
6.05	Fixed broadband Internet subs/100 pop	79	6.5
6.06	Mobile broadband subs/100 pop	82	31.0
6.07	Use of virtual social networks*	86	5.4
	7th pillar: Business usage		
7.01	Firm-level technology absorption*	121	3.9
7.02	Capacity for innovation*		
7.03	PCT patents, applications/million pop	92	0.2
7.04	ICT use for business-to-business transaction	ons*55	4.9
7.05	Business-to-consumer Internet use*	47	4.8
7.06	Extent of staff training*	73	3.9
	8th pillar: Government usage		
8.01	Importance of ICTs to gov't vision*	48	4.3
8.02	Government Online Service Index, 0-1 (be		
8.03	Gov't success in ICT promotion*	57	4.1
	9th pillar: Economic impacts		
9.01	Impact of ICTs on business models*	68	4.5
9.02	ICT PCT patents, applications/million pop.	87	0.1
9.03	Impact of ICTs on organizational models* .	66	4.2
9.04	Knowledge-intensive jobs, % workforce	95	10.3
	10th pillar: Social impacts		
10.01	Impact of ICTs on access to basic services		
10.02	Internet access in schools*		
10.03	ICT use & gov't efficiency*		
10.04	E-Participation Index, 0-1 (best)	64	0.49

Rank Value

	(out of 139)	(1-7)
Networked Readiness Index	116.	.3.2
Networked Readiness Index 2015 (out of 143)	114.	3.2
Networked Readiness Index 2014 (out of 148)	110.	3.3
Networked Readiness Index 2013 (out of 144)	115.	3.2
A. Environment subindex	46.	4.3
1st pillar: Political and regulatory environment	61 .	3.9
2nd pillar: Business and innovation environment	39.	4.8
B. Readiness subindex	127.	2.7
3rd pillar: Infrastructure	129.	2.0
4th pillar: Affordability	129.	2.5
5th pillar: Skills	114.	3.6
C. Usage subindex	113.	3.0
6th pillar: Individual usage	126.	2.0
7th pillar: Business usage	71.	3.6
8th pillar: Government usage	104.	3.3
D. Impact subindex	113.	3.0
9th pillar: Economic impacts	115.	2.7
10th pillar: Social impacts	111.	3.3



-C- Zambia -O- Lower-middle-income group average

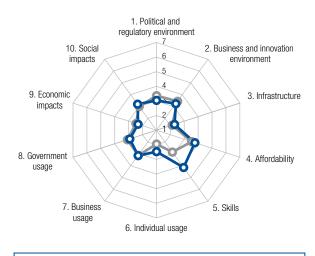
## The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*364.3
1.02	Laws relating to ICTs*
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*37 4.3
1.05	Efficiency of legal system in challenging regs*48 3.8
1.06	Intellectual property protection*4643
1.07	Software piracy rate, % software installed8781
1.08	No. procedures to enforce a contract4835
1.09	No. days to enforce a contract92 611
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*76
2.02	Venture capital availability*115
2.03	Total tax rate, % profits
2.04	No. days to start a business468
2.05	No. procedures to start a business546
2.06	Intensity of local competition*26
2.07	Tertiary education gross enrollment rate, %n/an/a
2.08	Quality of management schools*
2.09	Gov't procurement of advanced tech*253.9
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita99 873.5
3.02	Mobile network coverage, % pop128 78.0
3.03	Int'l Internet bandwidth, kb/s per user122 4.2
3.04	Secure Internet servers/million pop
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min118 0.46
4.02	Fixed broadband Internet tariffs, PPP \$/month 131 147.42
4.03	Internet & telephony competition, 0–2 (best)96 1.64
	5th pillar: Skills
5.01	Quality of education system*354.3
5.02	Quality of math & science education*813.9
5.03	Secondary education gross enrollment rate, %.n/an/a
5.04	Adult literacy rate, %

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop128 67.3
6.02	Individuals using Internet, %112 17.3
6.03	Households w/ personal computer, %126 6.6
6.04	Households w/ Internet access, %1176.9
6.05	Fixed broadband Internet subs/100 pop125 0.1
6.06	Mobile broadband subs/100 pop1331.0
6.07	Use of virtual social networks*104 5.0
	7th pillar: Business usage
7.01	Firm-level technology absorption*
7.02	Capacity for innovation*
7.03	PCT patents, applications/million pop114 0.0
7.04	ICT use for business-to-business transactions*71 4.7
7.05	Business-to-consumer Internet use*1043.9
7.06	Extent of staff training*
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*57
8.02	Government Online Service Index, 0-1 (best)122 0.14
8.03	Gov't success in ICT promotion*
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*864.2
9.02	ICT PCT patents, applications/million pop103 0.0
9.03	Impact of ICTs on organizational models*793.9
9.04	Knowledge-intensive jobs, % workforce997.3
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services*1063.6
10.02	Internet access in schools*94
10.03	ICT use & gov't efficiency*883.8
10.04	E-Participation Index, 0-1 (best)119 0.18

## Zimbabwe

	Rank (out of 139)	Value (1–7)
Networked Readiness Index	122.	.3.0
Networked Readiness Index 2015 (out of 143)	121.	3.1
Networked Readiness Index 2014 (out of 148)	117.	3.2
Networked Readiness Index 2013 (out of 144)	116.	3.2
A. Environment subindex	128.	3.1
1st pillar: Political and regulatory environment	121 .	3.0
2nd pillar: Business and innovation environment	132.	3.2
B. Readiness subindex	114.	3.4
3rd pillar: Infrastructure	123.	2.3
4th pillar: Affordability	112.	3.8
5th pillar: Skills	100.	4.1
C. Usage subindex	121 .	2.8
6th pillar: Individual usage	114.	2.5
7th pillar: Business usage	117.	3.1
8th pillar: Government usage	120.	2.9
D. Impact subindex	124.	2.8
9th pillar: Economic impacts	133.	2.3
10th pillar: Social impacts	116.	3.2



-C- Zimbabwe - Low-income group average

## The Networked Readiness Index in detail

	INDICATOR RANK/139 VALUE
	1st pillar: Political and regulatory environment
1.01	Effectiveness of law-making bodies*91
1.02	Laws relating to ICTs*
1.03	Judicial independence*
1.04	Efficiency of legal system in settling disputes*92 3.3
1.05	Efficiency of legal system in challenging regs*121 2.7
1.06	Intellectual property protection*9696
1.07	Software piracy rate, % software installed10491
1.08	No. procedures to enforce a contract7638
1.09	No. days to enforce a contract29 410
	2nd pillar: Business and innovation environment
2.01	Availability of latest technologies*1044.1
2.02	Venture capital availability*
2.03	Total tax rate, % profits51 32.8
2.04	No. days to start a business90
2.05	No. procedures to start a business1059
2.06	Intensity of local competition*884.8
2.07	Tertiary education gross enrollment rate, %127 5.9
2.08	Quality of management schools*834.0
2.09	Gov't procurement of advanced tech*1382.2
	3rd pillar: Infrastructure
3.01	Electricity production, kWh/capita105 636.5
3.02	Mobile network coverage, % pop120 88.0
3.03	Int'l Internet bandwidth, kb/s per user1253.9
3.04	Secure Internet servers/million pop 108 4.5
	4th pillar: Affordability
4.01	Prepaid mobile cellular tariffs, PPP \$/min114 0.43
4.02	Fixed broadband Internet tariffs, PPP \$/month 107 57.65
4.03	Internet & telephony competition, 0-2 (best)85 1.79
	5th pillar: Skills
5.01	Quality of education system*4242
5.02	Quality of math & science education*54
5.03	Secondary education gross enrollment rate, % 120 46.7
5.04	Adult literacy rate, %

	INDICATOR RANK/139 VALUE
	6th pillar: Individual usage
6.01	Mobile phone subscriptions/100 pop115 80.8
6.02	Individuals using Internet, %10219.9
6.03	Households w/ personal computer, %1217.6
6.04	Households w/ Internet access, %1265.8
6.05	Fixed broadband Internet subs/100 pop108 1.0
6.06	Mobile broadband subs/100 pop74 39.2
6.07	Use of virtual social networks*
	7th pillar: Business usage
7.01	Firm-level technology absorption* 111 4.1
7.02	Capacity for innovation*1293.2
7.03	PCT patents, applications/million pop102 0.1
7.04	ICT use for business-to-business transactions*109 4.1
7.05	Business-to-consumer Internet use*
7.06	Extent of staff training*873.8
	8th pillar: Government usage
8.01	Importance of ICTs to gov't vision*1332.8
8.02	Government Online Service Index, 0-1 (best)98 0.31
8.03	Gov't success in ICT promotion*1273.1
	9th pillar: Economic impacts
9.01	Impact of ICTs on business models*1203.7
9.02	ICT PCT patents, applications/million pop96 0.0
9.03	Impact of ICTs on organizational models* 129 3.0
9.04	Knowledge-intensive jobs, % workforce1026.6
	10th pillar: Social impacts
10.01	Impact of ICTs on access to basic services* 118 3.4
10.02	Internet access in schools* 117 3.2
10.03	ICT use & gov't efficiency*
10.04	E-Participation Index, 0-1 (best)73 0.45

# 2.2Data Tables

## How to Read the Data Tables

The following pages provide detailed data for all the 53 indicators used to compute the Networked Readiness Index (NRI). The data tables are organized into 10 sections, which correspond to the 10 pillars of the NRI.

#### **Environment subindex**

1st pillar: Political and regulatory environment 2nd pillar: Business and innovation environment

#### Readiness subindex

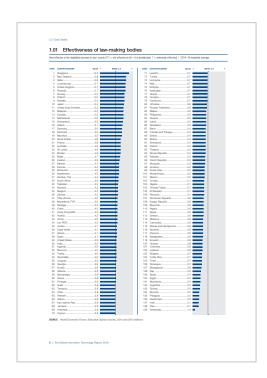
3rd pillar: Infrastructure 4th pillar: Affordability 5th pillar: Skills

#### Usage subindex

6th pillar: Individual usage 7th pillar: Business usage 8th pillar: Government usage

#### Impact subindex

9th pillar: Economic impacts 10th pillar: Social impacts



#### **EXECUTIVE OPINION SURVEY INDICATORS**

In the tables, indicators derived from the World Economic Forum's Executive Opinion Survey (the Survey) have scores represented by blue-colored bar graphs. Survey questions ask for responses on a scale of 1 to 7, where 1 is the worst possible outcome and 7 is the best. In the tables, the Survey question and the two extreme answers are shown above the rankings. Scores are reported with a precision of one decimal point, although exact figures are used to determine rankings. The sample mean is represented by a dotted line running across the bar graphs. For more information on the Executive Opinion Survey and a detailed explanation of how scores are computed, refer to Chapter 1.3 of The Global Competitiveness Report 2015-2016, available for free on the World Economic Forum website at www. weforum.org/gcr.

#### OTHER INDICATORS

Indicators not derived from the Executive Opinion Survey are presented in black bar graphs. For each indicator, a short description appears at the top of the page. The base period (i.e., the period to which the majority of the data corresponds) follows the description. When the period differs from the base period for a particular economy, this is indicated in a footnote. A detailed description for each indicator can be found in the Technical Notes and Sources section at the end of the Report. When data are not available or are too outdated, "n/a" is used in lieu of the rank and the value.

Because of the nature of data, ties between two or more economies are possible. In such cases, shared rankings are indicated accordingly. For example, it takes the same number of procedures—15—in Bolivia and Uganda to start a business. As a result, in Table 2.05, both countries are ranked 136th and listed alphabetically.

#### THE GITR ONLINE

In complement to the analysis presented in this Report, the GITR's portal—available at www.weforum.org/gitr offers additional analysis and a number of analytical tools and visualizations, including sortable rankings and maps. The portal also offers the option of downloading portions of the NRI dataset.

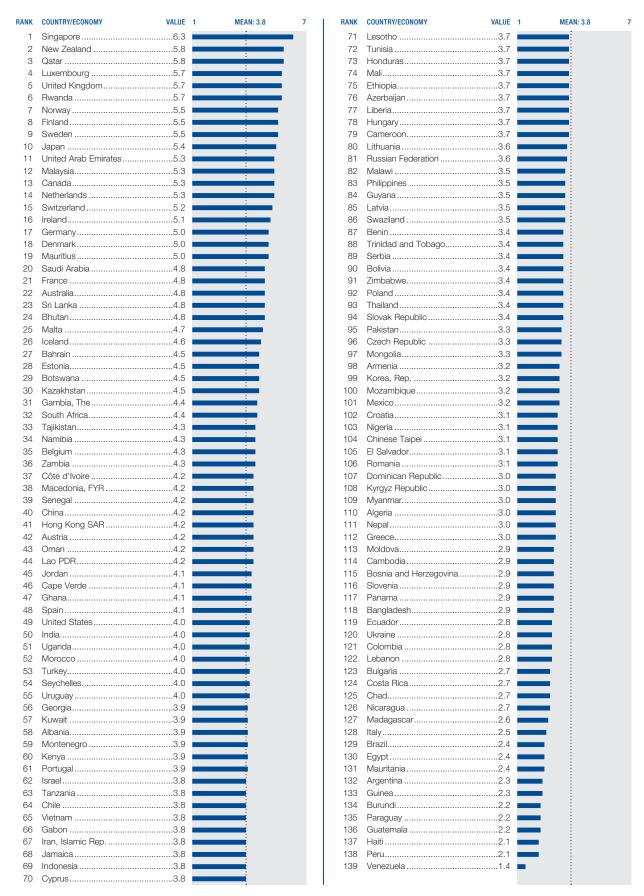
## **Index of Data Tables**

Environment subindex			Usage subindex			
1st pilla	ar: Political and regulatory environment201	6th pill	ar: Individual usage	237		
1.01	Effectiveness of law-making bodies	6.01	Mobile telephone subscriptions	238		
1.02	Laws relating to ICTs	6.02	Internet users	239		
1.03	Judicial independence	6.03	Households with a personal computer	240		
1.04	Efficiency of legal framework in settling disputes 205	6.04	Households with Internet access	24 <sup>-</sup>		
1.05	Efficiency of legal framework	6.05	Fixed broadband Internet subscriptions	242		
	in challenging regulations	6.06	Mobile broadband Internet subscriptions	243		
1.06	Intellectual property protection	6.07	Use of virtual social networks	244		
1.07	Software piracy rate					
1.08	Number of procedures to enforce a contract	7th pill	7th pillar: Business usage2			
1.09	Time required to enforce a contract	7.01	Firm-level technology absorption	246		
		7.02	Capacity for innovation	247		
2nd pil	lar: Business and innovation environment211	7.03	PCT patents applications	248		
2.01	Availability of latest technologies	7.04	ICT use for business-to-business transactions	249		
2.02	Venture capital availability	7.05	Business-to-consumer Internet use	250		
2.03	Total tax rate	7.06	Extent of staff training	25 <sup>-</sup>		
2.04	Time required to start a business					
2.05	Number of procedures required to start a business 216	8th pill	8th pillar: Government usage			
2.06	Intensity of local competition	8.01	Importance of ICTs to government			
2.07	Tertiary education enrollment rate		vision of the future	254		
2.08	Quality of management schools	8.02	Government Online Service Index	25		
2.09	Government procurement of	8.03	Government success in ICT promotion	256		
	advanced technology products					
		Impac	t subindex			
Readiness subindex			ar: Economic impacts	257		
3rd pills	ar: Infrastructure221	9.01	Impact of ICTs on business models	258		
3.01	Electricity production	9.02	PCT ICT patent applications	259		
3.02	Mobile network coverage rate	9.03	Impact of ICTs on new organizational models	260		
3.03	International Internet bandwidth	9.04	Share of workforce employed in			
3.04	Secure Internet servers		knowledge-intensive activities (%)	26 <sup>-</sup>		
4th pillar: Affordability227			10th pillar: Social impacts26			
4.01	Prepaid mobile cellular tariffs	10.01	Impact of ICTs on access to basic services	264		
4.02	Fixed broadband Internet tariffs	10.02	Internet access in schools	26		
4.03	Internet and telephony sectors competition index 230	10.03	ICT use and government efficiency	266		
	•	10.04	E-Participation Index	267		
5th pilla	ar: Skills231					
5.01	Quality of the education system					
5.02	Quality of math and science education					

# 1st pillar Political and regulatory environment

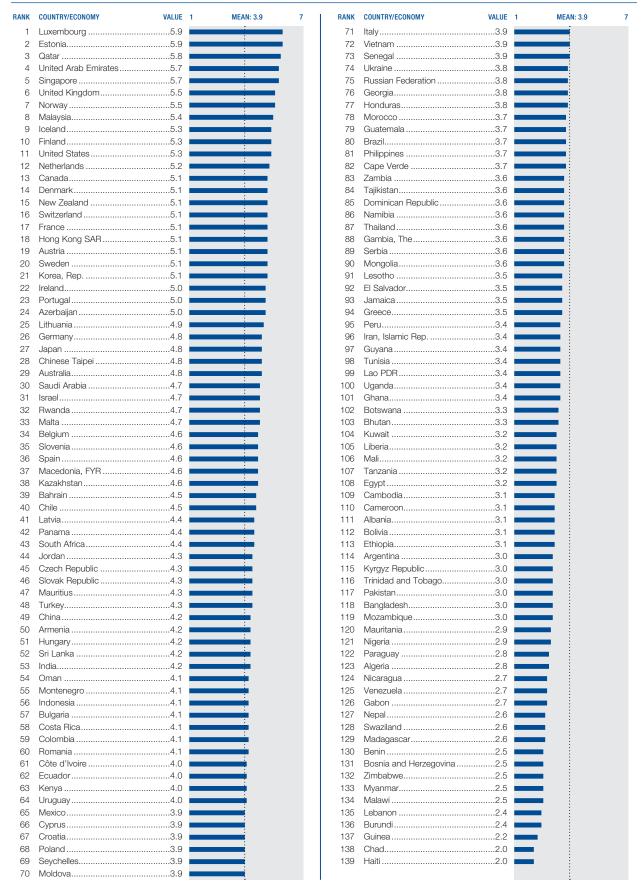
#### 1.01 Effectiveness of law-making bodies

How effective is the legislative process in your country? [1 = not effective at all—it is deadlocked; 7 = extremely effective] | 2014–15 weighted average



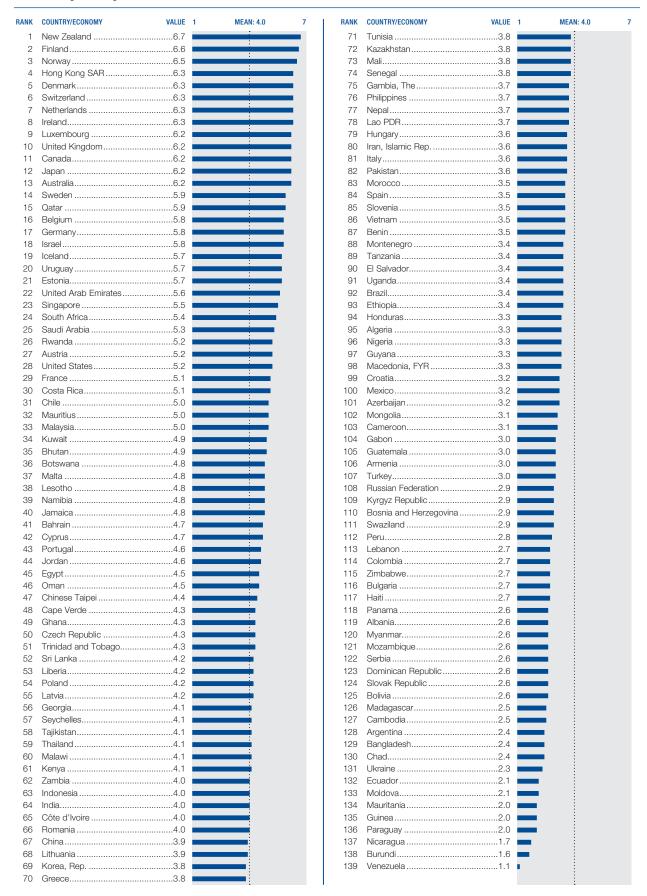
#### 1.02 Laws relating to ICTs

How developed are your country's laws relating to the use of ICTs (e.g., e-commerce, digital signatures, consumer protection)? [1 = not developed at all; 7 = extremely well developed] | 2014-15 weighted average



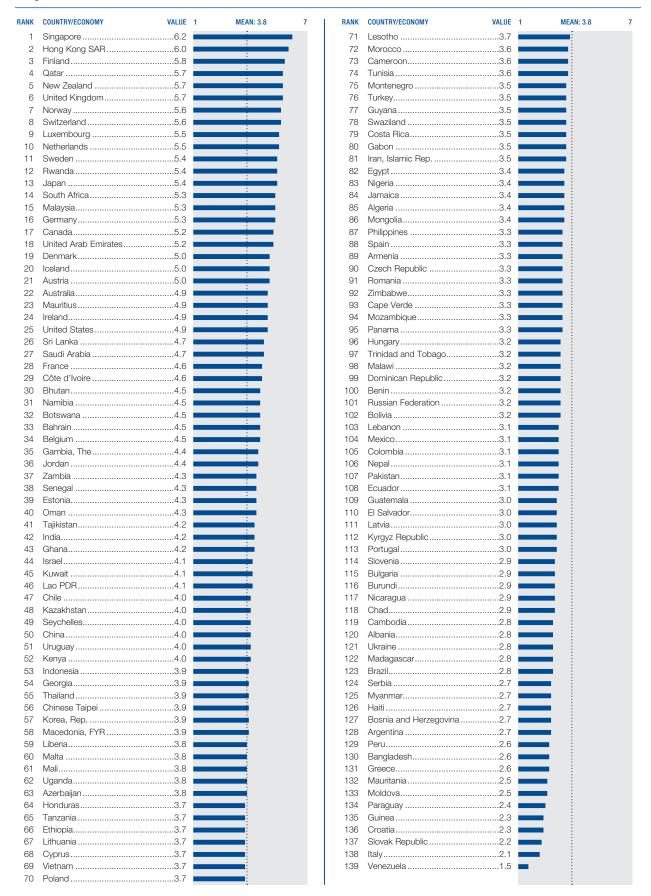
#### 1.03 Judicial independence

In your country, how independent is the judicial system from influences of the government, individuals, or companies? [1 = not independent at all; 7 = entirely independent] | 2014–15 weighted average



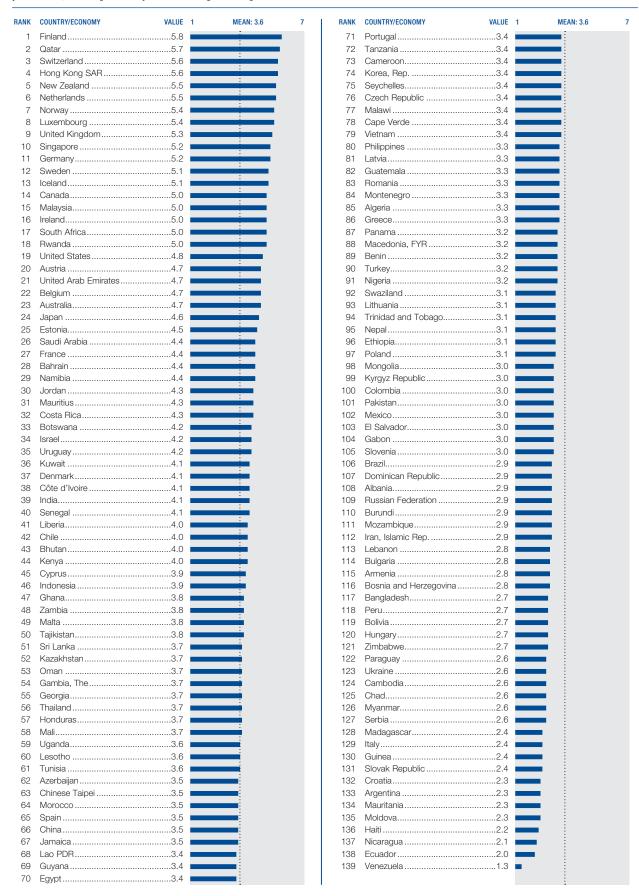
#### Efficiency of legal framework in settling disputes

In your country, how efficient are the legal and judicial systems for companies in settling disputes? [1 = extremely inefficient; 7 = extremely efficient] | 2014-15 weighted average



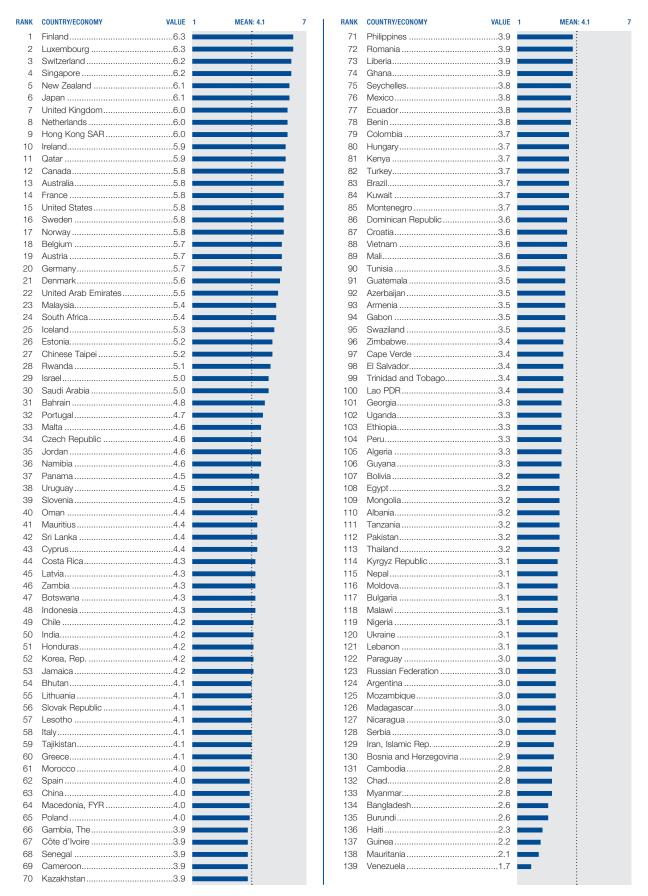
#### 1.05 Efficiency of legal framework in challenging regulations

In your country, to what extent can individuals, institutions (civil society), and businesses obtain justice through the judicial system against arbitrary government decisions? [1 = not at all; 7 = to a great extent] | 2014–15 weighted average



#### Intellectual property protection

In your country, to what extent is intellectual property protected? [1 = not at all; 7 = to a great extent] | 2014-15 weighted average



#### 1.07 Software piracy rate

Unlicensed software units as a percentage of total software units installed  $\,\,$   $\,$  2013

RANK	COUNTRY/ECONOMY	VALUE	
1	United States	18	
2	Japan	19	
3	Luxembourg		
3	New Zealand		
5 6	Australia		
7	Denmark		
7	Sweden		
9	Belgium	24	
9	Finland	24	
9	Germany		
9	Switzerland		
9 14	United Kingdom		
14	Netherlands		
14	Norway		
17	Israel	30	
18	Singapore	32	
19	Ireland		
20	Czech Republic		
20	South Africa		
22 22	United Arab Emirates		
24	Slovak Republic		
25	Chinese Taipei		
25	Korea, Rep	38	
27	Hungary		
28	Portugal		
29	Hong Kong SAR Malta		
30 31	Slovenia		
31	Spain		
33	Cyprus		
33	Estonia	47	
33	Italy	47	
36	Iceland		
37	Qatar		
38 38	Brazil Saudi Arabia		
40	Poland		
41	Colombia		
41	Croatia	52	
43	Bahrain	53	
43	Latvia		
43	Lithuania		
46 46	Malaysia Mexico		
48	Mauritius		
49	Jordan		
50	Kuwait	58	
51	Chile		
51	Costa Rica		
53	India		
53	Oman		
53 56	Turkey Egypt		
56	Greece		
56	Romania		
56	Russian Federation	62	
60	Bulgaria		
61	Bosnia and Herzegovina		
61	Macedonia, FYR		
61 64	Peru Morocco		
65	Ecuador		
65	Uruguay		
67	Argentina		
67	Philippines		
67	Serbia		
70	Lebanon	71	

DANY	COUNTRY/ECONOMY	1/41 ***	
<b>RANK</b> 70	COUNTRY/ECONOMY Thailand	VALUE 71	
70 72	Panama		
73	China		
73	Honduras		
73	Kazakhstan		
76	Albania		
76 76	Dominican Republic Tunisia		
79	Senegal		
80	Kenya		
80	Montenegro	78	
82	Bolivia		
82	Botswana		
82 85	Guatemala		
85	El Salvador		
87	Nigeria		
87	Vietnam	81	
87	Zambia	81	
90	Cameroon		
90	Nicaragua		
92	Sri Lanka		
92 94	Indonesia		
94	Paraguay		
96	Algeria		
96	Azerbaijan	85	
96	Pakistan		
99	Armenia		
100	Bangladesh		
101 102	Venezuela		
102	Moldova		
104	Zimbabwe		
n/a	Benin	n/a	
n/a	Bhutan		
n/a	Burundi		
n/a	Cambodia		
n/a n/a	Cape Verde		
n/a	Ethiopia		
n/a	Gabon		
n/a	Gambia, The		
n/a	Ghana		
n/a	Guinea		
n/a	Guyana		
n/a	1 ICACI	n/a	
n/a n/a	Iran, Islamic Rep  Jamaica		
n/a	Kyrgyz Republic		
n/a	Lao PDR		
n/a	Lesotho		
n/a	Liberia		
n/a	Madagascar		
n/a	Malawi		
n/a n/a	Mali Mauritania		
n/a n/a	Mongolia		
n/a	Mozambique		
n/a	Myanmar		
n/a	Namibia		
n/a	Nepal	n/a	
n/a	Rwanda		
n/a	Seychelles		
n/a	Swaziland		
n/a n/a	Tajikistan Tanzania		
n/a	Trinidad and Tobago		
n/a	Uganda		
	-		

SOURCES: The Software Alliance (BSA), The Compliance Gap: BSA Global Software Survey (June 2014); http://globalstudy.bsa.org/2013/downloads/studies/2013GlobalSurvey\_Study\_en.pdf

#### Number of procedures to enforce a contract 1.08

Number of procedures to resolve a dispute, counted from the moment the plaintiff files a lawsuit in court until payment | 2014

RANK	COUNTRY/ECONOMY V	/ALUE	
1	Ireland		
1	Singapore		
3	Rwanda		
5	Belgium		
5	Hong Kong SAR		
5	Luxembourg	26	
5	Netherlands		
9	Czech Republic		
9	Iceland Latvia		
12	Australia		
12	Botswana		
14	France	29	
14	Malaysia		
14	South Africa		
14 18	United Kingdom Mozambique		
18	New Zealand		
18	Ukraine		
18	Venezuela	30	
22	Germany		
22	Guatemala		
22 22	Lithuania Moldova		
22	Sweden		
27	Côte d'Ivoire		
27	Japan	32	
27	Korea, Rep		
27	Mongolia		
27 27	Panama		
27	Switzerland		
34	Colombia		
34	Finland	33	
34	Gambia, The		
34	Georgia		
34 34	Namibia Poland		
34	Slovak Republic		
41	United States		
42	Dominican Republic	34	
42	Hungary		
42	Mauritius		
42 42	Norway Portugal		
42	Romania		
48	Denmark	35	
48	El Salvador		
48	Estonia		
48 48	Haitilsrael		
48	Jamaica		
48	Russian Federation		
48	Tajikistan	35	
48	Turkey		
48	Zambia		
58 58	Argentina		
58	Chile		
58	Guyana		
58	Kazakhstan	36	
58	Mali		
58	Serbia		
58 58	Seychelles Thailand		
58	Vietnam		
68	Mexico		
69	Bosnia and Herzegovina	37	
69	Cape Verde	37	

RANK	COUNTRY/ECONOMY	VALUE	
69	China		
69	Italy		
69	Lebanon	37	
69	Nicaragua	37	
69	Philippines		
76	Bulgaria		
76 76	Croatia Ethiopia		
76	Gabon		
76	Ghana		
76	Greece	38	
76	Kyrgyz Republic		
76	Macedonia, FYR		
76 76	Madagascar Paraguay		
76	Tanzania		
76	Uganda		
76	Zimbabwe		
89	Albania	39	
89	Ecuador		
89	Jordan		
89	Nepal		
89 94	Tunisia		
94	Bolivia		
94	Costa Rica		
94	Indonesia	40	
94	Iran, Islamic Rep	40	
94	Liberia		
94	Malta		
94 94	Morocco		
94	Spain		
94	Sri Lanka		
94	Swaziland	40	
94	Uruguay	40	
107	Nigeria		
108	Bangladesh		
108 108	Benin		
108	Lesotho		
108	Peru	41	
113	Cameroon	42	
113	Egypt		
113	Lao PDR		
113	Malawi		
113 118	Trinidad and Tobago  Cyprus		
118	Qatar		
118	Senegal		
121	Brazil	44	
122	Burundi		
122	Cambodia		
122	Kenya		
125 125	Algeria		
125	Myanmar		
128	India		
128	Mauritania	46	
128	Pakistan		
131	Bhutan		
131	Honduras		
133 134	Bahrain		
134	Guinea		
134	Montenegro		
134	United Arab Emirates		
138	Kuwait		
139	Oman	51	

SOURCES: World Bank/International Finance Corporation, Doing Business 2015: Going Beyond Efficiency; http://www.doingbusiness.org

### 1.09 Time required to enforce a contract

Number of days to resolve a dispute, counted from the moment the plaintiff decides to file the lawsuit in court until payment | 2015

RANK	COUNTRY/ECONOMY	VALUE	
1	Singapore		_
2	New Zealand		_
3	Bhutan		
4	Korea, Rep.		
4	Rwanda		_
6	Azerbaijan		
7	Norway		
8	GeorgiaLithuania		
10	Russian Federation		
11	Guinea		
12	Luxembourg		
12	Sweden		
14	Hong Kong SAR	360	
14	Japan	360	
16	Kazakhstan	370	
16	Mauritania	370	
18	Mongolia		_
19	Finland		
20	Ukraine		
21	Mexico		
22	Switzerland		
23 23	Australia		
23	Hungary		
23 26	Austria		
27	Vietnam		
28	Gambia, The		
29	Denmark		
29	Kyrgyz Republic	410	
29	Zimbabwe	410	
32	Iceland	417	
33	United States	420	
34	Cape Verde	425	
34	Estonia		
34	Malaysia		_
37	Peru		
38	Germany		
39 40	Tajikistan Malawi		
40	United Kingdom		
42	Thailand		
43	Lao PDR		
44	China		
45	Dominican Republic		
45	Namibia	460	
47	Kenya	465	
48	Latvia		
49	Indonesia		
50	Chile		
51	Cambodia		
52	Uganda		
53 54	United Arab Emirates		
54 54	Belgium Iran, Islamic Rep		
54 54	Iran, Islamic Hep		
57	Nigeria		
58	Chinese Taipei		
58	Morocco		
58	Spain		
61	Romania		
62	Netherlands	514	
63	Tanzania	515	
64	Mauritius	519	
64	Nicaragua		
66	Albania		
66	Côte d'Ivoire		
68	Ethiopia		
68	Haiti		
70	Montenegro	545	

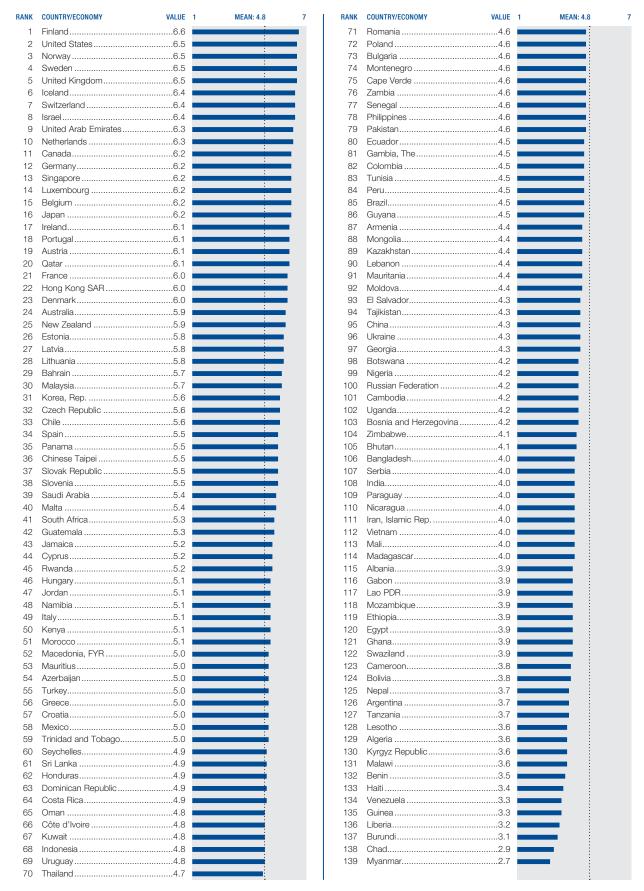
RANK	COUNTRY/ECONOMY	VALUE	
71	Portugal		
72	Bulgaria		
73	Tunisia		
74	Kuwait		
75	Armenia		
75	Canada		
75 78	Qatar Croatia		
79	Saudi Arabia		
80	Turkey	580	
81	Guyana	581	
82	Moldova		
83	Ecuador		
84 85	Argentina		
85	Paraguay		
87	Bosnia and Herzegovina		
88	Oman		
89	South Africa	600	
90	Macedonia, FYR		
91	Venezuela		
92 92	Czech Republic Zambia		
94	Lesotho		
95	Mali		
96	Botswana	625	
97	Algeria	630	
98	Bahrain		
98	Serbia		
100 101	Ireland  Jamaica		
102	Poland		
103	Panama		
104	Jordan	689	
105	Slovak Republic	705	
106	Ghana		
107	Lebanon		
108 109	Uruguay Brazil		
110	Senegal		
111	Chad		
112	Benin	750	
113	El Salvador		
114	Cameroon		
115 116	Burundi Philippines		
117	Costa Rica		
118	Madagascar		
119	Nepal		
120	Seychelles		
121	Honduras		
122	Mozambique		
123 124	Swaziland Israel		
125	Pakistan		
126	Egypt		
127	Gabon		
128	Cyprus		
129	Italy		
130 130	MyanmarSlovenia		
130	Liberia		
133	Colombia		
134	Sri Lanka		
135	Trinidad and Tobago		
136	Guatemala		
137	India Bangladesh		
138 139	Greece		
. 50		,000	

**SOURCES:** World Bank/International Finance Corporation, Doing Business 2016: Measuring Regulatory Quality and Efficiency; http://www.doingbusiness.org

# 2nd pillar Business and innovation environment

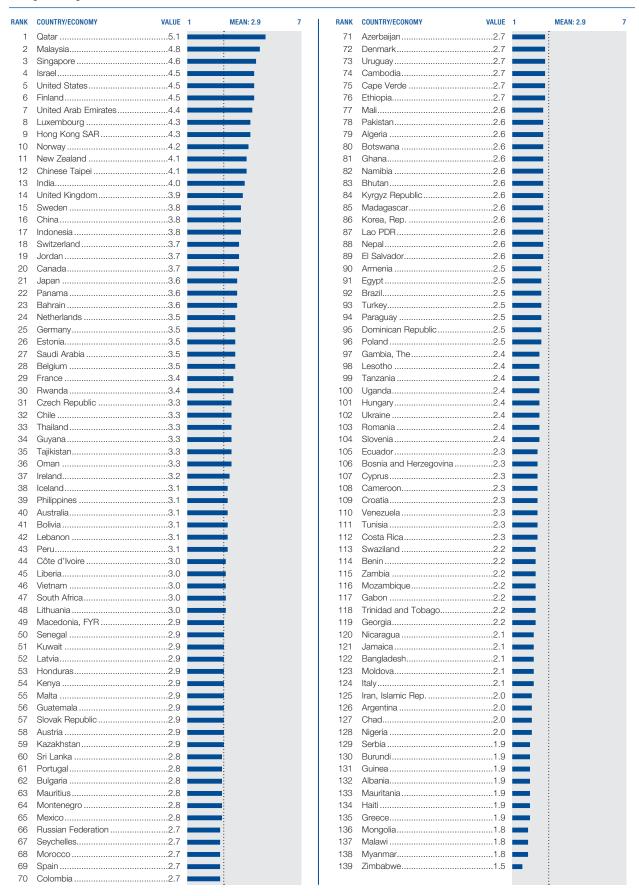
#### 2.01 Availability of latest technologies

In your country, to what extent are the latest technologies available? [1 = not at all; 7 = to a great extent] | 2014-15 weighted average



#### 2.02 Venture capital availability

In your country, how easy is it for start-up entrepreneurs with innovative but risky projects to obtain equity funding? [1 = extremely difficult; 7 = extremely easy] | 2014-15 weighted average



#### 2.03 Total tax rate

Sum of profit tax, labor tax and social contributions, property taxes, turnover taxes, and other taxes, as a share (%) of commercial profits | 2014

RANK	COUNTRY/ECONOMY	VALUE	
1	Qatar	.11.3	
2	Macedonia, FYR	.12.9	
3	Kuwait		_
4	Bahrain		
5	Lesotho		
6	Saudi Arabia		
7	United Arab Emirates		
8	Georgia Singapore		
10	Zambia		
11	Armenia		
12	Croatia	.20.0	
13	Luxembourg	.20.1	
14	Cambodia	.21.0	
15	Canada	.21.1	
16	Namibia		
17	Montenegro		
18 19	Mauritius		
20	Hong Kong SAR Oman		
21	Bosnia and Herzegovina		
22	Cyprus		
22	Mongolia		
24	Denmark	.24.5	
25	Botswana	.25.1	
26	Lao PDR		
27	Ireland		
28	Bulgaria		
29 30	Thailand		
30	Switzerland		
32	Chile		
33	Kyrgyz Republic		
34	Kazakhstan	.29.2	
35	Jordan	.29.5	
35	Nepal	.29.5	
37	Iceland		
38	Indonesia		
39	Seychelles		
40 41	Lebanonlsrael		
42	Slovenia		
43	Myanmar		
44	Bangladesh		
45	United Kingdom	.32.0	
46	Ethiopia		
47	Trinidad and Tobago		
48	Guyana		
49	PakistanGhana		
50 51	Zimbabwe		
52	Ecuador		
52	Rwanda		
54	Korea, Rep	.33.2	
55	Nigeria	.33.3	
56	New Zealand	.34.3	
57	Chinese Taipei		
57	Malawi		
59 60	Swaziland		
60 61	Paraguay  Jamaica		
62	Bhutan		
63	Latvia		
63	Peru		
65	Mozambique	.36.1	
66	Albania		
66	Cape Verde		
66	Uganda		
69	Kenya		
70	Panama	.01.2	

RANK	COUNTRY/ECONOMY	VALUE	
71	Guatemala		
72	Finland		
73	Madagascar	38.1	
74	El Salvador	38.7	
75	Vietnam		
76	Norway		
77 78	Serbia		
79	Malaysia		
80	Moldova		
81	Burundi	40.3	
81	Haiti		
81	Poland		
84 85	Turkey Netherlands		
85	Portugal		
87	Malta		
88	Uruguay		
89	Romania	42.0	
90	Dominican Republic		
91	Lithuania		_
92	Philippines		
93 93	Tanzania United States		
95 95	Iran, Islamic Rep.		
96	Honduras		
97	Egypt		
98	Gabon	45.7	
99	Russian Federation		
100	Senegal		
101	Australia		
102 103	Liberia Mali		
104	Hungary		
105	Cameroon		
105	Germany	48.8	
107	Morocco		
107	Sweden		
109	Estonia		
110 111	Greece		
112	Czech Republic		
113	Slovak Republic		
114	Japan	51.3	
115	Austria	51.7	
115	Mexico		
117	Côte d'Ivoire	51.9	
118 119	Ukraine Sri Lanka		
120	Costa Rica		
121	Belgium		
122	Tunisia	59.9	
123	India		
124	France		
125 125	Benin		
125	Chad		
128	Nicaragua		
129	Italy		
130	Venezuela	65.0	
131	China		
132	Guinea		
133 134	Brazil		
135	Mauritania		
136	Algeria		
137	Tajikistan		
138	Bolivia		
139	Argentina	137.4	

**SOURCES:** World Bank/PwC, Paying Taxes 2016: The Global Picture; http://www.doingbusiness.org

### 2.04 Time required to start a business

Number of days required to start a business | 2015

ANK	COUNTRY/ECONOMY	VALUE	RAN	IK	COUNTRY/ECONOMY	VALUE
1	New Zealand	1 I	7	0	Trinidad and Tobago	12
2	Macedonia, FYR	1	7	2	Benin	12
3	Canada	2	7	2	Croatia	12
3	Hong Kong SAR	2	7	2	Jordan	12
5	Georgia		7	2	Serbia	12
6	Australia	3	7	6	Greece	
6	Portugal		7	6	Israel	13
6	Singapore		7	6	Madagascar	
9	Armenia		7		Myanmar	
9	Azerbaijan		7		Nicaragua	
9	Denmark		8		Finland	
9	Jamaica		8		Ghana	
13	Estonia		8		Honduras	
13	Lithuania		8		Spain	
15	Belgium		8		Dominican Republic	
15	Burundi		8		Bhutan	
15	France		8		Cameroon	
15	Iceland		8		Czech Republic	
15	Korea, Rep		8		Iran, Islamic Rep	
15	Malaysia			6	Lebanon	
15	Moldova		9		El Salvador	
15	Netherlands		9		Nepal	
15	Norway	4	9	3	Bulgaria	18
24	Liberia	5	9	3	Guyana	18
24	United Kingdom	5 ■	9	5	Guatemala	19
26	Hungary	5 =	9	5	Luxembourg	19
26	Kazakhstan		9	7	Ethiopia	19
28	Albania	6	9	7	Mozambique	19
28	Chile	6	9	7	Pakistan	19
28	Italy	6	9	7	Saudi Arabia	19
28	Latvia		10	1	Bangladesh	
28	Rwanda		10		Algeria	
33	United States		10		Vietnam	
34	Ireland		10		Austria	
34	Mauritius		10		Costa Rica	
34	Mongolia		10		Argentina	
34	Panama		10		Gambia, The	
34	Senegal		10		Kenya	
34	Slovenia		10		Peru	
	Mexico					
40			10		Tanzania	
41	Uruguay		11		Uganda	
42	Côte d'Ivoire		11		Thailand	
42	Oman		11		Malta	
42	Sweden		11		India	
42	Ukraine		11		Lesotho	
46	Turkey		11	4	Philippines	
46	Zambia		11	7	Poland	30
48	Cyprus		11	7	Swaziland	
48	Egypt	8	11	9	Nigeria	31
48	Guinea	8	12	0	Kuwait	31
48	Mauritania	8	12	1	China	31
48	Romania		12	2	Seychelles	
48	United Arab Emirates		12		Paraguay	
54	Mali		12		Malawi	
54	Qatar		12		South Africa	
56	Bahrain		12		Indonesia	
57	Cape Verde		12		Botswana	
57	Chinese Taipei		12		Bolivia	
57	Kyrgyz Republic		12		Gabon	
57	Montenegro		13		Ecuador	
57	Morocco		13		Chad	
57	Sri Lanka		13		Namibia	
57	Switzerland	10	13	3	Bosnia and Herzegovina	67
64	Japan	10	13	4	Lao PDR	73
65	Germany	11	13	5	Brazil	83
65	Russian Federation		13		Cambodia	
67	Colombia		13		Zimbabwe	
	Tajikistan		13		Haiti	
6/	. ,					
67 67	Tunisia	11	13	9	Venezuela	144

**SOURCES:** World Bank/International Finance Corporation, Doing Business 2016: Measuring Regulatory Quality and Efficiency; http://www.doingbusiness.org

### 2.05 Number of procedures required to start a business

Number of procedures required to start a business | 2015

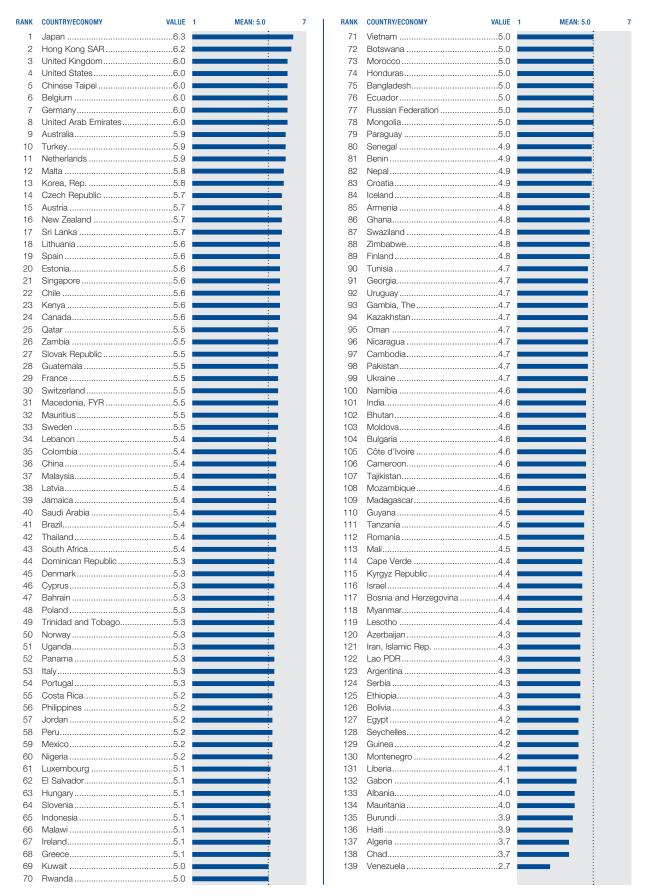
RANK	COUNTRY/ECONOMY	VALUE	
1	Macedonia, FYR		
1	New Zealand		
3	Armenia	2	_
3	Azerbaijan	2	_
3	Canada		-
3	Georgia		
3	Hong Kong SAR		
3	Jamaica		
3	Slovenia		
11	Australia		
11	Belgium	3	_
11	Burundi		
11	Chinese Taipei		
11 11	Estonia		
11	Korea, Rep.		
11	Malaysia		
11	Portugal		
11	Singapore	3	_
11	Sweden		
22	Bulgaria		
22	Côte d'Ivoire		
22 22	Hungary		
22	Ireland		
22	Kazakhstan		
22	Kyrgyz Republic	4	_
22	Latvia	4	_
22	Liberia		
22	Moldova		
22 22	Morocco		
22	Norway		
22	Poland		
22	Senegal		
22	Tajikistan	4	_
22	Ukraine		_
22	United Kingdom		
40 41	Russian Federation  Cameroon		
41	France		
41	Greece		
41	Iceland	5	
41	Israel	5	
41	Italy	5	
41	Mali		
41	Mauritius Mongolia		
41 41	Oman		
41	Panama		
41	Romania		
41	Uruguay	5	
54	Albania		
54	Cyprus		
54 = 4	Guatemala		
54 54	Guinea Lao PDR		
54 54	Lebanon		
54	Luxembourg		
54	Mauritania		
54	Mexico		
54	Montenegro		
54	Nicaragua		
54 = 4	Peru		
54 54	Serbia		
54	South Africa		
54	Switzerland		
54	Thailand		

BANK         COUNTRY ECONOMY         VALUE           54         United States         6           54         Lonited States         6           54         Zambia         6           74         Bahrain         7           74         Benin         7           74         Cambodia         7           74         Cambodia         7           74         Cambodia         7           74         Condica         7           74         Comica Republic         7           74         Gambia, The         7           74         Lesotho         7           74         Lesotho         7           74         Paraguay         7				
54         United States         6           54         Zambia         6           74         Bahrian         7           74         Banin         7           74         Cambodia         7           74         Chile         7           74         Chile         7           74         Chile         7           74         Contine         7           74         Contine         7           74         Gabon         7           74         Lesotho         7           74         Paraguay         7           74         Paraguay         7           74         Randa         7           74         Paraguay         7				
54 Zambia 6				
74 Benin				
74 Cape Verde				
74         Chile         7           74         Choatia         7           74         Croatia         7           74         Dominican Republic         7           74         Gayon         7           74         Gabon         7           74         Gabon         7           74         Gambia, The         7           74         Gayana         7           74         Jordan         7           74         Jordan         7           74         Jesotho         7           74         Lesotho         7           74         Paraguay         7           74         Trinidad and Tobago         7           75         Trinidad and Tobago         7				
74         Chile	74	Cambodia	7	
74 Croatia	74	Cape Verde	7	
74 Egypt				
74				
74 Gabon 77 74 Gambia, The 77 75 Guyana 77 74 Jordan 77 75 Jordan 77 76 Lesotho 77 77 Nepal 77 77 Paraguay 77 77 Paraguay 77 78 Paraguay 77 79 Paraguay 77 79 Paraguay 77 70 Trinicad and Tobago 77 70 Paraguay 77 70 Paraguay 77 70 Paraguay 77 71 Trinicad and Tobago 77 70 Paraguay 77 71 Trinicad and Tobago 77 70 Paraguay 77 72 Austria 88 73 Paraguay 77 74 Paraguay 77 75 Paraguay 77 77 Paraguay 77 77 Paraguay 77 78 Paraguay 77 79 Paraguay 77 79 Paraguay 77 70 Paraguay 77 70 Paraguay 77 71 Paraguay 77 72 Paraguay 77 73 Paraguay 77 74 Paraguay		· ·		
74 Gambia, The				
74         Jordan         7           74         Lesotho         7           74         Nepal         7           74         Paraguay         7           74         Rwanda         7           74         Spain         7           74         Trinidad and Tobago         7           92         Austria         8           92         Bhutan         8           92         Colombia         8           92         Clana         8           92         Crana         8           92         Crana, Islamic Rep         8           92         Japan         8           93         Malawi         8           94         Vatar         8           95         Japan         8           92         <	74			
74         Lesotho         7           74         Nepal         7           74         Paraguay         7           74         Rwanda         7           74         Spain         7           74         Trinidad and Tobago         7           74         Trinidad and Tobago         7           92         Austria         8           92         Austria         8           92         Clan         8           92         Colombia         8           92         Clan         8           92         Colombia         8           92         Clan         8           92         Clan         8           92         Clan         8           92         Clan         8           92         Japan         8           93         Japan         8           94         Malawi         8           92         Japan         8           92         Malawi         8           92         Yurkey         8           93         Turkey         8           94         Nigeria	74	Guyana	7	
74         Nepal         7           74         Paraguay         7           74         Rwanda         7           74         Spain         7           74         Trinidad and Tobago         7           92         Austria         8           92         Bhutan         8           92         Bhutan         8           92         Colombia         8           92         Cranka         8           92         Cranka         8           92         Japan         8           92         Jarkey				
74         Paraguay         7           74         Rwanda         7           74         Spain         7           74         Triniclad and Tobago         7           92         Austria         8           92         Bhutan         8           92         Colombia         8           92         Colombia         8           92         Colombia         8           92         Colombia         8           92         Crech Republic         8           92         Crach         8           92         Iranan         8           92         Iranan         8           92         Iranan         8           92         Japan         8           93         Iranka         8           94         Vigeria         9           105         Bangladesh         9           105         Bostwana         9      <				
74         Rwanda         7           74         Spain         7           74         Trinidad and Tobago         7           92         Austria         8           92         Bhutan         8           92         Bhutan         8           92         Bhutan         8           92         Czech Republic         8           92         El Salvador         8           92         Ghana         8           92         Isalmic Rep         8           92         Japan         8           92         Japan         8           92         Malawi         8           92         Japan		'		
74         Spain		• ,		
92 Austria				
92 Bhutan	74	•		
92 Colombia				
92         Czech Republic         8           92         El Salvador         8           92         Iran, Islamic Rep         8           92         Iran, Islamic Rep         8           92         Japan         8           92         Malawi         8           92         Malawi         8           92         Qatar         8           89         Turkey         8           80         Nigeria         9           91         Turkey         8           80         Nigeria         9           91         Bangladesh         9           91         Botswana         9           91         Botswana         9           92         Germany         9           93         Germany         9           94         Madagascar         9           95         Seychelles         9           96         Tanzania         9           96         Tanzania         9           97         Tanzania         9           98         Tanzania         9           99         Tanzania         10				
92         El Salvador				
92 Ghana				
92 Japan				
92 Malawi 8 92 Qatar 8 92 Sri Lanka 8 92 Turkey 8 104 Nigeria 9 105 Bangladesh 9 106 Botswana 9 107 Chad 9 108 Germany 9 109 Madagascar 9 100 Tanzania 9 100 Tanzania 9 100 Tanzania 9 101 Malta 10 114 Mozambique 10 114 Namibia 10 114 Tunisia 10 114 Vietnam 10 115 Brazil 11 120 China 11 120 Kenya 11 120 Kenya 11 120 Kenya 11 120 Kenya 11 120 Myanmar 11 120 Myanmar 11 120 Myanmar 11 120 Myanmar 11 120 Haiti 12 121 Bosnia and Herzegovina 12 125 Bosnia and Herzegovina 12 126 Honduras 12 127 Honduras 12 128 Swaziland 12 129 Swaziland 12 120 Swaziland 12 121 Saudi Arabia 12 122 Swaziland 12 123 India 13 134 Indonesia 13 135 Argentina 14 136 Bolivia 15 138 Philippines 16				
92 Qatar	92	Japan	8	
92 Sri Lanka 8 92 Turkey				
92         Turkey				
104         Nigeria				
105       Bangladesh		•		
105       Botswana       9         105       Chad       9         105       Costa Rica       9         105       Germany       9         105       Madagascar       9         105       Seychelles       9         105       Tanzania       9         105       Zimbabwe       9         106       Zimbabwe       9         114       Maita       10         114       Mozambique       10         114       Namibia       10         114       Pakistan       10         114       Tunisia       10         114       Tunisia       10         114       Tunisia       10         114       Vietnam       10         114       Vietnam       10         1120       Brazil       11         120       China       11         120       Ethiopia       11         120       Kenya       11         120       Kenya       11         121       Algeria       12         125       Bosnia and Herzegovina       12         125       Fuador </th <td></td> <td>-</td> <td></td> <td></td>		-		
105         Costa Rica         .9           105         Germany         .9           105         Madagascar         .9           105         Seychelles         .9           105         Tanzania         .9           105         Zimbabwe         .9           114         Malta         .10           114         Mozambique         .10           114         Namibia         .10           114         Pakistan         .10           114         Tunisia         .10           114         Vietnam         .10           120         Brazil         .11           120         China         .11           120         Ethiopia         .11           120         Kenya         .11           120         Kenya         .11           120         Myanmar         .11           125         Bosnia and Herzegovina         .12           125         Bosnia and Herzegovina         .12           125         Haiti         .12           125         Haiti         .12           126         Haiti         .12           127 <td< th=""><td></td><td>•</td><td></td><td></td></td<>		•		
105       Germany       9         105       Madagascar       9         105       Seychelles       9         105       Tanzania       9         105       Zimbabwe       9         114       Malta       10         114       Mozambique       10         114       Namibia       10         114       Pakistan       10         114       Tunisia       10         114       Vietnam       10         120       Brazil       11         120       China       11         120       China       11         120       Kenya       11         120       Myanmar       11         125       Algeria       12         125       Bosnia and Herzegovina       12         125       Ecuador       12         125       Haiti       12         125       Haiti       12         125       Haiti       12         126       Kuwait       12         127       Swaziland       12         128       Swaziland       12         129       Jalani	105	Chad	9	
105       Madagascar	105			
105         Seychelles.         .9           105         Tanzania         .9           105         Zimbabwe         .9           114         Malta         .10           114         Mozambique         .10           114         Namibia         .10           114         Pakistan         .10           114         Tunisia         .10           114         Vietnam         .10           120         Brazil.         .11           120         China         .11           120         Kenya         .11           120         Kenya         .11           120         Myanmar.         .11           125         Algeria         .12           125         Bosnia and Herzegovina         .12           125         Haiti         .12           125         Haiti         .12           125         Haiti         .12           125         Haiti         .12           126         Kuwait         .12           127         Saudi Arabia         .12           128         Saudi Arabia         .12           129         Saudi Ar		•		
105 Tanzania 9 105 Zimbabwe 9 114 Malta 10 114 Mozambique 10 114 Namibia 10 114 Pakistan 10 114 Vietnam 10 116 Brazil 11 120 China 11 120 Ethiopia 11 120 Kenya 11 120 Myanmar 11 120 Myanmar 11 121 Bosnia and Herzegovina 12 125 Sosnia and Herzegovina 12 126 Haiti 12 127 Kuwait 12 128 Swaziland 12 129 Swaziland 12 120 Swaziland 12 121 Saudi Arabia 12 122 Swaziland 12 123 India 13 134 Indonesia 13 135 Argentina 14 136 Bolivia 15 136 Uganda 15 138 Philippines 16		_		
105 Zimbabwe				
114         Mozambique         10           114         Namibia         10           114         Pakistan         10           114         Tunisia         10           114         Vietnam         10           120         Brazil         11           120         China         11           120         Ethiopia         11           120         Kenya         11           120         Myanmar         11           125         Algeria         12           125         Bosnia and Herzegovina         12           125         Ecuador         12           125         Haiti         12           125         Haiti         12           125         Kuwait         12           125         Saudi Arabia         12           125         Swaziland         12           126         Swaziland         12           127         Swaziland         12           128         Jain Indonesia         13           136         Haiti         14           137         Haiti         14           138         Philippines				
114       Namibia       10         114       Pakistan       10         114       Tunisia       10         114       Vietnam       10         120       Brazil       11         120       China       11         120       Ethiopia       11         120       Kenya       11         120       Myanmar       11         125       Algeria       12         125       Bosnia and Herzegovina       12         125       Ecuador       12         125       Haiti       12         125       Haiti       12         125       Kuwait       12         125       Saudi Arabia       12         125       Swaziland       12         125       Swaziland       12         126       Swaziland       12         127       Swaziland       12         128       Jain Indonesia       13         136       Bolivia       15         137       Philippines       16	114	Malta	10	
114       Pakistan	114	'		
114       Tunisia       10         114       Vietnam       10         120       Brazil       11         120       China       11         120       Ethiopia       11         120       Kenya       11         120       Myamar       11         125       Algeria       12         125       Bosnia and Herzegovina       12         125       Ecuador       12         125       Haiti       12         125       Honduras       12         125       Kuwait       12         125       Saudi Arabia       12         125       Swaziland       12         126       Swaziland       12         127       Swaziland       12         128       India       13         139       Indonesia       13         136       Bolivia       15         137       Philippines       16			10	
114       Vietnam       10         120       Brazil       11         120       China       11         120       Ethiopia       11         120       Kenya       11         120       Myanmar       11         125       Algeria       12         125       Bosnia and Herzegovina       12         125       Ecuador       12         125       Haiti       12         125       Honduras       12         125       Kuwait       12         126       Saudi Arabia       12         127       Swaziland       12         128       Swaziland       12         130       India       13         131       Indonesia       13         135       Argentina       14         136       Bolivia       15         137       Philippines       16			10	
120 Brazil				
120 China				
120 Kenya				
120 Myanmar	120	Ethiopia	11	
125     Algeria     12       125     Bosnia and Herzegovina     12       125     Ecuador     12       125     Haiti     12       125     Honduras     12       125     Kuwait     12       125     Saudi Arabia     12       125     Swaziland     12       133     India     13       134     Indonesia     13       135     Argentina     14       136     Bolivia     15       138     Philippines     16				
125 Bosnia and Herzegovina 12 12 125 Ecuador 12 12 125 Haiti 12 12 125 Honduras 12 12 125 Kuwait 12 12 125 Saudi Arabia 12 12 125 Swaziland 12 12 133 India 13 134 Indonesia 13 135 Argentina 14 136 Bolivia 15 136 Uganda 15 15 138 Philippines 16				
125     Ecuador		*		
125     Haiti     12       125     Honduras     12       125     Kuwait     12       125     Saudi Arabia     12       125     Swaziland     12       133     India     13       134     Indonesia     13       135     Argentina     14       136     Bolivia     15       136     Uganda     15       138     Philippines     16				
125     Honduras     12       125     Kuwait     12       125     Saudi Arabia     12       125     Swaziland     12       133     India     13       134     Indonesia     13       135     Argentina     14       136     Bolivia     15       136     Uganda     15       138     Philippines     16				
125     Saudi Arabia     12       125     Swaziland     12       133     India     13       134     Indonesia     13       135     Argentina     14       136     Bolivia     15       137     15     15       138     Philippines     16				
125     Swaziland     12       133     India				
133     India				
134     Indonesia     13       135     Argentina     14       136     Bolivia     15       136     Uganda     15       138     Philippines     16				
135     Argentina     14       136     Bolivia     15       136     Uganda     15       138     Philippines     16				
136       Bolivia       15         136       Uganda       15         138       Philippines       16				
136 Uganda		•		
139 Venezuela17				
	139	Venezuela	17	

SOURCES: World Bank/International Finance Corporation, Doing Business 2016: Measuring Regulatory Quality and Efficiency; http://www.doingbusiness.org

#### 2.06 Intensity of local competition

In your country, how intense is competition in the local markets? [1 = not intense at all; 7 = extremely intense] | 2014–15 weighted average



### 2.07 Tertiary education enrollment rate

Tertiary education gross enrollment rate (%) | 2013 or most recent

RANK	COUNTRY/ECONOMY	VALUE	
1	Greece	110.2	
2	Korea, Rep. <sup>11</sup>		
3	Finland	91.1	
4	United States		
5	Spain		
6	Australia		
7	Slovenia		
8	Chinese Taipei		
9 10	Singapore		
11	Ukraine <sup>11</sup>		
12	Iceland <sup>10</sup>		
13	Denmark		
14	Austria <sup>11</sup>	80.0	
15	Argentina	80.0	
16	New Zealand	79.7	
17	Turkey		
18	Netherlands <sup>10</sup>		
19	Russian Federation		
20	Venezuela <sup>7</sup>		
21	Norway		
22 23	Ireland Estonia		
23	Belgium		
25	Lithuania		
26	Poland		
27	Bulgaria <sup>11</sup>		
28	Hong Kong SAR <sup>11</sup>	68.8	
29	Latvia		
30	Israel	66.3	
31	Portugal		
32	Iran, Islamic Rep. <sup>11</sup>		
33	Czech Republic		
34	Mongolia <sup>11</sup>		
35	Italy		
36	Sweden		
37 38	Uruguay <sup>8</sup> Albania <sup>11</sup>		
39	Japan		
40	France		
41	Croatia <sup>10</sup>		
42	Saudi Arabia <sup>11</sup>	61.1	
43	Germany	61.1	
44	Serbia <sup>11</sup>	58.1	
45	Hungary	57.0	
46	United Kingdom		
47	Switzerland		
48	Montenegro <sup>8</sup>		
49	Slovak Republic		
50 51	Cyprus <sup>11</sup> Costa Rica <sup>11</sup>		
52	Romania		
53	Thailand		
54	Colombia <sup>11</sup>		
55	Jordan <sup>10</sup>	47.6	
56	Dominican Republic <sup>11</sup>		
57	Kyrgyz Republic	47.3	
58	Armenia <sup>11</sup>		
59	Kazakhstan <sup>12</sup>		
60	Brazil		
61	Malta <sup>11</sup>		
62	Lebanon <sup>11</sup>		
63 64	Moldova Peru <sup>8</sup>		
65	Ecuador		
66	Macedonia, FYR		
67	Georgia <sup>11</sup>		
68	Panama		
69	Mauritius <sup>11</sup>		
70	Malaysia	38.5	

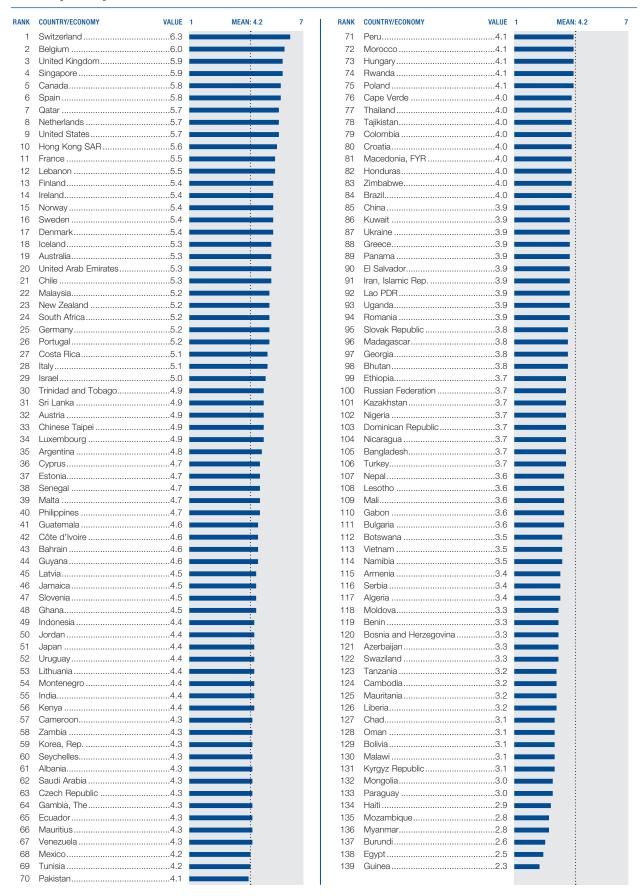
RANK	COUNTRY/ECONOMY	VALUE
71	Bolivia <sup>5</sup>	
72	Bahrain <sup>11</sup>	
73	Philippines <sup>11</sup>	
74	Paraguay <sup>8</sup>	
75	Algeria <sup>11</sup>	
76	Tunisia <sup>11</sup>	
77	Indonesia	
78	Vietnam <sup>11</sup>	
79	Egypt	
80 81	China Mexico	
82	El Salvador	
83	Oman <sup>9</sup>	
84	Botswana <sup>11</sup>	
85	Jamaica	
86	Kuwait	
87	Tajikistan <sup>12</sup>	26.4
88	Morocco <sup>11</sup>	24.6
89	India	23.9
90	Azerbaijan <sup>11</sup>	
91	Cape Verde <sup>11</sup>	
92	Bosnia and Herzegovina <sup>1</sup>	
93	United Arab Emirates <sup>11</sup>	
94	Honduras <sup>11</sup>	
95	Sri Lanka <sup>11</sup>	
96	South Africa	
97	Luxembourg <sup>10</sup>	
98	Guatemala	
99	Lao PDR <sup>11</sup>	
100	Nicaragua <sup>1</sup> Cambodia <sup>9</sup>	
101		
102	Nepal <sup>11</sup> Qatar <sup>11</sup>	
103	Ghana <sup>11</sup>	
104		
105 106	Benin Myanmar <sup>10</sup>	
106	Bangladesh <sup>10</sup>	
107	Guyana <sup>10</sup>	
109	Trinidad and Tobago <sup>3</sup>	
110	Cameroon <sup>9</sup>	
111	Liberia <sup>10</sup>	
112	Bhutan	10.9
113	Guinea <sup>11</sup>	
114	Nigeria <sup>4</sup>	
115	Pakistan <sup>11</sup>	
116	Lesotho <sup>11</sup>	
117	Namibia <sup>6</sup>	
118	Côte d'Ivoire11	8.7
119	Gabon <sup>2</sup>	8.4
120	Rwanda	7.5
121	Senegal <sup>8</sup>	7.4
122	Mali <sup>10</sup>	6.9
123	Haiti <sup>11</sup>	6.5
124	Seychelles11	6.5
125	Ethiopia <sup>11</sup>	6.3
126	Mozambique <sup>11</sup>	6.0
127	Zimbabwe	5.9
128	Mauritania	5.5
129	Swaziland	5.3
130	Uganda <sup>9</sup>	4.5
131	Burundi	4.4
132	Madagascar	4.2
133	Kenya <sup>7</sup>	4.0
134	Tanzania	3.6
135	Chad <sup>11</sup>	
136	Gambia, The <sup>9</sup>	3.4
137	Malawi <sup>9</sup>	
n/a	Canada	
n/a	Zambia	n/a

SOURCES: United Nations Education, Science and Culture Organization (UNESCO), UNESCO Institute for Statistics Data Centre (retrieved December 15, 2015), http://data.uis.unesco.org/; Authors' calculation based on Organisation for Economic Co-operation and Development (OECD); national sources

 $<sup>^1\ 2002 \</sup>quad ^2\ 2003 \quad ^3\ 2004 \quad ^4\ 2005 \quad ^5\ 2007 \quad ^6\ 2008 \quad ^7\ 2009 \quad ^8\ 2010 \quad ^9\ 2011 \quad ^{10}\ 2012 \quad ^{11}\ 2014 \quad ^{12}\ 2015$ 

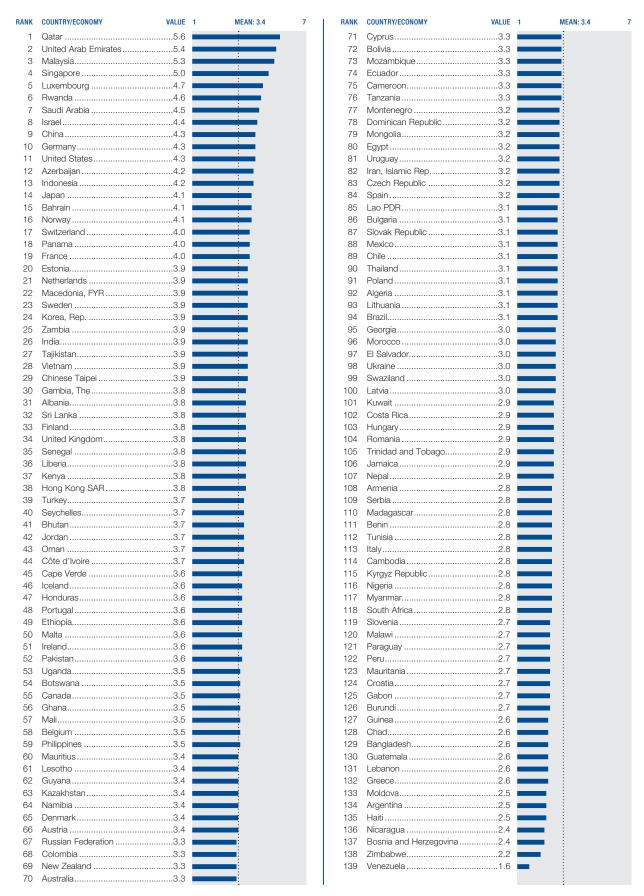
#### 2.08 Quality of management schools

In your country, how do you assess the quality of business schools? [1 = extremely poor—among the worst in the world; 7 = excellent—among the best in the world] 2014-15 weighted average



#### 2.09 Government procurement of advanced technology products

In your country, to what extent do government purchasing decisions foster innovation? [1 = not at all; 7 = to a great extent] | 2014–15 weighted average



## 3rd pillar Infrastructure

## 3.01 Electricity production

Electricity production (kWh) per capita | 2013 or most recent

Iceland	RANK	COUNTRY/ECONOMY	VALUE
3 Bahrain         19,205.2           4 Canada         18,539.2           5 Kuwait         16,969.2           6 Qatar         16,498.5           7 Sweden         15,940.1           8 United States         13,544.8           9 Finland         13,100.1           10 United Arab Emirates         11,750.2           11 Australia         10,765.5           12 Korea, Rep         10,710.8           13 Chinese Taipei         10,646.5           14 Estonia         10,072.1           15 Bhutan         10,004.8           16 New Zealand         9,737.7           17 Saudi Arabia         9,404.2           18 Paraguay         9,338.7           19 Singapore         8,883.5           20 France         8,606.2           21 Switzerland         8,505.6           22 Czech Republic         8,194.6           23 Japan         8,155.2           24 Germany         7,779.4           25 Slovenia         7,666.7           26 Austria         7,313.3           27 Israel         7,342.8           30 Trinicidad and Tobago         7,049.9           31 Oman         6,716.3           32 Montenegro <td>1</td> <td>Iceland</td> <td>55,954.3</td>	1	Iceland	55,954.3
4 Canada         18,539.2           5 Kuwait         16,498.5           7 Sweden         15,940.1           8 United States         13,644.8           9 Finland         13,100.1           10 United Arab Emirates         11,750.2           11 Australia         10,765.5           12 Korea, Rep.         10,710.8           13 Chinese Taipei         10,646.5           14 Estonia         10,072.1           15 Bhutan         10,004.8           16 New Zealand         9,737.7           17 Saudi Arabia         9,404.2           18 Paraguay         9,338.7           19 Singapore         8,883.5           20 France         8,606.2           21 Switzerland         8,505.6           22 Gzech Republic         8,194.6           23 Japan         8,155.2           24 Germany         7,779.4           25 Slovenia         7,666.7           26 Austria         7,666.7           27 Austria         7,342.8           30 Trinidad and Tobago         7,049.9           31 Oman         6,716.3           32 Montenegro         6,350.5           33 Denmark         6,188.7           34 Netherlan	2	Norway	26,319.9
5         Kuwait         16,969.2           6         Qatar         16,498.5           7         Sweden         15,940.1           8         United States         13,544.8           9         Finland         13,100.1           10         United Arab Emirates         11,750.2           11         Australia         10,765.5           12         Korea, Rep.         10,710.8           13         Chinese Taipei         10,646.5           14         Estonia         10,072.1           15         Bhutan         10,004.8           16         New Zealand         9,737.7           17         Saudi Arabia         9,404.2           18         Paraguay         9,338.7           19         Singapore         8,883.5           20         France         8,606.2           21         Switzerland         8,505.6           22         Czech Republic         8,146.2           23         Japan         8,155.2           24         Germany         7,779.4           25         Slovenia         7,666.7           26         Austria         7,611.3           27	3		
6 Qatar	4		,
Total	5		
United States	6	Qatar	16,498.5
9 Finland	7		,
10 United Arab Emirates	8	United States	13,544.8
11 Australia	9	Finland	13,100.1
Chinese Taipei	10		
13 Chinese Taipei	11	Australia	10,765.5
14         Estonia	12	Korea, Rep	10,710.8
15 Bhutan	13	,	
16         New Zealand         .9,737.7           17         Saudi Arabia         .9,404.2           18         Paraguay         .9,338.7           19         Singapore         .8,686.2           20         France         .8,606.2           21         Switzerland         .8,505.6           22         Czech Republic         .8,194.6           23         Japan         .8,155.2           24         Germany         .7,7779.4           25         Slovenia         .7,666.7           26         Austria         .7,611.3           27         Israel         .7,437.3           28         Russian Federation         .7,369.6           29         Belgium         .7,342.8           30         Trinidad and Tobago         .7,049.9           31         Oman         .6,716.3           32         Montenegro         .6,350.5           33         Denmark         .6,188.7           34         Netherlands         .6,002.9           35         Spain         .5,990.4           36         Bulgaria         .5,990.4           37         Ireland         .5,605.8	14	Estonia	10,072.1
17         Saudi Arabia         9,404.2           18         Paraguay         9,338.7           19         Singapore         8,883.5           20         France         3,606.2           21         Switzerland         8,505.6           22         Czech Republic         8,194.6           23         Japan         8,155.2           24         Germany         7,779.4           25         Slovenia         7,666.7           26         Austria         7,611.3           27         Israel         7,437.3           28         Russian Federation         7,369.6           29         Belgium         7,342.8           30         Trinidad and Tobago         7,049.9           31         Oman         6,716.3           32         Montenegro         6,350.5           33         Denmark         6,188.7           34         Netherlands         6,002.9           35         Spain         5,990.4           36         Bulgaria         5,592.2           37         Ireland         5,665.8           38         Kazakhstan         5,598.3           39	15		
18       Paraguay       9,338.7         19       Singapore       8,883.5         20       France       8,606.2         21       Switzerland       8,505.6         22       Czech Republic       8,194.6         23       Japan       8,155.2         24       Germany       7,779.4         25       Slovenia       7,666.7         26       Austria       7,611.3         27       Israel       7,437.3         28       Russian Federation       7,369.6         29       Belgium       7,342.8         30       Trinidad and Tobago       7,049.9         31       Oman       6,716.3         32       Montenegro       6,350.5         33       Denmark       6,188.7         34       Netherlands       6,002.9         35       Spain       5,990.4         36       Bulgaria       5,5928.2         37       Ireland       5,605.8         38       Kazakhstan       5,598.3         39       United Kingdom       5,557.2         40       Serbia       5,447.7         42       Malta       5,323.9 <td>16</td> <td>New Zealand</td> <td>9,737.7</td>	16	New Zealand	9,737.7
19         Singapore         8,883.5           20         France         8,606.2           21         Switzerland         8,505.6           22         Czech Republic         8,194.6           23         Japan         8,155.2           24         Germany         7,779.4           25         Slovenia         7,666.7           26         Austria         7,611.3           27         Israel         7,437.3           28         Russian Federation         7,369.6           29         Belgium         7,342.8           30         Trinidad and Tobago         7,049.9           31         Oman         6,716.3           32         Montenegro         6,350.5           33         Denmark         6,188.7           34         Netherlands         6,002.9           35         Spain         5,990.4           36         Bulgaria         5,990.4           36         Bulgaria         5,998.3           39         United Kingdom         5,557.2           40         Serbia         5,475.5           41         Hong Kong SAR         5,447.7           42	17	Saudi Arabia	9,404.2
20       France       8,606.2         21       Switzerland       8,505.6         22       Czech Republic       8,194.6         23       Japan       8,155.2         24       Germany       7,779.4         25       Slovenia       7,666.7         26       Austria       7,611.3         27       Israel       7,437.3         28       Russian Federation       7,369.6         29       Belgium       7,342.8         30       Trinidad and Tobago       7,049.9         31       Oman       6,716.3         32       Montenegro       6,350.5         33       Denmark       6,188.7         34       Netherlands       6,002.9         35       Spain       5,990.4         36       Bulgaria       5,928.2         37       Ireland       5,605.8         38       Kazakhstan       5,598.3         39       United Kingdom       5,557.2         40       Serbia       5,447.7         41       Hong Kong SAR       5,447.7         42       Malta       5,323.9         43       Slovak Republic       5,267.3 <td>18</td> <td>Paraguay</td> <td>9,338.7</td>	18	Paraguay	9,338.7
21       Switzerland       8,505.6         22       Czech Republic       8,194.6         23       Japan       8,155.2         24       Germany       7,779.4         25       Slovenia       7,666.7         26       Austria       7,611.3         27       Israel       7,437.3         28       Russian Federation       7,369.6         29       Belgium       7,342.8         30       Trinidad and Tobago       7,049.9         31       Oman       6,716.3         32       Montenegro       6,350.5         33       Denmark       6,002.9         34       Netherlands       6,002.9         35       Spain       5,998.2         37       Ireland       5,605.8         38       Kazakhstan       5,598.3         39       United Kingdom       5,557.2         40       Serbia       5,447.7         41       Hong Kong SAR       5,447.7         42       Malta       5,323.9         43       Slovak Republic       5,267.3         44       Greece       5,179.2         45       Portugal       4,832.4 <td>19</td> <td>• ,</td> <td></td>	19	• ,	
22       Czech Republic       8,194.6         23       Japan       8,155.2         24       Germany       7,7779.4         25       Slovenia       7,666.7         26       Austria       7,611.3         27       Israel       7,349.8         28       Russian Federation       7,369.6         29       Belgium       7,342.8         30       Trinidad and Tobago       7,049.9         31       Oman       6,716.3         32       Montenegro       6,350.5         33       Denmark       6,188.7         34       Netherlands       6,002.9         35       Spain       5,990.4         36       Bulgaria       5,990.4         37       Ireland       5,605.8         38       Kazakhstan       5,597.2         40       Serbia       5,475.5         41       Hong Kong SAR       5,447.7         42       Malta       5,323.9         43       Slovak Republic       5,267.3         44       Greece       5,179.2         45       Portugal       4,832.4         46       Italy       4,779.8 <td>20</td> <td>France</td> <td>8,606.2</td>	20	France	8,606.2
23 Japan	21	Switzerland	8,505.6
24       Germany       7,779.4         25       Slovenia       7,666.7         26       Austria       7,611.3         27       Israel       7,437.3         28       Russian Federation       7,389.6         29       Belgium       7,342.8         30       Trinidad and Tobago       7,049.9         31       Oman       6,716.3         32       Montenegro       6,350.5         33       Denmark       6,188.7         34       Netherlands       6,002.9         35       Spain       5,990.4         36       Bulgaria       5,992.2         37       Ireland       5,605.8         38       Kazakhstan       5,598.3         39       United Kingdom       5,557.2         40       Serbia       5,475.5         41       Hong Kong SAR       5,447.7         42       Malta       5,323.9         43       Slovak Republic       5,267.3         44       Greece       5,179.2         45       Portugal       4,832.4         46       Italy       4,779.8         47       South Africa       4,763.1	22		
25 Slovenia	23	Japan	8,155.2
26 Austria	24	Germany	7,779.4
27       Israel       7,437.3         28       Russian Federation       7,369.6         29       Belgium       7,342.8         30       Trinidad and Tobago       7,049.9         31       Oman       6,716.3         32       Montenegro       6,350.5         33       Denmark       6,188.7         34       Netherlands       6,002.9         35       Spain       5,990.4         36       Bulgaria       5,928.2         37       Ireland       5,605.8         38       Kazakhstan       5,598.3         39       United Kingdom       5,557.2         40       Serbia       5,475.5         41       Hong Kong SAR       5,447.7         42       Malta       5,323.9         43       Slovak Republic       5,267.3         44       Greece       5,179.2         45       Portugal       4,832.4         46       Italy       4,779.8         47       South Africa       4,763.1         48       Malaysia       4,695.3         49       Bosnia and Herzegovina       4,564.1         50       Poland       4	25	Slovenia	7,666.7
28         Russian Federation         7,369.6           29         Belgium         7,342.8           30         Trinidad and Tobago         7,049.9           31         Oman         6,716.3           32         Montenegro         6,350.5           33         Denmark         6,188.7           34         Netherlands         6,002.9           35         Spain         5,990.4           36         Bulgaria         5,928.2           37         Ireland         5,605.8           38         Kazakhstan         5,598.3           39         United Kingdom         5,557.2           40         Serbia         5,447.7           41         Hong Kong SAR         5,447.7           42         Malta         5,332.9           43         Slovak Republic         5,267.3           44         Greece         5,179.2           45         Portugal         4,832.4           46         Italy         4,779.8           47         South Africa         4,763.1           48         Malaysia         4,695.3           49         Bosnia and Herzegovina         4,564.1 <td< td=""><td>26</td><td>Austria</td><td>7,611.3</td></td<>	26	Austria	7,611.3
29         Belgium         7,342.8           30         Trinidad and Tobago         7,049.9           31         Oman         6,716.3           32         Montenegro         6,350.5           33         Denmark         6,188.7           34         Netherlands         6,002.9           35         Spain         5,990.4           36         Bulgaria         5,998.2           37         Ireland         5,605.8           38         Kazakhstan         5,598.3           39         United Kingdom         5,557.2           40         Serbia         5,475.5           41         Hong Kong SAR         5,447.7           42         Malta         5,323.9           43         Slovak Republic         5,267.3           44         Greece         5,179.2           45         Portugal         4,832.4           46         Italy         4,763.1           47         South Africa         4,763.1           48         Malaysia         4,695.3           49         Bosnia and Herzegovina         4,564.1           50         Poland         4,311.2           51	27	Israel	7,437.3
30 Trinidad and Tobago	28	Russian Federation	7,369.6
31 Oman	29	Belgium	7,342.8
32 Montenegro	30	Trinidad and Tobago	7,049.9
33 Denmark	31	Oman	6,716.3
34 Netherlands	32	Montenegro	6,350.5
35 Spain	33	Denmark	6,188.7
36 Bulgaria	34	Netherlands	6,002.9
37 Ireland	35	Spain	5,990.4
38 Kazakhstan	36	Bulgaria	5,928.2
39 United Kingdom	37	Ireland	5,605.8
40 Serbia	38	Kazakhstan	5,598.3
41 Hong Kong SAR	39	United Kingdom	5,557.2
42 Malta	40	Serbia	5,475.5
42 Malta	41	Hong Kong SAR	5,447.7
44 Greece	42	Malta	5,323.9
45 Portugal	43	Slovak Republic	5,267.3
46 Italy	44	Greece	5,179.2
47 South Africa	45	Portugal	4,832.4
47 South Africa		0	
48 Malaysia		,	•
49 Bosnia and Herzegovina			
50 Poland		,	,
51 Ukraine		•	
52 Chile			,-
53 Venezuela			
54 Lebanon			•
55 China			,
56 Cyprus			
57 Seychelles¹			
58       Iran, Islamic Rep.       .3,504.4         59       Uruguay.       .3,422.0         60       Luxembourg.       .3,402.9         61       Argentina.       .3,271.7         62       Turkey.       .3,201.6         63       Croatia.       .3,131.3         64       Latvia.       .3,085.0         65       Hungary.       .3,060.0         66       Macedonia, FYR       .2,940.3         67       Romania.       .2,929.2         68       Brazil.       .2,792.2		,,	
59 Uruguay			
60 Luxembourg 3,402.9 61 Argentina 3,271.7 62 Turkey 3,201.6 63 Croatia 3,131.3 64 Latvia 3,085.0 65 Hungary 3,060.0 66 Macedonia, FYR 2,940.3 67 Romania 2,929.2 68 Brazil 2,792.2			
61 Argentina			
62 Turkey		•	
63 Croatia		•	
64 Latvia			
65 Hungary			
66 Macedonia, FYR			
67 Romania			
68 Brazil2,792.2			
,			
			,
,	69		
70 Armenia	70	Armenia	2,576.7

RANK 71	COUNTRY/ECONOMY	VALUE
71 72	Azerbaijan Thailand	,
73	Kyrgyz Republic	
74	Albania	.2,401.8
75	Mexico	,
76	Panama	
77 78	Mauritius	,
79	Costa Rica	
80	Tajikistan	
81	Egypt	
82	Lao PDR <sup>1</sup>	.1,869.3
83	Mongolia	,
84	Dominican Republic	
85	Tunisia	
86 87	Algeria  Jamaica	
88	Ecuador	
89	Gabon	,
90	Lithuania	,
91	Peru	,
92	Vietnam	,
93	Colombia	,
94	Moldova	
95	Guyana <sup>1</sup>	
96	Honduras	,
97	El Salvador	
98 99	IndiaZambia	
100	Indonesia	
100	Morocco	
102	Bolivia	
103	Philippines	
104	Nicaragua	
105	Zimbabwe	
106	Guatemala	632.2
107	Cape Verde <sup>1</sup>	
108	Sri Lanka	
109	Namibia	
110	Mozambique	
111	Pakistan	
112 113	Ghana Botswana	
113	Côte d'Ivoire	
115	Swaziland <sup>1</sup>	
116	Bangladesh	
117	Cameroon	000 4
118	Mauritania <sup>1</sup>	
119	Senegal	
120	Lesotho <sup>1</sup>	
121	Myanmar	
122	Kenya	203.1
123	Nigeria	
124	Malawi <sup>1</sup>	
125	Nepal	
126	Gambia, The <sup>1</sup>	
127	Cambodia	
128	Tanzania	
129	Haiti	
130 131	EthiopiaMadagascar <sup>1</sup>	
132	Uganda <sup>1</sup>	
133	Guinea <sup>1</sup>	
134	Liberia <sup>1</sup>	
135	Mali <sup>1</sup>	
136	Rwanda <sup>1</sup>	
137	Burundi <sup>1</sup>	
138	Benin	16.8
139	Chad <sup>1</sup>	16.1

SOURCES: Authors' calculations based on International Energy Agency (IEA), World Energy Statistics and Balances 2015, www.iea.org/statistics/; The World Bank, World Development Indicators (retrieved January 4, 2016), http://data.worldbank.org; US Central Intelligence Agency (CIA), The World Factbook (retrieved January 5, 2016), https://www.cia.gov/library/publications/the-world-factbook/

### 3.02 Mobile network coverage rate

Percentage of total population covered by a mobile network signal | 2014 or most recent

RANK	COUNTRY/ECONOMY	VALUE	
1	Armenia		
1	Azerbaijan		
1	Bahrain		
1	Bhutan		
1	Chinese Taipei		
1	Colombia		
1	Costa Rica		
1	Croatia		
1	Estonia		
1	Hong Kong SAR		
1	Indonesia <sup>6</sup>		
1	Israel <sup>8</sup>		
1	Italy <sup>8</sup> Kuwait <sup>5</sup>		
1	Lithuania		
1	Malta		
1	Namibia		
1	Netherlands		
1 1	Nicaragua <sup>4</sup> Norway		
1	Peru		
1	Qatar		
1	Singapore		
1	Slovak Republic		
1	Trinidad and Tobago		
1	Uganda <sup>7</sup>		
1	United Arab Emirates		
1 32	Uruguay <sup>8</sup> Bulgaria		
32	Finland		
32	Sweden	100.0	
35	Brazil <sup>8</sup>		
35 37	Cyprus Belgium		
37	Greece		
37	Japan <sup>8</sup>		
37	Korea, Rep		
37 37	Macedonia, FYR <sup>5</sup>		
37	Poland		
37	Romania		
37	Rwanda		
37 37	South AfricaUkraine		
37	United States		
49	Albania	99.8	
49	Bosnia and Herzegovina		
49 49	Czech Republic Egypt		
49	Spain		
54	Serbia		
55	Paraguay <sup>8</sup>		
55 55	Slovenia United Kingdom		
58	Malawi		
59	Denmark		
59	Montenegro		
61 62	China <sup>8</sup>		
62 63	Saudi Arabia  Nigeria		
64	Morocco		
65	Lebanon <sup>7</sup>		
66	Georgia <sup>6</sup>		
67 67	Algeria  Australia		
67	Austria		
67	Bangladesh	99.0	

RANK	COUNTRY/ECONOMY	VALUE		
67	Benin			
67	Cambodia <sup>8</sup>			
67 67	France			
67	Germany			
67	Hungary			
67	Iceland	99.0		
67	Ireland			
67	Jordan			
67 67	Luxembourg Mauritius			
67	Moldova			
67	Oman	99.0		
67	Philippines			
67	Portugal			
67 87	Tunisia Latvia <sup>8</sup>			
88	Dominican Republic			
89	Cape Verde			
90	Botswana			
90	Seychelles			_
90	Sri Lanka <sup>8</sup> Turkey			
90 94	Côte d'Ivoire			
95	Kyrgyz Republic			
96	Guyana <sup>8</sup>			
97	New Zealand			
97	Thailand			
99 100	Ecuador Swaziland <sup>7</sup>			
101	Lao PDR			
101	Panama			
103	Malaysia	95.4		
104	Chile <sup>7</sup>			
104	Jamaica <sup>2</sup> Russian Federation <sup>1</sup>			
104 104	Tanzania			
108	Iran, Islamic Rep.			
109	Argentina <sup>2</sup>			
110	Gambia, The			
111	India <sup>8</sup>			
112 113	Lesotho  Madagascar <sup>8</sup>			
114	Senegal			
115	Mongolia <sup>7</sup>			
116	Ethiopia			_
116	Venezuela <sup>2</sup>			
118 119	Honduras <sup>2</sup> Kenya			
120	Zimbabwe			-
121	El Salvador			
122	Ghana <sup>7</sup>			
123	Kazakhstan			•
124	Chad			•
125 126	PakistanGuinea <sup>3</sup>			
126	Nepal			
128	Zambia	78.0		
129	Myanmar			
130	Mozambique			
131 132	Vietnam <sup>1</sup>			
133	Mauritania <sup>3</sup>			
134	Liberia <sup>8</sup>			
135	Cameroon <sup>1</sup>			
136	Burundi			
137 138	Mali <sup>1</sup>			
	Tajikistan		•	
n/a	Talikistari			

SOURCE: International Telecommunication Union (ITU), ITU World Telecommunication/ICT Indicators Database 2015 (December 2015 edition), http://www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx

 $^{1}\, 2006 \quad ^{2}\, 2007 \quad ^{3}\, 2008 \quad ^{4}\, 2009 \quad ^{5}\, 2010 \quad ^{6}\, 2011 \quad ^{7}\, 2012 \quad ^{8}\, 2013$ 

#### 3.03 International Internet bandwidth

International Internet bandwidth (kb/s) per Internet user | 2014 or most recent

RANK	COUNTRY/ECONOMY	VALUE	
1	Luxembourg	6,887.7	
2	Hong Kong SAR	3,721.8	
3	Malta	1,178.8	
4	Singapore	616.5	
5	Sweden	527.4	
6	Iceland	519.9	
7	United Kingdom	429.8	
8	Switzerland	352.2	
9	Denmark	341.7	
10	Netherlands		
11	Belgium		
12	France		
13	Portugal		
14	Finland		
15	Norway		
16	Ireland Moldova		
17 18	South Africa		
19	Germany		
20	Bulgaria		
21	Canada		
22	Lithuania		
23	Slovenia		
24	Romania		
25	Czech Republic		
26	Serbia		
27	Spain	111.5	
28	Greece	99.5	
29	Israel	98.4	
30	New Zealand	95.1	
31	Latvia	93.7	
32	Italy		
33	Poland		_
34	Mongolia		
35	United Arab Emirates		
36	Austria		
37	Montenegro		
38 39	Australia		
40	Chile		
41	Panama		
42	United States		_
43	Georgia		
44	Qatar		
45	Uruguay		
46	Chinese Taipei		
47	Croatia		
48	Thailand	54.8	
49	Kazakhstan	51.5	
50	El Salvador	50.3	
51	Kuwait	50.1	
52	Bahrain		
53	Trinidad and Tobago		
54	Japan		
55	Costa Rica		
56	Argentina		
57	Korea, Rep.		
58 50	Armenia  Bosnia and Herzegovina		
59 60	Bosnia and Herzegovina		
60 61	Turkey		
62	Macedonia, FYR		
63	Ukraine		
64	Hungary		
65	Ecuador		
66	Peru		
67	Colombia		
68	Namibia		
69	Saudi Arabia	34.0	_
70	Oman	33.7	

RANK		ALUE	_	
71 72	Mauritius			
73	Algeria			
74	Albania			
75	Russian Federation			
76	Seychelles			
77	Myanmar			
78	Estonia			
79	Philippines	27.7		
80	Guatemala	27.5	_	
81	Malaysia	27.2	_	
82	Tunisia			
83	Kenya			
84	Dominican Republic			
85	Lebanon			
86	Nicaragua			
87	Honduras			
88 89	MexicoVietnam			
90	Gabon			
91	Botswana		=	
92	Cambodia			
93	Bolivia			
94	Venezuela			
95	Jamaica			
96	Sri Lanka			
97	Paraguay	12.6	_	
98	Cape Verde		_	
99	Slovak Republic	11.5		
100	Gambia, The	10.9	_	
101	Morocco	10.8	_	
102	Guyana		_	
103	Egypt			
104	Mozambique			
105	Rwanda			
106	Senegal			
107 108	Kyrgyz Republic  Jordan		=	
109	Burundi			
110	Bangladesh		_	
111	Liberia			
112	Indonesia			
113	Tanzania			
114	Iran, Islamic Rep			
115	Pakistan		-	
116	India		-	
117	Côte d'Ivoire	5.2	-	
118	Ethiopia	5.0	-	
119	China	5.0	-	
120	Lesotho		-	
121	Malawi			
122	Zambia		-	
123	Uganda			
124	Tajikistan		-	
125	Zimbabwe			
126	Ghana		-	
127	Nigeria			
128	Nepal			
129	Lao PDR			
130	Benin		=	
131	BhutanGuinea			
132			=	
133 134	Mali  Cameroon			
134	Swaziland			
135	Mauritania		=	
136	Chad			
138	Madagascar		=	
139	Haiti <sup>1</sup>			
. 50			_	

**SOURCE:** International Telecommunication Union (ITU), *ITU World Telecommunication/ICT Indicators Database 2015* (December 2015 edition), http://www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx

#### 3.04 Secure Internet servers

Secure Internet servers per million population | 2014

DANK	COUNTRY/CONONY	ıe	
RANK 1	COUNTRY/ECONOMY VA		
2	Switzerland2,82		
3	Luxembourg2,64	3	
4	Netherlands2,63		
5	Korea, Rep2,17		
6	Denmark2,08		
7 8	Norway		-
9	Chinese Taipei1,75		
10	Malta		
11	Sweden1,60		
12	United States1,54	2	
13	Germany1,42		
14	Australia		
15 16	United Kingdom		
17	New Zealand1,21		
18	Canada1,21		
19	Estonia92	2	
20	Japan91		
21	Belgium85		
22	Singapore82 Hong Kong SAR79		
23 24	Ireland79		
25	Czech Republic69		
26	France68		
27	Slovenia64	3	
28	Cyprus60		
29	Seychelles46		
30 31	Poland		
32	Slovak Republic32		
33	Spain31		
34	Hungary30		
35	United Arab Emirates29	4 💻	
36	Portugal26		
37	Israel		
38 39	Italy		
40	Croatia		
41	Lithuania20		
42	Kuwait19	8 =	
43	Bahrain17		
44	Bulgaria17		
45	Mauritius15		
46 47	Greece	_	
48	Romania	_	
49	Panama11		
50	South Africa11	6 ■	
51	Trinidad and Tobago11		
52	Costa Rica9		
53 54	Uruguay 9 Malaysia		
54 55	Russian Federation8		
56	Oman		
57	Macedonia, FYR7		
58	Brazil6		
59	Turkey5		
60	Jamaica		
61 62	Montenegro		
62 63	Lebanon		
64	Cape Verde5		
65	Moldova4		
66	Colombia4		
67	Saudi Arabia4		
68	Ukraine4		
69	Serbia		
70	Armenia4	9	

ANK	COUNTRY/ECONOMY	VALUE	
71 72	Georgia		! !
73	Bosnia and Herzegovina  Ecuador		
74	Mexico		i
75	Jordan		i
76	Mongolia		i
77	Dominican Republic		ı
78	Peru	28.1	ı
79	Paraguay	24.1	ı
80	Albania	23.8	ı
81	Thailand		ı
82	Namibia		ı
83	El Salvador		ı
84	Tunisia		I
85	Guatemala		l
86 87	Kazakhstan		! !
88	Bhutan		
89	Bolivia		
90	Venezuela		
91	Vietnam		i
92	Sri Lanka		i
93	Honduras		i
94	Nicaragua		ı
95	Botswana		ı
96	Philippines	10.9	ı
97	Gabon	10.7	ı
98	Guyana	10.5	ı
99	Swaziland		ı
100	Kyrgyz Republic		ı
101	Kenya		I
102	China		l
103	Indonesia		
104 105	Gambia, The		! !
106	Morocco		
107	Egypt		i
108	Zimbabwe		i
109	Rwanda		
110	Ghana		ı
111	Senegal	3.5	ı
112	Zambia	3.4	ı
113	Cambodia	3.0	ı
114	Nepal	3.0	ı
115	Côte d'Ivoire		ı
116	Mauritania		I
117	Liberia	2.5	
118	Nigeria		
119	Benin		
120	Iran, Islamic Rep		
121 122	Lao PDR		
122	Pakistan		
123 124	Mozambique		
125	Haiti		
126	Cameroon		
127	Uganda		
128	Tanzania		
129	Tajikistan		ı
130	Lesotho		1
131	Mali	1.3	I
132	Malawi	1.1	1
133	Madagascar	0.9	ı
134	Bangladesh		I
	D al!	0.6	
135	Burundi		
135 136	Myanmar	0.5	I
		0.5	 

SOURCES: The World Bank, World Development Indicators (retrieved January 4, 2016), http://data.worldbank.org; national sources

## 4th pillar Affordability

### 4.01 Prepaid mobile cellular tariffs

Average per-minute cost of different types of mobile cellular calls (PPP \$) | 2014 or most recent

HANK   COUNTRY/ECONOMY   VALUE	TIVIC	COUNTRY/ECONOMY	VALUE	
2 Russian Federation 0.03   3 Bangladesh 0.04   4 Sri Lanka 0.05   5 India 0.05   6 China 0.06   7 Jordan 0.06   8 Tunisia 0.06   9 Denmark 0.06   10 Pakistan 0.06   11 Egypt 0.07   12 Finland 0.07   13 Sweden 0.08   14 Austria 0.08   15 Nepal 0.08   16 Thailand 0.09   17 Costa Rica 0.09   18 Georgia 0.09   19 Australia 0.10   20 Iran, Islamic Rep 0.10   21 Kenya 0.10   22 Turkey 0.10   24 Myanmar¹ 0.11   25 Lao PDR 0.11   26 Ethiopia 0.11   27 Germany 0.11   28 Ghana 0.12   30 Mexico 0.12   31 Mongolia 0.12   31 Mongolia 0.12   31 Mongolia 0.13   34 Portugal 0.14   35 Korea, Rep 0.15   41 United Arab Emirates 0.15   42 Usenam 0.15   43 Guinea 0.17   44 Myarius 0.15   45 Poland 0.15   46 Malaysia 0.15   47 Luxembourg 0.17   48 Ukraine 0.18   51 Singapore 0.19   52 Rwanda 0.20   55 Fixed 0.20   55 Fixer 0.20   56 Fixer 0.20   56 Fixer 0.20   57 Fixer 0.20   58 Fixer 0.20   58 Fixer 0.20   58 Fixer 0.20   59 Fixer 0.20   59 Fixer 0.20   50 Fixer 0.20	1			
4 Sri Lanka				
5 India	3	Bangladesh	.0.04	
6 China	4			•
7         Jordan         0.06           8         Tunisia         0.06           9         Denmark         0.06           10         Pakistan         0.06           11         Egypt         0.07           12         Finiland         0.07           13         Sweden         0.08           14         Austria         0.08           15         Nepal         0.08           16         Thailand         0.09           17         Costa Rica         0.09           18         Georgia         0.09           19         Australia         0.10           20         Iran, Islamic Rep         0.10           21         Kenya         0.10           22         Turkey         0.10           23         Norway         0.10           24         Myanmar¹         0.11           25         Lao PDR         0.11           26         Ethiopia         0.11           27         Germany         0.11           28         Ghana         0.12           30         Mexico         0.12           31         Mongolia				•
8 Tunisia 0.06 9 Denmark 0.06 10 Pakistan 0.06 11 Egypt 0.07 12 Finland 0.07 12 Finland 0.07 13 Sweden 0.08 14 Austria 0.08 15 Nepal 0.08 16 Thailand 0.09 17 Costa Rica 0.09 18 Georgia 0.09 19 Australia 0.10 10 10 10 10 10 10 10 10 10 10 10 10 1				•
9 Denmark 0.06				
10 Pakistan				
Finland				
13 Sweden	11	Egypt	.0.07	-
14 Austria	12	Finland	.0.07	-
15 Nepal				-
16 Thailand				_
17 Costa Rica		·		
18 Georgia				
19 Australia				
21       Kenya       0.10         22       Turkey       0.10         23       Norway       0.10         24       Myanmar¹       0.11         25       Lao PDR       0.11         26       Ethiopia       0.11         27       Germany       0.11         28       Ghana       0.12         29       Kazakhstan       0.12         30       Mexico       0.12         31       Mongolia       0.12         32       Cyprus       0.12         33       Nigeria       0.13         34       Portugal       0.14         35       Korea, Rep.       0.14         36       Bhutan       0.14         37       Morocco       0.14         38       Bahrain       0.15         39       Spain       0.15         40       Iceland       0.15         41       United Arab Emirates       0.15         42       Vietnam       0.15         43       Guinea       0.15         44       Kyrgyz Republic       0.16         45       Poland       0.16		•		
22       Turkey	20			-
23       Norway       0.10         24       Myanmar¹       0.11         25       Lao PDR       0.11         26       Ethiopia       0.11         27       Germany       0.11         28       Ghana       0.12         29       Kazakhstan       0.12         30       Mexico       0.12         31       Mongolia       0.12         32       Cyprus       0.12         33       Nigeria       0.13         34       Portugal       0.14         35       Korea, Rep.       0.14         36       Bhutan       0.14         37       Morocco       0.14         38       Bahrain       0.15         39       Spain       0.15         40       Iceland       0.15         41       United Arab Emirates       0.15         42       Vietnam       0.15         43       Guinea       0.15         44       Kyrgyz Republic       0.16         45       Poland       0.16         46       Malaysia       0.17         47       Luxembourg       0.17	21	•		-
24       Myanmar¹       0.11         25       Lao PDR       0.11         26       Ethiopia       0.11         27       Germany       0.11         28       Ghana       0.12         29       Kazakhstan       0.12         30       Mexico       0.12         31       Mongolia       0.12         32       Cyprus       0.12         33       Nigeria       0.13         34       Portugal       0.14         35       Korea, Rep.       0.14         36       Bhutan       0.14         37       Morocco       0.14         38       Bahrain       0.15         39       Spain       0.15         40       Iceland       0.15         41       United Arab Emirates       0.15         42       Vietnam       0.15         43       Guinea       0.15         44       Kyrgyz Republic       0.16         45       Poland       0.16         46       Malaysia       0.17         47       Luxembourg       0.17         48       Ukraine       0.17 <tr< td=""><td></td><td>•</td><td></td><td></td></tr<>		•		
25       Lao PDR       0.11         26       Ethiopia       0.11         27       Germany       0.11         28       Ghana       0.12         29       Kazakhstan       0.12         30       Mexico       0.12         31       Mongolia       0.12         32       Cyprus       0.12         33       Nigeria       0.13         34       Portugal       0.14         35       Korea, Rep.       0.14         36       Bhutan       0.14         37       Morocco       0.14         38       Bahrain       0.15         40       Iceland       0.15         41       United Arab Emirates       0.15         42       Vietnam       0.15         42       Vietnam       0.15         43       Guinea       0.15         44       Kyrgyz Republic       0.16         45       Poland       0.16         46       Malaysia       0.17         47       Luxembourg       0.17         48       Ukraine       0.17         49       Mauritius       0.18				
26       Ethiopia       0.11         27       Germany       0.11         28       Ghana       0.12         29       Kazakhstan       0.12         30       Mexico       0.12         31       Mongolia       0.12         32       Cyprus       0.12         33       Nigeria       0.13         34       Portugal       0.14         35       Korea, Rep.       0.14         36       Bhutan       0.14         37       Morocco       0.14         38       Bahrain       0.15         40       Iceland       0.15         41       United Arab Emirates       0.15         42       Vietnam       0.15         43       Guinea       0.15         44       Kyrgyz Republic       0.16         45       Poland       0.16         46       Malaysia       0.17         47       Luxembourg       0.17         48       Ukraine       0.17         49       Mauritius       0.18         50       Latvia       0.18         51       Singapore       0.19				
27       Germany       0.11         28       Ghana       0.12         29       Kazakhstan       0.12         30       Mexico       0.12         31       Mongolia       0.12         32       Cyprus       0.12         33       Nigeria       0.13         34       Portugal       0.14         35       Korea, Rep.       0.14         36       Bhutan       0.14         37       Morocco       0.14         38       Bahrain       0.15         39       Spain       0.15         40       Iceland       0.15         41       United Arab Emirates       0.15         42       Vietnam       0.15         43       Guinea       0.15         44       Kyrgyz Republic       0.16         45       Poland       0.16         46       Malaysia       0.17         47       Luxembourg       0.17         48       Ukraine       0.17         49       Mauritius       0.18         50       Latvia       0.18         51       Singapore       0.19 <t< td=""><td></td><td></td><td></td><td></td></t<>				
28 Ghana				
30       Mexico.       0.12         31       Mongolia.       0.12         32       Cyprus.       0.12         33       Nigeria.       0.13         34       Portugal.       0.14         35       Korea, Rep.       0.14         36       Bhutan.       0.14         37       Morocco.       0.14         38       Bahrain.       0.15         39       Spain.       0.15         40       Iceland.       0.15         41       United Arab Emirates.       0.15         42       Vietnam.       0.15         43       Guinea.       0.15         44       Kyrgyz Republic.       0.16         45       Poland.       0.16         46       Malaysia.       0.17         47       Luxembourg.       0.17         48       Ukraine.       0.17         49       Mauritius.       0.18         50       Latvia.       0.18         51       Singapore.       0.19         52       Indonesia.       0.19         53       Jamaica.       0.20         54       Macedonia, FYR.	28	Ghana	.0.12	_
31 Mongolia	29	Kazakhstan	.0.12	_
32 Cyprus				_
33 Nigeria		•		
34       Portugal       0.14         35       Korea, Rep.       0.14         36       Bhutan       0.14         37       Morocco       0.14         38       Bahrain       0.15         39       Spain       0.15         40       Iceland       0.15         41       United Arab Emirates       0.15         42       Vietnam       0.15         43       Guinea       0.15         44       Kyrgyz Republic       0.16         45       Poland       0.16         46       Malaysia       0.17         47       Luxembourg       0.17         48       Ukraine       0.17         49       Mauritius       0.18         50       Latvia       0.18         51       Singapore       0.19         52       Indonesia       0.19         53       Jamaica       0.20         54       Macedonia, FYR       0.20         55       Rwanda       0.20				
35       Korea, Rep.       0.14         36       Bhutan				_
36 Bhutan		-		_
38       Bahrain       0.15         39       Spain       0.15         40       Iceland       0.15         41       United Arab Emirates       0.15         42       Vietnam       0.15         43       Guinea       0.15         44       Kyrgyz Republic       0.16         45       Poland       0.16         46       Malaysia       0.17         47       Luxembourg       0.17         48       Ukraine       0.17         49       Mauritius       0.18         50       Latvia       0.18         51       Singapore       0.19         52       Indonesia       0.19         53       Jamaica       0.20         54       Macedonia, FYR       0.20         55       Rwanda       0.20				
39       Spain       0.15         40       Iceland       0.15         41       United Arab Emirates       0.15         42       Vietnam       0.15         43       Guinea       0.15         44       Kyrgyz Republic       0.16         45       Poland       0.16         46       Malaysia       0.17         47       Luxembourg       0.17         48       Ukraine       0.17         49       Mauritius       0.18         50       Latvia       0.18         51       Singapore       0.19         52       Indonesia       0.19         53       Jamaica       0.20         54       Macedonia, FYR       0.20         55       Rwanda       0.20	37	Morocco	.0.14	_
40 Iceland	38			_
41 United Arab Emirates				_
42 Vietnam				
43 Guinea				
44       Kyrgyz Republic       0.16         45       Poland       0.16         46       Malaysia       0.17         47       Luxembourg       0.17         48       Ukraine       0.17         49       Mauritius       0.18         50       Latvia       0.18         51       Singapore       0.19         52       Indonesia       0.19         53       Jamaica       0.20         54       Macedonia, FYR       0.20         55       Rwanda       0.20				_
46 Malaysia	44			_
47 Luxembourg	45	Poland	.0.16	_
48 Ukraine	46	Malaysia	.0.17	_
49 Mauritius		•		
50 Latvia				
51       Singapore       0.19         52       Indonesia       0.19         53       Jamaica       0.20         54       Macedonia, FYR       0.20         55       Rwanda       0.20				
52 Indonesia				
54 Macedonia, FYR		0 1		
55 Rwanda0.20	53			
	54			
56 Armenia				
57 Octor 0.00 —				
57 Qatar				
59 Panama				
60 Canada <sup>3</sup>				
61 Moldova				
62 Haiti0.23	62	Haiti	.0.23	
63 Chinese Taipei0.23				
64 Serbia				
65 Cambodia				
66 Slovak Republic		•		
6/ Mozambigue 0.25				
67 Mozambique				
67 Mozambique	69	Namidia	.0.20	

DANK	COUNTRY/FOOLONY		
RANK 71	COUNTRY/ECONOMY Guyana <sup>3</sup>	VALUE	
72	Czech Republic		
73	Italy		
74	Kuwait <sup>3</sup>		
75	Hungary		
76 77	Croatia United States		
78	Benin		
79	Algeria	0.28	
80	Gambia, The <sup>3</sup>		
81	Oman		
82 83	Ugandalsrael		
84	Colombia		
85	Slovenia		
86	Honduras		
87 88	BrazilEl Salvador		
89	Saudi Arabia		
90	Peru	0.32	
91	Bosnia and Herzegovina		
92	Belgium		
93 94	Chile		
95	Paraguay		
96	New Zealand	0.33	
97	Estonia		
98 99	Burundi Trinidad and Tobago		
100	Azerbaijan		
101	Côte d'Ivoire		
102	Cameroon		
103	Venezuela <sup>2</sup>		
104 105	Ecuador Netherlands		
106	Japan		
107	Uruguay	0.39	
108	Tajikistan		
109 110	Swaziland Philippines		
111	Botswana		
112	Malta		
113	United Kingdom <sup>3</sup>		
114	Zimbabwe <sup>3</sup>		
115 116	Gabon Switzerland		
117	Bolivia		
118	Zambia		
119	Dominican Republic		
120 121	Lebanon		
122	Seychelles		
123	Mali		
124	Senegal	0.50	
125	Ireland		
126 127	Lesotho		
127	Romania		
129	Malawi		
130	Guatemala		
131	Chad		
132 133	Cape Verde Tanzania		
134	Albania		
135	Greece		
136	Bulgaria		
137	Madagascar		
138 n/a	Nicaragua		
-	<u> </u>		

SOURCES: Authors' calculations based on International Telecommunication Union (ITU), ITU World Telecommunication/ICT Indicators Database 2015 (December 2015 edition), http://www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx; World Bank, World Development Indicators (retrieved January 4, 2016), http://data.worldbank.org; national sources

<sup>1</sup> 2011 <sup>2</sup> 2012 <sup>3</sup> 2013

#### 4.02 Fixed broadband Internet tariffs

Monthly subscription charge for fixed (wired) broadband Internet service (PPP \$) | 2014 or most recent

ıv	COUNTRY/ECONOMY	VALUE	RANK	COUNTRY/ECONOMY	VALUE
NK 1	Vietnam				
1			71	Norway	
2	Ukraine Sri Lanka		72	Egypt	
4	Bangladesh		73 74	Korea, Rep	
5	Iran, Islamic Rep		75	Spain	
6	United Kingdom		76	Serbia	
7	Albania		77	Ecuador	
8	Tunisia		78	Portugal	
9	Chinese Taipei		79	Montenegro	
10	Russian Federation		80	El Salvador	
11	United States		81	Canada <sup>3</sup>	
12	Bosnia and Herzegovina		82	Paraguay	
13	Romania		83	Malta	
14	Brazil		84	Guatemala	39.11
15	Pakistan	18.04	85	Netherlands	39.38
16	Trinidad and Tobago		86	Mozambique	
17	Turkey	19.10	87	Mauritius	42.35
18	Cape Verde	19.17	88	Lao PDR	42.39
19	Mongolia		89	Thailand	42.47
20	Kazakhstan	20.71	90	Guyana <sup>3</sup>	42.72
21	Japan	20.72	91	Jamaica	42.91
22	Costa Rica		92	Chile	43.12
23	Latvia	21.04	93	Hungary	43.18
24	Armenia	21.04	94	Mexico	43.50
25	Poland	21.33	95	New Zealand	44.27
26	Ireland	21.41	96	Honduras	44.35
27	Venezuela <sup>2</sup>		97	Germany	44.40
28	Kuwait <sup>3</sup>	22.27	98	Dominican Republic	44.63
29	Nepal	22.80	99	Singapore	46.31
30	Austria	22.93	100	Australia	46.70
31	Lesotho	23.27	101	Algeria	49.98
32	Bulgaria		102	Peru	51.00
33	Cyprus		103	Oman	
34	Switzerland		104	Philippines	
35	Lithuania		105	Gabon	
36	India		106	Saudi Arabia	
37	France		107	Zimbabwe <sup>3</sup>	
38	Moldova		108	Mauritania <sup>3</sup>	
39	Czech Republic		109	Nicaragua	
40	Uruguay		110	Malaysia	
41	Bhutan		111	Ghana	
42	Panama		112	Jordan	
43 44	Seychelles		113	Nigeria Tanzania	
44 45				Botswana	
45 46	Morocco		115 116	Kenya	
	Greece		117	Côte d'Ivoire	
47 48	Kyrgyz Republic		117	Senegal	
49	Azerbaijan		119	Malawi	
50	Estonia		120	United Arab Emirates.	
51	Finland		120	Namibia	
52	Italy		122	Haiti	
53	Georgia		123	Qatar	
54	Hong Kong SAR		124	Mali	
55	Slovak Republic		125	Benin	
56	Cambodia		126	Cameroon	
57	Bolivia		127	Myanmar <sup>1</sup>	
58	Lebanon		128	Swaziland	
59	Belgium		129	Burundi	
30	Israel		130	Gambia, The <sup>3</sup>	
61	South Africa		131	Zambia	
62	Macedonia, FYR		132	Liberia <sup>3</sup>	
63	Colombia		133	Madagascar	
64	Slovenia		134	Uganda	
65	Luxembourg		135	Tajikistan <sup>3</sup>	
66	Sweden		136	Rwanda	
67	Ethiopia		137	Chad	
68	China		n/a	Argentina	*
69	Bahrain		n/a	Guinea	
-		34.15	.,,		

SOURCES: Authors' calculations based on International Telecommunication Union (ITU), ITU World Telecommunication/ICT Indicators Database 2015 (December 2015 edition), http://www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx; World Bank, World Development Indicators (retrieved January 4, 2016), http://data.worldbank.org; national sources

### 4.03 Internet and telephony sectors competition index

Level of competition index for Internet services, international long distance services, and mobile telephone services on a 0-to-2 (best) scale | 2014 or most recent

RANK	COUNTRY/ECONOMY	VALUE	RANK	COUNTRY/ECONOMY	VALUE	
1	Argentina <sup>1</sup>	2.00	71	Denmark <sup>1</sup>	1.88	
1	Armenia		71	Nicaragua		
1	Australia		73	Slovak Republic		
1	Austria	2.00	73	United Kingdom	1.88	
1	Belgium	2.00	75	Czech Republic	1.87	
1	Brazil	2.00	75	El Salvador <sup>1</sup>	1.87	
1	Cambodia	2.00	75	Hungary	1.87	
1	Canada	2.00	75	Kazakhstan <sup>1</sup>	1.87	
1	Cape Verde	2.00	75	Kyrgyz Republic <sup>2</sup>		
1	Chile		80	Albania		
1	Chinese Taipei <sup>3</sup>		80	Bosnia and Herzegovina		
1	Colombia		80	Oman		
1	Croatia		80	Ukraine <sup>1</sup>		
1	Ecuador <sup>1</sup>		84	Trinidad and Tobago		
1	Estonia <sup>1</sup>		85	Greece		
1	Finland		85	Zimbabwe		
1	France		87	Indonesia <sup>1</sup>		
1	Georgia		87	Israel <sup>1</sup>		
1	Germany		89	Korea, Rep. <sup>1</sup>		
1	Guatemala <sup>2</sup>		89	Latvia		
1	Guinea		89	Liberia <sup>1</sup>		
- 1	Haiti <sup>1</sup>		92	Azerbaijan		
- 1	Hong Kong SARlceland		93	CyprusSenegal		
- 1	India <sup>2</sup>		93	•		
- 1	Iridia		96	Dominican Republic Zambia <sup>1</sup>		
1	Japan		90	Thailand		
1	Kenya <sup>1</sup>		98	Egypt		
1	Lesotho <sup>1</sup>		99	Burundi <sup>1</sup>		
1	Lithuania		100	New Zealand <sup>1</sup>		
1	Luxembourg		101	Chad <sup>1</sup>		
1	Macedonia, FYR		101	Russian Federation <sup>1</sup>		
1	Madagascar <sup>1</sup>		103	Costa Rica		
1	Malaysia <sup>2</sup>		104	Namibia		
1	Malta	2.00	105	Algeria <sup>1</sup>	1.33	
1	Mauritania <sup>1</sup>		105	Bangladesh <sup>2</sup>		
1	Mauritius	2.00	105	Bhutan <sup>1</sup>	1.33	
1	Mexico	2.00	105	Bulgaria <sup>1</sup>	1.33	
1	Moldova	2.00	109	Nepal	1.29	
1	Montenegro	2.00	110	Gabon <sup>1</sup>		
1	Morocco		111	Cameroon <sup>1</sup>		
1	Netherlands <sup>1</sup>		111	Côte d'Ivoire <sup>1</sup>		
1	Nigeria <sup>1</sup>		113	Botswana <sup>2</sup>		
1	Norway		114	Ghana		
1	Pakistan		114	Mali <sup>1</sup>		
1	Panama Paraguay <sup>2</sup>		116	Mozambique <sup>1</sup>		
1			117	-		
1	Peru		118	China <sup>2</sup> Gambia, The <sup>1</sup>		
1	Philippines <sup>1</sup>		119	Malawi <sup>1</sup>		
1	Portugal		121	Seychelles		
1	Romania		122	South Africa <sup>1</sup>		
1	Saudi Arabia		122	United Arab Emirates		
1	Serbia		124	Uruguay <sup>2</sup>		
1	Singapore		125	Qatar		
1	Slovenia		126	Benin	0.91	
1	Spain		126	Lao PDR1	0.91	
1	Sweden	2.00	128	Sri Lanka <sup>1</sup>	0.88	
1	Switzerland	2.00	129	Iran, Islamic Rep	0.85	
1	Tanzania		130	Bolivia <sup>1</sup>		
1	Turkey	2.00	131	Guyana <sup>1</sup>	0.50	
1	Uganda <sup>1</sup>		131	Lebanon		
1	United States		133	Kuwait <sup>1</sup>		
1	Vietnam		134	Swaziland <sup>1</sup>		
65	Honduras		135	Ethiopia		
65	Jamaica		135	Myanmar <sup>1</sup>		
67	Jordan <sup>1</sup>		135	Tajikistan <sup>1</sup>		
68	Rwanda <sup>1</sup>		n/a	Mongolia		
69	Bahrain		n/a	Venezuela	n/a	
69	Italy	1.90				

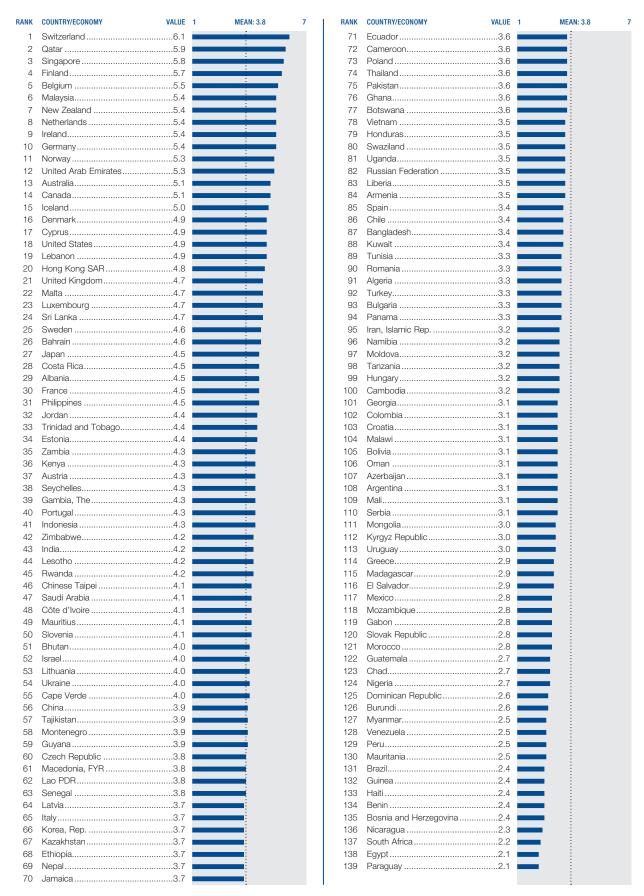
**SOURCE:** Authors' calculations based on International Telecommunication Union (ITU), ITU World Telecommunication Regulatory Database (retrieved January 5, 2016), http://www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx.

 $<sup>^{1}</sup>$  pre-2013  $^{2}$  2013  $^{3}$  2015

## 5th pillar Skills

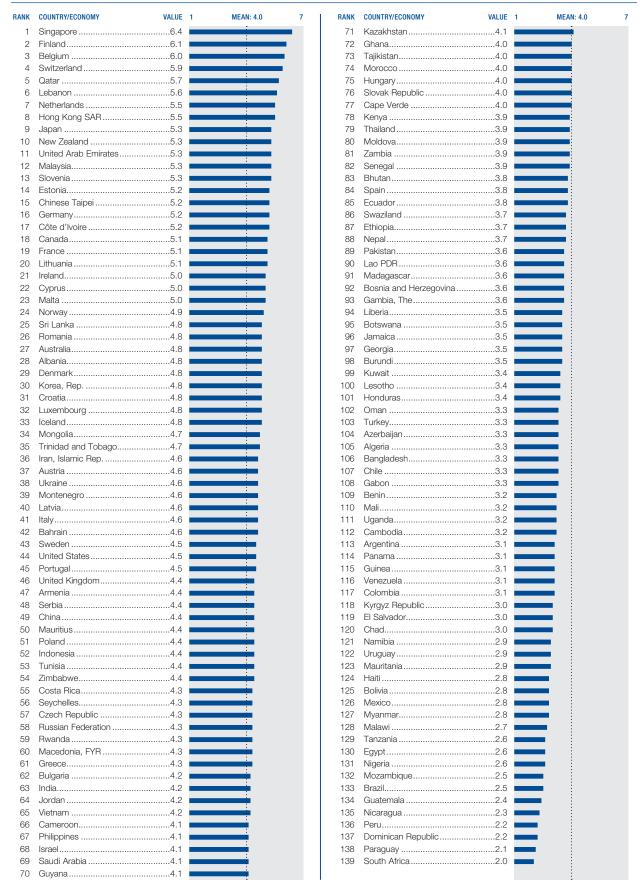
#### 5.01 Quality of the education system

In your country, how well does the education system meet the needs of a competitive economy? [1 = not well at all; 7 = extremely well] | 2014-15 weighted average



#### 5.02 Quality of math and science education

In your country, how do you assess the quality of math and science education [1 = extremely poor—among the worst in the world; 7 = excellent—among the best in the world] | 2014-15 weighted average



### 5.03 Secondary education enrollment rate

Secondary education gross enrollment rate (%) | 2013 or most recent

RANK	COUNTRY/ECONOMY	VALUE	
1	Belgium	163.1	
2	Finland		
3	Australia	137.6	
4	Spain	131.1	
5	Netherlands	130.7	
6	Denmark	129.8	
7	Sweden	128.5	
8	Ireland		
9	United Kingdom		
10	Costa Rica <sup>11</sup>		
11	Portugal		
12	New Zealand		
13	Turkey		
14	Norway		
15	Iceland <sup>10</sup>		
16	Slovenia		
17	France		
18	Latvia		
19	Canada <sup>10</sup>		
20 21	Qatar <sup>9</sup> Kazakhstan <sup>12</sup>		
21	Poland		
22	Estonia		
23 24	Saudi Arabia <sup>11</sup>		
25	Hungary		
26	Greece		
27	Singapore		
28	Argentina		
29	Lithuania		
30	Czech Republic		
31	Ecuador <sup>11</sup>		
32	Azerbaijan <sup>11</sup>		
33	Germany		
34	Luxembourg		
35	Italy	102.4	
36	Japan	101.9	
37	Israel	101.5	
38	Bulgaria <sup>11</sup>	100.9	
39	Hong Kong SAR <sup>11</sup>	100.6	
40	Chile		
41	Chinese Taipei		
42	Algeria <sup>9</sup>		
43	Croatia <sup>10</sup>		
44	Sri Lanka		
45	Oman <sup>10</sup>		
46	Georgia <sup>11</sup>		
47	Cyprus <sup>11</sup>		
48	Bahrain <sup>4</sup>		
49	Brazil <sup>9</sup>		
50 51	Austria <sup>11</sup> Ukraine <sup>11</sup>		
51 52	Colombia <sup>7</sup>		
53	Russian Federation		
53 54	South Africa		
55	Mauritius <sup>11</sup>		
56	Romania		
57	Korea, Rep. <sup>11</sup>		
58	Armenia <sup>7</sup>		
59	Albania <sup>11</sup>		
60	China		
61	Switzerland <sup>10</sup>		
62	United States		
63	Peru <sup>11</sup>		
64	Serbia <sup>11</sup>		
65	Cape Verde <sup>11</sup>	92.6	
66	Kuwait	92.5	
67	United Arab Emirates <sup>4</sup>	92.3	
68	Slovak Republic		
69	Venezuela <sup>11</sup>		
70	Kyrgyz Republic <sup>11</sup>	90.8	

DANK	COUNTRY/FOOLONY		
<b>RANK</b> 71	COUNTRY/ECONOMY  Mongolia <sup>11</sup>	VALUE	
71	Montenegro <sup>12</sup>		
73	Uruguay <sup>8</sup>		
74	Tunisia		
75	Guyana <sup>10</sup>		
76	Bosnia and Herzegovina <sup>9</sup>		
77	Iran, Islamic Rep. <sup>11</sup>		
78 79	Moldova		
80	Tajikistan		
81	Mexico	87.0	
82	Thailand		
83	Egypt		
84	Trinidad and Tobago <sup>2</sup> Malta <sup>11</sup>		
85 86	Bolivia		
87	Jordan <sup>10</sup>		
88	Bhutan <sup>11</sup>		
89	Botswana	83.9	
90	Jamaica <sup>11</sup>		
91	Indonesia		
92	Macedonia, FYR <sup>10</sup>		
93 94	Dominican Republic <sup>11</sup>		
95	Paraguay <sup>10</sup>		
96	Panama		
97	Vietnam <sup>3</sup>	75.2	
98	Seychelles <sup>11</sup>		
99	Nicaragua <sup>8</sup>		
100 101	MalaysiaGhana <sup>12</sup>		
101	Morocco <sup>10</sup>		
103	India		
104	Honduras <sup>11</sup>	68.4	
105	Lebanon		
106	Haiti <sup>10</sup>		
107	Kenya <sup>10</sup>		
108 109	Nepal <sup>12</sup> Namibia <sup>5</sup>		
110	Guatemala <sup>11</sup>		
111	Swaziland		
112	Bangladesh	58.3	
113	Gambia, The <sup>8</sup>		
114	Lao PDR <sup>11</sup>		
115 116	Cameroon <sup>11</sup>		
117	Gabon <sup>1</sup>		
118	Lesotho <sup>11</sup>		
119	Myanmar <sup>11</sup>	51.3	
120	Zimbabwe <sup>10</sup>		
121	Cambodia <sup>6</sup>		
122	Nigeria <sup>8</sup>		
123 124	Mali <sup>11</sup> Pakistan <sup>11</sup>		
125	Rwanda		
126	Côte d'Ivoire <sup>11</sup>		
127	Senegal <sup>9</sup>		
128	Malawi <sup>11</sup>		
129	Guinea <sup>11</sup>		
130	Madagascar <sup>11</sup> Burundi <sup>11</sup>		
131 132	Liberia <sup>11</sup>		
133	Ethiopia <sup>10</sup>		
134	Tanzania	32.3	
135	Mauritania <sup>11</sup>		
136	Uganda		
137	Mozambique <sup>11</sup>		
138 n/a	Chad <sup>10</sup> Zambia		
11/4	Zaribia	ı/a	

SOURCES: United Nations Education, Science and Culture Organization (UNESCO), UNESCO Institute for Statistics Data Centre (retrieved December 15, 2015), http://data.uis.unesco.org/; and Education for All Global Monitoring Monitor 2013; United Nations Children's Fund (UNICEF), Education Statistics; SITEAL - Sistema de Información de tendencias Educativas de América Latina; national sources

 $^1\ 2002 \quad ^2\ 2004 \quad ^3\ 2005 \quad ^4\ 2006 \quad ^5\ 2007 \quad ^6\ 2008 \quad ^7\ 2009 \quad ^8\ 2010 \quad ^9\ 2011 \quad ^{10}\ 2012 \quad ^{11}\ 2014 \quad ^{12}\ 2015$ 

### 5.04 Adult literacy rate

Adult literacy rate (%) | 2015 or most recent

RANK	COUNTRY/ECONOMY	VALUE	
1	Latvia		
2	Estonia		
3	Lithuania		
4	Azerbaijan		
5	Poland Kazakhstan		
6 7	Tajikistan		
8	Armenia		
9	Ukraine		
10	Georgia	99.8	
11	Russian Federation		
12	Slovenia		
13 14	Slovak Republic		
15	Moldova		
16	Croatia		
17	Italy	99.2	
18	Cyprus		
19	Hungary		
20 21	Trinidad and Tobago		
22	Montenegro		
23	Chinese Taipei <sup>1</sup>		
24	Bosnia and Herzegovina	98.5	
25	Uruguay		
26	Bulgaria		
27 28	Mongolia		
29	Spain		
30	Argentina		
31	Macedonia, FYR	97.8	
32	Qatar		
33 34	Costa Rica		
35	Albania		
36	Chile		
37	Singapore	96.8	
38	Jordan		
39	Thailand		
40 41	ChinaPhilippines		
42	Kuwait		
43	Bahrain		
44	Portugal	95.7	
45	Bolivia		
46	Paraguay		
47 48	Venezuela		
49	Panama		
50	Turkey	95.0	
51	Oman		
52	Colombia		
53 54	Saudi Arabia		
55	Vietnam		
56	Peru		
57	Ecuador	94.5	
58	Mexico		
59	South Africa		
60 61	Malta Lebanon		
62	Indonesia		
63	United Arab Emirates		
64	Myanmar	93.1	
65	Sri Lanka		
66 67	Brazil		
67 68	Dominican Republic		
69	Jamaica		
70	Guyana	88.5	

	OCUMEDW/FOOMOWY	
RANK	COUNTRY/ECONOMY	VALUE
71	Honduras	
72 73	Botswana	
74	Cape Verde	
75	Swaziland	
76	Iran, Islamic Rep	
77	Zimbabwe	
78	Burundi	
79	Gabon	83.2
80	Nicaragua	82.8
81	Namibia	81.9
82	Tunisia	81.8
83	Tanzania	80.3
84	Algeria	80.2
85	Lao PDR	79.9
86	Lesotho	79.4
87	Guatemala	79.3
88	Kenya	78.0
89	Cambodia	77.2
90	Ghana	76.6
91	Egypt	75.2
92	Cameroon	
93	Uganda	
94	Morocco	
95	India	72.1
96	Rwanda	70.5
97	Malawi	
98	Bhutan	
99	Nepal	64.7
100	Madagascar	64.7
101	Zambia	
102	Bangladesh	
103	Haiti	60.7
104	Nigeria	59.6
105	Mozambique	
106	Pakistan	
107	Senegal	
108	Gambia, The	
109	Mauritania	
110	Ethiopia	
111	Liberia	
112	Côte d'Ivoire	
113	Chad	
114	Mali	
115	Benin	38.4
116	Guinea	
n/a	Australia <sup>2</sup>	
n/a	Austria <sup>2</sup>	
n/a	Belgium <sup>2</sup>	
n/a	Canada <sup>2</sup>	
n/a	Czech Republic <sup>2</sup>	
n/a	Denmark <sup>2</sup>	
n/a	Finland <sup>2</sup>	
n/a	France <sup>2</sup>	
n/a	Germany <sup>2</sup>	
n/a	Hong Kong SAR <sup>2</sup>	
n/a	Iceland <sup>2</sup>	
n/a	Ireland <sup>2</sup>	
n/a	Israel <sup>2</sup>	
n/a	Japan <sup>2</sup>	
n/a	Korea, Rep. <sup>2</sup>	
n/a	Luxembourg <sup>2</sup>	
n/a	Netherlands <sup>2</sup>	
n/a	New Zealand <sup>2</sup>	
n/a	Norway <sup>2</sup>	
n/a	Sweden <sup>2</sup>	
n/a	Switzerland <sup>2</sup>	
n/a	United Kinadom <sup>2</sup>	n/a
n/a n/a	United Kingdom <sup>2</sup> United States <sup>2</sup>	

SOURCES: United Nations Education, Science and Culture Organization (UNESCO), UNESCO Institute for Statistics Data Centre (retrieved December 15, 2015), http://data.uis.unesco.org/; national sources

<sup>&</sup>lt;sup>1</sup> 2014

 $<sup>^{2}\,</sup>$  See the "Technical Notes and Sources" section.

# 6th pillar Individual usage

#### Mobile telephone subscriptions 6.01

Mobile telephone subscriptions (post-paid and pre-paid) per 100 population  $\,$  I  $\,$  2014

RANK	COUNTRY/ECONOMY	VALUE	
1	Hong Kong SAR		
2	Kuwait		
3	Saudi Arabia		
4	United Arab Emirates		
5	Bahrain		
6	Gabon		
7 8	Botswana		
9	Montenegro		
10	Seychelles		
11	Uruguay		
12	Estonia	160.7	
13	Argentina	158.8	
14	Panama	158.1	
15	Oman		
16	Russian Federation		
17	Italy		
18 19	Austria		
20	South Africa		
21	Mali		
22	Poland		
23	Malaysia		
24	Jordan	147.8	
25	Trinidad and Tobago		
26	Vietnam		
27	Lithuania		
28	Singapore		
29	Qatar		
30 31	Thailand		
32	El Salvador		
33	Costa Rica		
34	Finland		
35	Brazil	139.0	
36	Bulgaria	137.7	
37	Switzerland	136.7	
38	Kyrgyz Republic		
39	Chile		
40	Cambodia		
41 42	Mauritius		
43	Australia		
44	Chinese Taipei		
45	Czech Republic		
46	Indonesia	128.8	
47	Tunisia	128.5	
48	Sweden		
49	Malta		
50	Denmark		
51 52	GeorgiaUnited Kingdom		
53	Serbia		
54	Cape Verde		
55	Israel		
56	Germany		
57	Japan	120.2	
58	Gambia, The		
59	Hungary		
60	Slovak Republic		
61	Latvia		
62 63	Netherlands		
64	Armenia		
65	Korea, Rep.		
66	Ghana		
67	Nicaragua	114.6	
68	Egypt		
69	Belgium		
70	Namibia	113.8	

RANK	COUNTRY/ECONOMY	VALUE	
71 72	Colombia		
73	Slovenia		
74	New Zealand		
75	Philippines	.111.2	
76	Iceland	.111.1	
77	Azerbaijan		
78	Greece		
79 80	United States Moldova		
81	Spain		
82	Jamaica		
83	Guatemala	106.6	
84	Côte d'Ivoire	.106.2	
85	Romania		
86	Paraguay		
87 88	Macedonia, FYR		
89	Ireland		
90	Mongolia		
91	Croatia		
92	Ecuador		
93	Peru		
94	Sri Lanka		
95 96	France Benin		
97	Venezuela		
98	Senegal		
99	Bolivia	96.3	
100	Cyprus	96.3	
101	Tajikistan		
102	Turkey		
103 104	Mauritania Honduras		
105	Algeria		
106	China		
107	Bosnia and Herzegovina	91.3	
108	Lebanon		
109	Iran, Islamic Rep		
110 111	Lesotho Mexico		
112	Bhutan		
113	Nepal		
114	Canada		
115	Zimbabwe	80.8	
116	Bangladesh		
117	Dominican Republic		
118 119	Nigeria		
120	India		
121	Kenya		
122	Liberia		
123	Pakistan	73.3	
124	Swaziland		
125	Guinea		
126 127	Guyana		
127	MozambiqueZambia		
129	Lao PDR		
130	Haiti		
131	Rwanda	64.0	
132	Tanzania		
133	Myanmar		
134	Uganda		
135 136	MadagascarChad		
137	Malawi		
138	Ethiopia		
139	Burundi	30.5	_

# 6.02 Internet users

Percentage of individuals using the Internet | 2014

RANK	COUNTRY/ECONOMY	VALUE	
1	Iceland		
2	Norway		
3	Denmark	96.0	
4	Luxembourg		
5	Netherlands		
6	Sweden		
7 8	FinlandUnited Kingdom		
9	Qatar		
10	Bahrain		
11	Japan	90.6	
12	United Arab Emirates		
13	United States		
14 15	Canada Switzerland		
16	Germany		
17	New Zealand		
18	Belgium	85.0	
19	Australia	84.6	
20	Korea, Rep		
21	Estonia		
22 23	Chinese Taipei France		
23 24	Singapore		
25	Austria		
26	Slovak Republic		
27	Czech Republic	79.7	
28	Ireland		
29	Kuwait		
30 31	Spain Hungary		
32	Latvia		
33	Lebanon		
34	Hong Kong SAR		
35	Malta	73.2	
36	Chile		
37	Lithuania		
38 39	SloveniaIsrael		
40	Russian Federation		
41	Oman		
42	Cyprus	69.3	
43	Croatia	68.6	
44	Macedonia, FYR		
45	Malaysia		
46	Poland Trinidad and Tobago		
47 48	Argentina		
49	Portugal		
50	Saudi Arabia		
51	Greece	63.2	
52	Italy		
53	Uruguay		
54	Azerbaijan		
54 56	Montenegro		
57	Albania		
58	Brazil		
59	Venezuela	57.0	
60	Morocco		
61	Bulgaria		
62	Kazakhstan		
63 64	Seychelles		
65	Serbia		
66	Colombia		
67	Turkey		
68	Dominican Republic		
69	Costa Rica		
70	China	49.3	

RANK		VALUE
71	South Africa	
72 73	GeorgiaVietnam	
74	Moldova	
75	Armenia	.46.3
76	Tunisia	.46.2
77	Panama	
78	Mexico	
79	Jordan	
80 80	Kenya Ukraine	
82	Ecuador	
82	Paraguay	
84	Nigeria	
85	Mauritius	.41.4
86	Jamaica	.40.5
87	Cape Verde	.40.3
88	Peru	
89	Philippines	
90	Iran, Islamic Rep	
91	Bolivia	
92	Guyana	
93 94	Thailand Bhutan	
95	Egypt	
96	El Salvador	
97	Kyrgyz Republic	
98	Swaziland	
99	Mongolia	
100	Sri Lanka	
101	Guatemala	.23.4
102	Zimbabwe	.19.9
103	Honduras	
104	Ghana	
105	Botswana	
106	Algeria	
107	India	
108	Uganda	
109	Senegal	
111	Nicaragua Tajikistan	
112	Zambia	
113	Indonesia	
114	Gambia, The	
115	Nepal	
116	Namibia	
117	Côte d'Ivoire	.14.6
118	Lao PDR	
119	Pakistan	
120	Haiti	
121	Cameroon	
121	Lesotho	
123	Mauritania	
124	Rwanda	
125	Gabon	
126 127	Bangladesh Cambodia	
128	Mali	
128	Mozambique	
130	Malawi	
131	Liberia	
132	Benin	
133	Tanzania	
134	Madagascar	
135	Ethiopia	
136	Chad	
137	Myanmar	
138	Guinea	1.7
139	Burundi	1.4

# 6.03 Households with a personal computer

Percentage of households equipped with a personal computer | 2014 or most recent

RANK	COUNTRY/ECONOMY	VALUE	
1	Iceland	98.1	
2	Netherlands	97.6	
3	Qatar	97.2	
4	Luxembourg	96.3	
5	Norway	95.4	
6	Denmark	95.0	
7	Bahrain	94.6	
8	Sweden	93.4	
9	Finland	91.9	
10	United Kingdom		
11	Germany	90.6	
12	Singapore		
13	United Arab Emirates		
14	Kuwait		
15	Canada		
16	Switzerland		
17	Australia		
18	Ireland		
18	Oman		
20	Belgium		
21	Austria		
22	Hong Kong SAR		
23	Japan		
24	France		
25	Estonia		
26	Israel		
27	Malta		
28	United States		
29	Lebanon		
30	Slovak Republic		
31	Saudi Arabia		
32	New Zealand		
33	Slovenia		
34	Czech Republic		
35	Korea, Rep		
36	Chinese Taipei		
37	Poland		
38	Hungary		
39	Spain		
40	Cyprus		
40	Italy		
42	Latvia		
43	Russian Federation		
44	Croatia		
44	Macedonia, FYR		
46	Portugal		
47	Lithuania		
48	Uruguay		
49	Malaysia		
50	Serbia		
51	Kazakhstan		
52	Trinidad and Tobago		
53			
54	Greece		
55	Argentina		
56 57	Seychelles		
	Chile		
58 59	Bulgaria Turkey		
	•		
60 61	Montenegro  Morocco		
62	Iran, Islamic Rep		
63 63	Moldova Ukraine		
65	Costa Rica		
66	Brazil		
67	Azerbaijan		
68	Armenia		
69	Mauritius		
70	Jordan		
, 0			

RANK			
	COUNTRY/ECONOMY	VALUE	
71	China		
72	Georgia		
73 74	Egypt  Bosnia and Herzegovina		
75	Colombia		
76	Venezuela		
77	Ghana		
78	Mexico		
79	Panama	38.2	
80	Ecuador	38.0	
81	Mongolia	35.8	
82	Bolivia	34.9	
83	Thailand		
84	Tunisia		
85	Jamaica		
86	Peru		
87 88	Cape Verde Paraguay		
89	Algeria		
90	South Africa		
91	Guyana		
92	Dominican Republic		
93	El Salvador		
94	Albania	23.5	
95	Bhutan	21.9	
96	Honduras	21.6	
97	Guatemala	20.9	
98	Vietnam		
99	Philippines		
100	Sri Lanka		
101	Indonesia		
102 103	Kyrgyz Republic Swaziland		
103	Namibia		
105	Pakistan		
106	Botswana		
107	India		
108	Gabon	12.5	_
109	Kenya	12.3	_
110	Senegal	11.6	_
111	Nicaragua		
112	Cambodia		
113	Lao PDR		
114	Cameroon		
115	Tajikistan		
116 117	Nigeria	0 7	
118	Gambia, The		
119	Mali		
119	Nepal		
121	Zimbabwe		
122	Mozambique		
123	Côte d'Ivoire		
124	Bangladesh		
124	Lesotho	6.9	-
126	Zambia		-
127	Uganda		-
128	Malawi		•
129	Benin		•
	Madagascar		
	Mauritania		•
131			
131 132	Tanzania		
131 132 133	Tanzania Myanmar	3.4	•
131 132 133 134	Tanzania Myanmar Rwanda	3.4 3.4	:
132 133 134 135	Tanzania	3.4 3.4 2.9	•
131 132 133 134 135 136	Tanzania	3.4 3.4 2.9 2.8	
131 132 133 134 135	Tanzania	3.4 2.9 2.8 2.3	

#### Households with Internet access 6.04

Percentage of households with Internet access at home | 2014 or most recent

RANK	COUNTRY/ECONOMY	VALUE	
1	Korea, Rep		
2	Qatar		
3	Japan		
4	Iceland		
5	Netherlands		
6	Luxembourg		
7 8	Saudi Arabia  Denmark		
9	Norway		
10	Switzerland		
11	United Arab Emirates	90.1	
12	United Kingdom		
13	Finland		
14 15	Sweden		
16	Singapore		
17	Australia		
18	Canada		
19	Oman	86.2	
20	France		
21	Estonia		
22	Belgium		
23 24	Hong Kong SAR		
25	Bahrain		
26	Austria		
27	Malta	80.7	
28	New Zealand	79.8	
29	United States		
30	Slovak Republic		
31 32	Czech Republic Chinese Taipei		
33	Slovenia		
34	Kuwait		
35	Hungary	75.1	
36	Poland	74.8	
37	Spain		
38	Latvia		
39 40	ItalyIsrael		
41	Russian Federation		
42	Cyprus		
43	Lebanon	68.4	
44	Croatia		
45	Macedonia, FYR		
46 47	Lithuania		
48	Malaysia		
49	Portugal		
50	Romania		
51	Turkey	60.2	
52	Jordan		
53	Kazakhstan		
54 55	Uruguay		
55 56	Bulgaria Montenegro		
57	Costa Rica		
58	Seychelles		
59	Azerbaijan		
60	Chile		
61	Argentina		
62	Serbia		
63 64	Morocco Trinidad and Tobago		
65	Bosnia and Herzegovina		
66	Brazil		
67	Mauritius		
68	Moldova		
69	China		
70	Armenia	46.6	

RANK	COUNTRY/ECONOMY VALUE
71	Iran, Islamic Rep44.7
72	Ukraine43.0
73	Panama41.6
74	Georgia41.0
75	Colombia
76	South Africa
77 78	Egypt
79	Venezuela34.2
80	Thailand
81	Ecuador32.0
82	Indonesia
83	Ghana
83	Mongolia29.0
85	Tunisia28.8
86	Philippines26.9
87	Albania
88	Bhutan
89	Algeria25.9
90	Jamaica25.7
91	Cape Verde24.8
92	Paraguay24.6
93	Guyana24.2
94	Peru23.5
95	El Salvador23.3
96	Dominican Republic21.1
97	Honduras19.6
98	Vietnam18.6
99	Swaziland18.4
100	Namibia17.3
101	Bolivia17.0
102	Kenya16.9
103	India15.3
104	Sri Lanka15.3
105	Guatemala15.0
106	Pakistan13.2
107	Senegal12.6
108	Côte d'Ivoire12.2
109	Botswana12.1
110	Kyrgyz Republic12.0
111	Nicaragua11.6
112	Gabon9.7
113	Gambia, The8.5
114	Nigeria8.5
115	Tajikistan7.2
116	Cambodia7.0
117	Zambia6.9
118	Mali6.7
119	Bangladesh6.5
119	Cameroon6.5
119	Lesotho6.5
122	Malawi6.2
123	Mozambique6.2
124	Mauritania6.2
124	Uganda6.2
126	Zimbabwe5.8
127	Nepal5.6
128	Lao PDR
129	Madagascar4.7
130	Tanzania4.1
131	Haiti4.0
132	Rwanda
133	Benin
134	Myanmar
135	Ethiopia2.9
136	Chad2.7
137	Liberia2.5
138	Guinea1.5
139	Burundi <sup>1</sup> 0.1

# 6.05 Fixed broadband Internet subscriptions

Fixed broadband Internet subscriptions per 100 population | 2014

RANK	COUNTRY/ECONOMY	VALUE	
1	Switzerland	42.5	
2	Denmark	41.3	
3	Netherlands	40.8	
4	France	40.2	
5	Norway	38.8	
6	Korea, Rep.	38.8	
7	United Kingdom	37.4	
8	Belgium		
9	Iceland		
10 11	Germany		
12	Malta		
13	Luxembourg		
14	Sweden		
15	Finland	32.3	
16	Chinese Taipei	31.9	
17	Hong Kong SAR	31.4	
18	United States		
19	New Zealand		
20	Japan		
21 22	Estonia		
23	Czech Republic		
24	Austria		
25	Australia		
26	Hungary	27.3	
27	Spain	27.3	
28	Israel	27.2	
29	Ireland		
30	Singapore		
31	Lithuania		
32 33	Slovenia		
34	Latvia		
35	Uruguay		
36	Italy		
37	Saudi Arabia		
38	Philippines	23.2	
39	Croatia	23.0	
40	Lebanon		
41	Slovak Republic		
42 43	Bahrain		
43	Bulgaria		
45	Azerbaijan		
46	Poland		
47	Romania		
48	Trinidad and Tobago	17.6	
49	Russian Federation		
50	Macedonia, FYR		
51	Montenegro		
52 53	Argentina		
54	Moldova		
55	Mauritius		
56	China		
57	Bosnia and Herzegovina	14.2	
58	Chile		
59	Kazakhstan		
60	Seychelles		
61	Georgia		
62 63	Turkey		
64	United Arab Emirates		
65	Costa Rica		
66	Mexico		
67	Colombia		
68	Malaysia	10.1	
69	Qatar		
70	Iran, Islamic Rep	9.5	

RANK	COUNTRY/ECONOMY VALUE
71	Ukraine
72	Armenia9.1
73	Thailand8.5
74	Ecuador8.3
75	Panama
76	Venezuela7.8
77	Mongolia6.8
78	Albania
79	Vietnam
80	Peru
81	Dominican Republic5.7
82	Guyana5.6
83	Jamaica5.4
84	El Salvador5.0
85	Jordan4.7
86	Oman4.5
87	Tunisia
88	Kyrgyz Republic4.2
89	Algeria4.0
90	Egypt
91	Cape Verde3.4
92	Bhutan3.3
93	South Africa3.2
94	Morocco3.0
95	Guatemala2.7
96	Sri Lanka
97	Nicaragua2.5
98	Paraguay2.4
	· ·
99	Bangladesh2.0
100	Namibia1.8
101	Botswana1.6
102	Bolivia1.6
103	Honduras1.4
104	Kuwait1.4
105	India1.2
106	Indonesia
107	Pakistan1.1
108	Zimbabwe1.0
109	Nepal0.9
110	Senegal
111	Gabon
112	Côte d'Ivoire0.6
113	Ethiopia0.5
114	Cambodia0.4
115	Swaziland0.4
116	Benin0.4
117	Uganda0.3
118	Myanmar
119	Ghana0.3
120	Mauritania0.2
121	Kenya0.2
122	Tanzania
123	Lao PDR
124	Gambia, The0.1
125	Zambia0.1
126	Liberia0.1
127	Madagascar0.1
128	Chad
129	Mozambique0.1
130	Tajikistan0.1
131	Lesotho0.1
132	Cameroon0.1
133	Malawi0.1
134	Rwanda
135	Mali
136	Burundi
137	Nigeria0.0
138	Guinea0.0
139	Haiti0.0
. 50	

#### Mobile broadband Internet subscriptions 6.06

Mobile broadband Internet subscriptions per 100 population | 2014 or most recent

RANK	COUNTRY/ECONOMY	VALUE	
1	Singapore	141.7	
2	Kuwait		
3	FinlandBahrain		
5	Japan		
6	Estonia		
7	Sweden	116.3	
8	Denmark		
9	United Arab Emirates		
10 11	AustraliaLuxembourg		
12	Korea, Rep.		
13	Hong Kong SAR		
14	United States		
15	Saudi Arabia		
16 17	New Zealand United Kingdom		
18	Norway		
19	Costa Rica		
20	Switzerland		
21	Iceland		
22 23	Ireland Thailand		
24	Brazil		
25	Spain		
26	Oman	73.7	
27	Qatar		
28 29	Italy Netherlands		
30	Croatia		
31	Kyrgyz Republic		
32	Austria		
33 34	Crock Popublic		
35	Czech Republic Bulgaria		
36	Serbia		
37	France		
38	Russian Federation		
39 40	Germany		
41	Azerbaijan		
42	Latvia	61.2	
43	Uruguay		
44 45	GhanaSlovak Republic		
46	Kazakhstan		
47	Malaysia		
48	Belgium	57.8	
49	Mongolia		
50 51	Malta Poland		
52	Canada		
53	Argentina		
54	Lebanon	53.5	
55	Israel		
56 57	Cape Verde		
58	Botswana		
59	Macedonia, FYR		
60	Romania		
61	Moldova		
62 63	Tunisia  South Africa		
64	Slovenia		
65	Colombia		
66	Portugal		
67	Venezuela		
68 69	Egypt Turkey		
70	Cyprus		

RANK	COUNTRY/ECONOMY	VALUE
71	China	
72	Mexico	
73	GreeceZimbabwe	
74		
75 76	JamaicaIndonesia	
77	Armenia	
78	Namibia	
79	Hungary	
80	Mauritius	
81	Cambodia	
82	Vietnam	
83	Montenegro	
84	Albania	
85	Ecuador	
86	Dominican Republic	30.1
87	Panama	29.5
88	Trinidad and Tobago	
89	Bhutan	28.2
90	Bolivia	28.1
91	Philippines	28.0
92	Bosnia and Herzegovina	27.8
93	Morocco	26.8
94	Lesotho	25.5
95	Côte d'Ivoire	24.6
96	Senegal	23.7
97	Georgia	21.8
98	Algeria	20.8
99	Jordan	19.1
100	El Salvador	18.4
101	Nepal	17.4
102	Honduras	16.3
103	Myanmar	14.9
104	Uganda	14.7
105	Mauritania	14.4
106	Peru	13.7
107	Bangladesh	13.4
108	Sri Lanka	13.0
109	Seychelles	12.7
110	Nigeria	11.7
111	Mali	11.3
112	Rwanda	11.1
113	Iran, Islamic Rep	10.7
114	Tajikistan	9.5
115	Guatemala	9.4
116	Kenya	9.1
117	Gambia, The	8.0
118	Swaziland	8.0
119	Liberia	7.6
120	Ethiopia	7.5
121	Ukraine	7.5
122	Lao PDR	6.5
123	Madagascar	6.1
124	India	5.5
125	Pakistan	5.1
126	Paraguay <sup>1</sup>	4.9
127	Malawi	4.1
128	Tanzania	3.0
129	Mozambique	3.0
130	Benin	2.8
131	Guinea	2.2
132	Nicaragua	1.4
133	Zambia	1.0
134	Burundi	0.5
135	Guyana	0.2
136	Haiti	0.2
137	Cameroon	0.0
137	Chad	0.0
137	Gabon	0.0

# 6.07 Use of virtual social networks

In your country, how widely are virtual social networks used (e.g., Facebook, Twitter, LinkedIn)? [1 = not at all used; 7 = used extensively] | 2014–15 weighted average

RANK	COUNTRY/ECONOMY	VALUE 1	MEAN: 5.5 7	RANK	COUNTRY/ECONOMY	VALUE 1	MEAN: 5.5	7
1	Iceland	6.7		71	Guatemala	5.6		
2	Norway			72	Tunisia			
3	United States			73	South Africa			
4	Netherlands			74	Sri Lanka			
5	United Kingdom			75	Jamaica			
6	United Arab Emirates			76	Seychelles			
7	Sweden			77	Morocco			
8	Singapore	6.4		78	Ukraine			
9	Lithuania			79	El Salvador	5.5		
10	Finland			80	Moldova			
11	Israel			81	Cape Verde			
12	Qatar			82	Namibia			
13	Thailand			83	Dominican Republic			
14	Estonia			84	Croatia			
15	Bahrain			85	Nigeria			
16	Hong Kong SAR			86	Vietnam			
17	Ireland			87	Cambodia			
18	Canada			88	Oman			
19	Luxembourg			89	Colombia			
20	New Zealand			90	Hungary	5.4		
21	Denmark			91	Mexico			
22	Malaysia			92	Greece			
23	Macedonia, FYR			93	Kazakhstan			
24	Chinese Taipei			94	Guyana	5.2		
25	Belgium			95	Botswana	5.2		
26	Azerbaijan			96	Poland			
27	Philippines			97	Senegal	5.2		
28	Latvia	6.1		98	Bosnia and Herzegovina	5.2		
29	Malta	6.1		99	Rwanda			
30	Switzerland	6.1		100	Bhutan	5.2		
31	Saudi Arabia			101	Gambia, The			
32	Australia	6.0		102	Paraguay			
33	Trinidad and Tobago			103	Peru			
34	Georgia			104	Zambia	5.0		
35	Italy	6.0		105	Kyrgyz Republic	5.0		
36	Indonesia	5.9		106	Nepal	4.9		
37	Chile	5.9		107	Zimbabwe	4.9		
38	Cyprus	5.9		108	Madagascar	4.9		
39	Panama	5.9		109	Côte d'Ivoire	4.8		
40	Korea, Rep	5.9		110	Uganda	4.8		
41	Czech Republic	5.9		111	Myanmar	4.8		
42	Kuwait	5.9		112	Gabon	4.8		
43	Japan	5.9		113	Mozambique	4.8		
44	Portugal	5.9		114	Ecuador	4.8		
45	France	5.9		115	Lao PDR	4.8		
46	Brazil	5.9		116	Mauritania	4.8		
47	Austria			117	Cameroon			
48	Slovenia	5.8		118	Bangladesh			
49	Turkey	5.8		119	Swaziland			
50	Albania			120	Ghana			
51	Montenegro			121	China			
52	Egypt			122	Benin			
53	Argentina			123	Algeria			
54	Germany			124	Haiti	4.5		
55	Costa Rica			125	Nicaragua			
56	Mongolia			126	Tajikistan			
57	Jordan			127	Mali			
58	Slovak Republic			128	Ethiopia			
59	Armenia			129	Malawi			
60	Kenya			130	India			
61	Venezuela			131	Pakistan			
62	Bulgaria			132	Bolivia			
63	Lebanon			133	Tanzania			
64	Uruguay			134	Iran, Islamic Rep			
65	Honduras			135	Liberia			
66	Russian Federation			136	Guinea			
67	Romania			137	Lesotho			
68	Serbia			138	Chad			
69	Spain			139	Burundi	3.2		
70	Mauritius	5.6						

# 7th pillar Business usage

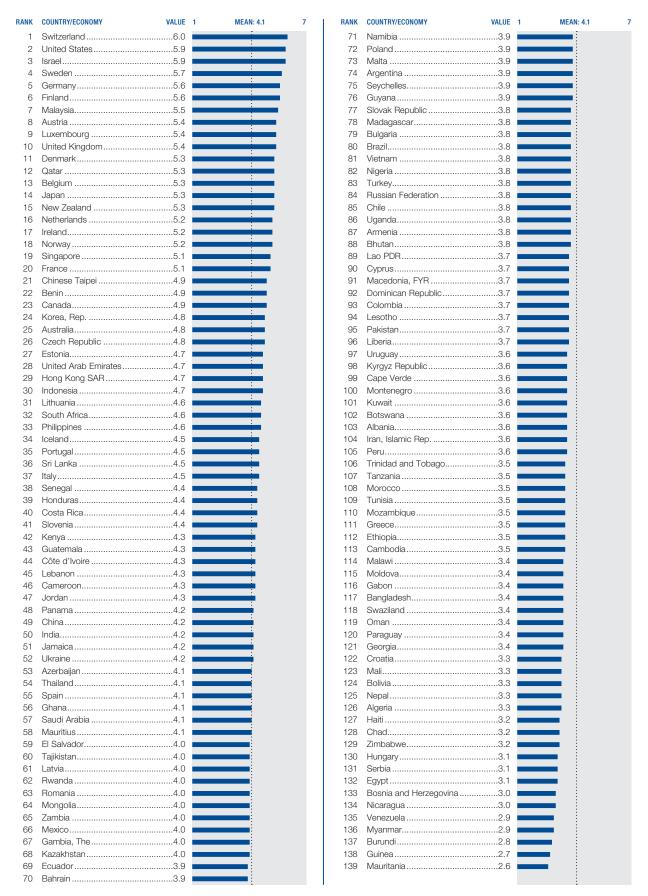
#### Firm-level technology absorption 7.01

In your country, to what extent do businesses adopt new technology? [1 = not at all; 7 = adopt extensively] | 2013-14 weighted average

RANK	COUNTRY/ECONOMY	VALUE 1	MEAN: 4.7	7	RANK	COUNTRY/ECONOMY	VALUE 1	MEAN: 4.7	7
1	Iceland	6.2			71	Côte d'Ivoire	4.6		
2	Japan	6.1			72	Greece	4.5		
3	United States	6.1			73	Morocco	4.5		
4	Norway	6.1			74	Gambia, The	4.5		
5	Israel	6.0			75	Dominican Republic	4.5		
6	Switzerland	6.0			76	Ecuador	4.5		
7	United Arab Emirates	6.0			77	Peru	4.5		
8	Luxembourg				78	Tunisia			
9	Sweden				79	Guyana			
10	Finland				80	Romania			
11	New Zealand				81	El Salvador			
12	Qatar				82	Pakistan			
13	Germany				83	Bosnia and Herzegovina			
14	United Kingdom				84	Cameroon			
15	Denmark				85	Bulgaria			
16	Singapore				86	Gabon			
	Austria								
17					87	Madagascar			
18	Hong Kong SAR				88	Montenegro Colombia			
19	Belgium				89				
20	Netherlands				90	Kazakhstan			
21	Portugal				91	Nigeria			
22	Australia				92	Botswana			
23	Malaysia				93	Uruguay			
24	Ireland				94	Lebanon			
25	Chinese Taipei				95	Ghana			
26	France				96	Lao PDR			
27	Korea, Rep				97	Cambodia			
28	South Africa				98	Russian Federation	4.2		
29	Canada	5.4			99	Mozambique	4.2		
30	Saudi Arabia	5.4			100	Ukraine	4.2		
31	Estonia	5.4			101	Poland	4.2		
32	Lithuania	5.4			102	India	4.2		
33	Bahrain	5.3			103	Georgia	4.2		
34	Panama	5.3			104	Mauritania	4.2		
35	Jordan	5.3			105	Macedonia, FYR	4.2		
36	Turkey	5.2			106	Italy	4.2		
37	Malta	5.2			107	Mali	4.1		
38	Chile	5.2			108	Bangladesh	4.1		
39	Cyprus	5.1			109	Moldova	4.1		
40	Philippines				110	Uganda	4.1		
41	Indonesia				111	Zimbabwe			
42	Senegal				112	Albania	4.1		
43	Mauritius				113	Armenia	4.1		
44	Costa Rica	5.0			114	Paraguay	4.1		
45	Guatemala	5.0			115	Argentina			
46	Latvia				116	Tajikistan			
47	Rwanda				117	Benin			
48	Czech Republic	5.0			118	Kyrgyz Republic	3.9		
49	Slovenia		:		119	Swaziland			
50	Spain		:		120	Bhutan			
51	Sri Lanka				121	Vietnam			
52	Namibia				122	Venezuela			
53	Thailand				123	Nepal			
54	Kenya				124	Nicaragua			
55	Slovak Republic				125	Malawi			
56	Oman				126	Egypt			
57	Brazil				127	Serbia			
58	Honduras				128	Ethiopia			
59	Jamaica				129	Tanzania			
60	Kuwait				130	Liberia			
61	Seychelles				131	Bolivia			
62	Azerbaijan				132	Iran, Islamic Rep			
63	Hungary				133	Guinea			
64	Mongolia				134	Haiti			
65	Zambia				135	Lesotho			
66	China				136	Algeria			
67	Cape Verde				137	Chad			
68	Mexico				138	Burundi			
69	Trinidad and Tobago				139	Myanmar	2.9		
70	Croatia	4.6							

#### Capacity for innovation 7.02

In your country, to what extent do companies have the capacity to innovate? [1 = not at all; 7 = to a great extent] | 2014–15 weighted average



# 7.03 PCT patents applications

Number of applications filed under the Patent Cooperation Treaty (PCT) per million population | 2012-13 average

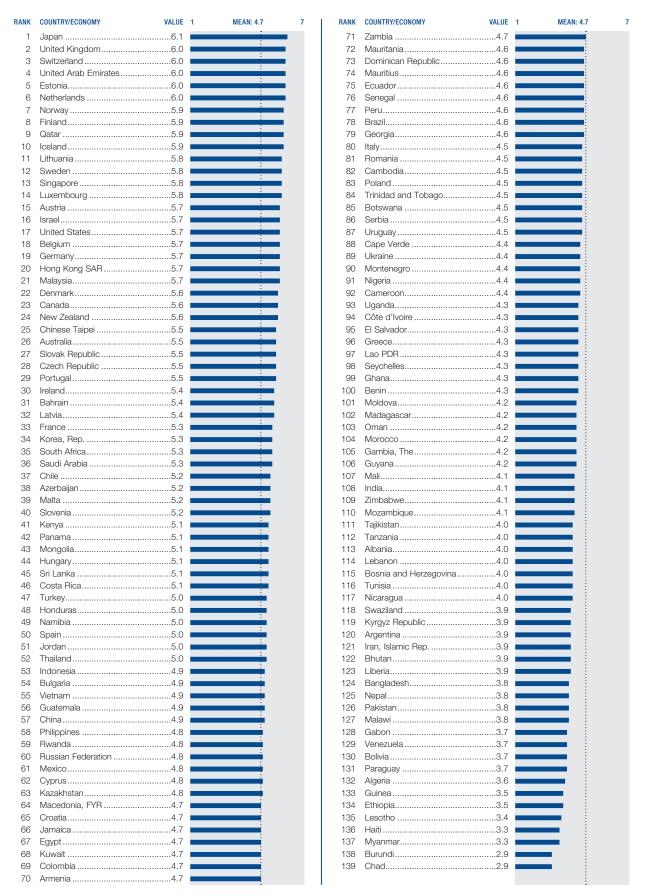
RANK	COUNTRY/ECONOMY VA	LUE	
1	Japan33		
2	Sweden32		
3	Switzerland30		
4	Finland28		
5	Israel24	2.5	
6	Korea, Rep23		
7	Germany21		
8	Denmark20		
9	Netherlands20		
10	United States173		
11	Austria16		
12	Norway13		
13	Singapore13		
14	France11		
15	Luxembourg11		
16	Belgium10		
17	Iceland10		
18	United Kingdom9		
19	Canada8		
20	Ireland8		
20	New Zealand7		
22	Australia		
23	Slovenia		
24	Italy5		
25	Spain		
26	Hungary2		
27	Qatar2		
28	Czech Republic2		
29	Estonia1		•
30	Malta1		•
31	Latvia1	3.5	•
32	China1	5.2	•
33	Lithuania1	4.6	•
34	Portugal1	3.9	•
35	Malaysia1	1.3	
36	Slovak Republic1	0.3	
37	Greece1	0.2	•
38	Poland	9.6	
39	Croatia	9.6	•
40	Turkey	9.0	
41	Russian Federation		
42	Cyprus	7.7	
43	Chile		
44	Bulgaria		ı
45	United Arab Emirates		
46	South Africa		i
47		5.9	
48	Seychelles	5.6	
49	Serbia		
50	Ukraine		
51	Brazil		
52	Romania		
53	Montenegro		
53 54	Uruguay		
	Bahrain		
L F	Dallall		
55 56		∠.ర	
56	Armenia	2 4	
56 57	Armenia		
56 57 58	Armenia	2.0	
56 57 58 59	Armenia	2.0 1.7	
56 57 58 59 60	Armenia	2.0 1.7 1.7	
56 57 58 59 60 61	Armenia	2.0 1.7 1.7 1.7	
56 57 58 59 60 61 62	Armenia	2.0 1.7 1.7 1.7	
56 57 58 59 60 61 62 63	Armenia	2.0 1.7 1.7 1.7 1.7	
56 57 58 59 60 61 62	Armenia	2.0 1.7 1.7 1.7 1.7 1.6	
56 57 58 59 60 61 62 63	Armenia	2.0 1.7 1.7 1.7 1.7 1.6	
56 57 58 59 60 61 62 63 64	Armenia	2.0 1.7 1.7 1.7 1.7 1.6 1.5	
56 57 58 59 60 61 62 63 64 65	Armenia	2.0 1.7 1.7 1.7 1.7 1.6 1.5	
56 57 58 59 60 61 62 63 64 65 66	Armenia	2.0 11.7 11.7 11.7 11.6 11.5 11.5	
56 57 58 59 60 61 62 63 64 65 66	Armenia	2.0 1.7 1.7 1.7 1.7 1.6 1.5 1.5 1.4	

RANK         COUNTRY/ECONOMY         VALUE           71         Sri Lanka         0.8           72         Jordan         0.8           73         Mongolia         0.7           74         Egypt         0.7           75         Tunisia         0.7           76         Moldova         0.7           77         Jamaica         0.6           78         Peru         0.5           9         Azerbaijan         0.5           80         Gambia, The         0.4           81         Trinidad and Tobago         0.4           82         Oman         0.4           83         Philippines         0.3           84         Kuwait         0.3           85         Dominican Republic         0.3           86         Venezuela         0.3           87         Albania         0.2           88         Ecuador         0.2           89         Algeria         0.2           90         Kenya         0.2           91         Namibia         0.2           92         Vietnam         0.2           95         Bao PDR <th></th> <th></th> <th></th>			
72         Jordan         0.8           73         Mongolia         0.7           74         Egypt         0.7           75         Tunisia         0.7           76         Moldova         0.7           77         Jamaica         0.6           78         Peru         0.5           79         Azerbaijan         0.5           80         Gambia, The         0.4           81         Trinidad and Tobago         0.4           81         Trinidad and Tobago         0.4           82         Oman         0.4           83         Philippines         0.3           84         Kuwait         0.3           85         Dominican Republic         0.3           86         Venezuela         0.3           86         Venezuela         0.3           87         Albania         0.2           88         Ecuador         0.2           98         Algeria         0.2           90         Kenya         0.2           91         Namibia         0.2           92         Vietnam         0.2           95         Lao PDR </td <td></td> <td></td> <td></td>			
73         Mongolia         0.7           74         Egypt         0.7           75         Tunisia         0.7           76         Moldova         0.7           77         Jamaica         0.6           78         Peru         0.5           79         Azerbaijan         0.5           80         Gambia, The         0.4           81         Trinidad and Tobago         0.4           81         Trinidad and Tobago         0.4           82         Oman         0.4           83         Philippines         0.3           84         Kuwait         0.3           85         Dominican Republic         0.3           86         Venezuela         0.3           87         Albania         0.2           88         Ecuador         0.2           89         Algeria         0.2           90         Kenya         0.2           90         Kenya         0.2           91         Namibia         0.2           92         Vietnam         0.2           93         Swaziland         0.2           94         El Salvado			
74         Egypt         0.7           75         Tunisia         0.7           76         Moldova         0.7           77         Jamaica         0.6           78         Peru         0.5           79         Azerbaijan         0.5           80         Gambia, The         0.4           81         Trinidad and Tobago         0.4           81         Trinidad and Tobago         0.4           82         Oman         0.4           83         Philippines         0.3           84         Kuwait         0.3           85         Dominican Republic         0.3           86         Venezuela         0.3           87         Albania         0.2           88         Ecuador         0.2           98         Recuador         0.2           99         Kenya         0.2           90         Kenya         0.2           91         Namibia         0.2           92         Vietnam         0.2           93         Swaziland         0.2           94         El Salvador         0.2           95         Lao PD			
76         Moldova.         0.7           77         Jamaica         0.6           78         Peru.         0.5           79         Azerbaijan         0.5           80         Gambia, The.         0.4           81         Trinidad and Tobago.         0.4           81         Trinidad and Tobago.         0.4           82         Oman         0.4           83         Philippines         0.3           84         Kuwait         0.3           85         Dominican Republic         0.3           86         Venezuela         0.3           87         Albania         0.2           88         Ecuador         0.2           89         Algeria         0.2           90         Kenya         0.2           90         Kenya         0.2           91         Namibia         0.2           92         Vettnam         0.2           93         Swaziland         0.2           94         El Salvador         0.2           95         Lao PDR         0.2           96         Botswana         0.1           97 <td< td=""><td>74</td><td></td><td></td></td<>	74		
77         Jamaica         0.6           78         Peru         0.5           79         Azerbaijan         0.5           80         Gambia, The         0.4           81         Trinidad and Tobago         0.4           82         Oman         0.4           83         Philippines         0.3           84         Kuwait         0.3           85         Dominican Republic         0.3           86         Venezuela         0.3           87         Albania         0.2           88         Ecuador         0.2           98         Algeria         0.2           90         Kenya         0.2           91         Namibia         0.2           92         Vietnam         0.2           92         Vietnam         0.2           93         Swaziland         0.2           94         El Salvador         0.2           95         Lao PDR         0.2           96         Botswana         0.1           97         Kyrgyz Republic         0.1           98         Iran, Islamic Rep         0.1           100			
78         Peru			
79         Azerbaijan         0.5           80         Gambia, The         0.4           81         Trinidad and Tobago         0.4           82         Oman         0.4           83         Philippines         0.3           84         Kuwait         0.3           85         Dominican Republic         0.3           86         Venezuela         0.3           87         Albania         0.2           88         Ecuador         0.2           89         Algeria         0.2           90         Kenya         0.2           91         Namibia         0.2           92         Vietnam         0.2           93         Swaziland         0.2           94         El Salvador         0.2           95         Lao PDR         0.2           96         Botswana         0.1           97         Kyrgyz Republic         0.1           98         Indonesia         0.1           109         Iran, Islamic Rep         0.1           101         Bolivia         0.1           102         Zimbabwe         0.1           103 <td></td> <td></td> <td></td>			
80         Gambia, The			
82         Oman         0.4           83         Philippines         0.3           84         Kuwait         0.3           85         Dominican Republic         0.3           86         Venezuela         0.3           87         Albania         0.2           88         Ecuador         0.2           89         Algeria         0.2           90         Kenya         0.2           91         Namibia         0.2           92         Vietnam         0.2           92         Vietnam         0.2           93         Swaziland         0.2           94         El Salvador         0.2           95         Lao PDR         0.2           96         Botswana         0.1           197         Kyrgyz Republic         0.1           198         Indonesia         0.1           199         Iran, Islamic Rep         0.1           100         Gabon         0.1           101         Bolivia         0.1           102         Zimbabwe         0.1           103         Nicaragua         0.1           104         G		,	
83         Philippines         0.3           84         Kuwait         0.3           85         Dominican Republic         0.3           86         Venezuela         0.3           87         Albania         0.2           88         Ecuador         0.2           89         Algeria         0.2           90         Kenya         0.2           90         Kenya         0.2           91         Namibia         0.2           92         Vietnam         0.2           93         Swaziland         0.2           94         El Salvador         0.2           95         Lao PDR         0.2           96         Botswana         0.1           97         Kyrgyz Republic         0.1           98         Indonesia         0.1           99         Iran, Islamic Rep         0.1           100         Gabon         0.1           101         Bolivia         0.1           102         Zimbabwe         0.1           103         Nicaragua         0.1           104         Guatemala         0.1           105	81	Trinidad and Tobago	0.4
84         Kuwait         0.3           85         Dominican Republic         0.3           86         Venezuela         0.3           87         Albania         0.2           88         Ecuador         0.2           89         Algeria         0.2           90         Kenya         0.2           91         Namibia         0.2           91         Namibia         0.2           92         Vietnam         0.2           93         Swaziland         0.2           94         El Salvador         0.2           95         Lao PDR         0.2           96         Botswana         0.1           97         Kyrgyz Republic         0.1           98         Indonesia         0.1           99         Iran, Islamic Rep.         0.1           100         Gabon         0.1           101         Bolivia         0.1           102         Zimbabwe         0.1           103         Nicaragua         0.1           104         Guatemala         0.1           105         Côte d'Ivoire         0.1           106			
85         Dominican Republic         0.3           86         Venezuela         0.3           87         Albania         0.2           88         Ecuador         0.2           89         Algeria         0.2           90         Kenya         0.2           91         Namibia         0.2           91         Namibia         0.2           92         Vietnam         0.2           93         Swaziland         0.2           94         El Salvador         0.2           95         Lao PDR         0.2           96         Botswana         0.1           97         Kyrgyz Republic         0.1           98         Iran, Islamic Rep         0.1           99         Iran, Islamic Rep         0.1           100         Gabon         0.1           101         Bolivia         0.1           102         Zimbabwe         0.1           103         Nicaragua         0.1           104         Guatemala         0.1           105         Côte d'Ivoire         0.1           106         Ghana         0.0           107			
86         Venezuela         0.3           87         Albania         0.2           88         Ecuador         0.2           89         Algeria         0.2           90         Kenya         0.2           91         Namibia         0.2           92         Vietnam         0.2           93         Swaziland         0.2           94         El Salvador         0.2           95         Lao PDR         0.2           96         Botswana         0.1           97         Kyrgyz Republic         0.1           98         Indonesia         0.1           99         Iran, Islamic Rep         0.1           100         Gabon         0.1           101         Bolivia         0.1           101         Bolivia         0.1           102         Zimbabwe         0.1           103         Nicaragua         0.1           104         Guatemala         0.1           105         Côte d'Ivoire         0.1           106         Ghana         0.0           107         Madagascar         0.0           108         C			
87         Albania         0.2           88         Ecuador         0.2           89         Algeria         0.2           90         Kenya         0.2           91         Namibia         0.2           92         Vietnam         0.2           92         Vietnam         0.2           94         El Salvador         0.2           95         Lao PDR         0.2           96         Botswana         0.1           97         Kyrgyz Republic         0.1           98         Indonesia         0.1           199         Iran, Islamic Rep         0.1           100         Gabon         0.1           101         Bolivia         0.1           102         Zimbabwe         0.1           103         Nicaragua         0.1           104         Guatemala         0.1           105         Côte d'Ivoire         0.1           106         Ghana         0.0           107         Madagascar         0.0           108         Cambodia         0.0           109         Cameroon         0.0           110         P		·	
89         Algeria         0.2           90         Kenya         0.2           91         Namibia         0.2           92         Vietnam         0.2           93         Swaziland         0.2           94         El Salvador         0.2           95         Lao PDR         0.2           96         Botswana         0.1           97         Kyrgyz Republic         0.1           98         Indonesia         0.1           99         Iran, Islamic Rep.         0.1           100         Gabon         0.1           101         Bolivia         0.1           102         Zimbabwe         0.1           103         Nicaragua         0.1           104         Guatemala         0.1           105         Côte d'Ivoire         0.1           106         Ghana         0.0           107         Madagascar         0.0           108         Cambodia         0.0           109         Cameroon         0.0           110         Pakistan         0.0           111         Nigeria         0.0           112			
90         Kenya         0.2           91         Namibia         0.2           92         Vietnam         0.2           92         Vietnam         0.2           94         El Salvador         0.2           95         Lao PDR         0.2           96         Botswana         0.1           97         Kyrgyz Republic         0.1           98         Indonesia         0.1           109         Iran, Islamic Rep         0.1           100         Gabon         0.1           101         Bolivia         0.1           102         Zimbabwe         0.1           103         Nicaragua         0.1           104         Guatemala         0.1           105         Côte d'Ivoire         0.1           106         Ghana         0.0           107         Madagascar         0.0           108         Cambodia         0.0           109         Cameroon         0.0           110         Pakistan         0.0           111         Nigeria         0.0           112         Banjladesh         0.0           113	88	Ecuador	0.2
91         Namibia         0.2           92         Vietnam         0.2           93         Swaziland         0.2           94         El Salvador         0.2           95         Lao PDR         0.2           96         Botswana         0.1           97         Kyrgyz Republic         0.1           98         Iran, Islamic Rep         0.1           100         Gabon         0.1           101         Bolivia         0.1           102         Zimbabwe         0.1           103         Nicaragua         0.1           104         Guatemala         0.1           105         Côte d'Ivoire         0.1           106         Ghana         0.0           107         Madagascar         0.0           108         Cambodia         0.0           109         Cameroon         0.0           109         Cameroon         0.0           110         Pakistan         0.0           111         Nigeria         0.0           112         Bangladesh         0.0           113         Ethiopia         0.0           114	89	•	
92         Vietnam         0.2           93         Swaziland         0.2           94         El Salvador         0.2           95         Lao PDR         0.2           95         Lao PDR         0.2           96         Botswana         0.1           97         Kyrgyz Republic         0.1           98         Indonesia         0.1           99         Iran, Islamic Rep.         0.1           100         Gabon         0.1           101         Bolivia         0.1           102         Zimbabwe         0.1           103         Nicaragua         0.1           104         Guatemala         0.1           105         Côte d'Ivoire         0.1           106         Ghana         0.0           107         Madagascar         0.0           108         Cambodia         0.0           109         Cameroon         0.0           109         Cameroon         0.0           110         Pakistan         0.0           111         Nigeria         0.0           112         Bangladesh         0.0           113		*	
93         Swaziland         0.2           94         El Salvador         0.2           95         Lao PDR         0.2           96         Botswana         0.1           97         Kyrgyz Republic         0.1           98         Indonesia         0.1           199         Iran, Islamic Rep         0.1           100         Gabon         0.1           101         Bolivia         0.1           102         Zimbabwe         0.1           103         Nicaragua         0.1           104         Guatemala         0.1           105         Côte d'Ivoire         0.1           106         Ghana         0.0           107         Madagascar         0.0           108         Cambodia         0.0           109         Cameroon         0.0           110         Pakistan         0.0           111         Nigeria         0.0           112         Bangladesh         0.0           113         Ethiopia         0.0           114         Zambia         0.0           115         Rwanda         0.0           116			
94         El Salvador         0.2           95         Lao PDR         0.2           96         Botswana         0.1           97         Kyrgyz Republic         0.1           98         Indonesia         0.1           199         Iran, Islamic Rep         0.1           100         Gabon         0.1           101         Bolivia         0.1           101         Bolivia         0.1           102         Zimbabwe         0.1           103         Nicaragua         0.1           104         Guatemala         0.1           105         Côte d'Ivoire         0.1           106         Ghana         0.0           107         Madagascar         0.0           108         Cambodia         0.0           109         Cameroon         0.0           109         Cameroon         0.0           110         Pakistan         0.0           111         Nigeria         0.0           112         Bangladesh         0.0           113         Ethiopia         0.0           114         Zambia         0.0           115			
95         Lao PDR         0.2           96         Botswana         0.1           97         Kyrgyz Republic         0.1           98         Indonesia         0.1           199         Iran, Islamic Rep         0.1           100         Gabon         0.1           101         Bolivia         0.1           101         Bolivia         0.1           102         Zimbabwe         0.1           103         Nicaragua         0.1           104         Guatemala         0.1           105         Côte d'Ivoire         0.1           106         Ghana         0.0           107         Madagascar         0.0           108         Cambodia         0.0           109         Cameroon         0.0           100         Cameroon         0.0           110         Pakistan         0.0           111         Nigeria         0.0           112         Bangladesh         0.0           113         Ethiopia         0.0           114         Zambia         0.0           115         Rwanda         0.0           116			
97         Kyrgyz Republic         0.1           98         Indonesia         0.1           99         Iran, Islamic Rep.         0.1           100         Gabon         0.1           101         Bolivia         0.1           102         Zimbabwe         0.1           103         Nicaragua         0.1           104         Guatemala         0.1           105         Côte d'Ivoire         0.1           106         Ghana         0.0           107         Madagascar         0.0           108         Cambodia         0.0           109         Cameroon         0.0           110         Pakistan         0.0           111         Nigeria         0.0           112         Bangladesh         0.0           113         Ethiopia         0.0           114         Zambia         0.0           115         Rwanda         0.0           116         Uganda         0.0           117         Nepal         0.0           118         Malawi         0.0           119         Myanmar         0.0           120			
98         Indonesia         0.1           99         Iran, Islamic Rep.         0.1           100         Gabon         0.1           101         Bolivia         0.1           102         Zimbabwe         0.1           103         Nicaragua         0.1           104         Guatemala         0.1           105         Côte d'Ivoire         0.1           106         Ghana         0.0           107         Madagascar         0.0           108         Cambodía         0.0           109         Cameroon         0.0           110         Pakistan         0.0           111         Nigeria         0.0           112         Bangladesh         0.0           113         Ethiopia         0.0           114         Zambia         0.0           115         Rwanda         0.0           116         Uganda         0.0           117         Nepal         0.0           118         Malawi         0.0           119         Myanmar         0.0           120         Tanzania         0.0           121         B	96	Botswana	0.1
99         Iran, Islamic Rep.         0.1           100         Gabon         0.1           101         Bolivia         0.1           102         Zimbabwe         0.1           103         Nicaragua         0.1           104         Guatemala         0.1           105         Côte d'Ivoire         0.1           106         Ghana         0.0           107         Madagascar         0.0           108         Cambodía         0.0           109         Cameroon         0.0           110         Pakistan         0.0           111         Nigeria         0.0           112         Bangladesh         0.0           113         Ethiopia         0.0           114         Zambia         0.0           115         Rwanda         0.0           116         Uganda         0.0           117         Nepal         0.0           118         Malawi         0.0           119         Myanmar         0.0           120         Tanzania         0.0           121         Berin         0.0           121         Buru			
100         Gabon         0.1           101         Bolivia         0.1           102         Zimbabwe         0.1           103         Nicaragua         0.1           104         Guatemala         0.1           105         Côte d'Ivoire         0.1           106         Ghana         0.0           107         Madagascar         0.0           108         Cambodia         0.0           109         Cameroon         0.0           110         Pakistan         0.0           111         Nigeria         0.0           112         Bangladesh         0.0           113         Ethiopia         0.0           114         Zambia         0.0           115         Rwanda         0.0           116         Uganda         0.0           117         Nepal         0.0           118         Malawi         0.0           119         Myanmar         0.0           120         Tanzania         0.0           121         Burundi         0.0           121         Burundi         0.0           121         Guyana			
101         Bolivia         0.1           102         Zimbabwe         0.1           103         Nicaragua         0.1           104         Guatemala         0.1           105         Côte d'Ivoire         0.1           106         Ghana         0.0           107         Madagascar         0.0           108         Cambodia         0.0           109         Cameroon         0.0           110         Pakistan         0.0           111         Nigeria         0.0           112         Bangladesh         0.0           113         Ethiopia         0.0           114         Zambia         0.0           115         Rwanda         0.0           116         Uganda         0.0           117         Nepal         0.0           118         Malawi         0.0           119         Myanmar         0.0           120         Tanzania         0.0           121         Benin         0.0           121         Burundi         0.0           121         Burudi         0.0           121         Guyana			
102         Zimbabwe         0.1           103         Nicaragua         0.1           104         Guatemala         0.1           105         Côte d'Ivoire         0.1           106         Ghana         0.0           107         Madagascar         0.0           108         Cambodía         0.0           109         Cameroon         0.0           110         Pakistan         0.0           111         Nigeria         0.0           112         Bangladesh         0.0           113         Ethiopia         0.0           114         Zambia         0.0           115         Rwanda         0.0           116         Uganda         0.0           117         Nepal         0.0           118         Malawi         0.0           119         Myanmar         0.0           120         Tanzania         0.0           121         Benin         0.0           121         Burundi         0.0           121         Burundi         0.0           121         Cape Verde         0.0           121         Chad			
103         Nicaragua         0.1           104         Guatemala         0.1           105         Côte d'Ivoire         0.1           106         Ghana         0.0           107         Madagascar         0.0           108         Cambodia         0.0           109         Cameroon         0.0           109         Pakistan         0.0           110         Pakistan         0.0           111         Nigeria         0.0           112         Bangladesh         0.0           113         Ethiopia         0.0           114         Zambia         0.0           115         Rwanda         0.0           116         Uganda         0.0           117         Nepal         0.0           118         Malawi         0.0           119         Myanmar         0.0           120         Tanzania         0.0           121         Benin         0.0           121         Burundi         0.0           121         Burundi         0.0           121         Cape Verde         0.0           121         Chad			
104         Guatemala         0.1           105         Côte d'Ivoire         0.1           106         Ghana         0.0           107         Madagascar         0.0           108         Cambodia         0.0           109         Cameroon         0.0           109         Pakistan         0.0           111         Nigeria         0.0           112         Bangladesh         0.0           113         Ethiopia         0.0           114         Zambia         0.0           115         Rwanda         0.0           116         Uganda         0.0           117         Nepal         0.0           118         Malawi         0.0           119         Myanmar         0.0           120         Tanzania         0.0           121         Benin         0.0           121         Burundi         0.0           121         Burundi         0.0           121         Cape Verde         0.0           121         Chad         0.0           121         Guinea         0.0           121         Haiti			
106         Ghana.         0.0           107         Madagascar         0.0           108         Cambodía.         0.0           109         Cameroon.         0.0           110         Pakistan.         0.0           111         Nigeria.         0.0           112         Bangladesh.         0.0           113         Ethiopia.         0.0           114         Zambia.         0.0           115         Rwanda.         0.0           116         Uganda.         0.0           117         Nepal.         0.0           118         Malawi.         0.0           119         Myanmar.         0.0           120         Tanzania.         0.0           121         Benin.         0.0           121         Burundi.         0.0           121         Burundi.         0.0           121         Cape Verde.         0.0           121         Guinea.         0.0           121         Guinea.         0.0           121         Haiti.         0.0           121         Lesotho.         0.0           121         Li	104		
107         Madagascar         0.0           108         Cambodia         0.0           109         Cameroon         0.0           110         Pakistan         0.0           111         Nigeria         0.0           112         Bangladesh         0.0           113         Ethiopia         0.0           114         Zambia         0.0           115         Rwanda         0.0           116         Uganda         0.0           117         Nepal         0.0           118         Malawi         0.0           119         Myanmar         0.0           120         Tanzania         0.0           121         Benin         0.0           121         Burundi         0.0           121         Burundi         0.0           121         Cape Verde         0.0           121         Guinea         0.0           121         Guinea         0.0           121         Haiti         0.0           121         Haiti         0.0           121         Honduras         0.0           121         Haiti			
108         Cambodia         0.0           109         Cameroon         0.0           110         Pakistan         0.0           111         Nigeria         0.0           112         Bangladesh         0.0           113         Ethiopia         0.0           114         Zambia         0.0           115         Rwanda         0.0           116         Uganda         0.0           117         Nepal         0.0           118         Malawi         0.0           119         Myanmar         0.0           120         Tanzania         0.0           121         Benin         0.0           121         Burundi         0.0           121         Burundi         0.0           121         Gape Verde         0.0           121         Guinea         0.0           121         Guinea         0.0           121         Haiti         0.0			
109         Cameroon.         0.0           110         Pakistan.         0.0           111         Nigeria.         0.0           112         Bangladesh.         0.0           113         Ethiopia.         0.0           114         Zambia.         0.0           115         Rwanda.         0.0           116         Uganda.         0.0           117         Nepal.         0.0           118         Malawi.         0.0           119         Myanmar.         0.0           120         Tanzania.         0.0           121         Benin.         0.0           121         Burundi.         0.0           121         Burundi.         0.0           121         Cape Verde.         0.0           121         Guinea.         0.0           121         Guinea.         0.0           121         Guinea.         0.0           121         Haiti.         0.0           121         Haiti.         0.0           121         Hasotho.         0.0           121         Hasotho.         0.0           121         Hasoth			
110         Pakistan			
111         Nigeria         0.0           112         Bangladesh         0.0           113         Ethiopia         0.0           114         Zambia         0.0           115         Rwanda         0.0           116         Uganda         0.0           117         Nepal         0.0           118         Malawi         0.0           119         Myanmar         0.0           120         Tanzania         0.0           121         Benin         0.0           121         Burundi         0.0           121         Burundi         0.0           121         Cape Verde         0.0           121         Chad         0.0           121         Chad         0.0           121         Guinea         0.0           121         Guyana         0.0           121         Haiti         0.0           121         Hesotho         0.0           121         Lesotho         0.0           121         Lesotho         0.0           121         Mauritania         0.0           121         Mauritania         0.0			
113         Ethiopia         0.0           114         Zambia         0.0           115         Rwanda         0.0           116         Uganda         0.0           117         Nepal         0.0           118         Malawi         0.0           119         Myanmar         0.0           120         Tanzania         0.0           121         Benin         0.0           121         Bhutan         0.0           121         Burundi         0.0           121         Cape Verde         0.0           121         Chad         0.0           121         Guinea         0.0           121         Guyana         0.0           121         Haiti         0.0           121         Haiti         0.0           121         Lesotho         0.0           121         Liberia         0.0           121         Mauritania         0.0           121         Mazuritania         0.0           121         Paraguay         0.0           121         Senegal         0.0           121         Tajikistan <t< td=""><td>111</td><td></td><td></td></t<>	111		
114         Zambia         0.0           115         Rwanda         0.0           116         Uganda         0.0           117         Nepal         0.0           118         Malawi         0.0           119         Myanmar         0.0           120         Tanzania         0.0           121         Benin         0.0           121         Bhutan         0.0           121         Burundi         0.0           121         Cape Verde         0.0           121         Cape Verde         0.0           121         Guinea         0.0           121         Guinea         0.0           121         Guinea         0.0           121         Haiti         0.0           121         Honduras         0.0           121         Lesotho         0.0           121         Mali         0.0           121         Mali         0.0           121         Mauritania         0.0           121         Paraguay         0.0           121         Senegal         0.0           121         Chinese Taipei	112		
115         Rwanda         0.0           116         Uganda         0.0           117         Nepal         0.0           118         Malawi         0.0           119         Myanmar         0.0           120         Tanzania         0.0           121         Benin         0.0           121         Bhutan         0.0           121         Burundi         0.0           121         Cape Verde         0.0           121         Cape Verde         0.0           121         Guinea         0.0           121         Guinea         0.0           121         Haiti         0.0           121         Haiti         0.0           121         Hesotho         0.0           121         Liberia         0.0           121         Mali         0.0           121         Mauritania         0.0           121         Mozambique         0.0           121         Senegal         0.0           121         Chinese Taipei         n/a			
116         Uganda         0.0           117         Nepal         0.0           118         Malawi         0.0           119         Myanmar         0.0           120         Tanzania         0.0           121         Benin         0.0           121         Bhutan         0.0           121         Burundi         0.0           121         Cape Verde         0.0           121         Chad         0.0           121         Guinea         0.0           121         Guinea         0.0           121         Haiti         0.0           121         Haiti         0.0           121         Lesotho         0.0           121         Liberia         0.0           121         Mauritania         0.0           121         Mozambique         0.0           121         Senegal         0.0           121         Senegal         0.0           121         Chinese Taipei         n/a			
117         Nepal         0.0           118         Malawi         0.0           119         Myanmar         0.0           120         Tanzania         0.0           121         Benin         0.0           121         Bhutan         0.0           121         Burundi         0.0           121         Cape Verde         0.0           121         Chad         0.0           121         Guinea         0.0           121         Guyana         0.0           121         Haiti         0.0           121         Haiti         0.0           121         Lesotho         0.0           121         Liberia         0.0           121         Mauritania         0.0           121         Mozambique         0.0           121         Senegal         0.0           121         Senegal         0.0           121         Chinese Taipei         n/a			
118         Malawi         0.0           119         Myanmar         0.0           120         Tanzania         0.0           121         Benin         0.0           121         Bhutan         0.0           121         Burundi         0.0           121         Cape Verde         0.0           121         Chad         0.0           121         Guinea         0.0           121         Guyana         0.0           121         Haiti         0.0           121         Haiti         0.0           121         Lesotho         0.0           121         Liberia         0.0           121         Mauritania         0.0           121         Mozambique         0.0           121         Paraguay         0.0           121         Senegal         0.0           121         Tajikistan         0.0           n/a         Chinese Taipei         n/a			
119         Myanmar         0.0           120         Tanzania         0.0           121         Benin         0.0           121         Bhutan         0.0           121         Burundi         0.0           121         Cape Verde         0.0           121         Chad         0.0           121         Guinea         0.0           121         Guyana         0.0           121         Haiti         0.0           121         Honduras         0.0           121         Lesotho         0.0           121         Liberia         0.0           121         Mauritania         0.0           121         Mozambique         0.0           121         Paraguay         0.0           121         Senegal         0.0           121         Tajikistan         0.0           n/a         Chinese Taipei         n/a		•	
121     Benin     0.0       121     Bhutan     0.0       121     Cape Verde     0.0       121     Chad     0.0       121     Chad     0.0       121     Guinea     0.0       121     Guyana     0.0       121     Haiti     0.0       121     Honduras     0.0       121     Lesotho     0.0       121     Liberia     0.0       121     Maii     0.0       121     Mozambique     0.0       121     Paraguay     0.0       121     Senegal     0.0       121     Tajikistan     0.0       n/a     Chinese Taipei     n/a			
121       Bhutan       0.0         121       Burundi       0.0         121       Cape Verde       0.0         121       Chad       0.0         121       Guinea       0.0         121       Haiti       0.0         121       Honduras       0.0         121       Lesotho       0.0         121       Liberia       0.0         121       Mali       0.0         121       Mauritania       0.0         121       Mozambique       0.0         121       Paraguay       0.0         121       Senegal       0.0         121       Tajjikistan       0.0         n/a       Chinese Taipei       n/a	120	Tanzania	0.0
121     Burundi     0.0       121     Cape Verde     0.0       121     Chad     0.0       121     Guinea     0.0       121     Guyana     0.0       121     Haiti     0.0       121     Honduras     0.0       121     Lesotho     0.0       121     Liberia     0.0       121     Mali     0.0       121     Mauritania     0.0       121     Mozambique     0.0       121     Paraguay     0.0       121     Senegal     0.0       121     Tajikistan     0.0       n/a     Chinese Taipei     n/a			
121     Cape Verde     0.0       121     Chad     0.0       121     Guinea     0.0       121     Guyana     0.0       121     Haiti     0.0       121     Honduras     0.0       121     Lesotho     0.0       121     Liberia     0.0       121     Mali     0.0       121     Mauritania     0.0       121     Mozambique     0.0       121     Paraguay     0.0       121     Senegal     0.0       121     Tajjikistan     0.0       n/a     Chinese Taipei     n/a			
121         Chad         0.0           121         Guinea         0.0           121         Guyana         0.0           121         Haiti         0.0           121         Honduras         0.0           121         Lesotho         0.0           121         Liberia         0.0           121         Mali         0.0           121         Mauritania         0.0           121         Mozambique         0.0           121         Paraguay         0.0           121         Senegal         0.0           121         Tajikistan         0.0           n/a         Chinese Taipei         n/a			
121     Guinea     0.0       121     Guyana     0.0       121     Haiti     0.0       121     Honduras     0.0       121     Lesotho     0.0       121     Liberia     0.0       121     Mali     0.0       121     Mauritania     0.0       121     Mozambique     0.0       121     Paraguay     0.0       121     Senegal     0.0       121     Tajikistan     0.0       n/a     Chinese Taipei     n/a		'	
121       Guyana       0.0         121       Haiti       0.0         121       Honduras       0.0         121       Lesotho       0.0         121       Liberia       0.0         121       Mali       0.0         121       Mauritania       0.0         121       Mozambique       0.0         121       Paraguay       0.0         121       Senegal       0.0         121       Tajjikistan       0.0         n/a       Chinese Taipei       n/a			
121       Haiti       0.0         121       Honduras       0.0         121       Lesotho       0.0         121       Liberia       0.0         121       Mali       0.0         121       Mauritania       0.0         121       Mozambique       0.0         121       Paraguay       0.0         121       Senegal       0.0         121       Tajikistan       0.0         n/a       Chinese Taipei       n/a			
121     Honduras     0.0       121     Lesotho     0.0       121     Liberia     0.0       121     Mali     0.0       121     Mauritania     0.0       121     Mozambique     0.0       121     Paraguay     0.0       121     Senegal     0.0       121     Tajikistan     0.0       n/a     Chinese Taipei     n/a		•	
121       Liberia.       0.0         121       Mali.       0.0         121       Mauritania.       0.0         121       Mozambique.       0.0         121       Paraguay.       0.0         121       Senegal.       0.0         121       Tajikistan.       0.0         n/a       Chinese Taipei.       n/a			
121       Mali			
121       Mauritania       0.0         121       Mozambique       0.0         121       Paraguay       0.0         121       Senegal       0.0         121       Tajjikistan       0.0         n/a       Chinese Taipei       n/a			
121       Mozambique       0.0         121       Paraguay       0.0         121       Senegal       0.0         121       Tajjkistan       0.0         n/a       Chinese Taipei       n/a			
121       Paraguay       0.0         121       Senegal       0.0         121       Tajjikistan       0.0         n/a       Chinese Taipei       n/a			
121       Senegal       0.0         121       Tajikistan       0.0         n/a       Chinese Taipei       n/a			
121       Tajikistan			
•		•	
n/a Hong Kong SARn/a	n/a	Chinese Taipei	n/a
	n/a	Hong Kong SAR	n/a

SOURCES: World Intellectual Property Organization (WIPO) PCT Data, sourced from Organisation for Economic Co-operation and Development (OECD), Patent Database, January 2016, http://www.oecd.org/sti/inno/oecdpatentdatabases.htm; World Bank, World Development Indicators (retrieved December 15, 2015), http://data.worldbank.org; national sources

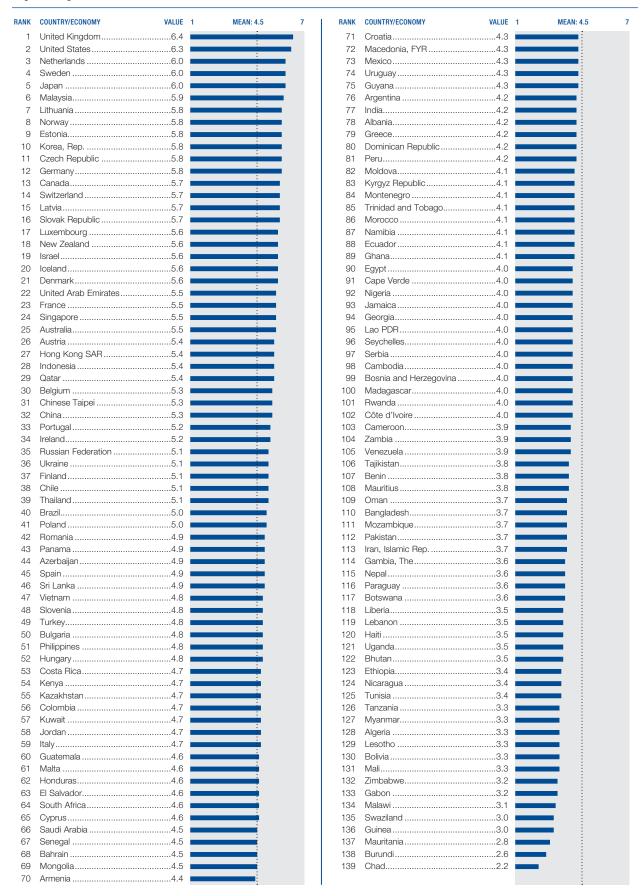
#### ICT use for business-to-business transactions

In your country, to what extent do businesses use ICTs for transactions with other businesses? [1 = not at all; 7 = to a great extent] | 2014-15 weighted average



## 7.05 Business-to-consumer Internet use

In your country, to what extent do businesses use the Internet for selling their goods and services to consumers? [1 = not at all; 7 = to a great extent] | 2014–15 weighted average



#### 7.06 Extent of staff training

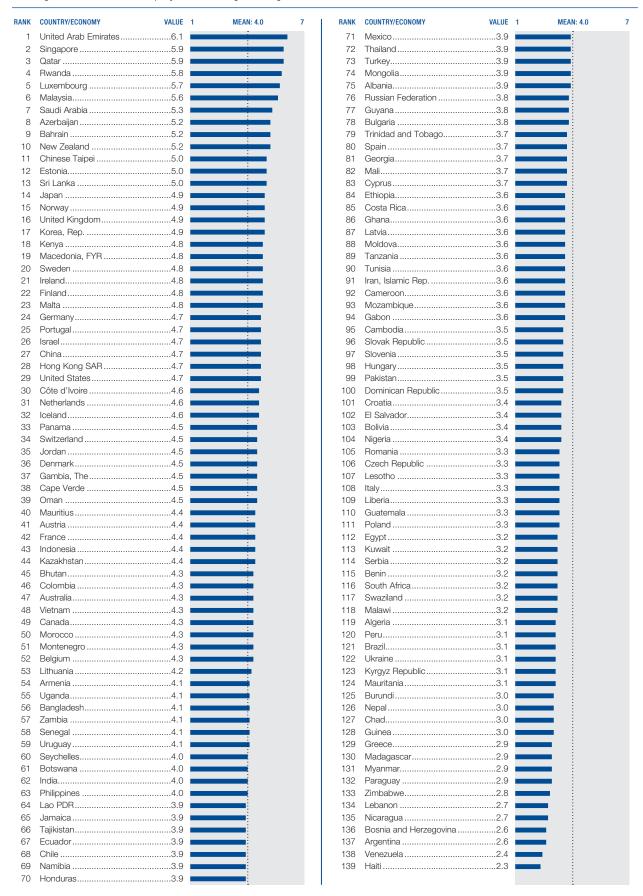
In your country, to what extent do companies invest in training and employee development? [1 = not at all; 7 = to a great extent] | 2014–15 weighted average

RANK	COUNTRY/ECONOMY	VALUE 1	MEAN: 4.0	7 RANK	COUNTRY/ECONOMY	VALUE 1	MEAN: 4.0 7
1	Switzerland	5.7		71	Swaziland	4.0	
2	Luxembourg	5.5		72	Zambia	4.0	
3	Malaysia	5.5		73	Vietnam	3.9	
4	Singapore			74	Ukraine	3.9	
5	Qatar			75	Lesotho		
6	Japan	5.4		76	Kazakhstan		
7	Norway			77	Senegal	3.9	
8	Sweden			78	Liberia		
9	Netherlands			79	Mexico		
10	Finland			80	Mongolia	3.9	
11	Belgium			81	Tajikistan		
12	United Arab Emirates			82	Slovak Republic		
13	Germany	5.1		83	Russian Federation	3.8	
14	United States	5.1		84	Kuwait	3.8	
15	Austria	5.1		85	Uruguay	3.8	
16	Denmark			86	Bhutan		
17	Iceland	4.9		87	Zimbabwe		
18	New Zealand			88	Argentina		
19	South Africa			89	Romania		
20	Ireland			90	Azerbaijan		
21	United Kingdom		<u> </u>	91	Greece		
22	Bahrain			92	Peru	3.7	
23	Hong Kong SAR			93	Colombia		
24	Australia			94	Ecuador		
25	Canada			95	Cambodia		
26	Philippines			96	Macedonia, FYR		
27	Chinese Taipei			97	El Salvador		
28	France			98	Montenegro		
29	Honduras			99	Gabon		
30	Mauritius			100	Cape Verde		
31	Costa Rica			101	Kyrgyz Republic		
32	Estonia			102	Turkey		
33	Indonesia			103	Dominican Republic		
34	Guatemala			104	Spain		
35	Lithuania			105	Madagascar		
36	Korea, Rep.			106	Tunisia		
37	Albania			107	Uganda		
38	Jordan			108	Lebanon		
39	Czech Republic			109	Nicaragua		
40	Namibia			110	Benin		
41	Thailand			111	Venezuela		
42	Latvia			112	Ethiopia		
43	Israel			113	Hungary		
44	Malta			114	Paraguay		
45	Panama			115	Tanzania		
46	Kenya			116	Armenia		
47	Trinidad and Tobago			117	Bulgaria		
48	India			118	Georgia		
49	Guyana			119	Morocco		
50	China			120	Moldova		
51	Botswana			121	Pakistan		
52	Chile			122	Croatia		
53	Saudi Arabia			123	Bolivia		
54	Portugal			124	Mozambique		
55	Cyprus			125	Nepal		
56	Côte d'Ivoire			126	Algeria		
57	Rwanda			127	Guinea		
58	Slovenia			128	Iran, Islamic Rep		
59	Lao PDR			129	Bangladesh		
60	Seychelles			130	Mali		
61	Brazil			131	Italy		
62	Nigeria			132	Haiti		
63	Sri Lanka			133	Chad		
64	Ghana			134	Serbia		
65	Poland			135	Myanmar		
66	Malawi			136	Bosnia and Herzegovina		
67	Jamaica			137	Burundi		
68	Oman			138	Egypt		
69	Gambia, The			139	Mauritania		
70	Cameroon			139	rviduritariid		
10	Out1010011	4.0					:

# 8th pillar Government usage

# 8.01 Importance of ICTs to government vision of the future

To what extent does the government have a clear implementation plan for utilizing ICTs to improve your country's overall competitiveness? [1 = not at all—there is no plan; 7 = to a great extent—there is a clear plan] | 2014–15 weighted average



## 8.02 Government Online Service Index

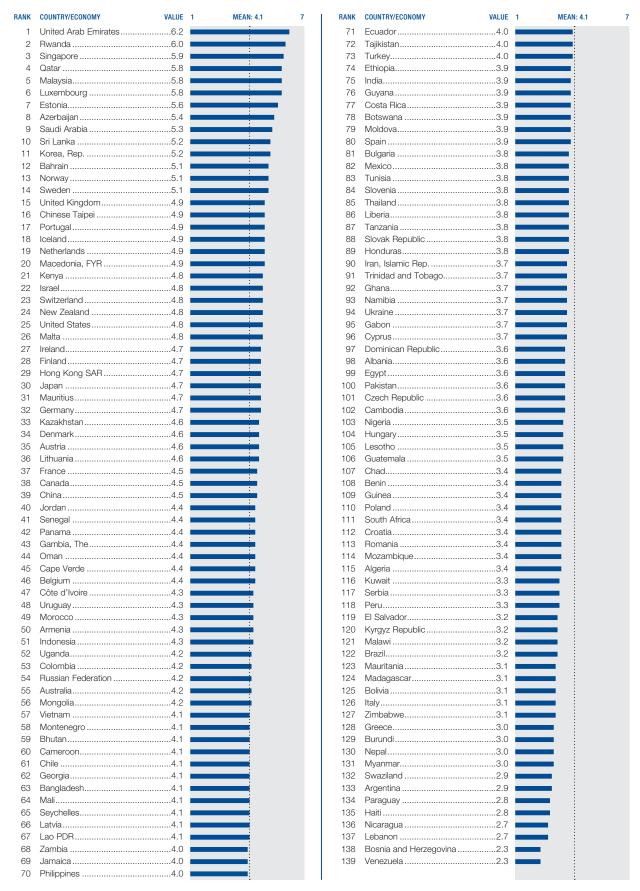
The Government Online Service Index assesses the quality of government's delivery of online services on a 0-to-1 (best) scale | 2013

RANK	COUNTRY/ECONOMY	VALUE	RANK	COUNTRY/ECONOMY	VALUE	
1	France	1.00	71	Ethiopia	0.46	
2	Singapore		72	Albania		
3	Korea, Rep		73	Romania	0.44	
4	Japan	0.94	73	Thailand	0.44	
4	Spain		75	Azerbaijan		
4	United States		76	Kenya		
7	Bahrain		76	Slovenia		
8	Australia Netherlands		78 79	Vietnam Honduras		
10	Canada		79	Malta		
11	United Kingdom		81	Bolivia		
12	United Arab Emirates		81	Serbia		
13	Israel		83	Dominican Republic		
14	Uruguay	0.85	83	South Africa	0.39	
15	New Zealand	0.84	85	Czech Republic	0.37	
16	Chile	0.82	85	Iran, Islamic Rep	0.37	
17	Colombia		85	Panama		
18	Estonia		88	Indonesia		
18	Finland		89	Lebanon		
18 21	Saudi Arabia		90	Bangladesh Seychelles		
21	Norway		91	Trinidad and Tobago		
23	Austria		93	Namibia		
23	Italy		93	Pakistan		
23	Kazakhstan		95	Ghana		
26	Oman		95	Jamaica	0.31	
27	Russian Federation	0.71	95	Mozambique	0.31	
28	Latvia	0.70	98	Botswana	0.31	
28	Sweden		98	Nigeria	0.31	
30	Morocco		98	Senegal		
31	Belgium		98	Zimbabwe		
31	Ireland		102	Tanzania		
31 34	MalaysiaGermany		103	Bosnia and Herzegovina Kyrgyz Republic		
35	Denmark		105	Ukraine		
35	Mexico		106	Bhutan		
37	Qatar		106	Guyana		
37	Sri Lanka	0.65	106	Macedonia, FYR		
39	Portugal	0.64	106	Madagascar	0.24	
39	Tunisia	0.64	110	Bulgaria		
41	Peru		111	Paraguay		
42	Luxembourg		112	Gambia, The		
43 43	Armenia Costa Rica		113	Cameroon		
43	Iceland		114	Côte d'Ivoire		
43	Mongolia		114	Malawi		
47	China		117	Cape Verde		
47	Greece		118	Lesotho		
49	Brazil		118	Nepal	0.16	_
49	Georgia	0.60	120	Guatemala	0.15	_
51	Egypt		120	Uganda		
52	Kuwait		122	Lao PDR		
53	Hungary		122	Zambia		
53	Turkey		124	Mali		
55 55	Argentina		124	Swaziland Benin		
55 57	Venezuela India		126	Haiti		
57	Poland		128	Gabon		
59	El Salvador		128	Nicaragua		
60	Moldova		130	Algeria		
60	Montenegro		130	Liberia		
62	Jordan		132	Tajikistan	0.06	
63	Rwanda		133	Chad		
64	Switzerland		133	Mauritania		
65	Slovak Republic		135	Myanmar		
66	Ecuador		136	Burundi		
66	Philippines		137	Guinea		
68 68	Cyprus Mauritius		n/a	Chinese Taipei		
70	Croatia		n/a	Hong Kong SAR	IVa	
10	J. Outid					

**SOURCE:** United Nations Department of Economic and Social Affairs (UNDESA), UN E-Government Development Database (retrieved November 27, 2014), http://unpan3.un.org/egovkb/en-us/

# 8.03 Government success in ICT promotion

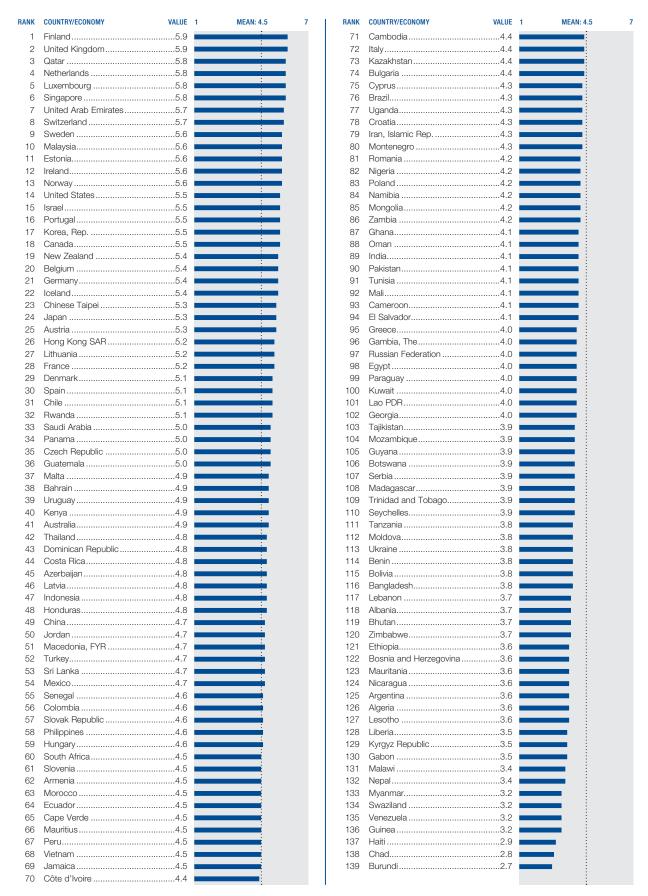
In your country, how successful is the government in promoting the use of ICTs? [1 = not successful at all; 7 = extremely successful] | 2014-15 weighted average



# 9th pillar Economic impacts

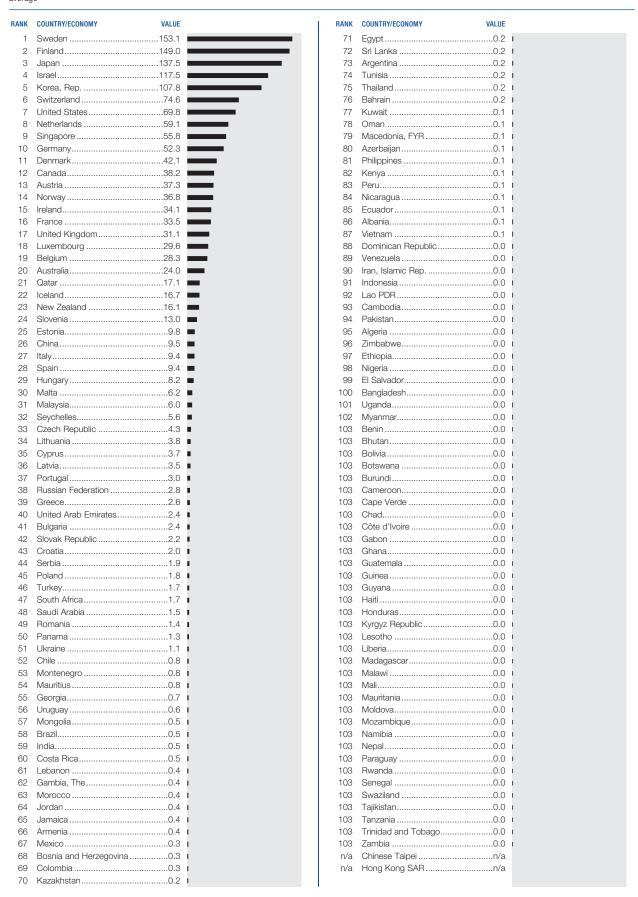
# 9.01 Impact of ICTs on business models

In your country, to what extent do ICTs enable new business models? [1 = not at all; 7 = to a great extent] | 2014-15 weighted average



# PCT ICT patent applications

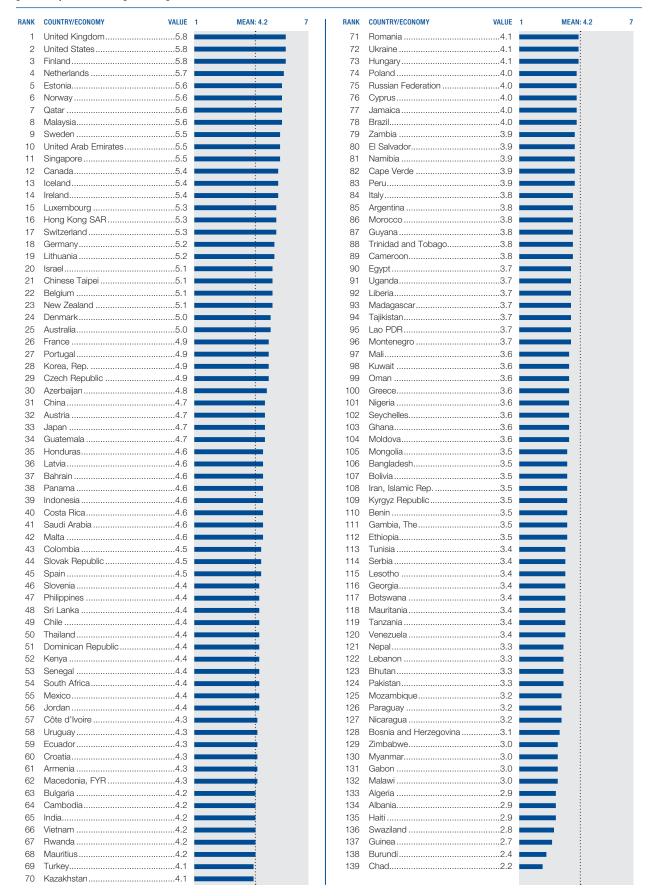
Number of applications for information and communication technology-related patents filed under the Patent Cooperation Treaty (PCT) per million population | 2012-13 average



SOURCES: World Intellectual Property Organization (WIPO) PCT Data, sourced from Organisation for Economic Co-operation and Development (OECD), Patent Database, January 2016, http://www.oecd.org/sti/inno/oecdpatentdatabases.htm; World Bank, World Development Indicators (retrieved December 15, 2015), http://data.worldbank.org

# 9.03 Impact of ICTs on organizational models

In your country, to what extent do ICTs enable new organizational models (e.g., virtual teams, remote working, telecommuting) within companies? [1 = not at all; 7 = to a great extent] | 2014–15 weighted average



# 9.04 Share of workforce employed in knowledge-intensive activities (%)

Share of workforce employed in knowledge-intensive activities (%)  $\,\,$  I  $\,\,$  2014 or most recent

RANK	COUNTRY/ECONOMY	VALUE	
1	Luxembourg	62.3	
2	Singapore <sup>8</sup>	52.7	
3	Switzerland	52.1	
4	Norway		
5	Sweden		
6	Iceland		
7	Israel		
8 9	United Kingdom  Netherlands		
10	Belgium		
11	Denmark		
12	Finland		
13	Australia	44.9	
14	Russian Federation	44.2	
15	France		
16	Canada		
17	Germany		
18	New Zealand <sup>3</sup>		
19 20	Lithuania		
21	Slovenia		
22	Austria		
23	Ireland		
24	Latvia	39.6	
25	Malta	39.3	
26	United States <sup>8</sup>	38.0	
27	Hong Kong SAR		
28	Czech Republic		
29	Montenegro <sup>7</sup>		
30 31	Poland Egypt <sup>8</sup>		
32	United Arab Emirates <sup>3</sup>		
33	Cyprus		
34	Croatia		
35	Italy	35.6	
36	Hungary	35.3	
37	Portugal		
38	Ukraine <sup>8</sup>		
39	Chinese Taipei <sup>8</sup>		
40	Spain Kazakhstan <sup>8</sup>		
41 42	Slovak Republic		
43	Bulgaria		
44	Lebanon <sup>2</sup>		
45	Greece	30.6	
46	Serbia	29.1	
47	Moldova	28.7	
48	Saudi Arabia		
49	Trinidad and Tobago		
50	Armenia <sup>6</sup>		
51 52	Macedonia, FYR Seychelles <sup>6</sup>		
53	Malaysia		
54	Costa Rica <sup>8</sup>		
55	Mongolia		
56	Chile	24.8	
57	South Africa	24.8	
58	Japan		
59	Panama		
60	Argentina		
61 62	Philippines		
62 63	Azerbaijan		
64	Brazil		
65	Korea, Rep.		
66	Romania		
67	Uruguay		
68	Tunisia <sup>7</sup>		
69	Mauritius <sup>7</sup>		
70	Jamaica <sup>3</sup>	20.1	

RAMK COUNTRYECONOMY 71 Bangladesh6 20.0 72 Turkey 19.7 73 Pakistar3 19.5 74 Mexico 19.5 75 Venezuela8 19.2 76 Qatar3 18.2 77 Paraguay 18.1 78 Botswana5 17.9 79 Kyrgyz Republic 17.9 80 Albania 17.7 81 Algeria8 17.6 82 Dominican Republic8 17.2 83 Iran, Islamic Rep. 17.1 84 Sri Lanka 16.8 85 Bolivia* 15.3 86 Peru8 15.0 87 Nicaragua¹ 14.8 88 Bhutan 14.8 89 Bhutan 14.8 89 Namibia8 14.6 90 Thailand 13.8 91 Ecuador 12.3 92 El Salvador8 12.1 93 Colombia8 11.7 94 Guatemala 10.9 95 Vietnam 10.3 96 Ghana6 9.6 97 Liberia5 9.3 98 Indonesia8 8.9 9 Zambia6 7.3 100 Morocco3 6.8 101 Lesotho8 6.8 102 Liberiab 6.8 103 Nepal8 4.3 104 Camboodia5 4.1 105 Uganda8 4.1 106 Ethiopia8 3.8 107 Ranaina 14.8 108 Madagascar7 3.3 109 Tanzania¹ 2.6 108 Cimbara 17.9 109 Camboula5 4.1 110 Guinea5 0.7 110 G			
72 Turkey	RANK	COUNTRY/ECONOMY VA	LUE
73 Pakistan³	71	Bangladesh <sup>6</sup> 2	0.0
74 Mexico	72		
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104 Cambodia <sup>5</sup>	102	Zimbabwe <sup>6</sup>	6.6
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109       Tanzania¹       2.6         110       Guinea⁵       0.7         n/a       Bahrain       n/a         n/a       Benin       n/a         n/a       Bosnia and Herzegovina       n/a         n/a       Bosnia and Herzegovina       n/a         n/a       Burundi       n/a         n/a       Cameroon       n/a         n/a       Cape Verde       n/a         n/a       Chad       n/a         n/a       Chad       n/a         n/a       China       n/a         n/a       Chia       n/a         n/a       Chia       n/a         n/a       Chia       n/a         n/a       Gabon       n/a         n/a       Gabon       n/a         n/a       Gambia       n/a         n/a       Gambia       n/a         n/a       Gambia       n/a         n/a       Haiti       n/a         n/a       n/a       n/a         n/a       n/a       n/a         n/a       n/a       n/a         n/a       Hoduras       n/a         n/a <td< td=""><td></td><td></td><td></td></td<>			
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n/a       Jordan       .n/a         n/a       Kenya       .n/a         n/a       Kuwait       .n/a         n/a       Lao PDR       .n/a         n/a       Malawi       .n/a         n/a       Mali       .n/a         n/a       Mozambique       .n/a         n/a       Myanmar       .n/a         n/a       Nigeria       .n/a         n/a       Oman       .n/a         n/a       Senegal       .n/a         n/a       Swaziland       .n/a			
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n/a         Kuwait         .n/a           n/a         Lao PDR         .n/a           n/a         Malawi         .n/a           n/a         Mali         .n/a           n/a         Mauritania         .n/a           n/a         Mozambique         .n/a           n/a         Myanmar         .n/a           n/a         Nigeria         .n/a           n/a         Oman         .n/a           n/a         Senegal         .n/a           n/a         Swaziland         .n/a			
n/a     Lao PDR     .n/a       n/a     Malawi     .n/a       n/a     Mali     .n/a       n/a     Mauritania     .n/a       n/a     Mozambique     .n/a       n/a     Myanmar     .n/a       n/a     Nigeria     .n/a       n/a     Oman     .n/a       n/a     Senegal     .n/a       n/a     Swaziland     .n/a		•	
n/a       Malawi       .n/a         n/a       Mali       .n/a         n/a       Mauritania       .n/a         n/a       Mozambique       .n/a         n/a       Myanmar       .n/a         n/a       Nigeria       .n/a         n/a       Oman       .n/a         n/a       Senegal       .n/a         n/a       Swaziland       .n/a			
n/a       Mali			
n/a     Mozambique     .n/a       n/a     Myanmar     .n/a       n/a     Nigeria     .n/a       n/a     Oman     .n/a       n/a     Senegal     .n/a       n/a     Swaziland     .n/a			
n/a       Myanmar       .n/a         n/a       Nigeria       .n/a         n/a       Oman       .n/a         n/a       Senegal       .n/a         n/a       Swaziland       .n/a	n/a		
n/a     Nigeria       n/a     Oman       n/a     Senegal       n/a     Swaziland       n/a     N/a		'	
n/a Oman		•	
n/a Senegaln/a n/a Swazilandn/a		9	
n/a Swazilandn/a			
		O .	

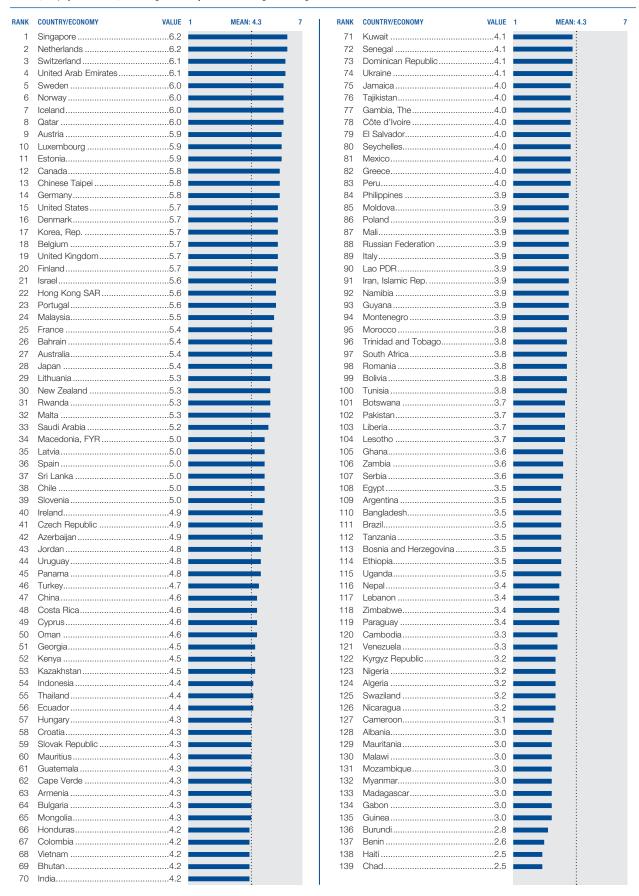
 $\textbf{SOURCE:} \quad \text{International Labour Organization (ILO), ILOSTAT Database (retrieved January 5, 2016), http://www.ilo.org/ilostat.pdf.} \\$ 

 $^{1}\, 2006 \quad ^{2}\, 2007 \quad ^{3}\, 2008 \quad ^{4}\, 2009 \quad ^{5}\, 2010 \quad ^{6}\, 2011 \quad ^{7}\, 2012 \quad ^{8}\, 2013$ 

# 10th pillarSocial impacts

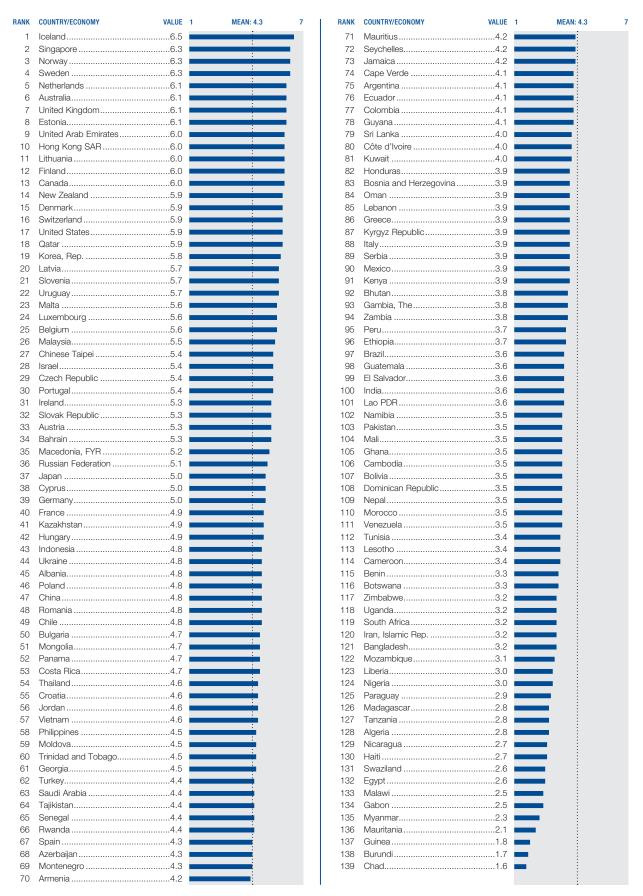
## 10.01 Impact of ICTs on access to basic services

In your country, to what extent do information and communication technologies (ICTs) enable access for all individuals to basic services (e.g., health, education, financial services, etc.)? [1 = not at all; 7 = to a great extent] | 2014–15 weighted average



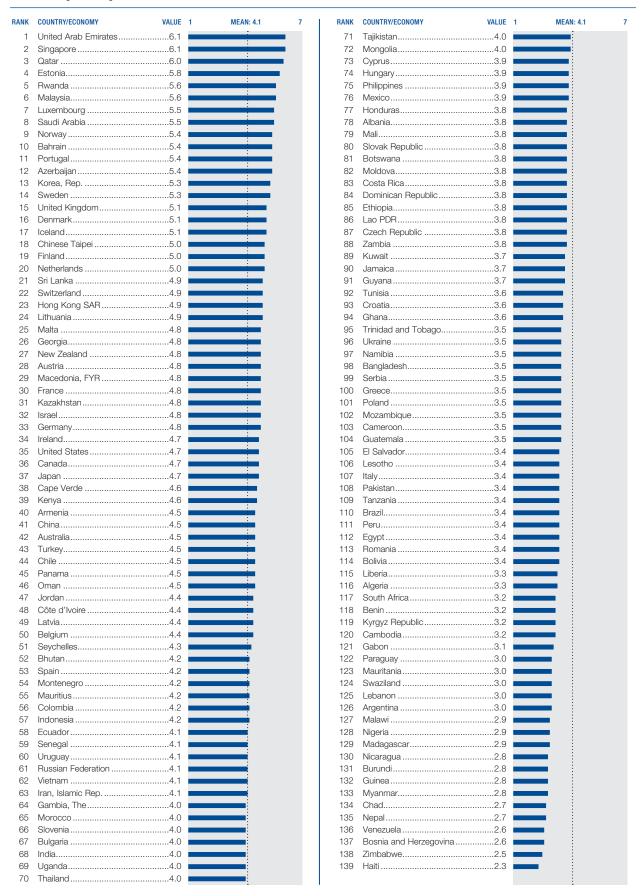
## 10.02 Internet access in schools

In your country, to what extent is the Internet used in schools for learning purposes? [1 = not at all; 7 = to a great extent] | 2014-15 weighted average



## 10.03 ICT use and government efficiency

In your country, to what extent does the use of ICTs by the government improve the quality of government services to the population? [1 = not at all; 7 = to a great extent] | 2014–15 weighted average



# 10.04 E-Participation Index

The E-Participation Index assesses, on a 0-to-1 (best) scale, the quality, relevance, and usefulness of government websites in providing online information and participatory tools and services to their citizens.  $\,\,$   $\,$  2013

North-Articles	RANK	COUNTRY/ECONOMY	VALUE	RANK	COUNTRY/ECONOMY	VALUE	
Section   Company   Comp	1	Korea, Rep	1.00	70	Malta	0.47	
Finne	1			70	Romania	0.47	
4. Minder Krigotom. 0.096 7. Autoritalis. 0.04 7. Autoritalis. 0.04 7. Chile. 0.04 9. United States. 0.09 9. Trivial 0.04 9. United States. 0.09 9. Trivial 0.04 9. United States. 0.09 9. Trivial 0.04 11. Coloritis. 0.08 9. Septime 0.05 12. Republic. 0.03 13. United States. 0.09 14. Republic. 0.03 15. Republic. 0.03 16. Republic. 0.03 17. Republic. 0.03 17. Republic. 0.03 18. Republic. 0.03 19. Republic. 0.03							
Control Mingdom							
7 Acidoris					,		
7 O'Ne							
9 United States							
10   Singapore   0.00   78   Sarbia   0.41   11   Colombia   0.08   12   Iarnal   0.08   13   Chara   0.09   13   Chara   0.09   14   Entratina   0.44   15   Entratina   0.09   14   Entratina   0.02   15   Turcuria   0.09   16   Entratina   0.09   16   Entratina   0.09   16   Entratina   0.09   17   Entratina   0.09   18   Entratina   0.09   18   Entratina   0.09   18   Entratina   0.05   18   Entratina   0.05   18   Entratina   0.05   19   Entratina   0.05   10   Entratina   0.0							
11   Coorbia   0.98     38   Bangladesh   0.99   13   United Arab Finistesh   0.16   31   Shorein   0.39   14   Sharinan   0.92   35   Shitzarland   0.27   14   Coula Rea.   0.92   35   Shitzarland   0.27   17   Coula Rea.   0.92   36   Shitzarland   0.27   17   Coula Rea.   0.92   36   Shitzarland   0.27   17   Corece.   0.90   36   Madagascar   0.95   18   United Arab Finistesh   0.93   18   United Arab Finistesh   0.93   19   United Arab Finistesh   0.9							
12   Stordin		• .					
13   United Arab Eminates	12				•		
14   Coate Rice	13			81	Slovenia	0.39	_
14   Costa Rica   0.82   88   Bhutan   0.35   17   Morroco   0.80   88   Mategassara   0.35   17   Morroco   0.80   88   Senegal   0.33   19   New Zeeland   0.72   89   Coratis   0.33   19   New Zeeland   0.78   89   Coratis   0.33   19   New Zeeland   0.76   89   Coratis   0.33   19   New Zeeland   0.33   New Zeeland   0.71   19   New Zeeland   0.33   New Zeeland   0.66   101   New Zeeland   0.33   New Zeeland   0.66   101   New Zeeland   0.33   New Zeeland   0.66   101   New Zeeland   0.29	14	Bahrain	0.82	81	Tanzania	0.39	
17   Greece   0.80   88   Mediagascar   0.35     19   New Zealand   0.76   88   Greate   0.33     19   New Zealand   0.76   89   Greate   0.33     19   Spain   0.76   89   Greate   0.33     19   Spain   0.76   89   Greate   0.33     20   East-onion   0.76   89   Guyran   0.33     21   East-onion   0.76   89   Mozaraticipe   0.33     22   East-onion   0.76   89   Mozaraticipe   0.33     23   East-onion   0.71   89   Mozaraticipe   0.33     24   Firland   0.71   89   Mozaraticipe   0.33     25   Germany   0.71   89   Nigoria   0.33     26   Germany   0.71   89   Nigoria   0.33     27   Germany   0.71   89   Nigoria   0.33     28   Germany   0.71   89   Nigoria   0.33     29   Fertu   0.71   89   South Africa   0.33     20   Greate   0.71   89   South Africa   0.31     20   Fertu   0.71   89   South Africa   0.31     20   Morogia   0.69   101   Frincide and Tobaga   0.31     20   Norway   0.69   101   Frincide and Tobaga   0.31     20   Roussier Federation   0.69   101   Frincide and Tobaga   0.31     21   Fertu   0.75   0.69   101   Frincide and Tobaga   0.31     22   Greate   0.69   101   Frincide and Tobaga   0.31     23   Srelead   0.66   101   Megal   0.29     24   Greate   0.29   0.29   0.29     25   Greate   0.29   0.29   0.29     26   Greate   0.29   0.29   0.29     27   Greate   0.29   0.29   0.29     28   Frincide   0.29   0.29   0.29     29   Greate   0.29   0.29   0.29     20   Greate   Greate   0.29   0.29   0.29     20   Greate   0.29   0.29   0.29   0.29     21   Greate   0.29   0.29   0.29   0.29   0.29     22   Greate   0.29   0	14	Canada	0.82	85	Switzerland	0.37	_
17 Morcoco	14			86	Bhutan	0.35	
19   Islay	17			86	•		
19   New Zealand   0.78   88   Dominican Republic   0.33     22   Estorial   0.76   88   Guyana   0.33     23   Estorial   0.76   89   Honduras   0.33     24   Estorial   0.71   89   Nembie   0.33     25   Finand   0.71   89   Nembie   0.33     26   Germany   0.71   89   Nigoria   0.33     27   Finand   0.71   89   Nigoria   0.33     28   Latvie   0.71   89   South Africa   0.33     29   Palsistan   0.33   0.33     20   Common   0.71   89   South Africa   0.33     20   Common   0.71   89   South Africa   0.33     21   Common   0.71   89   South Africa   0.33     22   Pen					•		-
19   Spoin.   0.76   88   Guyena   0.33   22   Estrona   0.76   89   Horoduras   0.33   22   Kazalhstan   0.76   89   Mozambique   0.33   24   Great   0.71   89   Nigeria   0.33   24   Gremany   0.71   89   Nigeria   0.33   24   Germany   0.71   89   Nigeria   0.33   24   Germany   0.71   89   South Africa   0.33   24   Common   0.71   89   Coyptus   0.31   24   Common   0.71   89   Coyptus   0.31   24   Common   0.71   89   Coyptus   0.31   24   Common   0.71   29   Common   0.71   29   Common   0.72   20   Commo		•					•
22 Estonia					· ·		
22   Karzeltslan					•		
24   Brizal   0.71   89   Namble   0.33   24   Finland   0.71   89   Nagria   0.33   99   99   99   99   99   99   99							_
24 Finland					·		
24   Cemany							
24					~		
24   Peru							
24   Peru.							
Mongolia							
Norway	30			98	Trinidad and Tobago	0.31	
China	30	•		101			
Teland.	30	Russian Federation	0.69	101	Iran, Islamic Rep	0.29	i
Second	33	China	0.65	101	Lebanon	0.29	i
105   Czech Republic   .0.25   .0.24   .0.24   .0.24   .0.24   .0.24   .0.24   .0.24   .0.24   .0.24   .0.24   .0.24   .0.24   .0.24   .0.24   .0.24   .0.24   .0.24   .0.24   .0.25	33	Ireland	0.65	101	Nepal	0.29	j
33   Portugal   0.65   105   Ethiopia   0.25   33   Sri Lanka   0.65   105   Paraguay   0.25   33   Sri Lanka   0.65   105   Seychelles   0.25   34   37   Insida   0.65   105   Seychelles   0.25   37   37   37   37   37   38   38   38	33	Kenya	0.65	105	Bulgaria	0.25	
33 Sri Lanka	33	Lithuania	0.65	105	Czech Republic	0.25	
105   Seychelles		•					
40 Austria					• •		
Belgium					•		
Moldova							
Moldova							
40       Slovak Republic       0.63       112       Macedonia, FYR       0.22         45       El Salvador       0.61       115       Cambodia       0.20         45       Mexico       0.61       115       Guatemala       0.20         45       Okatar       0.61       115       Jamaica       0.20         45       Sweden       0.61       115       Lao PDR       0.20         49       Georgia       0.59       119       Benin       0.18         50       Philippines       0.59       119       Benin       0.18         51       Philippines       0.57       119       Hait       0.18         51       Philippines       0.57       119       Zambia       0.18         51       Venezuela       0.57       119       Zameroon       0.18         51       Venezuela       0.57       123       Cameroon       0.16         54       Argentina       0.55       123       Mali       0.16         54       Egypt       0.55       128       Lesotho       0.14       1         54       Luxembourg       0.55       126       Lesotho       0.14							
45       El Salvador.       0.61       115       Cambodía.       0.20         45       Mexico.       0.61       115       Guatemala.       0.20         45       Qatar.       0.61       115       Janaica.       0.20         45       Sweden.       0.61       115       Lan PDR.       0.20         49       Georgia.       0.59       119       Benin.       0.18         49       Montenegro.       0.59       119       Benin.       0.18         51       Philippines.       0.57       119       Haiti.       0.18         51       Philippines.       0.57       119       Haiti.       0.18         51       Venezuela.       0.57       119       Zambia.       0.18         51       Venezuela.       0.57       123       Cameroon.       0.16         54       Argentina.       0.55       123       Mali.       0.16         54       Argentina.       0.55       123       Swaziland.       0.16         54       Egypt.       0.55       123       Swaziland.       0.16         54       Luxembourg.       0.55       126       Uganda.       0.14							
45       Mexico       0.61       115       Guatermala       0.20         45       Oatar       0.61       115       Jamaica       0.20         45       Sweden       0.61       115       Jano PDR       0.20         49       Georgia       0.59       119       Benin       0.18         49       Montenegro       0.59       119       Benin       0.18         51       Philippines       0.57       119       Haiti       0.18         51       Saudi Arabia       0.57       119       Jambia       0.18         51       Venezuela       0.57       123       Zambia       0.18         51       Venezuela       0.57       123       Mali       0.18         51       Venezuela       0.57       123       Mali       0.18         51       Venezuela       0.55       123       Mazziland       0.16         54       Argentina       0.55       123       Mazziland       0.16         54       Argentina       0.55       126       Lesotho       0.14       1         54       Luxembourg       0.55       126       Uganda       0.14       1 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
115   Jamaica							
115							
49       Georgia       0.59       119       Benin       0.18         49       Montenegro       0.59       119       Côte d'Ivoire       0.18         51       Philippines       0.57       119       Halit       0.18         51       Saudi Arabia       0.57       119       Zambia       0.18         51       Venezuela       0.57       123       Cameroon       0.16         54       Argentina       0.55       123       Mali       0.16         54       Argentina       0.55       123       Swaziland       0.16         54       Egypt       0.55       126       Lesotho       0.14         54       Egypt       0.55       126       Lesotho       0.14         54       Egypt       0.55       126       Lesotho       0.14         54       Euxembourg       0.55       126       Uganda       0.14         54       Thailand       0.55       128       Liberia       0.12         59       Albania       0.53       128       Tajikistan       0.12         59       Armenia       0.53       130       Cape Verde       0.10         59 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
51 Philippines       0.57       119 Haiti       0.18         51 Saudi Arabia       0.57       119 Zambia       0.18         51 Venezuela       0.57       123 Cameroon       0.16         54 Argentina       0.55       123 Mali       0.16         54 Denmark       0.55       123 Swaziland       0.16         54 Egypt       0.55       126 Lesotho       0.14         54 Luxembourg       0.55       126 Uganda       0.14         54 Thailand       0.55       128 Liberia       0.12         59 Albania       0.53       128 Tajikistan       0.12         59 Armenia       0.53       130 Nicaragua       0.10         59 Mauritius       0.53       130 Nicaragua       0.10         59 Mauritius       0.53       132 Algeria       0.08         63 Rwanda       0.51       132 Mauritania       0.08         64 Iceland       0.49       132 Mauritania       0.08         64 Poland       0.49       137 Guinea       0.02         64 Turkey       0.49       137 Guinea       0.02         64 Vietnam       0.49       14 Hong Kong SAR       n/a	49			119	Benin	0.18	
51 Saudi Arabia       0.57       119 Zambia       0.18         51 Venezuela       0.57       123 Cameroon       0.16         54 Argentina       0.55       123 Mali       0.16         54 Denmark       0.55       123 Swaziland       0.16         54 Egypt       0.55       126 Lesotho       0.14         54 Luxembourg       0.55       126 Uganda       0.14         54 Thailand       0.55       128 Liberia       0.12         59 Albania       0.53       128 Tajikistan       0.12         59 Armenia       0.53       130 Cape Verde       0.10         59 Malaysia       0.53       130 Nicaragua       0.10         59 Mauritius       0.53       132 Algeria       0.08         63 Rwanda       0.51       132 Chad       0.08         64 Ecuador       0.49       132 Mauritania       0.08         64 Panama       0.49       136 Burundi       0.06       137 Guinea       0.02         64 Turkey       0.49       137 Guinea       0.02       17 A Chinese Taipei       n/a         64 Vietnam       0.49       n/a Chinese Taipei       n/a	49	Montenegro	0.59	119	Côte d'Ivoire	0.18	
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54       Argentina       0.55       123       Mali       0.16         54       Denmark       0.55       123       Swaziland       0.16         54       Egypt       0.55       126       Lesotho       0.14         54       Luxembourg       0.55       126       Uganda       0.14         54       Thailand       0.55       128       Liberia       0.12         59       Albania       0.53       128       Tajikistan       0.12         59       Armenia       0.53       130       Cape Verde       0.10         59       Malaysia       0.53       130       Nicaragua       0.10         59       Mauritius       0.53       132       Algeria       0.08         63       Rwanda       0.51       132       Algeria       0.08         64       Ecuador       0.49       132       Mauritania       0.08         64       Iceland       0.49       132       Myanmar       0.08         64       Poland       0.49       136       Burundi       0.06         64       Poland       0.49       137       Guinea       0.02       1 <t< td=""><td>51</td><td>Saudi Arabia</td><td>0.57</td><td>119</td><td>Zambia</td><td>0.18</td><td></td></t<>	51	Saudi Arabia	0.57	119	Zambia	0.18	
54 Denmark       0.55       123 Swaziland       0.16         54 Egypt       0.55       126 Lesotho       0.14         54 Luxembourg       0.55       126 Uganda       0.14         54 Thailand       0.55       128 Liberia       0.12         59 Albania       0.53       128 Tajikistan       0.12         59 Armenia       0.53       130 Cape Verde       0.10         59 Malaysia       0.53       130 Nicaragua       0.10         59 Mauritius       0.53       132 Algeria       0.08         63 Rwanda       0.51       132 Chad       0.08         64 Ecuador       0.49       132 Mauritania       0.08         64 Iceland       0.49       132 Myanmar       0.08         64 Panama       0.49       136 Burundi       0.06         64 Poland       0.49       137 Guinea       0.02         64 Turkey       0.49       n/a Chinese Taipei       n/a         64 Vietnam       0.49       n/a Hong Kong SAR       .n/a	51	Venezuela	0.57	123	Cameroon	0.16	
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54       Luxembourg       0.55       126       Uganda       0.14         54       Thailand       0.55       128       Liberia       0.12         59       Albania       0.53       128       Tajikistan       0.12         59       Armenia       0.53       130       Cape Verde       0.10         59       Malaysia       0.53       130       Nicaragua       0.10         59       Mauritius       0.53       132       Algeria       0.08         63       Rwanda       0.51       132       Chad       0.08         64       Ecuador       0.49       132       Mauritania       0.08         64       Iceland       0.49       132       Myanmar       0.08         64       Panama       0.49       136       Burundi       0.06       1         64       Poland       0.49       137       Guinea       0.02       1         64       Vietnam       0.49       n/a       Chinese Taipei       n/a         64       Vietnam       0.49       n/a       Hong Kong SAR       .n/a	54			123			
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59 Armenia       .0.53       130 Cape Verde       .0.10         59 Malaysia       .0.53       130 Nicaragua       .0.10         59 Mauritius       .0.53       132 Algeria       .0.08         63 Rwanda       .0.51       132 Chad       .0.08         64 Ecuador       .0.49       132 Mauritania       .0.08         64 Iceland       .0.49       132 Myanmar       .0.08         64 Panama       .0.49       136 Burundi       .0.06         64 Poland       .0.49       137 Guinea       .0.02         64 Turkey       .0.49       n/a Chinese Taipei       .n/a         64 Vietnam       .0.49       n/a Hong Kong SAR       .n/a							
59       Malaysia       .0.53       130       Nicaragua       .0.10         59       Mauritius       .0.53       132       Algeria       .0.08         63       Rwanda       .0.51       132       Chad       .0.08         64       Ecuador       0.49       132       Mauritania       .0.08         64       Iceland       0.49       132       Myanmar       .0.08         64       Panama       0.49       136       Burundi       .0.06         64       Poland       0.49       137       Guinea       .0.02         64       Turkey       0.49       n/a       Chinese Taipei       .n/a         64       Vietnam       0.49       n/a       Hong Kong SAR       .n/a					,		
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63 Rwanda		,			-		
64 Ecuador					•		
64       Iceland       0.49       132       Myanmar       0.08       ■         64       Panama       0.49       136       Burundi       0.06       ■         64       Poland       0.49       137       Guinea       0.02       ■         64       Turkey       0.49       n/a       Chinese Taipei       n/a         64       Vietnam       0.49       n/a       Hong Kong SAR       n/a							
64 Panama							
64 Poland					•		
64 Turkey							
64 Vietnam							
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**SOURCE:** United Nations Department of Economic and Social Affairs (UNDESA), UN E-Government Development Database (retrieved November 27, 2014), http://unpan3.un.org/egovkb/en-us/

# 2.3

# **Technical Notes and Sources**

# **Technical Notes and Sources**

This section complements the Data Tables by providing additional information for all indicators used in the computation of the Networked Readiness Index 2016. In the case of indicators derived from the Executive Opinion Survey (the Survey), the full question and associated answers are provided. For more details on Survey indicators, refer to Chapter 1.3 of The Global Competitiveness Report 2015–2016.

For indicators sourced from other organizations, because of space limitations it is not possible to reproduce in this Report all the additional information associated with specific data points. Readers and users are urged to refer to the original source for any additional information and exceptions for certain economies or/and data points.

Although the World Economic Forum takes every reasonable step to ensure the quality and accuracy of the data used in the computation of the Networked Readiness Index, it makes no warranties with respect to their quality and accuracy. The World Economic Forum shall not be held responsible or liable for any outcome resulting from the use of these data. In particular, it shall not be responsible for any interpretation, decisions, or actions based on these data.

Furthermore, the data used in the computation of the Networked Readiness Index 2016 represent the most recent or/and best data available at the time when they were collected. It is possible that data were updated or revised subsequently.

For the detailed terms of use and disclaimer, refer to page ii at the beginning of the Report.

#### 1st pillar: Political and regulatory environment

#### 1.01 Effectiveness of law-making bodies

How effective is the legislative process in your country? [1 = not effective at all—it is deadlocked; 7 = extremely effective] | 2014-15 weighted average

Source: World Economic Forum, Executive Opinion Survey, 2014 and 2015 editions

#### 1.02 Laws relating to ICTs

How developed are your country's laws relating to the use of ICTs (e.g., e-commerce, digital signatures, consumer protection)? [1 = not developed at all; 7 = extremely well developed] | 2014-15 weighted average

Source: World Economic Forum, Executive Opinion Survey, 2014 and 2015 editions

#### 1.03 Judicial independence

In your country, how independent is the judicial system from influences of the government, individuals, or companies? [1 = not independent at all; 7 = entirely independent] | 2014–15 weighted average

Source: World Economic Forum, Executive Opinion Survey, 2014 and 2015 editions

#### 1.04 Efficiency of legal framework in settling disputes

In your country, how efficient are the legal and judicial systems for companies in settling disputes? [1 = extremely inefficient; 7 = extremely efficient] | 2014-15 weighted average

Source: World Economic Forum, Executive Opinion Survey, 2014 and 2015 editions

#### 1.05 Efficiency of legal framework in challenging regulations

In your country, to what extent can individuals, institutions (civil society), and businesses obtain justice through the judicial system against arbitrary government decisions? [1 = not at all; 7 = to a great extent] | 2014-15 weighted

Source: World Economic Forum, Executive Opinion Survey, 2014 and 2015 editions

#### 1.06 Intellectual property protection

In your country, to what extent is intellectual property protected? [1 = not at all; 7 = to a great extent] | 2014-15 weighted average

Source: World Economic Forum, Executive Opinion Survey, 2014 and 2015 editions

#### 1.07 Software piracy rate

#### Unlicensed software units as a percentage of total software units installed | 2013

This measure covers piracy of all packaged software that runs on personal computers (PCs), including desktops, laptops, and ultraportables, including netbooks. This includes operating systems; systems software such as databases and security packages; business applications; and consumer applications such as games, personal finance, and reference software. The study does not include software that runs on servers or mainframes, or software loaded onto tablets or smart phones.

For more information about the methodology, refer to the study available at http://globalstudy.bsa.org/2013/index.html.

Source: The Software Alliance (BSA), The Compliance Gap: BSA Global Software Survey (June 2014); http://globalstudy.bsa. org/2013/downloads/studies/2013GlobalSurvey\_Study\_en.pdf

#### 1.08 Number of procedures to enforce a contract

Number of procedures to resolve a dispute, counted from the moment the plaintiff files a lawsuit in court until payment | 2014

The list of procedural steps compiled for each economy traces the chronology of a commercial dispute before the relevant court. A procedure is defined as any interaction, required by law or commonly used in practice, between the parties or between them and the judge or court officer. Other procedural steps, internal to the court or between the parties and their counsel, may be counted as well. This indicator includes steps to file and serve the case, steps to assign the case to a judge, steps for trial and judgment, and steps necessary to enforce the judgment. To indicate overall efficiency, one procedure is subtracted from the total number for economies that have specialized commercial courts or divisions, and one procedure for economies that allow electronic filing of the initial complaint. Some procedural steps that are part of others are not counted in the total number of procedures.

The World Bank discontinued the publication of this indicator within its Doing Business report series. Hence the NRI includes data published in the 2015 edition of the report.

Source: World Bank/International Finance Corporation, Doing Business 2015: Going Beyond Efficiency; http://www. doinabusiness.ora

#### 1.09 Time required to enforce a contract

Number of days to resolve a dispute, counted from the moment the plaintiff decides to file the lawsuit in court until payment | 2015

Time is recorded in calendar days, counted from the moment the plaintiff decides to file the lawsuit in court until payment. This includes both the days when actions take place and the waiting periods between.

For more details about the methodology employed and the assumptions made to compute this indicator, visit http://www. doingbusiness.org/methodology/enforcing-contracts.

Source: World Bank/International Finance Corporation, Doing Business 2016: Measuring Regulatory Quality and Efficiency; http://www.doingbusiness.org

#### 2nd pillar: Business and innovation environment

#### 2.01 Availability of latest technologies

In your country, to what extent are the latest technologies available? [1 = not at all; 7 = to a great extent] | 2014-15 weighted average

Source: World Economic Forum, Executive Opinion Survey, 2014 and 2015 editions

#### 2.02 Venture capital availability

In your country, how easy is it for start-up entrepreneurs with innovative but risky projects to obtain equity funding? [1 = extremely difficult; 7 = extremely easy] | 2014–15 weighted

Source: World Economic Forum, Executive Opinion Survey, 2014 and 2015 editions

#### 2.03 Total tax rate

Sum of profit tax, labor tax and social contributions, property taxes, turnover taxes, and other taxes, as a share (%) of commercial profits | 2014

The total tax rate measures the amount of taxes and mandatory contributions borne by the business in the second year of operation, expressed as a share of commercial profit, Paving Taxes 2016 reports the total tax rate for calendar year 2014. The total amount of taxes borne is the sum of all the different taxes and contributions payable after accounting for allowable deductions and exemptions. The taxes withheld (such as personal income tax) or collected by the company and remitted to the tax authorities (such as value-added tax, sales tax, or goods and service tax) but not borne by the company are excluded. The taxes included can be divided into five categories: profit or corporate income taxes; social contributions and labor taxes paid by the employer (in respect of which all mandatory contributions are included, even if paid to a private entity such as a requited pension fund); property taxes; turnover taxes; and other taxes (such as municipal fees and vehicle taxes).

For more details about the methodology employed and the assumptions made to compute this indicator, visit http://www. doingbusiness.org/methodology/paying-taxes.

Source: World Bank/PwC, Paying Taxes 2016: The Global Picture; http://www.doinabusiness.org

#### 2.04 Time required to start a business

#### Number of days required to start a business | 2015

Time is recorded in calendar days. The measure captures the median duration that incorporation lawyers indicate is necessary in practice to complete a procedure with minimum follow-up with government agencies and no extra payments.

For more details about the methodology employed and the assumptions made to compute this indicator, visit http://www. doingbusiness.org/methodology/starting-a-business.

Source: World Bank/International Finance Corporation, Doing Business 2016: Measuring Regulatory Quality and Efficiency; http://www.doingbusiness.org

#### 2.05 Number of procedures required to start a business

Number of procedures required to start a business | 2015

A procedure is defined as any interaction of the company founders with external parties (e.g., government agencies, lawyers, auditors, or notaries).

For details about the methodology employed and the assumptions made to compute this indicator, visit http://www.doingbusiness.org/methodology/starting-a-business.

Source: World Bank/International Finance Corporation, Doing Business 2016: Measuring Regulatory Quality and Efficiency; http://www.doingbusiness.org

#### 2.06 Intensity of local competition

In your country, how intense is competition in the local markets? [1 = not intense at all; 7 = extremely intense] | 2014-15 weighted average

#### 2.07 Tertiary education enrollment rate

#### Tertiary education gross enrollment rate (%) | 2013 or most recent year available

Tertiary enrollment rate is the ratio of total enrollment, regardless of age, to the population of the age group that officially corresponds to the tertiary education level. Tertiary education, whether or not leading to an advanced research qualification. normally requires, as a minimum condition of admission, the successful completion of education at the secondary level.

Sources: United Nations Education, Science and Culture Organization (UNESCO), UNESCO Institute for Statistics Data Centre (retrieved December 15, 2015), http://data.uis.unesco. org/; Authors' calculations based on Organisation for Economic Co-operation and Development (OECD), OECD, stat (retrieved February 4, 2016), http://stats.oecd.org/; national sources

#### 2.08 Quality of management schools

In your country, how do you assess the quality of business schools? [1 = extremely poor-among the worst in the world; 7 = excellent—among the best in the world] | 2014–15 weighted average

Source: World Economic Forum, Executive Opinion Survey, 2014 and 2015 editions

#### 2.09 Government procurement of advanced technology products

In your country, to what extent do government purchasing decisions foster innovation? [1 = not at all; 7 = to a great extent] | 2014-15 weighted average

Source: World Economic Forum, Executive Opinion Survey, 2014 and 2015 editions

### 3rd pillar: Infrastructure

#### 3.01 Electricity production

#### Electricity production (kWh) per capita | 2013 or most recent vear available

Electricity production is measured at the terminals of all alternator sets in a station. In addition to hydropower, coal, oil, gas, and nuclear power generation, it covers generation by geothermal, solar, wind, and tide and wave energy as well as that from combustible renewables and waste. Production includes the output of electricity plants designed to produce electricity only, as well as that of combined heat and power plants. Total electricity production is then divided by total population. Population figures are from the World Bank's World Development Indicators (retrieved January 4, 2016).

Sources: Authors' calculations based on International Energy Agency (IEA), World Energy Statistics and Balances 2015, www. iea.org/statistics/; World Bank, World Development Indicators (retrieved January 4, 2016), http://data.worldbank.org; US Central Intelligence Agency (CIA), The World Factbook (retrieved January 5, 2016), https://www.cia.gov/library/publications/the-world-

#### 3.02 Mobile network coverage rate

#### Percentage of total population covered by a mobile network signal | 2014 or most recent year available

This indicator measures the percentage of inhabitants who are within range of a mobile cellular signal, irrespective of whether or not they are subscribers. This is calculated by dividing the number of inhabitants within range of a mobile cellular signal by the total population. Note that this is not the same as the mobile subscription density or penetration.

Source: International Telecommunication Union (ITU), ITU World Telecommunication/ICT Indicators Database 2015 (December 2015 edition), http://www.itu.int/en/ITU-D/Statistics/Pages/ publications/wtid.aspx

#### 3.03 International Internet bandwidth

#### International Internet bandwidth (kb/s) per Internet user | 2014 or most recent year available

International Internet bandwidth is the sum of the capacity of all Internet exchanges offering international bandwidth measured in kilobits per second (kb/s).

Source: International Telecommunication Union (ITU), ITU World Telecommunication/ICT Indicators Database 2015 (December 2015 edition), http://www.itu.int/en/ITU-D/Statistics/Pages/ publications/wtid.aspx

#### 3.04 Secure Internet servers

#### Secure Internet servers per million population | 2014

Secure Internet servers are servers using encryption technology in Internet transactions.

Source: The World Bank, World Development Indicators (retrieved January 4, 2016), http://data.worldbank.org; national sources

#### 4th pillar: Affordability

#### 4.01 Prepaid mobile cellular tariffs

#### Average per-minute cost of different types of mobile cellular calls (PPP \$) | 2014 or most recent year available

This measure is constructed by first taking the average per-minute cost of a local call to another mobile cellular phone on the same network (on-net) and on another network (off-net). This amount is then averaged with the per-minute cost of a local call to a fixed telephone line. All the tariffs are for calls placed during peak hours and based on a basic, representative mobile cellular pre-paid subscription service.

In order to account for differences in costs of living, we convert the dollar amounts into international dollars by applying the purchasing power parity (PPP) conversion factor sourced from the World Bank's World Development Indicators (retrieved January 4,

There are limitations associated with using PPP estimates. First, finding comparable baskets of goods with which to compare purchasing power across countries is an arduous task because there are inherent differences across countries in the quality of goods and consumption patterns. Second, price levels in one particular sector or industry, or for a particular product (or service), do not always reflect the general level of prices; this is a result of specific market conditions (competition, maturity, offering, and so on). Tariff rates expressed in PPP terms must therefore be interpreted with caution.

Sources: Authors' calculations based on International Telecommunication Union (ITU), ITU World Telecommunication/ ICT Indicators Database 2015 (December 2015 edition), http:// www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx; World Bank, World Development Indicators (retrieved January 4, 2016), http://data.worldbank.org; national sources

#### 4.02 Fixed broadband Internet tariffs

## Monthly subscription charge for fixed (wired) broadband Internet service (PPP \$) | 2014 or most recent year available

Fixed (wired) broadband is considered any dedicated connection to the Internet at downstream speeds equal to, or greater than, 256 kilobits per second. In order to account for differences in costs of living, we convert the dollar amounts into international dollars by applying the purchasing power parity (PPP) conversion factor sourced from the World Bank's World Development Indicators (retrieved January 4, 2016).

There are limitations associated with using PPP estimates. First, finding comparable baskets of goods with which to compare purchasing power across countries is an arduous task because there are inherent differences across countries in the quality of goods and consumption patterns. Second, price levels in one particular sector or industry, or for a particular product (or service), do not always reflect the general level of prices; this is a result of specific market conditions (competition, maturity, offering, and so on). Tariff rates expressed in PPP terms must therefore be interpreted with caution.

Sources: Authors' calculations based on International Telecommunication Union (ITU), ITU World Telecommunication/ ICT Indicators Database 2015 (December 2015 edition), http:// www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx; World Bank, World Development Indicators (retrieved January 4, 2016), http://data.worldbank.org; national sources

### 4.03 Internet and telephony sectors competition index

### Level of competition index for Internet services, international long distance services, and mobile telephone services on a 0-to-2 (best) scale | 2014 or most recent year available

This indicator measures the degree of liberalization in 17 categories of ICT services, including 3G/4G telephony. international long distance calls, and international gateways. For each economy, the level of competition in each of the categories is assessed as follows: monopoly, partial competition, and full competition. The results reflect the situation as of 2014 for the majority of countries (for others, data are available as of 2013 or earlier years). The index is calculated as the average of points obtained in each of the 17 categories for which data are available. Full liberalization across all categories yields a score of 2, the best

For more information, consult http://www.itu.int/ITU-D/ICTEYE/ Reports.aspx.

Source: Authors' calculations based on International Telecommunication Union (ITU), ITU World Telecommunication Regulatory Database (retrieved January 5, 2016), http://www.itu. int/en/ITU-D/Statistics/Pages/publications/wtid.aspx

## 5th pillar: Skills

## 5.01 Quality of the education system

In your country, how well does the education system meet the needs of a competitive economy? [1 = not well at all; 7 = extremely well] | 2014-15 weighted average

Source: World Economic Forum, Executive Opinion Survey, 2014 and 2015 editions

## 5.02 Quality of math and science education

In your country, how do you assess the quality of math and science education [1 = extremely poor—among the worst in the world; 7 = excellent—among the best in the world] | 2014-15 weighted average

Source: World Economic Forum, Executive Opinion Survey, 2014 and 2015 editions

### 5.03 Secondary education enrolment rate

### Secondary education gross enrollment rate (%) | 2013 or most recent year available

The reported value corresponds to the ratio of total secondary enrollment, regardless of age, to the population of the age group that officially corresponds to the secondary education level. Secondary education (ISCED levels 2 and 3) completes the provision of basic education that began at the primary level, and aims to lay the foundations for lifelong learning and human development, by offering more subject- or skills-oriented instruction using more specialized teachers.

Sources: United Nations Education, Science and Culture Organization (UNESCO), UNESCO Institute for Statistics Data Centre (retrieved December 15, 2015), http://data.uis.unesco. org/; and Education for All Global Monitoring Monitor 2013; United Nations Children's Fund (UNICEF), Education Statistics; SITEAL - Sistema de Información de tendencias Educativas de América Latina; national sources

#### 5.04 Adult literacy rate

### Adult literacy rate (%) | 2015 or most recent year available

Adult literacy is defined as the percentage of the population aged 15 years and over who can both read and write with understanding a short, simple statement on his/her everyday life. For OECD member countries, when data are missing we apply a value of 99 percent for the purposes of calculating the NRI. This is in line with the approach adopted by the United Nations Development Programme (UNDP) in calculating the 2009 edition of the Human Development Index. We also assume a rate of 99 percent for Hong Kong SAR. In the corresponding table, those countries are identified by an asterisk.

Sources: United Nations Education, Science and Culture Organization (UNESCO), UNESCO Institute for Statistics Data Centre (retrieved December 15, 2015), http://data.uis.unesco. org/; national sources

## 6th pillar: Individual usage

### 6.01 Mobile telephone subscriptions

#### Mobile telephone subscriptions (post-paid and pre-paid) per 100 population | 2014

A mobile telephone subscription refers to a subscription to a public mobile telephone service that provides access to the Public Switched Telephone Network using cellular technology, including prepaid SIM cards active during the past three months. This includes both analog and digital cellular systems (IMT-2000, Third Generation, 3G) and 4G subscriptions, but excludes mobile broadband subscriptions via data cards or USB modems. Subscriptions to public mobile data services, private trunked mobile radio, telepoint or radio paging, and telemetry services are also excluded. It includes all mobile cellular subscriptions that offer voice communications.

Source: International Telecommunication Union (ITU), ITU World Telecommunication/ICT Indicators Database 2015 (December 2015 edition), http://www.itu.int/en/ITU-D/Statistics/Pages/ publications/wtid.aspx

### 6.02 Internet users

## Percentage of individuals using the Internet | 2014

Internet users refers to the proportion of individuals who used the Internet in the last 12 months. Data are based on surveys generally carried out by national statistical offices or estimated based on the number of Internet subscriptions.

Source: International Telecommunication Union (ITU), ITU World Telecommunication/ICT Indicators Database 2015 (December 2015 edition), http://www.itu.int/en/ITU-D/Statistics/Pages/ publications/wtid.aspx

### 6.03 Households with a personal computer

## Percentage of households equipped with a personal computer | 2014 or most recent year available

The proportion of households with a computer is calculated by dividing the number of households with a computer by the total number of households. A computer refers to a desktop or a laptop computer. It does not include equipment with some embedded computing abilities such as mobile cellular phones, personal digital assistants (PDAs), or TV sets.

Source: International Telecommunication Union (ITU), ITU World Telecommunication/ICT Indicators Database 2015 (December 2015 edition), http://www.itu.int/en/ITU-D/Statistics/Pages/ publications/wtid.aspx

### 6.04 Households with Internet access

### Percentage of households with Internet access at home | 2014 or most recent year available

The share of households with Internet access at home is calculated by dividing the number of in-scope households (where at least one household member is aged 15-74) with Internet access by the total number of in-scope households.

Source: International Telecommunication Union (ITU), ITU World Telecommunication/ICT Indicators Database 2015 (December 2015 edition), http://www.itu.int/en/ITU-D/Statistics/Pages/ publications/wtid.aspx

#### 6.05 Fixed broadband Internet subscriptions

# Fixed broadband Internet subscriptions per 100 population |

This refers to total fixed (wired) broadband Internet subscriptions (that is, subscriptions to high-speed access to the public Internet—a TCP/IP connection—at downstream speeds equal to, or greater than, 256 kb/s). This includes cable modem, DSL, fiber-to-the-home/building, and other fixed (wired)-broadband subscriptions. This total is measured irrespective of the method of payment. It excludes subscriptions that have access to data communications (including the Internet) via mobile-cellular networks and wireless-broadband technologies.

Source: International Telecommunication Union (ITU), ITU World Telecommunication/ICT Indicators Database 2015 (December 2015 edition), http://www.itu.int/en/ITU-D/Statistics/Pages/ publications/wtid.aspx

## 6.06 Mobile broadband Internet subscriptions

## Mobile broadband Internet subscriptions per 100 population | 2014 or most recent year available

Mobile broadband subscriptions refers to the sum of standard mobile broadband and dedicated mobile broadband subscriptions to the public Internet. It covers actual subscribers, not potential subscribers, even though the latter may have broadband-enabled

Source: International Telecommunication Union (ITU), ITU World Telecommunication/ICT Indicators Database 2015 (December 2015 edition), http://www.itu.int/en/ITU-D/Statistics/Pages/ publications/wtid.aspx

## 6.07 Use of virtual social networks

In your country, how widely are virtual social networks used (e.g., Facebook, Twitter, LinkedIn)? [1 = not at all used; 7 = used extensively] | 2014-15 weighted average

Source: World Economic Forum, Executive Opinion Survey, 2014 and 2015 editions

## 7th pillar: Business usage

#### 7.01 Firm-level technology absorption

In your country, to what extent do businesses adopt new technology? [1 = not at all; 7 = adopt extensively] | 2013-14 weighted average

Source: World Economic Forum, Executive Opinion Survey, 2013 and 2014 editions

#### 7.02 Capacity for innovation

In your country, to what extent do companies have the capacity to innovate? [1 = not at all; 7 = to a great extent] | 2014-15 weighted average

Source: World Economic Forum, Executive Opinion Survey, 2014 and 2015 editions

## 7.03 PCT patents applications

#### Number of applications filed under the Patent Cooperation Treaty (PCT) per million population | 2012-2013 average

This measures the total count of applications filed under the Patent Cooperation Treaty (PCT), by priority date and inventor nationality, using fractional count if an application is filed by multiple inventors.

In the absence of reliable data on PCT applications for Chinese Taipei and Hong Kong SAR, two advanced economies that are not signatories of the Treaty, the number of applications is estimated as follows: first, we compute the average number of all utility patent applications filed with the United States Patents and Trademarks Office (USPTO) for 2012 and 2013. We then divide this value by the average number of PCT applications for 2012 and 2013, before computing the average of these ratios (1.70) across all countries. In doing this, only economies with a two-year average number of at least 100 USPTO applications and 50 PCT applications are considered. Chinese Taipei and Hong Kong SAR are excluded in both cases. We then divide the 2012-2013 average number of USPTO applications filed by residents of Chinese Taipei (20,766) and Hong Kong SAR (1,118), respectively, by the ratio above in order to produce estimates for PCT applications. As a final step, we compute the estimates per million population-that is, 522.6 for Chinese Taipei and 91.5 for Hong Kong SAR. The estimates are used in the computation of the respective business usage pillar scores of the two economies.

For more information, consult http://www.oecd.org/sti/ innovationinsciencetechnologyandindustry/oecdpatentdatabases. htm. The average count of applications filed in 2012 and 2013 is divided by population, using figures from the World Bank's World Development Indicators (retrieved December 15, 2015).

Sources: World Intellectual Property Organization (WIPO) PCT Data, sourced from Organisation for Economic Co-operation and Development (OECD), Patent Database, January 2016, http:// www.oecd.org/sti/inno/oecdpatentdatabases.htm; World Bank, World Development Indicators (retrieved December 15, 2015), http://data.worldbank.org; World Economic Forum's calculations

### 7.04 ICT use for business-to-business transactions

In your country, to what extent do businesses use ICTs for transactions with other businesses? [1 = not at all; 7 = to a great extent] | 2014-15 weighted average

Source: World Economic Forum, Executive Opinion Survey, 2014 and 2015 editions

### 7.05 Business-to-consumer Internet use

In your country, to what extent do businesses use the Internet for selling their goods and services to consumers? [1 = not at all; 7 = to a great extent] | 2014-15 weighted average

Source: World Economic Forum, Executive Opinion Survey, 2014 and 2015 editions

#### 7.06 Extent of staff training

In your country, to what extent do companies invest in training and employee development? [1 = not at all; 7 = to a great extent] | 2014-15 weighted average

Source: World Economic Forum, Executive Opinion Survey, 2014 and 2015 editions

## 8th pillar: Government usage

### 8.01 Importance of ICTs to government vision of the future

To what extent does the government have a clear implementation plan for utilizing ICTs to improve your country's overall competitiveness? [1 = not at all—there is no plan; 7 = to a great extent—there is a clear plan] | 2014-15 weighted average

Source: World Economic Forum, Executive Opinion Survey, 2014 and 2015 editions

#### 8.02 Government Online Service Index

The Government Online Service Index assesses the quality of government's delivery of online services on a 0-to-1 (best)

According to the United Nations' Public Administration Network, the Government Online Service Index captures a government's performance in delivering online services to the citizens. There are four stages of service delivery: Emerging, Enhanced, Transactional, and Connected. Online services are assigned to each stage according to their degree of sophistication, from the more basic to the more sophisticated. In each country, the performance of the government in each of the four stages is measured as the number of services provided as a percentage of the maximum services in the corresponding stage. Examples of services include online presence, deployment of multimedia content, governments' solicitation of citizen input, widespread data sharing, and use of social networking.

For more information about the methodology, consult http://unpan3.un.org/egovkb/en-us/.

Source: United Nations Department of Economic and Social Affairs (UNDESA), UN E-Government Development Database (retrieved November 27, 2014), http://unpan3.un.org/egovkb/

## 8.03 Government success in ICT promotion

In your country, how successful is the government in promoting the use of ICTs? [1 = not successful at all; 7 = extremely successful] | 2014–15 weighted average

Source: World Economic Forum, Executive Opinion Survey, 2014 and 2015 editions

## 9th pillar: Economic impacts

## 9.01 Impact of ICTs on business models

In your country, to what extent do ICTs enable new business models? [1 = not at all; 7 = to a great extent] | 2014-15 weighted average

Source: World Economic Forum, Executive Opinion Survey, 2014 and 2015 editions

### 9.02 PCT ICT patent applications

Number of applications for information and communication technology-related patents filed under the Patent Cooperation Treaty (PCT) per million population | 2012–2013

This measures the count of applications filed under the Patent Cooperation Treaty (PCT) in the technology domain of information and communication technologies by priority date and inventor nationality, using fractional count if an application is filed by multiple inventors.

For more information, consult http://www.oecd.org/sti/ innovation in science technology and industry/oecd patent databases.htm. The average count of applications filed in 2012 and 2013 is divided by population, using figures from the World Bank's  $\ensuremath{\textit{World}}$ Development Indicators (retrieved December 15, 2015).

Sources: World Intellectual Property Organization (WIPO) PCT Data, sourced from Organisation for Economic Co-operation and Development (OECD), Patent Database, January 2016, http://www.oecd.org/sti/inno/oecdpatentdatabases.htm; World Bank, World Development Indicators (retrieved December 15, 2015), http://data.worldbank.org

#### 9.03 Impact of ICTs on new organizational models

In your country, to what extent do ICTs enable new organizational models (e.g., virtual teams, remote working, telecommuting) within companies? [1 = not at all; 7 = to a great extent] | 2014-15 weighted average

Source: World Economic Forum, Executive Opinion Survey, 2014 and 2015 editions

#### 9.04 Share of workforce employed in knowledge-intensive activities (%)

Share of workforce employed in knowledge-intensive activities (%) | 2014 or most recent year available

Knowledge-intensive jobs correspond to the International Labour Organization (ILO) aggregate category "Managers, professionals, and technicians," as provided in the ILOSTAT Database. For a few countries, when aggregate data were not available, authors have manually calculated the share of knowledge-intensive jobs (as a percentage of total employment) summing the following ISCO-08 categories: (1) Managers; (2) Professionals; and (3) Technicians and associate professionals.

Source: International Labour Organization (ILO), ILOSTAT Database (retrieved January 5, 2016), http://www.ilo.org/ilostat

## 10th pillar: Social impacts

## 10.01 Impact of ICTs on access to basic services

In your country, to what extent do information and communication technologies (ICTs) enable access for all individuals to basic services (e.g., health, education, financial services, etc.)? [1 = not at all; 7 = to a great extent] | 2014–15 weighted average

Source: World Economic Forum, Executive Opinion Survey, 2014 and 2015 editions

## 10.02 Internet access in schools

In your country, to what extent is the Internet used in schools for learning purposes? [1 = not at all; 7 = to a great extent] | 2014-15 weighted average

Source: World Economic Forum, Executive Opinion Survey, 2014 and 2015 editions

### 10.03 ICT use and government efficiency

In your country, to what extent does the use of ICTs by the government improve the quality of government services to the population? [1 = not at all; 7 = to a great extent] | 2014–15 weighted average

Source: World Economic Forum, Executive Opinion Survey, 2014 and 2015 editions

### 10.04 E-Participation Index

The E-Participation Index assesses, on a 0-to-1 (best) scale, the quality, relevance, and usefulness of government websites in providing online information and participatory tools and services to their citizens | 2013

According to the United Nations, the E-Participation Index assesses the quality and usefulness of information and services provided by a country for the purpose of engaging its citizens in public policymaking through the use of e-government programs. Within the E-Participation Index, countries are benchmarked in three areas: e-information, e-consultation, and e-decision-making. As such, the index indicates both the capacity and the willingness of the state in encouraging the citizen in promoting deliberative, participatory decision-making in public policy and of the reach of its own socially inclusive governance program.

For more information about the methodology, consult http://unpan3.un.org/egovkb/en-us/.

Source: United Nations Department of Economic and Social Affairs (UNDESA), UN E-Government Development Database (retrieved November 27, 2014), http://unpan3.un.org/egovkb/en-us/

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