

The Little Data Book on Information and Communication Technology

17

Economic and social context

Sector structure

Sector efficiency and capacity

Sector performance

Access

Usage

Quality

Affordability

Trade

Applications



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**International
Telecommunication
Union**

2017 | THE LITTLE DATA BOOK ON INFORMATION AND COMMUNICATION TECHNOLOGY



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**International
Telecommunication
Union**

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Contents

Acknowledgments	iv
Preface.	v
Data notes	vi
 Regional tables	 1
World	2
East Asia and Pacific	3
Europe and Central Asia.	4
Latin America and the Caribbean	5
Middle East and North Africa	6
North America	7
South Asia	8
Sub-Saharan Africa	9
 Income group tables	 10
Low income.	11
Middle income.	12
Lower middle income	13
Upper middle income	14
Low and middle income	15
High income	16
 Country tables (in alphabetical order)	 17
 Notes.	 235
 Glossary.	 236

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Preface

Since the late 1990s access to information and communication technologies (ICTs) has seen tremendous growth—driven primarily by the wireless technologies and liberalization of telecommunications markets. Mobile communications have evolved from simple voice and text services to diversified innovative applications and mobile broadband Internet. In 2016, there were more than 7.3 billion mobile-cellular subscriptions worldwide. Globally, 3.5 billion people were using the Internet, of which 2.5 billion were from developing countries. Mobile-broadband subscriptions have risen constantly to reach 3.6 billion, while the number of fixed-broadband subscriptions reached more than 884 million during the same period.

The impacts of ICTs cross all sectors. Research has shown that investment in information and communication technologies is associated with such economic benefits as higher productivity, lower costs, new economic opportunities, job creation, innovation, and increased trade. ICTs also help provide better services in health and education, and strengthen social cohesion.

The Little Data Book on Information and Communication Technology 2017 illustrates the progress of this revolution for 217 economies around the world. It provides comparable statistics on the sector for 2005 and 2015 across a range of indicators, enabling readers to readily compare economies. This book includes indicators covering the economic and social context, the structure of the information and communication technology sector, sector efficiency and capacity, and sector performance related to access, usage, quality, affordability, trade, and applications. The glossary contains definitions of the terms used in the tables.

For more information and other World Bank data publications, visit our data Web site at data.worldbank.org or the Web site of the Information and Communication Technologies Department at www.worldbank.org/ict.

For more statistics on information and communication technology infrastructure, access, and usage, as well as analytical reports such as the annual *Measuring the Information Society Report*, visit ITU's Web site at www.itu.int/en/ITU-D/Statistics/Pages/default.aspx and the ITU ICT Eye at www.itu.int/icteye.

Data notes

The data in this book are for 2010 and 2015 or the most recent year unless otherwise noted in the table or the glossary.

- Growth rates are proportional changes from the previous year unless otherwise noted.
- Regional aggregates include data for low- and middle-income economies only.
- Figures in italics indicate data for years or periods other than those specified.

Symbols used:

. . indicates that data are not available or that aggregates cannot be calculated because of missing data.

0 or 0.0 indicates zero or small enough that the number would round to zero at the displayed number of decimal places.

\$ indicates current U.S. dollars.

Lettered notes on some country tables can be found in the notes on page 235.

Data are shown for economies with populations greater than 30,000 or for smaller economies if they are members of the World Bank or the ITU. The term country (used interchangeably with economy) does not imply political independence or official recognition by the World Bank or the ITU but refers to any economy for which the authorities report separate social or economic statistics.

Aggregates for groups of economies are based on the World Bank's regional and income classifications, and may differ from those published by the ITU. Because of missing data, aggregates should be treated as approximations of unknown totals or average values. The aggregation method for each indicator is noted in the glossary. Sums (s) are simple totals of available data. Weighted averages (w) are calculated using the value of the denominator or, in some cases, another indicator as the weight. Median (m) calculations are based on available data and exclude economies with populations below 1 million. For more information about aggregation methods visit datahelpdesk.worldbank.org.

The cutoff date for data is June 18, 2016.

Regional tables

The country composition of regions is based on the World Bank's analytical regions and may differ from common geographic usage.

East Asia and Pacific

American Samoa; Australia; Brunei Darussalam; Cambodia; China; Fiji; French Polynesia; Guam; Hong Kong SAR, China; Indonesia; Japan; Kiribati; Democratic People's Republic of Korea; Republic of Korea; Lao People's Democratic Republic; Macao SAR, China; Malaysia; Marshall Islands; Federated States of Micronesia; Mongolia; Myanmar; Nauru; New Caledonia; New Zealand; Northern Mariana Islands; Palau; Papua New Guinea; Philippines; Samoa; Singapore; Solomon Islands; Thailand; Timor-Leste; Tonga; Tuvalu; Vanuatu; Vietnam

Europe and Central Asia

Albania, Andorra, Armenia, Austria, Azerbaijan, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Channel Islands, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Faroe Islands, Finland, France, Georgia, Germany, Gibraltar, Greece, Greenland, Hungary, Iceland, Ireland, Isle of Man, Italy, Kazakhstan, Kosovo, Kyrgyz Republic, Latvia, Liechtenstein, Lithuania, Luxembourg, former Yugoslav Republic of Macedonia, Moldova, Monaco, Montenegro, Netherlands, Norway, Poland, Portugal, Romania, Russian Federation, San Marino, Serbia, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Tajikistan, Turkey, Turkmenistan, Ukraine, United Kingdom, Uzbekistan

Latin America and the Caribbean

Antigua and Barbuda, Argentina, Aruba, The Bahamas, Barbados, Belize, Bolivia, Brazil, British Virgin Islands, Cayman Islands, Chile, Colombia, Costa Rica, Cuba, Curaçao, Dominica, Dominican Republic, Ecuador, El Salvador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, Sint Maarten (Dutch part), St. Kitts and Nevis, St. Lucia, St. Martin (French part), St. Vincent and the Grenadines, Suriname, Trinidad and Tobago, Turks and Caicos Islands, Uruguay, República Bolivariana de Venezuela, Virgin Islands (U.S.)

Middle East and North Africa

Algeria, Bahrain, Djibouti, Arab Republic of Egypt, Islamic Republic of Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Libya, Malta, Morocco, Oman, Qatar, Saudi Arabia, Syrian Arab Republic, Tunisia, United Arab Emirates, West Bank and Gaza, Republic of Yemen

North America

Bermuda, Canada, United States

South Asia

Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, Sri Lanka

Sub-Saharan Africa

Angola, Benin, Botswana, Burkina Faso, Burundi, Cabo Verde, Cameroon, Central African Republic, Chad, Comoros, Democratic Republic of Congo, Republic of Congo, Côte d'Ivoire, Equatorial Guinea, Eritrea, Ethiopia, Gabon, The Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mauritius, Mozambique, Namibia, Niger, Nigeria, Rwanda, São Tomé and Príncipe, Senegal, Seychelles, Sierra Leone, Somalia, South Africa, South Sudan, Sudan, Swaziland, Tanzania, Togo, Uganda, Zambia, Zimbabwe

	2010	2015
Economic and social context		
Population (millions)	6,924	7,347
Urban population (% of total)	51	54
GNI per capita, <i>World Bank Atlas</i> method (\$)	9,355	10,433
GDP growth, 2005–10 and 2010–15 (avg. annual %)	2.3	2.6
Adult literacy rate (% ages 15 and older)	85	..
Gross primary, secondary, and tertiary school enrollment (%)	71	74
Sector structure		
Separate telecommunications/ICT regulator		
Status of main fixed-line telephone operator		
Level of competition (competition, partial comp., monopoly)		
International gateway(s)		
Mobile telephone service		
Internet service		
Foreign ownership (not allowed, restricted, allowed)		
Reg. treatment of VoIP (banned, closed, no framework, allowed)		
Sector efficiency and capacity		
Telecommunications revenue (% of GDP)	2.7	2.4
Telecommunications investment (% of revenue)	18.4	18.8
Sector performance		
Access		
Fixed-telephone subscriptions (per 100 people)	17.8	14.3
Mobile-cellular telephone subscriptions (per 100 people)	76.5	98.6
Fixed-broadband subscriptions (per 100 people)	7.9	11.3
Households with a computer (%)	36.0	44.9
Households with Internet access at home (%)	30.1	48.5
Usage		
Int'l. voice traffic, total (minutes/subscription/month)	7.1	..
Domestic mobile traffic (minutes/subscription/month)	207	166
Individuals using the Internet (%)	29.1	44.0
Quality		
Population covered by at least a 3G mobile network (%)	..	73
International Internet bandwidth (bit/s per Internet user)	30,636	57,311
Affordability		
Mobile-cellular sub-basket (\$ a month)	15.4	9.8
Fixed-broadband sub-basket (\$ a month)	26.3	20.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	15.0	8.0
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	18.4	12.0
Trade		
ICT goods exports (% of total goods exports)	11.8	10.8
ICT goods imports (% of total goods imports)	12.7	11.6
ICT service exports (% of total service exports)	28.3	31.1
Applications		
Online service index (0-1, 1=highest presence)	0.26	0.36
Secure Internet servers (per million people)	154.4	208.7

East Asia & Pacific

	2010	2015
Economic and social context		
Population (millions)	2,205	2,279
Urban population (% of total)	52	57
GNI per capita, <i>World Bank Atlas</i> method (\$)	7,232	9,602
GDP growth, 2005–10 and 2010–15 (avg. annual %)	4.6	4.4
Adult literacy rate (% ages 15 and older)	95	..
Gross primary, secondary, and tertiary school enrollment (%)	72	77
Sector structure		
Separate telecommunications/ICT regulator		
Status of main fixed-line telephone operator		
Level of competition (competition, partial comp., monopoly)		
International gateway(s)		
Mobile telephone service		
Internet service		
Foreign ownership (not allowed, restricted, allowed)		
Reg. treatment of VoIP (banned, closed, no framework, allowed)		
Sector efficiency and capacity		
Telecommunications revenue (% of GDP)	2.7	..
Telecommunications investment (% of revenue)	19.1	..
Sector performance		
Access		
Fixed-telephone subscriptions (per 100 people)	22.3	17.3
Mobile-cellular telephone subscriptions (per 100 people)	73.7	104.2
Fixed-broadband subscriptions (per 100 people)	9.7	15.8
Households with a computer (%)	37.3	47.7
Households with Internet access at home (%)	28.8	55.5
Usage		
Int'l. voice traffic, total (minutes/subscription/month)	3.2	2.2
Domestic mobile traffic (minutes/subscription/month)	338	176
Individuals using the Internet (%)	34.2	49.8
Quality		
Population covered by at least a 3G mobile network (%)	..	65
International Internet bandwidth (bit/s per Internet user)	12,974	37,552
Affordability		
Mobile-cellular sub-basket (\$ a month)	8.8	6.8
Fixed-broadband sub-basket (\$ a month)	23.1	20.5
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	6.0
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	27.9	11.0
Trade		
ICT goods exports (% of total goods exports)	24.5	22.8
ICT goods imports (% of total goods imports)	20.0	19.1
ICT service exports (% of total service exports)	16.7	26.3
Applications		
Online service index (0–1, 1=highest presence)	0.14	0.35
Secure Internet servers (per million people)	91.4	143.0

Europe & Central Asia

	2010	2015
Economic and social context		
Population (millions)	889	908
Urban population (% of total)	70	71
GNI per capita, <i>World Bank Atlas</i> method (\$)	24,350	24,147
GDP growth, 2005–10 and 2010–15 (avg. annual %)	1.0	1.0
Adult literacy rate (% ages 15 and older)	99	..
Gross primary, secondary, and tertiary school enrollment (%)	88	92
Sector structure		
Separate telecommunications/ICT regulator		
Status of main fixed-line telephone operator		
Level of competition (competition, partial comp., monopoly)		
International gateway(s)		
Mobile telephone service		
Internet service		
Foreign ownership (not allowed, restricted, allowed)		
Reg. treatment of VoIP (banned, closed, no framework, allowed)		
Sector efficiency and capacity		
Telecommunications revenue (% of GDP)	2.1	1.7
Telecommunications investment (% of revenue)	16.2	19.1
Sector performance		
Access		
Fixed-telephone subscriptions (per 100 people)	37.5	32.7
Mobile-cellular telephone subscriptions (per 100 people)	120.1	126.9
Fixed-broadband subscriptions (per 100 people)	19.0	24.7
Households with a computer (%)	63.7	76.3
Households with Internet access at home (%)	58.2	77.4
Usage		
Int'l. voice traffic, total (minutes/subscription/month)	..	..
Domestic mobile traffic (minutes/subscription/month)	119	149
Individuals using the Internet (%)	56.1	71.7
Quality		
Population covered by at least a 3G mobile network (%)	85	88
International Internet bandwidth (bit/s per Internet user)	68,905	122,145
Affordability		
Mobile-cellular sub-basket (\$ a month)	21.3	9.7
Fixed-broadband sub-basket (\$ a month)	22.8	14.6
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	12.8	6.6
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	15.9	8.3
Trade		
ICT goods exports (% of total goods exports)	5.4	4.4
ICT goods imports (% of total goods imports)	8.6	7.2
ICT service exports (% of total service exports)	32.3	35.4
Applications		
Online service index (0-1, 1=highest presence)	0.39	0.55
Secure Internet servers (per million people)	383.4	616.9

Latin America & Caribbean

	2010	2015
Economic and social context		
Population (millions)	599	633
Urban population (% of total)	78	80
GNI per capita, <i>World Bank Atlas</i> method (\$)	7,989	8,939
GDP growth, 2005–10 and 2010–15 (avg. annual %)	3.5	2.0
Adult literacy rate (% ages 15 and older)	92	..
Gross primary, secondary, and tertiary school enrollment (%)	82	83
Sector structure		
Separate telecommunications/ICT regulator		
Status of main fixed-line telephone operator		
Level of competition (competition, partial comp., monopoly)		
International gateway(s)		
Mobile telephone service		
Internet service		
Foreign ownership (not allowed, restricted, allowed)		
Reg. treatment of VoIP (banned, closed, no framework, allowed)		
Sector efficiency and capacity		
Telecommunications revenue (% of GDP)	3.1	..
Telecommunications investment (% of revenue)	18.3	15.7
Sector performance		
Access		
Fixed-telephone subscriptions (per 100 people)	17.9	17.4
Mobile-cellular telephone subscriptions (per 100 people)	96.4	110.4
Fixed-broadband subscriptions (per 100 people)	6.7	10.5
Households with a computer (%)	30.8	47.0
Households with Internet access at home (%)	22.4	43.4
Usage		
Int'l. voice traffic, total (minutes/subscriber/month)	..	..
Domestic mobile traffic (minutes/subscriber/month)	90	..
Individuals using the Internet (%)	34.7	54.5
Quality		
Population covered by at least a 3G mobile network (%)	..	88
International Internet bandwidth (bit/s per Internet user)	13,430	43,386
Affordability		
Mobile-cellular sub-basket (\$ a month)	16.9	13.6
Fixed-broadband sub-basket (\$ a month)	24.9	21.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	17.9	12.9
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	17.8	14.4
Trade		
ICT goods exports (% of total goods exports)	7.4	6.3
ICT goods imports (% of total goods imports)	12.4	11.1
ICT service exports (% of total service exports)	..	..
Applications		
Online service index (0-1, 1=highest presence)	0.28	0.37
Secure Internet servers (per million people)	28.3	56.6

Middle East & North Africa

	2010	2015
Economic and social context		
Population (millions)	385	424
Urban population (% of total)	63	64
GNI per capita, <i>World Bank Atlas</i> method (\$)	6,943	8,207
GDP growth, 2005–10 and 2010–15 (avg. annual %)	4.7	3.0
Adult literacy rate (% ages 15 and older)	80	..
Gross primary, secondary, and tertiary school enrollment (%)	74	78
Sector structure		
Separate telecommunications/ICT regulator		
Status of main fixed-line telephone operator		
Level of competition (competition, partial comp., monopoly)		
International gateway(s)		
Mobile telephone service		
Internet service		
Foreign ownership (not allowed, restricted, allowed)		
Reg. treatment of VoIP (banned, closed, no framework, allowed)		
Sector efficiency and capacity		
Telecommunications revenue (% of GDP)	2.9	2.2
Telecommunications investment (% of revenue)	20.8	..
Sector performance		
Access		
Fixed-telephone subscriptions (per 100 people)	16.7	15.3
Mobile-cellular telephone subscriptions (per 100 people)	92.9	113.0
Fixed-broadband subscriptions (per 100 people)	2.6	7.1
Households with a computer (%)	34.1	49.8
Households with Internet access at home (%)	25.0	48.5
Usage		
Int'l. voice traffic, total (minutes/subscription/month)	7.1	12.7
Domestic mobile traffic (minutes/subscription/month)	..	..
Individuals using the Internet (%)	24.9	43.7
Quality		
Population covered by at least a 3G mobile network (%)	51	76
International Internet bandwidth (bit/s per Internet user)	8,885	29,072
Affordability		
Mobile-cellular sub-basket (\$ a month)	12.2	10.2
Fixed-broadband sub-basket (\$ a month)	25.3	17.5
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	23.3	13.0
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	13.7	13.0
Trade		
ICT goods exports (% of total goods exports)	1.7	..
ICT goods imports (% of total goods imports)	5.2	..
ICT service exports (% of total service exports)	..	..
Applications		
Online service index (0-1, 1=highest presence)	0.27	0.55
Secure Internet servers (per million people)	17.5	29.2

North America

	2010	2015
Economic and social context		
Population (millions)	343	357
Urban population (% of total)	81	82
GNI per capita, <i>World Bank Atlas</i> method (\$)	48,513	54,217
GDP growth, 2005–10 and 2010–15 (avg. annual %)	0.5	2.0
Adult literacy rate (% ages 15 and older)	..	..
Gross primary, secondary, and tertiary school enrollment (%)	96	95
Sector structure		
Separate telecommunications/ICT regulator		
Status of main fixed-line telephone operator		
Level of competition (competition, partial comp., monopoly)		
International gateway(s)		
Mobile telephone service		
Internet service		
Foreign ownership (not allowed, restricted, allowed)		
Reg. treatment of VoIP (banned, closed, no framework, allowed)		
Sector efficiency and capacity		
Telecommunications revenue (% of GDP)	3.3	3.3
Telecommunications investment (% of revenue)	17.0	31.9
Sector performance		
Access		
Fixed-telephone subscriptions (per 100 people)	48.5	38.2
Mobile-cellular telephone subscriptions (per 100 people)	89.8	114.0
Fixed-broadband subscriptions (per 100 people)	27.5	32.0
Households with a computer (%)	76.2	87.1
Households with Internet access at home (%)	71.8	82.6
Usage		
Int'l. voice traffic, total (minutes/subscription/month)	16.8	..
Domestic mobile traffic (minutes/subscription/month)	348	324
Individuals using the Internet (%)	72.5	75.9
Quality		
Population covered by at least a 3G mobile network (%)	98	100
International Internet bandwidth (bit/s per Internet user)	41,790	89,316
Affordability		
Mobile-cellular sub-basket (\$ a month)	37.3	30.4
Fixed-broadband sub-basket (\$ a month)	23.1	32.9
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	54.4	30.3
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	40.3	28.5
Trade		
ICT goods exports (% of total goods exports)	8.7	7.3
ICT goods imports (% of total goods imports)	13.4	12.0
ICT service exports (% of total service exports)	24.9	24.4
Applications		
Online service index (0-1, 1=highest presence)	0.91	0.93
Secure Internet servers (per million people)	1,425.8	1,616.7

South Asia

	2010	2015
Economic and social context		
Population (millions)	1,629	1,744
Urban population (% of total)	31	33
GNI per capita, <i>World Bank Atlas</i> method (\$)	1,191	1,533
GDP growth, 2005–10 and 2010–15 (avg. annual %)	7.1	6.4
Adult literacy rate (% ages 15 and older)	67	..
Gross primary, secondary, and tertiary school enrollment (%)	63	67
Sector structure		
Separate telecommunications/ICT regulator		
Status of main fixed-line telephone operator		
Level of competition (competition, partial comp., monopoly)		
International gateway(s)		
Mobile telephone service		
Internet service		
Foreign ownership (not allowed, restricted, allowed)		
Reg. treatment of VoIP (banned, closed, no framework, allowed)		
Sector efficiency and capacity		
Telecommunications revenue (% of GDP)	2.4	1.8
Telecommunications investment (% of revenue)	12.2	16.2
Sector performance		
Access		
Fixed-telephone subscriptions (per 100 people)	2.9	1.9
Mobile-cellular telephone subscriptions (per 100 people)	59.6	78.4
Fixed-broadband subscriptions (per 100 people)	0.8	1.4
Households with a computer (%)	6.6	13.8
Households with Internet access at home (%)	4.2	19.0
Usage		
Int'l. voice traffic, total (minutes/subscription/month)	7.1	9.0
Domestic mobile traffic (minutes/subscription/month)	129	174
Individuals using the Internet (%)	7.2	23.6
Quality		
Population covered by at least a 3G mobile network (%)	1	..
International Internet bandwidth (bit/s per Internet user)	5,357	5,112
Affordability		
Mobile-cellular sub-basket (\$ a month)	2.8	2.3
Fixed-broadband sub-basket (\$ a month)	8.3	6.6
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	5.3	3.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	6.6	4.9
Trade		
ICT goods exports (% of total goods exports)	1.7	0.9
ICT goods imports (% of total goods imports)	5.7	6.0
ICT service exports (% of total service exports)	63.2	63.2
Applications		
Online service index (0-1, 1=highest presence)	0.24	0.33
Secure Internet servers (per million people)	1.8	5.8

Sub-Saharan Africa

	2010	2015
Economic and social context		
Population (millions)	874	1,001
Urban population (% of total)	35	38
GNI per capita, <i>World Bank Atlas</i> method (\$)	1,281	1,628
GDP growth, 2005–10 and 2010–15 (avg. annual %)	5.4	4.1
Adult literacy rate (% ages 15 and older)	60	..
Gross primary, secondary, and tertiary school enrollment (%)	58	59
Sector structure		
Separate telecommunications/ICT regulator		
Status of main fixed-line telephone operator		
Level of competition (competition, partial comp., monopoly)		
International gateway(s)		
Mobile telephone service		
Internet service		
Foreign ownership (not allowed, restricted, allowed)		
Reg. treatment of VoIP (banned, closed, no framework, allowed)		
Sector efficiency and capacity		
Telecommunications revenue (% of GDP)	3.4	..
Telecommunications investment (% of revenue)	23.1	..
Sector performance		
Access		
Fixed-telephone subscriptions (per 100 people)	1.5	1.1
Mobile-cellular telephone subscriptions (per 100 people)	44.4	75.7
Fixed-broadband subscriptions (per 100 people)	0.2	0.5
Households with a computer (%)	5.6	10.0
Households with Internet access at home (%)	4.3	14.5
Usage		
Int'l. voice traffic, total (minutes/subscription/month)	5.1	..
Domestic mobile traffic (minutes/subscription/month)	56	68
Individuals using the Internet (%)	9.8	22.4
Quality		
Population covered by at least a 3G mobile network (%)	..	61
International Internet bandwidth (bit/s per Internet user)	30,798	26,590
Affordability		
Mobile-cellular sub-basket (\$ a month)	16.3	8.7
Fixed-broadband sub-basket (\$ a month)	50.1	31.6
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	19.7	8.5
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	14.0
Trade		
ICT goods exports (% of total goods exports)	0.5	0.8
ICT goods imports (% of total goods imports)	6.6	5.4
ICT service exports (% of total service exports)	15.7	17.7
Applications		
Online service index (0-1, 1=highest presence)	0.10	0.15
Secure Internet servers (per million people)	4.8	9.9

Income group tables

For operational and analytical purposes the World Bank's main criterion for classifying economies is gross national income (GNI) per capita. Every economy in *The Little Data Book on Information and Communication Technology* is classified as low income, middle income, or high income. Note: Classifications are fixed during the World Bank's fiscal year (ending on June 30), thus countries remain in the categories in which they are classified irrespective of any revisions to their per capita income data.

Low-income economies are those with a GNI per capita of \$1,025 or less in 2015.

Lower middle-income economies are those with a GNI per capita between \$1,026 and \$4,035.

Upper middle-income economies are those with a GNI per capita between \$4,036 and \$12,475.

High-income economies are those with a GNI per capita of \$12,476 or more.

	2010	2015
Economic and social context		
Population (millions)	557	638
Urban population (% of total)	29	31
GNI per capita, <i>World Bank Atlas</i> method (\$)	502	620
GDP growth, 2005–10 and 2010–15 (avg. annual %)	5.8	5.4
Adult literacy rate (% ages 15 and older)	57	..
Gross primary, secondary, and tertiary school enrollment (%)	58	60
Sector structure		
Separate telecommunications/ICT regulator		
Status of main fixed-line telephone operator		
Level of competition (competition, partial comp., monopoly)		
International gateway(s)		
Mobile telephone service		
Internet service		
Foreign ownership (not allowed, restricted, allowed)		
Reg. treatment of VoIP (banned, closed, no framework, allowed)		
Sector efficiency and capacity		
Telecommunications revenue (% of GDP)	..	..
Telecommunications investment (% of revenue)	..	..
Sector performance		
Access		
Fixed-telephone subscriptions (per 100 people)	1.0	0.9
Mobile-cellular telephone subscriptions (per 100 people)	28.7	60.0
Fixed-broadband subscriptions (per 100 people)	0.1	0.3
Households with a computer (%)	2.3	4.8
Households with Internet access at home (%)	1.7	7.1
Usage		
Int'l. voice traffic, total (minutes/subscription/month)	..	..
Domestic mobile traffic (minutes/subscription/month)	45	49
Individuals using the Internet (%)	3.3	9.5
Quality		
Population covered by at least a 3G mobile network (%)	..	51
International Internet bandwidth (bit/s per Internet user)	1,753	4,245
Affordability		
Mobile-cellular sub-basket (\$ a month)	14.2	9.4
Fixed-broadband sub-basket (\$ a month)	48.5	33.6
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	10.7	8.0
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	10.8
Trade		
ICT goods exports (% of total goods exports)	..	..
ICT goods imports (% of total goods imports)	4.5	3.4
ICT service exports (% of total service exports)	..	..
Applications		
Online service index (0-1, 1=highest presence)	0.08	0.11
Secure Internet servers (per million people)	0.5	1.5

Middle income

	2010	2015
Economic and social context		
Population (millions)	5,212	5,521
Urban population (% of total)	48	51
GNI per capita, <i>World Bank Atlas</i> method (\$)	3,616	4,925
GDP growth, 2005–10 and 2010–15 (avg. annual %)	6.2	4.7
Adult literacy rate (% ages 15 and older)	83	..
Gross primary, secondary, and tertiary school enrollment (%)	69	73
Sector structure		
Separate telecommunications/ICT regulator		
Status of main fixed-line telephone operator		
Level of competition (competition, partial comp., monopoly)		
International gateway(s)		
Mobile telephone service		
Internet service		
Foreign ownership (not allowed, restricted, allowed)		
Reg. treatment of VoIP (banned, closed, no framework, allowed)		
Sector efficiency and capacity		
Telecommunications revenue (% of GDP)	2.6	2.1
Telecommunications investment (% of revenue)	19.2	..
Sector performance		
Access		
Fixed-telephone subscriptions (per 100 people)	13.0	10.1
Mobile-cellular telephone subscriptions (per 100 people)	74.4	97.5
Fixed-broadband subscriptions (per 100 people)	4.5	8.3
Households with a computer (%)	24.2	34.7
Households with Internet access at home (%)	17.1	39.0
Usage		
Int'l. voice traffic, total (minutes/subscription/month)	4.2	4.7
Domestic mobile traffic (minutes/subscription/month)	199	164
Individuals using the Internet (%)	22.3	39.8
Quality		
Population covered by at least a 3G mobile network (%)	..	68
International Internet bandwidth (bit/s per Internet user)	9,178	20,739
Affordability		
Mobile-cellular sub-basket (\$ a month)	11.9	8.0
Fixed-broadband sub-basket (\$ a month)	19.8	15.0
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	13.1	7.5
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	15.4	10.9
Trade		
ICT goods exports (% of total goods exports)	14.6	13.9
ICT goods imports (% of total goods imports)	13.3	12.8
ICT service exports (% of total service exports)	25.9	27.0
Applications		
Online service index (0-1, 1=highest presence)	0.25	0.31
Secure Internet servers (per million people)	7.9	20.2

Lower middle income

	2010	2015
Economic and social context		
Population (millions)	2,719	2,927
Urban population (% of total)	37	39
GNI per capita, <i>World Bank Atlas</i> method (\$)	1,531	2,035
GDP growth, 2005–10 and 2010–15 (avg. annual %)	6.1	5.4
Adult literacy rate (% ages 15 and older)	73	..
Gross primary, secondary, and tertiary school enrollment (%)	65	68
Sector structure		
Separate telecommunications/ICT regulator		
Status of main fixed-line telephone operator		
Level of competition (competition, partial comp., monopoly)		
International gateway(s)		
Mobile telephone service		
Internet service		
Foreign ownership (not allowed, restricted, allowed)		
Reg. treatment of VoIP (banned, closed, no framework, allowed)		
Sector efficiency and capacity		
Telecommunications revenue (% of GDP)	2.5	..
Telecommunications investment (% of revenue)	20.6	..
Sector performance		
Access		
Fixed-telephone subscriptions (per 100 people)	5.6	3.5
Mobile-cellular telephone subscriptions (per 100 people)	67.6	90.5
Fixed-broadband subscriptions (per 100 people)	1.0	1.9
Households with a computer (%)	10.0	19.3
Households with Internet access at home (%)	7.0	24.3
Usage		
Int'l. voice traffic, total (minutes/subscription/month)	7.4	7.5
Domestic mobile traffic (minutes/subscription/month)	113	152
Individuals using the Internet (%)	11.8	28.6
Quality		
Population covered by at least a 3G mobile network (%)	..	..
International Internet bandwidth (bit/s per Internet user)	5,468	10,372
Affordability		
Mobile-cellular sub-basket (\$ a month)	10.0	6.9
Fixed-broadband sub-basket (\$ a month)	26.7	14.3
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	10.9	5.8
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	15.0	10.0
Trade		
ICT goods exports (% of total goods exports)	3.9	5.7
ICT goods imports (% of total goods imports)	7.3	7.6
ICT service exports (% of total service exports)	44.1	48.0
Applications		
Online service index (0-1, 1=highest presence)	0.18	0.26
Secure Internet servers (per million people)	2.4	7.4

Upper middle income

	2010	2015
Economic and social context		
Population (millions)	2,493	2,594
Urban population (% of total)	60	64
GNI per capita, <i>World Bank Atlas</i> method (\$)	5,889	8,186
GDP growth, 2005–10 and 2010–15 (avg. annual %)	6.2	4.5
Adult literacy rate (% ages 15 and older)	94	..
Gross primary, secondary, and tertiary school enrollment (%)	75	81
Sector structure		
Separate telecommunications/ICT regulator		
Status of main fixed-line telephone operator		
Level of competition (competition, partial comp., monopoly)		
International gateway(s)		
Mobile telephone service		
Internet service		
Foreign ownership (not allowed, restricted, allowed)		
Reg. treatment of VoIP (banned, closed, no framework, allowed)		
Sector efficiency and capacity		
Telecommunications revenue (% of GDP)	2.7	2.1
Telecommunications investment (% of revenue)	18.4	18.8
Sector performance		
Access		
Fixed-telephone subscriptions (per 100 people)	20.9	17.3
Mobile-cellular telephone subscriptions (per 100 people)	81.7	105.1
Fixed-broadband subscriptions (per 100 people)	8.1	15.4
Households with a computer (%)	35.7	48.7
Households with Internet access at home (%)	25.1	52.2
Usage		
Int'l. voice traffic, total (minutes/subscription/month)	2.6	2.3
Domestic mobile traffic (minutes/subscription/month)	273	173
Individuals using the Internet (%)	33.6	52.1
Quality		
Population covered by at least a 3G mobile network (%)	..	69
International Internet bandwidth (bit/s per Internet user)	10,564	26,098
Affordability		
Mobile-cellular sub-basket (\$ a month)	15.4	8.5
Fixed-broadband sub-basket (\$ a month)	18.0	15.5
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	16.2	7.7
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	15.6	11.1
Trade		
ICT goods exports (% of total goods exports)	17.1	15.7
ICT goods imports (% of total goods imports)	15.2	14.4
ICT service exports (% of total service exports)	15.1	25.7
Applications		
Online service index (0-1, 1=highest presence)	0.28	0.37
Secure Internet servers (per million people)	13.9	34.7

Low and middle income

	2010	2015
Economic and social context		
Population (millions)	5,769	6,159
Urban population (% of total)	46	49
GNI per capita, <i>World Bank Atlas</i> method (\$)	3,315	4,479
GDP growth, 2005–10 and 2010–15 (avg. annual %)	6.2	4.7
Adult literacy rate (% ages 15 and older)	81	..
Gross primary, secondary, and tertiary school enrollment (%)	67	71
Sector structure		
Separate telecommunications/ICT regulator		
Status of main fixed-line telephone operator		
Level of competition (competition, partial comp., monopoly)		
International gateway(s)		
Mobile telephone service		
Internet service		
Foreign ownership (not allowed, restricted, allowed)		
Reg. treatment of VoIP (banned, closed, no framework, allowed)		
Sector efficiency and capacity		
Telecommunications revenue (% of GDP)	2.6	2.1
Telecommunications investment (% of revenue)	20.3	..
Sector performance		
Access		
Fixed-telephone subscriptions (per 100 people)	11.8	9.1
Mobile-cellular telephone subscriptions (per 100 people)	70.0	93.6
Fixed-broadband subscriptions (per 100 people)	4.1	7.5
Households with a computer (%)	22.7	32.4
Households with Internet access at home (%)	16.0	36.5
Usage		
Int'l. voice traffic, total (minutes/subscription/month)	4.3	4.7
Domestic mobile traffic (minutes/subscription/month)	217	158
Individuals using the Internet (%)	20.5	36.8
Quality		
Population covered by at least a 3G mobile network (%)	..	66
International Internet bandwidth (bit/s per Internet user)	9,070	20,323
Affordability		
Mobile-cellular sub-basket (\$ a month)	13.4	8.1
Fixed-broadband sub-basket (\$ a month)	23.5	18.3
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	12.8	7.8
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	16.2	10.8
Trade		
ICT goods exports (% of total goods exports)	14.5	13.8
ICT goods imports (% of total goods imports)	13.2	12.7
ICT service exports (% of total service exports)	25.8	26.9
Applications		
Online service index (0-1, 1=highest presence)	0.18	0.27
Secure Internet servers (per million people)	7.3	18.3

High income

	2010	2015
Economic and social context		
Population (millions)	1,154	1,187
Urban population (% of total)	80	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	39,538	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	0.8	1.5
Adult literacy rate (% ages 15 and older)	99	..
Gross primary, secondary, and tertiary school enrollment (%)	92	95
Sector structure		
Separate telecommunications/ICT regulator		
Status of main fixed-line telephone operator		
Level of competition (competition, partial comp., monopoly)		
International gateway(s)		
Mobile telephone service		
Internet service		
Foreign ownership (not allowed, restricted, allowed)		
Reg. treatment of VoIP (banned, closed, no framework, allowed)		
Sector efficiency and capacity		
Telecommunications revenue (% of GDP)	2.7	2.5
Telecommunications investment (% of revenue)	15.6	18.8
Sector performance		
Access		
Fixed-telephone subscriptions (per 100 people)	47.4	41.2
Mobile-cellular telephone subscriptions (per 100 people)	108.8	124.5
Fixed-broadband subscriptions (per 100 people)	26.3	31.0
Households with a computer (%)	76.6	83.2
Households with Internet access at home (%)	73.2	85.0
Usage		
Int'l. voice traffic, total (minutes/subscription/month)	..	..
Domestic mobile traffic (minutes/subscription/month)	177	196
Individuals using the Internet (%)	72.2	81.0
Quality		
Population covered by at least a 3G mobile network (%)	93	99
International Internet bandwidth (bit/s per Internet user)	61,237	134,761
Affordability		
Mobile-cellular sub-basket (\$ a month)	22.3	14.2
Fixed-broadband sub-basket (\$ a month)	26.7	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	20.6	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	25.0	14.4
Trade		
ICT goods exports (% of total goods exports)	10.5	9.5
ICT goods imports (% of total goods imports)	12.5	11.2
ICT service exports (% of total service exports)	28.9	32.0
Applications		
Online service index (0-1, 1=highest presence)	0.46	0.67
Secure Internet servers (per million people)	882.4	1,194.6

Country tables

China

Data for China do not include data for Hong Kong SAR, China; Macao SAR, China; or Taiwan, China.

Cyprus

GNI and GDP data and data calculated using GNI and GDP refer to the area controlled by the government of Cyprus.

Georgia

GNI, GDP, and population data and data calculated using GNI, GDP, and population exclude Abkhazia and South Ossetia.

Kosovo, Montenegro, and Serbia

Montenegro declared independence from Serbia and Montenegro on June 3, 2006. Where available, data for each country are shown separately. However, some indicators for Serbia prior to 2006 include data for Montenegro. Moreover, data for most indicators for Serbia from 1999 onward exclude data for Kosovo, which in 1999 became a territory under international administration pursuant to UN Security Council Resolution 1244 (1999). Kosovo became a member of the World Bank on June 29, 2009, and its data are shown where available.

Moldova

GNI, GDP, and population data and data calculated using GNI, GDP, and population exclude Transnistria.

Morocco

GNI and GDP data and data calculated using GNI and GDP include former Spanish Sahara.

South Sudan and Sudan

South Sudan declared its independence on July 9, 2011. Data are shown separately for South Sudan where available. Data reported for Sudan exclude South Sudan after 2011 unless otherwise noted.

Tanzania

GNI and GDP data and data calculated using GNI and GDP refer to mainland Tanzania only.

For more information, see *World Development Indicators 2017* or data.worldbank.org.

Afghanistan

South Asia

Low income

	Country data		Low-income group
	2010	2015	2015
Economic and social context			
Population (millions)	28	33	638
Urban population (% of total)	25	27	31
GNI per capita, <i>World Bank Atlas</i> method (\$)	520	630	620
GDP growth, 2005–10 and 2010–15 (avg. annual %)	10.7	5.1	5.4
Adult literacy rate (% ages 15 and older)	32	38	..
Gross primary, secondary, and tertiary school enrollment (%)	65	70	60
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Public	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	P	..	
Mobile telephone service	P	P	
Internet service	P	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	C	C	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	..	..	..
Telecommunications investment (% of revenue)	..	..	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	0.1	0.3	0.9
Mobile-cellular telephone subscriptions (per 100 people)	36.0	61.6	60.0
Fixed-broadband subscriptions (per 100 people)	0.0	0.0	0.3
Households with a computer (%)	1.9 ^a	2.9 ^a	4.8
Households with Internet access at home (%)	1.5 ^a	3.9 ^a	7.1
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	..	..	..
Domestic mobile traffic (minutes/subscription/month)	..	..	48.9
Individuals using the Internet (%)	4.0 ^a	8.3 ^a	9.5
Quality			
Population covered by at least a 3G mobile network (%)	..	40	51
International Internet bandwidth (bit/s per Internet user)	1,761	10,213	4,245
Affordability			
Mobile-cellular sub-basket (\$ a month)	9.7	5.4	9.4
Fixed-broadband sub-basket (\$ a month)	53.5	20.8	33.6
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	6.9	5.8	8.0
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	5.8	10.8
Trade			
ICT goods exports (% of total goods exports)	..	..	..
ICT goods imports (% of total goods imports)	0.4	0.1	3.4
ICT service exports (% of total service exports)	32.6	27.7	..
Applications			
Online service index (0-1, 1=highest presence)	0.23	0.18	0.11
Secure Internet servers (per million people)	0.7	1.4	1.5

Europe & Central Asia

Upper middle income

	Country data		Upper middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	3	3	2,594
Urban population (% of total)	52	57	64
GNI per capita, <i>World Bank Atlas</i> method (\$)	4,360	4,290	8,186
GDP growth, 2005–10 and 2010–15 (avg. annual %)	5.3	1.8	4.5
Adult literacy rate (% ages 15 and older)	97	98	..
Gross primary, secondary, and tertiary school enrollment (%)	78	88	81
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	P	C	
Mobile telephone service	P	P	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	R	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	4.6	1.7	2.1
Telecommunications investment (% of revenue)	17.2	32.0	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	10.6	7.1	17.3
Mobile-cellular telephone subscriptions (per 100 people)	85.5	106.4	105.1
Fixed-broadband subscriptions (per 100 people)	3.4	7.6	15.4
Households with a computer (%)	15.6 ^a	25.7 ^a	48.7
Households with Internet access at home (%)	13.7 ^a	35.5 ^a	52.2
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	21.8	28.2	2.3
Domestic mobile traffic (minutes/subscription/month)	141.8	165.6	173.1
Individuals using the Internet (%)	45.0	63.3 ^a	52.1
Quality			
Population covered by at least a 3G mobile network (%)	86	99	69
International Internet bandwidth (bit/s per Internet user)	11,992	30,660	26,098
Affordability			
Mobile-cellular sub-basket (\$ a month)	25.8	6.4	8.5
Fixed-broadband sub-basket (\$ a month)	10.7	9.5	15.5
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	4.6	4.4	7.7
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	15.7	4.4	11.1
Trade			
ICT goods exports (% of total goods exports)	0.8	0.1	15.7
ICT goods imports (% of total goods imports)	4.1	1.0	14.4
ICT service exports (% of total service exports)	10.8	10.1	25.7
Applications			
Online service index (0-1, 1=highest presence)	0.31	0.45	0.37
Secure Internet servers (per million people)	9.3	37.7	34.7

Algeria

Middle East & North Africa

Upper middle income

	Country data		Upper middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	36	40	2,594
Urban population (% of total)	68	71	64
GNI per capita, <i>World Bank Atlas</i> method (\$)	4,470	4,870	8,186
GDP growth, 2005–10 and 2010–15 (avg. annual %)	2.5	3.3	4.5
Adult literacy rate (% ages 15 and older)	75	80	..
Gross primary, secondary, and tertiary school enrollment (%)	79	..	81
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Public	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	P	M	
Mobile telephone service	P	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	..	R	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	3.1	2.9	2.1
Telecommunications investment (% of revenue)	..	..	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	7.9	8.0	17.3
Mobile-cellular telephone subscriptions (per 100 people)	88.4	113.0	105.1
Fixed-broadband subscriptions (per 100 people)	2.4	5.6	15.4
Households with a computer (%)	20.0 ^a	37.0	48.7
Households with Internet access at home (%)	9.0 ^a	31.9	52.2
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	4.4	4.9	2.3
Domestic mobile traffic (minutes/subscription/month)	164.3	166.6	173.1
Individuals using the Internet (%)	12.5	38.2 ^a	52.1
Quality			
Population covered by at least a 3G mobile network (%)	..	46	69
International Internet bandwidth (bit/s per Internet user)	7,771	30,119	26,098
Affordability			
Mobile-cellular sub-basket (\$ a month)	13.8	10.2	8.5
Fixed-broadband sub-basket (\$ a month)	14.8	15.5	15.5
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	6.0	7.7
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	19.9	11.1
Trade			
ICT goods exports (% of total goods exports)	0.0	0.0	15.7
ICT goods imports (% of total goods imports)	3.0	5.1	14.4
ICT service exports (% of total service exports)	56.7	50.7	25.7
Applications			
Online service index (0-1, 1=highest presence)	0.10	0.08	0.37
Secure Internet servers (per million people)	0.9	2.5	34.7

American Samoa

East Asia & Pacific

Upper middle income

	Country data		Upper middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	0.06	0.06	2,594
Urban population (% of total)	88	87	64
GNI per capita, <i>World Bank Atlas</i> method (\$)	8,186
GDP growth, 2005–10 and 2010–15 (avg. annual %)	4.5
Adult literacy rate (% ages 15 and older)
Gross primary, secondary, and tertiary school enrollment (%)	81
Sector structure			
Separate telecommunications/ICT regulator	
Status of main fixed-line telephone operator	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	
Mobile telephone service	
Internet service	
Foreign ownership (not allowed, restricted, allowed)	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	2.1
Telecommunications investment (% of revenue)	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	18.7	18.0	17.3
Mobile-cellular telephone subscriptions (per 100 people)	105.1
Fixed-broadband subscriptions (per 100 people)	15.4
Households with a computer (%)	48.7
Households with Internet access at home (%)	52.2
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	2.3
Domestic mobile traffic (minutes/subscription/month)	173.1
Individuals using the Internet (%)	52.1
Quality			
Population covered by at least a 3G mobile network (%)	69
International Internet bandwidth (bit/s per Internet user)	26,098
Affordability			
Mobile-cellular sub-basket (\$ a month)	8.5
Fixed-broadband sub-basket (\$ a month)	15.5
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	7.7
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	11.1
Trade			
ICT goods exports (% of total goods exports)	15.7
ICT goods imports (% of total goods imports)	14.4
ICT service exports (% of total service exports)	25.7
Applications			
Online service index (0-1, 1=highest presence)	0.37
Secure Internet servers (per million people)	35.9	72.0	34.7

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	0.08	0.07	1,187
Urban population (% of total)	88	85	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	41,670	43,270	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	–3.3	–2.2	1.5
Adult literacy rate (% ages 15 and older)	..	..	..
Gross primary, secondary, and tertiary school enrollment (%)	..	..	95
Sector structure			
Separate telecommunications/ICT regulator	No	No	
Status of main fixed-line telephone operator	Public	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	M	M	
Mobile telephone service	M	M	
Internet service	M	..	
Foreign ownership (not allowed, restricted, allowed)	No	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	..	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	3.6	3.4	2.5
Telecommunications investment (% of revenue)	..	..	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	49.0	48.0	41.2
Mobile-cellular telephone subscriptions (per 100 people)	84.1	88.1	124.5
Fixed-broadband subscriptions (per 100 people)	31.5	37.9	31.0
Households with a computer (%)	83.2 ^a	82.7 ^a	83.2
Households with Internet access at home (%)	67.2	84.8 ^a	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	91.9	67.2	..
Domestic mobile traffic (minutes/subscription/month)	57.6	52.4	195.9
Individuals using the Internet (%)	81.0	96.9 ^a	81.0
Quality			
Population covered by at least a 3G mobile network (%)	95	97	99
International Internet bandwidth (bit/s per Internet user)	36,447	82,857	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	..	31.0	14.2
Fixed-broadband sub-basket (\$ a month)	..	17.4	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	24.9	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	55.1	15.1	14.4
Trade			
ICT goods exports (% of total goods exports)	25.0	21.7	9.5
ICT goods imports (% of total goods imports)	7.1	6.7	11.2
ICT service exports (% of total service exports)	..	..	32.0
Applications			
Online service index (0–1, 1=highest presence)	0.23	0.43	0.67
Secure Internet servers (per million people)	924.0	1,631.8	1,194.6

Sub-Saharan Africa

Upper middle income

	Country data		Upper middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	21	25	2,594
Urban population (% of total)	40	44	64
GNI per capita, <i>World Bank Atlas</i> method (\$)	3,570	4,180	8,186
GDP growth, 2005-10 and 2010-15 (avg. annual %)	12.4	5.0	4.5
Adult literacy rate (% ages 15 and older)	..	71	..
Gross primary, secondary, and tertiary school enrollment (%)	60	..	81
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Public	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	M	M	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	R	R	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	No	No	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	2.2	1.8	2.1
Telecommunications investment (% of revenue)	34.2	18.9	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	1.4	1.2	17.3
Mobile-cellular telephone subscriptions (per 100 people)	48.1	60.8	105.1
Fixed-broadband subscriptions (per 100 people)	0.1	0.7	15.4
Households with a computer (%)	7.1 ^a	11.1 ^a	48.7
Households with Internet access at home (%)	5.7 ^a	10.2 ^a	52.2
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	3.7	4.8	2.3
Domestic mobile traffic (minutes/subscription/month)	87.2	112.5	173.1
Individuals using the Internet (%)	2.8 ^a	12.4 ^a	52.1
Quality			
Population covered by at least a 3G mobile network (%)	40	60	69
International Internet bandwidth (bit/s per Internet user)	2,192	6,518	26,098
Affordability			
Mobile-cellular sub-basket (\$ a month)	19.2	15.4	8.5
Fixed-broadband sub-basket (\$ a month)	133.4	40.8	15.5
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	94.3	15.0	7.7
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	149.9	11.1
Trade			
ICT goods exports (% of total goods exports)	..	..	15.7
ICT goods imports (% of total goods imports)	..	..	14.4
ICT service exports (% of total service exports)	5.9	2.7	25.7
Applications			
Online service index (0-1, 1=highest presence)	0.34	0.30	0.37
Secure Internet servers (per million people)	2.5	5.5	34.7

Antigua and Barbuda

Latin America & Caribbean

High income

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	0.09	0.09	1,187
Urban population (% of total)	26	24	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	12,620	13,390	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	-0.1	2.2	1.5
Adult literacy rate (% ages 15 and older)	..	99	..
Gross primary, secondary, and tertiary school enrollment (%)	84	..	95
Sector structure			
Separate telecommunications/ICT regulator	No	No	
Status of main fixed-line telephone operator	Public	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	M	P	
Mobile telephone service	P	P	
Internet service	P	P	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	B	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	..	..	2.5
Telecommunications investment (% of revenue)	..	..	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	41.6	13.1	41.2
Mobile-cellular telephone subscriptions (per 100 people)	192.6	137.2	124.5
Fixed-broadband subscriptions (per 100 people)	8.2	13.1	31.0
Households with a computer (%)	48.9 ^a	57.6 ^a	83.2
Households with Internet access at home (%)	40.0 ^a	56.3 ^a	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	19.0	..	..
Domestic mobile traffic (minutes/subscription/month)	126.7	148.9	195.9
Individuals using the Internet (%)	47.0 ^a	65.2 ^a	81.0
Quality			
Population covered by at least a 3G mobile network (%)	0	98	99
International Internet bandwidth (bit/s per Internet user)	29,269	71,825	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	25.3	23.4	14.2
Fixed-broadband sub-basket (\$ a month)	54.9	54.9	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	27.8	9.3	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	29.3	30.7	14.4
Trade			
ICT goods exports (% of total goods exports)	2.2	2.2	9.5
ICT goods imports (% of total goods imports)	3.1	3.8	11.2
ICT service exports (% of total service exports)	6.4	6.7	32.0
Applications			
Online service index (0-1, 1=highest presence)	0.12	0.42	0.67
Secure Internet servers (per million people)	1,100.5	305.0	1,194.6

Argentina

Latin America & Caribbean

Upper middle income

	Country data		Upper middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	41	43	2,594
Urban population (% of total)	91	92	64
GNI per capita, <i>World Bank Atlas</i> method (\$)	9,240	12,460	8,186
GDP growth, 2005–10 and 2010–15 (avg. annual %)	4.2	0.9	4.5
Adult literacy rate (% ages 15 and older)	..	98	..
Gross primary, secondary, and tertiary school enrollment (%)	99	100	81
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Private	Private	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	..
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	R	R	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	2.7	2.4	2.1
Telecommunications investment (% of revenue)	15.9	21.2	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	24.6	24.0	17.3
Mobile-cellular telephone subscriptions (per 100 people)	141.4	143.9	105.1
Fixed-broadband subscriptions (per 100 people)	10.0	16.1	15.4
Households with a computer (%)	47.0	65.1 ^a	48.7
Households with Internet access at home (%)	34.0 ^a	55.5 ^a	52.2
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	..	..	2.3
Domestic mobile traffic (minutes/subscription/month)	19.5	119.2	173.1
Individuals using the Internet (%)	45.0 ^a	69.4 ^a	52.1
Quality			
Population covered by at least a 3G mobile network (%)	..	90 ^a	69
International Internet bandwidth (bit/s per Internet user)	31,373	46,145	26,098
Affordability			
Mobile-cellular sub-basket (\$ a month)	41.1	30.8	8.5
Fixed-broadband sub-basket (\$ a month)	24.3	41.2	15.5
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	10.0	7.7
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	19.8	16.2	11.1
Trade			
ICT goods exports (% of total goods exports)	0.1	0.2	15.7
ICT goods imports (% of total goods imports)	9.0	7.4	14.4
ICT service exports (% of total service exports)	42.6	45.1	25.7
Applications			
Online service index (0-1, 1=highest presence)	0.41	0.55	0.37
Secure Internet servers (per million people)	25.6	63.3	34.7

Armenia

Europe & Central Asia

Lower middle income

	Country data		Lower middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	3	3	2,927
Urban population (% of total)	64	63	39
GNI per capita, <i>World Bank Atlas</i> method (\$)	3,370	3,880	2,035
GDP growth, 2005–10 and 2010–15 (avg. annual %)	3.3	4.4	5.4
Adult literacy rate (% ages 15 and older)	100	100	..
Gross primary, secondary, and tertiary school enrollment (%)	78	..	68
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Private	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	C	
Mobile telephone service	P	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	4.4	3.3	..
Telecommunications investment (% of revenue)	29.0	22.1	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	20.0	18.4	3.5
Mobile-cellular telephone subscriptions (per 100 people)	130.4	115.1	90.5
Fixed-broadband subscriptions (per 100 people)	3.2	9.6	1.9
Households with a computer (%)	20.0	64.7 ^a	19.3
Households with Internet access at home (%)	13.6	56.2 ^a	24.3
Usage			
Int'l. voice traffic, total (minutes/subscriber/month)	23.1	17.9	7.5
Domestic mobile traffic (minutes/subscriber/month)	98.9	210.1	152.0
Individuals using the Internet (%)	25.0 ^a	58.2 ^a	28.6
Quality			
Population covered by at least a 3G mobile network (%)	93	100	..
International Internet bandwidth (bit/s per Internet user)	14,236	67,871	10,372
Affordability			
Mobile-cellular sub-basket (\$ a month)	8.8	7.0	6.9
Fixed-broadband sub-basket (\$ a month)	32.4	8.4	14.3
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	12.5	8.4	5.8
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	29.0	7.3	10.0
Trade			
ICT goods exports (% of total goods exports)	0.8	0.3	5.7
ICT goods imports (% of total goods imports)	4.7	3.5	7.6
ICT service exports (% of total service exports)	13.5	11.4	48.0
Applications			
Online service index (0-1, 1=highest presence)	0.17	0.61	0.26
Secure Internet servers (per million people)	18.2	49.0	7.4

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	0.10	0.10	1,187
Urban population (% of total)	43	42	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	..	..	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	–3.9	..	1.5
Adult literacy rate (% ages 15 and older)	97	98	..
Gross primary, secondary, and tertiary school enrollment (%)	87	..	95
Sector structure			
Separate telecommunications/ICT regulator	..	..
Status of main fixed-line telephone operator	..	..
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	..
Mobile telephone service	..	..
Internet service	..	..
Foreign ownership (not allowed, restricted, allowed)	..	..
Reg. treatment of VoIP (banned, closed, no framework, allowed)	..	..
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	5.6	..	2.5
Telecommunications investment (% of revenue)	15.8	..	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	34.5	33.7	41.2
Mobile-cellular telephone subscriptions (per 100 people)	129.7 ^a	135.7	124.5
Fixed-broadband subscriptions (per 100 people)	18.9	18.3	31.0
Households with a computer (%)	62.5	76.6 ^a	83.2
Households with Internet access at home (%)	63.0	..	85.0
Usage			
Int'l. voice traffic, total (minutes/subscriber/month)	..	..	..
Domestic mobile traffic (minutes/subscriber/month)	..	..	195.9
Individuals using the Internet (%)	62.0 ^a	88.7 ^a	81.0
Quality			
Population covered by at least a 3G mobile network (%)	..	80 ^a	99
International Internet bandwidth (bit/s per Internet user)	81,283	..	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	..	..	14.2
Fixed-broadband sub-basket (\$ a month)	..	..	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	..	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	..	14.4
Trade			
ICT goods exports (% of total goods exports)	0.4	0.9	9.5
ICT goods imports (% of total goods imports)	4.8	5.2	11.2
ICT service exports (% of total service exports)	14.0	13.0	32.0
Applications			
Online service index (0–1, 1=highest presence)	..	..	0.67
Secure Internet servers (per million people)	364.2	279.1	1,194.6

Australia

East Asia & Pacific

High income

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	22	24	1,187
Urban population (% of total)	89	89	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	46,530	60,070	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	2.9	2.7	1.5
Adult literacy rate (% ages 15 and older)	..	..	..
Gross primary, secondary, and tertiary school enrollment (%)	111	116	95
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	P	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	3.3	2.5	2.5
Telecommunications investment (% of revenue)	16.5	..	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	47.4	38.0	41.2
Mobile-cellular telephone subscriptions (per 100 people)	100.4	132.8	124.5
Fixed-broadband subscriptions (per 100 people)	24.6	27.9	31.0
Households with a computer (%)	81.1 ^a	80.4	83.2
Households with Internet access at home (%)	74.1 ^a	85.9	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	..	..	..
Domestic mobile traffic (minutes/subscription/month)	..	..	195.9
Individuals using the Internet (%)	76.0 ^a	84.6	81.0
Quality			
Population covered by at least a 3G mobile network (%)	99	99	99
International Internet bandwidth (bit/s per Internet user)	41,110	81,564	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	27.7	14.7	14.2
Fixed-broadband sub-basket (\$ a month)	36.9	37.5	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	20.7	15.0	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	41.4	18.8	14.4
Trade			
ICT goods exports (% of total goods exports)	1.0	1.1	9.5
ICT goods imports (% of total goods imports)	10.4	9.2	11.2
ICT service exports (% of total service exports)	17.7	19.1	32.0
Applications			
Online service index (0-1, 1=highest presence)	0.77	0.93	0.67
Secure Internet servers (per million people)	1,784.6	1,460.9	1,194.6

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	8	9	1,187
Urban population (% of total)	66	66	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	49,350	47,120	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	1.1	0.9	1.5
Adult literacy rate (% ages 15 and older)	..	..	..
Gross primary, secondary, and tertiary school enrollment (%)	94	95	95
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	R	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	No	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	1.6	1.1	2.5
Telecommunications investment (% of revenue)	14.6	15.3	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	40.4	42.2	41.2
Mobile-cellular telephone subscriptions (per 100 people)	145.7	157.4	124.5
Fixed-broadband subscriptions (per 100 people)	24.4	28.6	31.0
Households with a computer (%)	76.2	82.1	83.2
Households with Internet access at home (%)	72.9	82.4	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	16.6	15.6	..
Domestic mobile traffic (minutes/subscription/month)	149.5	131.4	195.9
Individuals using the Internet (%)	75.2	83.9	81.0
Quality			
Population covered by at least a 3G mobile network (%)	96	98 ^a	99
International Internet bandwidth (bit/s per Internet user)	39,584	90,501	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	13.9	6.7	14.2
Fixed-broadband sub-basket (\$ a month)	39.3	23.5	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	5.1	5.5	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	5.1	6.5	14.4
Trade			
ICT goods exports (% of total goods exports)	3.9	4.3	9.5
ICT goods imports (% of total goods imports)	5.8	5.3	11.2
ICT service exports (% of total service exports)	25.0	31.5	32.0
Applications			
Online service index (0-1, 1=highest presence)	0.48	0.75	0.67
Secure Internet servers (per million people)	858.7	1,500.5	1,194.6

Azerbaijan

Europe & Central Asia

Upper middle income

	Country data		Upper middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	9	10	2,594
Urban population (% of total)	53	55	64
GNI per capita, <i>World Bank Atlas</i> method (\$)	5,370	6,560	8,186
GDP growth, 2005–10 and 2010–15 (avg. annual %)	15.8	2.6	4.5
Adult literacy rate (% ages 15 and older)	100	100	..
Gross primary, secondary, and tertiary school enrollment (%)	70	75	81
Sector structure			
Separate telecommunications/ICT regulator	No	No	
Status of main fixed-line telephone operator	Public	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	M	C	
Mobile telephone service	P	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	R	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	C	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	2.6	2.9	2.1
Telecommunications investment (% of revenue)	18.3	18.0	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	16.6	18.7	17.3
Mobile-cellular telephone subscriptions (per 100 people)	100.1	111.3	105.1
Fixed-broadband subscriptions (per 100 people)	5.2	19.8	15.4
Households with a computer (%)	30.3	62.4	48.7
Households with Internet access at home (%)	37.4 ^a	76.7	52.2
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	6.7	5.4	2.3
Domestic mobile traffic (minutes/subscription/month)	79.2	155.2	173.1
Individuals using the Internet (%)	46.0	77.0	52.1
Quality			
Population covered by at least a 3G mobile network (%)	69	97	69
International Internet bandwidth (bit/s per Internet user)	9,083	35,127	26,098
Affordability			
Mobile-cellular sub-basket (\$ a month)	7.3	8.0	8.5
Fixed-broadband sub-basket (\$ a month)	12.5	9.8	15.5
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	5.1	3.9	7.7
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	11.5	6.8	11.1
Trade			
ICT goods exports (% of total goods exports)	0.0	0.0	15.7
ICT goods imports (% of total goods imports)	3.5	3.0	14.4
ICT service exports (% of total service exports)	20.1	10.7	25.7
Applications			
Online service index (0-1, 1=highest presence)	0.32	0.43	0.37
Secure Internet servers (per million people)	5.1	16.4	34.7

Bahamas, The

Latin America & Caribbean

High income

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	0.36	0.39	1,187
Urban population (% of total)	83	83	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	21,660	21,310	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	-0.7	1.0	1.5
Adult literacy rate (% ages 15 and older)	..	..	..
Gross primary, secondary, and tertiary school enrollment (%)	..	..	95
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Public	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	M	..	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	R	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	No	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	..	7.6	2.5
Telecommunications investment (% of revenue)	..	8.4	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	35.9	31.2	41.2
Mobile-cellular telephone subscriptions (per 100 people)	118.8	80.3	124.5
Fixed-broadband subscriptions (per 100 people)	6.9	20.9	31.0
Households with a computer (%)	..	69.2 ^a	83.2
Households with Internet access at home (%)	..	61.1 ^a	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	..	25.3	..
Domestic mobile traffic (minutes/subscription/month)	..	12.9	195.9
Individuals using the Internet (%)	43.0 ^a	78.0 ^a	81.0
Quality			
Population covered by at least a 3G mobile network (%)	..	98	99
International Internet bandwidth (bit/s per Internet user)	4,000	225,877	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	17.5	17.5	14.2
Fixed-broadband sub-basket (\$ a month)	30.0	30.0	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	21.5	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	26.9	14.4
Trade			
ICT goods exports (% of total goods exports)	0.2	0.6	9.5
ICT goods imports (% of total goods imports)	2.8	3.0	11.2
ICT service exports (% of total service exports)	..	..	32.0
Applications			
Online service index (0-1, 1=highest presence)	0.23	0.34	0.67
Secure Internet servers (per million people)	352.0	337.6	1,194.6

Bahrain

Middle East & North Africa

High income

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	1	1	1,187
Urban population (% of total)	89	89	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	18,660	20,350	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	5.6	3.9	1.5
Adult literacy rate (% ages 15 and older)	95	96	..
Gross primary, secondary, and tertiary school enrollment (%)	..	..	95
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	P	P	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	3.7	3.4	2.5
Telecommunications investment (% of revenue)	51.0	11.1	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	18.2	20.5	41.2
Mobile-cellular telephone subscriptions (per 100 people)	125.2	185.3	124.5
Fixed-broadband subscriptions (per 100 people)	12.4	18.6	31.0
Households with a computer (%)	87.0	94.8	83.2
Households with Internet access at home (%)	74.0	88.7	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	107.8	116.5	..
Domestic mobile traffic (minutes/subscription/month)	191.5	228.5	195.9
Individuals using the Internet (%)	55.0	93.5	81.0
Quality			
Population covered by at least a 3G mobile network (%)	100	98	99
International Internet bandwidth (bit/s per Internet user)	14,528	47,205	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	15.0	11.1	14.2
Fixed-broadband sub-basket (\$ a month)	26.6	13.3	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	6.7	8.0	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	13.3	18.6	14.4
Trade			
ICT goods exports (% of total goods exports)	0.3	1.7	9.5
ICT goods imports (% of total goods imports)	2.8	3.8	11.2
ICT service exports (% of total service exports)	23.1	21.6	32.0
Applications			
Online service index (0-1, 1=highest presence)	0.73	0.94	0.67
Secure Internet servers (per million people)	97.5	187.3	1,194.6

Bangladesh

South Asia

Lower middle income

	Country data		Lower middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	152	161	2,927
Urban population (% of total)	30	34	39
GNI per capita, <i>World Bank Atlas</i> method (\$)	780	1,190	2,035
GDP growth, 2005–10 and 2010–15 (avg. annual %)	6.1	6.3	5.4
Adult literacy rate (% ages 15 and older)	..	61	..
Gross primary, secondary, and tertiary school enrollment (%)	59	..	68
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Public	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	<i>M</i>	<i>P</i>	
Mobile telephone service	<i>C</i>	<i>P</i>	
Internet service	<i>C</i>	<i>C</i>	
Foreign ownership (not allowed, restricted, allowed)	<i>A</i>	<i>R</i>	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	<i>A</i>	<i>A</i>	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	5.7	1.9	..
Telecommunications investment (% of revenue)	4.0	29.3	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	0.8	0.5	3.5
Mobile-cellular telephone subscriptions (per 100 people)	44.9	83.4	90.5
Fixed-broadband subscriptions (per 100 people)	0.3	2.4	1.9
Households with a computer (%)	3.0	8.2 ^a	19.3
Households with Internet access at home (%)	1.4	11.0 ^a	24.3
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	20.9	23.6	7.5
Domestic mobile traffic (minutes/subscription/month)	152.2	160.5	152.0
Individuals using the Internet (%)	3.7 ^a	14.4 ^a	28.6
Quality			
Population covered by at least a 3G mobile network (%)	1	71	..
International Internet bandwidth (bit/s per Internet user)	1,431	6,181	10,372
Affordability			
Mobile-cellular sub-basket (\$ a month)	2.3	1.5	6.9
Fixed-broadband sub-basket (\$ a month)	8.3	4.4	14.3
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	7.0	2.8	5.8
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	8.4	4.1	10.0
Trade			
ICT goods exports (% of total goods exports)	0.0	..	5.7
ICT goods imports (% of total goods imports)	4.0	..	7.6
ICT service exports (% of total service exports)	36.2	28.3	48.0
Applications			
Online service index (0-1, 1=highest presence)	0.36	0.35	0.26
Secure Internet servers (per million people)	0.3	1.3	7.4

Barbados

Latin America & Caribbean

High income

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	0.28	0.28	1,187
Urban population (% of total)	32	31	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	15,860	14,800	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	0.4	0.3	1.5
Adult literacy rate (% ages 15 and older)	..	..	..
Gross primary, secondary, and tertiary school enrollment (%)	97	..	95
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	..
Mobile telephone service	P	C	
Internet service	..	C	
Foreign ownership (not allowed, restricted, allowed)	R	R	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	..	5.0	2.5
Telecommunications investment (% of revenue)	..	12.1	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	49.0	54.6	41.2
Mobile-cellular telephone subscriptions (per 100 people)	124.8	116.5	124.5
Fixed-broadband subscriptions (per 100 people)	20.0	27.2	31.0
Households with a computer (%)	56.0	70.8 ^a	83.2
Households with Internet access at home (%)	46.9	62.9 ^a	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	..	22.9	..
Domestic mobile traffic (minutes/subscription/month)	..	115.0	195.9
Individuals using the Internet (%)	65.1 ^a	76.1 ^a	81.0
Quality			
Population covered by at least a 3G mobile network (%)	20	98	99
International Internet bandwidth (bit/s per Internet user)	21,694	247,474	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	20.0	28.1	14.2
Fixed-broadband sub-basket (\$ a month)	38.8	30.0	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	18.5	20.0	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	18.0	18.0	14.4
Trade			
ICT goods exports (% of total goods exports)	1.5	0.8	9.5
ICT goods imports (% of total goods imports)	6.1	5.4	11.2
ICT service exports (% of total service exports)	25.9	18.5	32.0
Applications			
Online service index (0-1, 1=highest presence)	0.20	0.22	0.67
Secure Internet servers (per million people)	321.9	457.4	1,194.6

Belarus

Europe & Central Asia

Upper middle income

	Country data		Upper middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	9	10	2,594
Urban population (% of total)	75	77	64
GNI per capita, <i>World Bank Atlas</i> method (\$)	5,990	6,460	8,186
GDP growth, 2005–10 and 2010–15 (avg. annual %)	7.1	1.3	4.5
Adult literacy rate (% ages 15 and older)	100	100	..
Gross primary, secondary, and tertiary school enrollment (%)	97	99	81
Sector structure			
Separate telecommunications/ICT regulator	No	No	
Status of main fixed-line telephone operator	Public	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	M	M	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	R	R	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	C	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	3.0	1.8	2.1
Telecommunications investment (% of revenue)	29.2	..	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	43.6	49.0	17.3
Mobile-cellular telephone subscriptions (per 100 people)	108.9	123.6	105.1
Fixed-broadband subscriptions (per 100 people)	17.6	31.3	15.4
Households with a computer (%)	40.8	63.1	48.7
Households with Internet access at home (%)	31.2	59.1	52.2
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	4.6	3.4	2.3
Domestic mobile traffic (minutes/subscription/month)	180.1	173.6	173.1
Individuals using the Internet (%)	31.8	62.2	52.1
Quality			
Population covered by at least a 3G mobile network (%)	67	96	69
International Internet bandwidth (bit/s per Internet user)	22,199	139,374	26,098
Affordability			
Mobile-cellular sub-basket (\$ a month)	7.9	4.3	8.5
Fixed-broadband sub-basket (\$ a month)	18.1	7.2	15.5
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	3.3	2.5	7.7
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	4.8	4.4	11.1
Trade			
ICT goods exports (% of total goods exports)	0.5	0.6	15.7
ICT goods imports (% of total goods imports)	2.4	3.2	14.4
ICT service exports (% of total service exports)	17.9	23.6	25.7
Applications			
Online service index (0-1, 1=highest presence)	0.30	0.32	0.37
Secure Internet servers (per million people)	9.5	62.9	34.7

Belgium

Europe & Central Asia

High income

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	11	11	1,187
Urban population (% of total)	98	98	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	47,810	44,360	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	1.2	0.8	1.5
Adult literacy rate (% ages 15 and older)	..	..	..
Gross primary, secondary, and tertiary school enrollment (%)	94	119	95
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	No	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	2.2	1.5	2.5
Telecommunications investment (% of revenue)	14.2	24.4	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	42.4	40.1	41.2
Mobile-cellular telephone subscriptions (per 100 people)	111.1	115.7	124.5
Fixed-broadband subscriptions (per 100 people)	30.8	36.8	31.0
Households with a computer (%)	76.7	82.1	83.2
Households with Internet access at home (%)	72.7	81.8	85.0
Usage			
Int'l. voice traffic, total (minutes/subscriber/month)	..	..	..
Domestic mobile traffic (minutes/subscriber/month)	90.9	93.7	195.9
Individuals using the Internet (%)	75.0	85.1	81.0
Quality			
Population covered by at least a 3G mobile network (%)	97	100	99
International Internet bandwidth (bit/s per Internet user)	109,676	241,805	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	40.2	28.5	14.2
Fixed-broadband sub-basket (\$ a month)	24.8	30.5	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	25.7	11.1	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	25.7	20.9	14.4
Trade			
ICT goods exports (% of total goods exports)	2.3	1.8	9.5
ICT goods imports (% of total goods imports)	3.5	2.9	11.2
ICT service exports (% of total service exports)	37.6	47.2	32.0
Applications			
Online service index (0-1, 1=highest presence)	0.63	0.68	0.67
Secure Internet servers (per million people)	489.1	976.9	1,194.6

Latin America & Caribbean

Upper middle income

	Country data		Upper middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	0.32	0.36	2,594
Urban population (% of total)	45	44	64
GNI per capita, <i>World Bank Atlas</i> method (\$)	3,970	4,420	8,186
GDP growth, 2005–10 and 2010–15 (avg. annual %)	2.4	2.7	4.5
Adult literacy rate (% ages 15 and older)	..	83	..
Gross primary, secondary, and tertiary school enrollment (%)	76	77	81
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Public	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	M	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	R	R	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	B	B	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	5.2	..	2.1
Telecommunications investment (% of revenue)	41.7	..	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	9.8	6.0	17.3
Mobile-cellular telephone subscriptions (per 100 people)	62.9	48.9	105.1
Fixed-broadband subscriptions (per 100 people)	2.9	2.9	15.4
Households with a computer (%)	27.1	32.0 ^a	48.7
Households with Internet access at home (%)	13.6	25.6 ^a	52.2
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	35.9	..	2.3
Domestic mobile traffic (minutes/subscription/month)	..	..	173.1
Individuals using the Internet (%)	28.2	41.6 ^a	52.1
Quality			
Population covered by at least a 3G mobile network (%)	..	..	69
International Internet bandwidth (bit/s per Internet user)	9,193	35,970	26,098
Affordability			
Mobile-cellular sub-basket (\$ a month)	31.0	31.2	8.5
Fixed-broadband sub-basket (\$ a month)	100.0	12.5	15.5
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	15.0	7.7
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	12.5	11.1
Trade			
ICT goods exports (% of total goods exports)	0.5	0.1	15.7
ICT goods imports (% of total goods imports)	3.6	2.9	14.4
ICT service exports (% of total service exports)	9.6	13.6	25.7
Applications			
Online service index (0-1, 1=highest presence)	0.16	0.38	0.37
Secure Internet servers (per million people)	323.4	411.9	34.7

	Country data		Low-income group
	2010	2015	2015
Economic and social context			
Population (millions)	10	11	638
Urban population (% of total)	42	44	31
GNI per capita, <i>World Bank Atlas</i> method (\$)	760	860	620
GDP growth, 2005–10 and 2010–15 (avg. annual %)	4.0	5.5	5.4
Adult literacy rate (% ages 15 and older)	29	38	..
Gross primary, secondary, and tertiary school enrollment (%)	68	73	60
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Public	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	P	M	
Mobile telephone service	C	C	
Internet service	P	C	
Foreign ownership (not allowed, restricted, allowed)	A	..	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	B	C	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	5.7	5.3	..
Telecommunications investment (% of revenue)	23.3	16.9	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	1.4	1.8	0.9
Mobile-cellular telephone subscriptions (per 100 people)	74.4	85.6	60.0
Fixed-broadband subscriptions (per 100 people)	0.3	0.7	0.3
Households with a computer (%)	2.0	5.1 ^a	4.8
Households with Internet access at home (%)	1.2 ^a	5.4 ^a	7.1
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	6.5	7.2	..
Domestic mobile traffic (minutes/subscription/month)	32.6	40.9	48.9
Individuals using the Internet (%)	3.1	6.8 ^a	9.5
Quality			
Population covered by at least a 3G mobile network (%)	0	45	51
International Internet bandwidth (bit/s per Internet user)	2,090	3,002	4,245
Affordability			
Mobile-cellular sub-basket (\$ a month)	15.5	8.5	9.4
Fixed-broadband sub-basket (\$ a month)	50.1	42.3	33.6
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	9.8	7.6	8.0
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	29.4	14.0	10.8
Trade			
ICT goods exports (% of total goods exports)	0.0	0.2	..
ICT goods imports (% of total goods imports)	1.9	1.1	3.4
ICT service exports (% of total service exports)	23.0	18.8	..
Applications			
Online service index (0-1, 1=highest presence)	0.12	0.11	0.11
Secure Internet servers (per million people)	0.1	3.9	1.5

Bermuda

North America

High income

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	0.07	0.07	1,187
Urban population (% of total)	100	100	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	110,440	106,140	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	0.3	–3.7	1.5
Adult literacy rate (% ages 15 and older)	..	..	..
Gross primary, secondary, and tertiary school enrollment (%)	69	65	95
Sector structure			
Separate telecommunications/ICT regulator	..	..
Status of main fixed-line telephone operator	..	..
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	..
Mobile telephone service	..	..
Internet service	..	..
Foreign ownership (not allowed, restricted, allowed)	..	..
Reg. treatment of VoIP (banned, closed, no framework, allowed)	..	..
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	..	..	2.5
Telecommunications investment (% of revenue)	..	..	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	89.0	18.3	41.2
Mobile-cellular telephone subscriptions (per 100 people)	135.8	57.9	124.5
Fixed-broadband subscriptions (per 100 people)	61.7	45.7	31.0
Households with a computer (%)	90.0	94.7 ^a	83.2
Households with Internet access at home (%)	68.4 ^a	94.8 ^a	85.0
Usage			
Int'l. voice traffic, total (minutes/subscriber/month)	..	..	..
Domestic mobile traffic (minutes/subscriber/month)	..	..	195.9
Individuals using the Internet (%)	84.2 ^a	98.3 ^a	81.0
Quality			
Population covered by at least a 3G mobile network (%)	..	99 ^a	99
International Internet bandwidth (bit/s per Internet user)	..	..	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	..	..	14.2
Fixed-broadband sub-basket (\$ a month)	..	..	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	..	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	..	14.4
Trade			
ICT goods exports (% of total goods exports)	6.6	12.6	9.5
ICT goods imports (% of total goods imports)	3.4	3.3	11.2
ICT service exports (% of total service exports)	42.0	38.9	32.0
Applications			
Online service index (0–1, 1=highest presence)	..	..	0.67
Secure Internet servers (per million people)	5,850.4	7,204.7	1,194.6

Bhutan

South Asia

Lower middle income

	Country data		Lower middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	0.72	0.77	2,927
Urban population (% of total)	35	39	39
GNI per capita, <i>World Bank Atlas</i> method (\$)	1,990	2,370	2,035
GDP growth, 2005–10 and 2010–15 (avg. annual %)	9.4	4.5	5.4
Adult literacy rate (% ages 15 and older)	57	64	..
Gross primary, secondary, and tertiary school enrollment (%)	65	68	68
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Public	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	R	R	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	No	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	2.4	2.3	..
Telecommunications investment (% of revenue)	21.1	42.2	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	3.7	2.8	3.5
Mobile-cellular telephone subscriptions (per 100 people)	55.0	87.1	90.5
Fixed-broadband subscriptions (per 100 people)	1.2	3.6	1.9
Households with a computer (%)	8.9 ^a	24.6 ^a	19.3
Households with Internet access at home (%)	6.0 ^a	31.7 ^a	24.3
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	..	..	7.5
Domestic mobile traffic (minutes/subscription/month)	44.6	15.2	152.0
Individuals using the Internet (%)	13.6	39.8 ^a	28.6
Quality			
Population covered by at least a 3G mobile network (%)	15	80	..
International Internet bandwidth (bit/s per Internet user)	1,590	11,220	10,372
Affordability			
Mobile-cellular sub-basket (\$ a month)	4.5	2.6	6.9
Fixed-broadband sub-basket (\$ a month)	10.5	8.2	14.3
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	2.8	1.7	5.8
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	5.6	4.8	10.0
Trade			
ICT goods exports (% of total goods exports)	11.3	..	5.7
ICT goods imports (% of total goods imports)	2.5	..	7.6
ICT service exports (% of total service exports)	3.9	0.3	48.0
Applications			
Online service index (0-1, 1=highest presence)	0.19	0.24	0.26
Secure Internet servers (per million people)	4.2	16.8	7.4

Latin America & Caribbean

Lower middle income

	Country data		Lower middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	10	11	2,927
Urban population (% of total)	66	69	39
GNI per capita, <i>World Bank Atlas</i> method (\$)	1,810	3,080	2,035
GDP growth, 2005–10 and 2010–15 (avg. annual %)	4.7	5.5	5.4
Adult literacy rate (% ages 15 and older)	92	95	..
Gross primary, secondary, and tertiary school enrollment (%)	..	..	68
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Public	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	..
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	No	..	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	8.2	4.2	..
Telecommunications investment (% of revenue)	16.7	33.2	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	8.4	8.0	3.5
Mobile-cellular telephone subscriptions (per 100 people)	70.7	92.2	90.5
Fixed-broadband subscriptions (per 100 people)	0.9	1.6	1.9
Households with a computer (%)	22.8 ^a	33.1 ^a	19.3
Households with Internet access at home (%)	6.0 ^a	23.8 ^a	24.3
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	8.8	4.1	7.5
Domestic mobile traffic (minutes/subscription/month)	36.0	35.2	152.0
Individuals using the Internet (%)	22.4 ^a	45.1 ^a	28.6
Quality			
Population covered by at least a 3G mobile network (%)	2	27	..
International Internet bandwidth (bit/s per Internet user)	3,728	19,673	10,372
Affordability			
Mobile-cellular sub-basket (\$ a month)	11.3	10.7	6.9
Fixed-broadband sub-basket (\$ a month)	35.0	14.3	14.3
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	10.9	5.8	5.8
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	17.2	7.2	10.0
Trade			
ICT goods exports (% of total goods exports)	0.0	..	5.7
ICT goods imports (% of total goods imports)	3.5	3.7	7.6
ICT service exports (% of total service exports)	11.1	8.5	48.0
Applications			
Online service index (0-1, 1=highest presence)	0.30	0.39	0.26
Secure Internet servers (per million people)	8.0	15.8	7.4

Bosnia and Herzegovina

Europe & Central Asia

Upper middle income

	Country data		Upper middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	4	4	2,594
Urban population (% of total)	39	40	64
GNI per capita, <i>World Bank Atlas</i> method (\$)	4,780	4,680	8,186
GDP growth, 2005–10 and 2010–15 (avg. annual %)	2.9	1.2	4.5
Adult literacy rate (% ages 15 and older)	..	98	..
Gross primary, secondary, and tertiary school enrollment (%)	73	78	81
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	..
Mobile telephone service	C	P	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	No	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	4.1	5.3	2.1
Telecommunications investment (% of revenue)	23.8	18.7	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	26.0	20.2	17.3
Mobile-cellular telephone subscriptions (per 100 people)	80.9	90.2	105.1
Fixed-broadband subscriptions (per 100 people)	10.2	16.6	15.4
Households with a computer (%)	33.7 ^a	47.1 ^a	48.7
Households with Internet access at home (%)	23.0 ^a	53.6 ^a	52.2
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	20.1	16.7	2.3
Domestic mobile traffic (minutes/subscription/month)	45.2	60.7	173.1
Individuals using the Internet (%)	42.8 ^a	65.1 ^a	52.1
Quality			
Population covered by at least a 3G mobile network (%)	60	96	69
International Internet bandwidth (bit/s per Internet user)	18,612	56,331	26,098
Affordability			
Mobile-cellular sub-basket (\$ a month)	15.4	12.6	8.5
Fixed-broadband sub-basket (\$ a month)	13.4	6.6	15.5
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	49.3	5.7	7.7
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	15.4	6.6	11.1
Trade			
ICT goods exports (% of total goods exports)	0.1	0.2	15.7
ICT goods imports (% of total goods imports)	2.9	2.9	14.4
ICT service exports (% of total service exports)	7.4	7.7	25.7
Applications			
Online service index (0-1, 1=highest presence)	0.28	0.28	0.37
Secure Internet servers (per million people)	15.6	42.8	34.7

Botswana

Sub-Saharan Africa

Upper middle income

	Country data		Upper middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	2	2	2,594
Urban population (% of total)	56	57	64
GNI per capita, <i>World Bank Atlas</i> method (\$)	5,480	6,510	8,186
GDP growth, 2005–10 and 2010–15 (avg. annual %)	4.0	5.1	4.5
Adult literacy rate (% ages 15 and older)	..	88	..
Gross primary, secondary, and tertiary school enrollment (%)	74	77	81
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Public	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	P	
Mobile telephone service	C	P	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	3.7	..	2.1
Telecommunications investment (% of revenue)	21.0	..	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	7.0	7.8	17.3
Mobile-cellular telephone subscriptions (per 100 people)	120.0	169.0	105.1
Fixed-broadband subscriptions (per 100 people)	0.6	1.8	15.4
Households with a computer (%)	9.2 ^a	16.0 ^a	48.7
Households with Internet access at home (%)	6.1 ^a	19.6 ^a	52.2
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	..	..	2.3
Domestic mobile traffic (minutes/subscription/month)	22.8	67.7	173.1
Individuals using the Internet (%)	6.0	27.5 ^a	52.1
Quality			
Population covered by at least a 3G mobile network (%)	40	92	69
International Internet bandwidth (bit/s per Internet user)	6,559	11,379	26,098
Affordability			
Mobile-cellular sub-basket (\$ a month)	14.7	8.8	8.5
Fixed-broadband sub-basket (\$ a month)	29.7	28.6	15.5
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	50.5	14.7	7.7
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	78.7	66.4	11.1
Trade			
ICT goods exports (% of total goods exports)	0.3	0.1	15.7
ICT goods imports (% of total goods imports)	3.1	2.6	14.4
ICT service exports (% of total service exports)	12.1	12.3	25.7
Applications			
Online service index (0-1, 1=highest presence)	0.20	0.31	0.37
Secure Internet servers (per million people)	8.3	17.2	34.7

Brazil

Latin America & Caribbean

Upper middle income

	Country data		Upper middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	199	208	2,594
Urban population (% of total)	84	86	64
GNI per capita, <i>World Bank Atlas</i> method (\$)	9,650	9,850	8,186
GDP growth, 2005–10 and 2010–15 (avg. annual %)	4.3	1.2	4.5
Adult literacy rate (% ages 15 and older)	90	93	..
Gross primary, secondary, and tertiary school enrollment (%)	88	89	81
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Private	Private	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	..	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	3.2	..	2.1
Telecommunications investment (% of revenue)	12.5	..	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	21.6	21.4	17.3
Mobile-cellular telephone subscriptions (per 100 people)	100.9	126.6	105.1
Fixed-broadband subscriptions (per 100 people)	7.2	12.2	15.4
Households with a computer (%)	34.9	53.5 ^a	48.7
Households with Internet access at home (%)	27.1	54.5 ^a	52.2
Usage			
Int'l. voice traffic, total (minutes/subscriber/month)	0.2	..	2.3
Domestic mobile traffic (minutes/subscriber/month)	60.4	..	173.1
Individuals using the Internet (%)	40.7	59.1 ^a	52.1
Quality			
Population covered by at least a 3G mobile network (%)	67	94	69
International Internet bandwidth (bit/s per Internet user)	12,602	43,634	26,098
Affordability			
Mobile-cellular sub-basket (\$ a month)	57.2	11.9	8.5
Fixed-broadband sub-basket (\$ a month)	31.2	8.9	15.5
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	30.7	7.5	7.7
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	33.2	12.0	11.1
Trade			
ICT goods exports (% of total goods exports)	1.0	0.4	15.7
ICT goods imports (% of total goods imports)	9.5	8.8	14.4
ICT service exports (% of total service exports)	46.7	56.4	25.7
Applications			
Online service index (0-1, 1=highest presence)	0.37	0.60	0.37
Secure Internet servers (per million people)	40.0	77.1	34.7

British Virgin Islands

Latin America & Caribbean

High income

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	0.03	0.03	1,187
Urban population (% of total)	45	46	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	..	..	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	..	..	1.5
Adult literacy rate (% ages 15 and older)	..	..	..
Gross primary, secondary, and tertiary school enrollment (%)	87	..	95
Sector structure			
Separate telecommunications/ICT regulator	..	..
Status of main fixed-line telephone operator	..	..
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	..
Mobile telephone service	..	..
Internet service	..	..
Foreign ownership (not allowed, restricted, allowed)	..	..
Reg. treatment of VoIP (banned, closed, no framework, allowed)	..	..
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	..	..	2.5
Telecommunications investment (% of revenue)	4.6	8.3	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	46.9	41.7	41.2
Mobile-cellular telephone subscriptions (per 100 people)	174.6	145.8	124.5
Fixed-broadband subscriptions (per 100 people)	25.3	24.3	31.0
Households with a computer (%)	..	..	83.2
Households with Internet access at home (%)	..	..	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	139.8	84.7	..
Domestic mobile traffic (minutes/subscription/month)	176.8	118.4	195.9
Individuals using the Internet (%)	37.0	..	81.0
Quality			
Population covered by at least a 3G mobile network (%)	..	91 ^a	99
International Internet bandwidth (bit/s per Internet user)	37,131	..	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	..	..	14.2
Fixed-broadband sub-basket (\$ a month)	..	..	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	..	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	..	14.4
Trade			
ICT goods exports (% of total goods exports)	..	..	9.5
ICT goods imports (% of total goods imports)	..	..	11.2
ICT service exports (% of total service exports)	..	..	32.0
Applications			
Online service index (0-1, 1=highest presence)	..	..	0.67
Secure Internet servers (per million people)	6,832.5	5,312.6	1,194.6

Brunei Darussalam

East Asia & Pacific

High income

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	0.39	0.42	1,187
Urban population (% of total)	76	77	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	32,190	..	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	0.1	–0.4	1.5
Adult literacy rate (% ages 15 and older)	96	97	..
Gross primary, secondary, and tertiary school enrollment (%)	78	82	95
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Public	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	P	P	
Mobile telephone service	M	P	
Internet service	P	P	
Foreign ownership (not allowed, restricted, allowed)	R	R	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	..	..	2.5
Telecommunications investment (% of revenue)	..	..	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	19.9	9.0	41.2
Mobile-cellular telephone subscriptions (per 100 people)	108.6	108.1	124.5
Fixed-broadband subscriptions (per 100 people)	5.4	8.0	31.0
Households with a computer (%)	79.6 ^a	93.4 ^a	83.2
Households with Internet access at home (%)	65.0 ^a	81.7 ^a	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	..	..	..
Domestic mobile traffic (minutes/subscription/month)	..	..	195.9
Individuals using the Internet (%)	53.0 ^a	71.2 ^a	81.0
Quality			
Population covered by at least a 3G mobile network (%)	..	91	99
International Internet bandwidth (bit/s per Internet user)	23,551	63,090	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	19.5	9.0	14.2
Fixed-broadband sub-basket (\$ a month)	49.9	28.4	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	56.0	18.6	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	24.0	20.4	14.4
Trade			
ICT goods exports (% of total goods exports)	0.3	0.2	9.5
ICT goods imports (% of total goods imports)	4.1	4.9	11.2
ICT service exports (% of total service exports)	21.4	..	32.0
Applications			
Online service index (0–1, 1=highest presence)	0.28	0.36	0.67
Secure Internet servers (per million people)	66.1	203.2	1,194.6

Bulgaria

Europe & Central Asia

Upper middle income

	Country data		Upper middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	7	7	2,594
Urban population (% of total)	72	74	64
GNI per capita, <i>World Bank Atlas</i> method (\$)	6,840	7,220	8,186
GDP growth, 2005–10 and 2010–15 (avg. annual %)	3.1	1.4	4.5
Adult literacy rate (% ages 15 and older)	98	98	..
Gross primary, secondary, and tertiary school enrollment (%)	81	90	81
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	P	P	
Mobile telephone service	P	P	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	3.4	2.6	2.1
Telecommunications investment (% of revenue)	31.8	26.9	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	29.3	23.3	17.3
Mobile-cellular telephone subscriptions (per 100 people)	138.0	129.3	105.1
Fixed-broadband subscriptions (per 100 people)	15.2	22.4	15.4
Households with a computer (%)	35.1	59.0	48.7
Households with Internet access at home (%)	33.1	59.1	52.2
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	7.8	9.5	2.3
Domestic mobile traffic (minutes/subscription/month)	108.9	144.2	173.1
Individuals using the Internet (%)	46.2	56.7	52.1
Quality			
Population covered by at least a 3G mobile network (%)	93	100	69
International Internet bandwidth (bit/s per Internet user)	68,091	145,170	26,098
Affordability			
Mobile-cellular sub-basket (\$ a month)	32.9	21.7	8.5
Fixed-broadband sub-basket (\$ a month)	13.4	10.1	15.5
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	13.1	6.8	7.7
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	6.6	6.2	11.1
Trade			
ICT goods exports (% of total goods exports)	2.5	2.5	15.7
ICT goods imports (% of total goods imports)	5.6	4.9	14.4
ICT service exports (% of total service exports)	14.9	21.1	25.7
Applications			
Online service index (0-1, 1=highest presence)	0.41	0.24	0.37
Secure Internet servers (per million people)	74.9	181.5	34.7

Burkina Faso

Sub-Saharan Africa

Low income

	Country data		Low-income group
	2010	2015	2015
Economic and social context			
Population (millions)	16	18	638
Urban population (% of total)	26	30	31
GNI per capita, <i>World Bank Atlas</i> method (\$)	610	660	620
GDP growth, 2005–10 and 2010–15 (avg. annual %)	5.9	4.8	5.4
Adult literacy rate (% ages 15 and older)	29	38	..
Gross primary, secondary, and tertiary school enrollment (%)	40	47	60
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	P	C	
Mobile telephone service	P	P	
Internet service	P	C	
Foreign ownership (not allowed, restricted, allowed)	R	R	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	B	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	..	5.0	..
Telecommunications investment (% of revenue)	..	9.4	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	0.9	0.4	0.9
Mobile-cellular telephone subscriptions (per 100 people)	36.7	80.6	60.0
Fixed-broadband subscriptions (per 100 people)	0.1	0.0	0.3
Households with a computer (%)	2.1 ^a	5.2 ^a	4.8
Households with Internet access at home (%)	2.0 ^a	12.5 ^a	7.1
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	..	3.9	..
Domestic mobile traffic (minutes/subscription/month)	28.4	32.3	48.9
Individuals using the Internet (%)	2.4 ^a	11.4 ^a	9.5
Quality			
Population covered by at least a 3G mobile network (%)	0	..	51
International Internet bandwidth (bit/s per Internet user)	2,148	2,862	4,245
Affordability			
Mobile-cellular sub-basket (\$ a month)	21.7	9.7	9.4
Fixed-broadband sub-basket (\$ a month)	83.1	37.2	33.6
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	8.5	8.0
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	8.5	10.8
Trade			
ICT goods exports (% of total goods exports)	0.0	0.0	..
ICT goods imports (% of total goods imports)	2.5	2.3	3.4
ICT service exports (% of total service exports)	21.1	12.8	..
Applications			
Online service index (0-1, 1=highest presence)	0.16	0.30	0.11
Secure Internet servers (per million people)	0.3	0.7	1.5

	Country data		Low-income group
	2010	2015	2015
Economic and social context			
Population (millions)	9	11	638
Urban population (% of total)	11	12	31
GNI per capita, <i>World Bank Atlas</i> method (\$)	200	260	620
GDP growth, 2005–10 and 2010–15 (avg. annual %)	4.5	3.4	5.4
Adult literacy rate (% ages 15 and older)	87	85	..
Gross primary, secondary, and tertiary school enrollment (%)	58	62	60
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Public	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	B	B	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	3.8	3.5	..
Telecommunications investment (% of revenue)	..	..	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	0.4	0.2	0.9
Mobile-cellular telephone subscriptions (per 100 people)	18.2 ^a	46.2	60.0
Fixed-broadband subscriptions (per 100 people)	0.0	0.0	0.3
Households with a computer (%)	0.2 ^a	1.2 ^a	4.8
Households with Internet access at home (%)	0.2 ^a	4.0 ^a	7.1
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	5.9	1.9	..
Domestic mobile traffic (minutes/subscription/month)	23.9	1.5	48.9
Individuals using the Internet (%)	1.0 ^a	4.9 ^a	9.5
Quality			
Population covered by at least a 3G mobile network (%)	0	..	51
International Internet bandwidth (bit/s per Internet user)	1,652	5,702	4,245
Affordability			
Mobile-cellular sub-basket (\$ a month)	..	8.0	9.4
Fixed-broadband sub-basket (\$ a month)	..	82.9	33.6
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	..	8.0
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	..	10.8
Trade			
ICT goods exports (% of total goods exports)	0.4	0.6	..
ICT goods imports (% of total goods imports)	5.8	4.5	3.4
ICT service exports (% of total service exports)	3.5	14.1	..
Applications			
Online service index (0-1, 1=highest presence)	0.04	0.02	0.11
Secure Internet servers (per million people)	0.2	0.5	1.5

Cabo Verde

Sub-Saharan Africa

Lower middle income

	Country data		Lower middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	0.49	0.52	2,927
Urban population (% of total)	62	66	39
GNI per capita, <i>World Bank Atlas</i> method (\$)	3,410	3,290	2,035
GDP growth, 2005–10 and 2010–15 (avg. annual %)	6.1	2.1	5.4
Adult literacy rate (% ages 15 and older)	85	88	..
Gross primary, secondary, and tertiary school enrollment (%)	74	77	68
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	..	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	6.9	3.9	..
Telecommunications investment (% of revenue)	32.4	20.7	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	14.8	11.5	3.5
Mobile-cellular telephone subscriptions (per 100 people)	76.3	127.2	90.5
Fixed-broadband subscriptions (per 100 people)	3.3	3.0	1.9
Households with a computer (%)	20.4	34.2 ^a	19.3
Households with Internet access at home (%)	7.1	27.0 ^a	24.3
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	18.6	16.5	7.5
Domestic mobile traffic (minutes/subscription/month)	65.9	81.1	152.0
Individuals using the Internet (%)	30.0 ^a	43.0 ^a	28.6
Quality			
Population covered by at least a 3G mobile network (%)	50	87	..
International Internet bandwidth (bit/s per Internet user)	3,179	17,149	10,372
Affordability			
Mobile-cellular sub-basket (\$ a month)	31.6	23.9	6.9
Fixed-broadband sub-basket (\$ a month)	31.5	10.0	14.3
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	5.8	3.5	5.8
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	18.5	16.0	10.0
Trade			
ICT goods exports (% of total goods exports)	..	..	5.7
ICT goods imports (% of total goods imports)	7.5	4.4	7.6
ICT service exports (% of total service exports)	4.8	7.4	48.0
Applications			
Online service index (0-1, 1=highest presence)	0.27	0.17	0.26
Secure Internet servers (per million people)	14.3	51.9	7.4

Cambodia

East Asia & Pacific

Lower middle income

	Country data		Lower middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	14	16	2,927
Urban population (% of total)	20	21	39
GNI per capita, <i>World Bank Atlas</i> method (\$)	750	1,070	2,035
GDP growth, 2005–10 and 2010–15 (avg. annual %)	6.4	7.2	5.4
Adult literacy rate (% ages 15 and older)	74	78	..
Gross primary, secondary, and tertiary school enrollment (%)	63	..	68
Sector structure			
Separate telecommunications/ICT regulator	No	Yes	
Status of main fixed-line telephone operator	Public	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	P	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	No	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	5.5	..	..
Telecommunications investment (% of revenue)	69.8	..	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	2.5	1.6	3.5
Mobile-cellular telephone subscriptions (per 100 people)	56.7	133.0	90.5
Fixed-broadband subscriptions (per 100 people)	0.2	0.5	1.9
Households with a computer (%)	4.3 ^a	16.0 ^a	19.3
Households with Internet access at home (%)	1.6 ^a	21.0 ^a	24.3
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	..	7.8	7.5
Domestic mobile traffic (minutes/subscription/month)	..	44.2	152.0
Individuals using the Internet (%)	1.3	19.0 ^a	28.6
Quality			
Population covered by at least a 3G mobile network (%)	43	70	..
International Internet bandwidth (bit/s per Internet user)	27,625	17,792	10,372
Affordability			
Mobile-cellular sub-basket (\$ a month)	7.7	6.8	6.9
Fixed-broadband sub-basket (\$ a month)	45.0	12.0	14.3
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	1.0	5.8
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	2.0	10.0
Trade			
ICT goods exports (% of total goods exports)	0.1	1.2	5.7
ICT goods imports (% of total goods imports)	2.5	1.5	7.6
ICT service exports (% of total service exports)	5.8	7.9	48.0
Applications			
Online service index (0-1, 1=highest presence)	0.14	0.17	0.26
Secure Internet servers (per million people)	1.7	5.1	7.4

Cameroon

Sub-Saharan Africa

Lower middle income

	Country data		Lower middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	21	23	2,927
Urban population (% of total)	52	54	39
GNI per capita, <i>World Bank Atlas</i> method (\$)	1,170	1,330	2,035
GDP growth, 2005–10 and 2010–15 (avg. annual %)	2.9	5.3	5.4
Adult literacy rate (% ages 15 and older)	71	75	..
Gross primary, secondary, and tertiary school enrollment (%)	62	..	68
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Public	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	P	
Mobile telephone service	C	P	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	..	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	B	B	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	3.5	..	..
Telecommunications investment (% of revenue)	28.0	..	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	2.6	4.5	3.5
Mobile-cellular telephone subscriptions (per 100 people)	41.9	71.8	90.5
Fixed-broadband subscriptions (per 100 people)	0.0	0.1	1.9
Households with a computer (%)	7.2	12.7 ^a	19.3
Households with Internet access at home (%)	1.9	8.6 ^a	24.3
Usage			
Int'l. voice traffic, total (minutes/subscriber/month)	5.1	..	7.5
Domestic mobile traffic (minutes/subscriber/month)	38.7	..	152.0
Individuals using the Internet (%)	4.3 ^a	20.7 ^a	28.6
Quality			
Population covered by at least a 3G mobile network (%)	..	50 ^a	..
International Internet bandwidth (bit/s per Internet user)	363	992	10,372
Affordability			
Mobile-cellular sub-basket (\$ a month)	18.8	10.3	6.9
Fixed-broadband sub-basket (\$ a month)	80.2	50.6	14.3
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	10.1	5.8
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	13.5	10.0
Trade			
ICT goods exports (% of total goods exports)	0.0	0.0	5.7
ICT goods imports (% of total goods imports)	2.6	4.2	7.6
ICT service exports (% of total service exports)	30.6	27.4	48.0
Applications			
Online service index (0-1, 1=highest presence)	0.15	0.20	0.26
Secure Internet servers (per million people)	0.5	2.5	7.4

North America

High income

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	34	36	1,187
Urban population (% of total)	81	82	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	44,400	47,500	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	0.8	2.1	1.5
Adult literacy rate (% ages 15 and older)	..	..	..
Gross primary, secondary, and tertiary school enrollment (%)	..	..	95
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Public	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	R	R	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	2.5	2.3	2.5
Telecommunications investment (% of revenue)	20.1	31.9	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	53.9	44.3	41.2
Mobile-cellular telephone subscriptions (per 100 people)	75.7	81.9	124.5
Fixed-broadband subscriptions (per 100 people)	31.7	36.4	31.0
Households with a computer (%)	82.7	85.1 ^a	83.2
Households with Internet access at home (%)	78.4	86.6 ^a	85.0
Usage			
Int'l. voice traffic, total (minutes/subscriber/month)	..	..	..
Domestic mobile traffic (minutes/subscriber/month)	366.0	409.0	195.9
Individuals using the Internet (%)	80.3	88.5 ^a	81.0
Quality			
Population covered by at least a 3G mobile network (%)	98	99 ^a	99
International Internet bandwidth (bit/s per Internet user)	54,738	135,496	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	38.9	25.1	14.2
Fixed-broadband sub-basket (\$ a month)	26.2	49.4	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	22.5	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	58.8	40.5	14.4
Trade			
ICT goods exports (% of total goods exports)	2.8	1.9	9.5
ICT goods imports (% of total goods imports)	8.4	6.9	11.2
ICT service exports (% of total service exports)	42.7	40.6	32.0
Applications			
Online service index (0-1, 1=highest presence)	0.88	0.91	0.67
Secure Internet servers (per million people)	1,242.7	1,308.8	1,194.6

Cayman Islands

Latin America & Caribbean

High income

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	0.06	0.06	1,187
Urban population (% of total)	100	100	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	..	..	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	..	..	1.5
Adult literacy rate (% ages 15 and older)	99	..	..
Gross primary, secondary, and tertiary school enrollment (%)	..	..	95
Sector structure			
Separate telecommunications/ICT regulator	..	..
Status of main fixed-line telephone operator	..	..
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	..
Mobile telephone service	..	..
Internet service	..	..
Foreign ownership (not allowed, restricted, allowed)	..	..
Reg. treatment of VoIP (banned, closed, no framework, allowed)	No	..	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	..	..	2.5
Telecommunications investment (% of revenue)	..	21.5	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	67.3	55.9	41.2
Mobile-cellular telephone subscriptions (per 100 people)	181.2	155.5	124.5
Fixed-broadband subscriptions (per 100 people)	34.0	45.7	31.0
Households with a computer (%)	73.8	72.1	83.2
Households with Internet access at home (%)	65.2	70.1	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	..	..	..
Domestic mobile traffic (minutes/subscription/month)	..	..	195.9
Individuals using the Internet (%)	66.0 ^a	77.0 ^a	81.0
Quality			
Population covered by at least a 3G mobile network (%)	100	100	99
International Internet bandwidth (bit/s per Internet user)	..	..	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	..	..	14.2
Fixed-broadband sub-basket (\$ a month)	..	..	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	..	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	..	14.4
Trade			
ICT goods exports (% of total goods exports)	..	..	9.5
ICT goods imports (% of total goods imports)	..	..	11.2
ICT service exports (% of total service exports)	..	..	32.0
Applications			
Online service index (0-1, 1=highest presence)	..	..	0.67
Secure Internet servers (per million people)	1,927.6	2,284.6	1,194.6

Central African Republic

Sub-Saharan Africa

Low income

	Country data		Low-income group
	2010	2015	2015
Economic and social context			
Population (millions)	4	5	638
Urban population (% of total)	39	40	31
GNI per capita, <i>World Bank Atlas</i> method (\$)	470	320	620
GDP growth, 2005–10 and 2010–15 (avg. annual %)	2.9	–9.8	5.4
Adult literacy rate (% ages 15 and older)	37	37	..
Gross primary, secondary, and tertiary school enrollment (%)	42	..	60
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	..	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	C	C	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	2.4	2.7	..
Telecommunications investment (% of revenue)	56.3	..	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	0.0	0.0	0.9
Mobile-cellular telephone subscriptions (per 100 people)	22.5	20.4	60.0
Fixed-broadband subscriptions (per 100 people)	0.0	..	0.3
Households with a computer (%)	2.1 ^a	3.5 ^a	4.8
Households with Internet access at home (%)	1.6 ^a	2.9 ^a	7.1
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	4.5	2.8	..
Domestic mobile traffic (minutes/subscription/month)	23.8	40.6	48.9
Individuals using the Internet (%)	2.0 ^a	4.6 ^a	9.5
Quality			
Population covered by at least a 3G mobile network (%)	0	23	51
International Internet bandwidth (bit/s per Internet user)	207	100	4,245
Affordability			
Mobile-cellular sub-basket (\$ a month)	12.9	11.5	9.4
Fixed-broadband sub-basket (\$ a month)	1,329.5	488.6	33.6
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	..	8.0
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	..	10.8
Trade			
ICT goods exports (% of total goods exports)	0.2	0.0	..
ICT goods imports (% of total goods imports)	7.7	6.6	3.4
ICT service exports (% of total service exports)	..	..	..
Applications			
Online service index (0–1, 1=highest presence)	0.00	0.04	0.11
Secure Internet servers (per million people)	0.2	0.2	1.5

	Country data		Low-income group
	2010	2015	2015
Economic and social context			
Population (millions)	12	14	638
Urban population (% of total)	22	22	31
GNI per capita, <i>World Bank Atlas</i> method (\$)	910	880	620
GDP growth, 2005–10 and 2010–15 (avg. annual %)	4.5	5.3	5.4
Adult literacy rate (% ages 15 and older)	..	40	..
Gross primary, secondary, and tertiary school enrollment (%)	43	..	60
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Public	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	..
Mobile telephone service	..	..
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	R	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	B	B	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	2.1	2.6	..
Telecommunications investment (% of revenue)	..	..	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	0.4	0.1	0.9
Mobile-cellular telephone subscriptions (per 100 people)	24.5	40.2	60.0
Fixed-broadband subscriptions (per 100 people)	0.0	0.1	0.3
Households with a computer (%)	1.1 ^a	3.5 ^a	4.8
Households with Internet access at home (%)	0.9 ^a	3.1 ^a	7.1
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	3.4	3.5	..
Domestic mobile traffic (minutes/subscription/month)	31.1	41.2	48.9
Individuals using the Internet (%)	1.7 ^a	2.7 ^a	9.5
Quality			
Population covered by at least a 3G mobile network (%)	..	13	51
International Internet bandwidth (bit/s per Internet user)	96	2,575	4,245
Affordability			
Mobile-cellular sub-basket (\$ a month)	..	15.8	9.4
Fixed-broadband sub-basket (\$ a month)	..	500.8	33.6
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	8.5	8.0
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	17.4	10.8
Trade			
ICT goods exports (% of total goods exports)	..	..	..
ICT goods imports (% of total goods imports)	..	..	3.4
ICT service exports (% of total service exports)	..	..	..
Applications			
Online service index (0-1, 1=highest presence)	0.02	0.05	0.11
Secure Internet servers (per million people)	..	0.2	1.5

Channel Islands

Europe & Central Asia

High income

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	0.16	0.16	1,187
Urban population (% of total)	31	31	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	1.5
Adult literacy rate (% ages 15 and older)
Gross primary, secondary, and tertiary school enrollment (%)	95
Sector structure			
Separate telecommunications/ICT regulator	
Status of main fixed-line telephone operator	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	
Mobile telephone service	
Internet service	
Foreign ownership (not allowed, restricted, allowed)	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	2.5
Telecommunications investment (% of revenue)	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	41.2
Mobile-cellular telephone subscriptions (per 100 people)	124.5
Fixed-broadband subscriptions (per 100 people)	31.0
Households with a computer (%)	83.2
Households with Internet access at home (%)	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)
Domestic mobile traffic (minutes/subscription/month)	195.9
Individuals using the Internet (%)	81.0
Quality			
Population covered by at least a 3G mobile network (%)	99
International Internet bandwidth (bit/s per Internet user)	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	14.2
Fixed-broadband sub-basket (\$ a month)	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	14.4
Trade			
ICT goods exports (% of total goods exports)	9.5
ICT goods imports (% of total goods imports)	11.2
ICT service exports (% of total service exports)	32.0
Applications			
Online service index (0-1, 1=highest presence)	0.67
Secure Internet servers (per million people)	1,194.6

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	17	18	1,187
Urban population (% of total)	89	90	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	10,800	14,060	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	3.2	3.8	1.5
Adult literacy rate (% ages 15 and older)	97	97	..
Gross primary, secondary, and tertiary school enrollment (%)	90	96	95
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Private	Private	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	3.8	3.8	2.5
Telecommunications investment (% of revenue)	24.7	19.4	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	20.2	19.2	41.2
Mobile-cellular telephone subscriptions (per 100 people)	115.8	129.5	124.5
Fixed-broadband subscriptions (per 100 people)	10.4	15.2	31.0
Households with a computer (%)	46.8 ^a	63.6 ^a	83.2
Households with Internet access at home (%)	35.0 ^a	59.7 ^a	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	2.3	1.6	..
Domestic mobile traffic (minutes/subscription/month)	87.3	104.4	195.9
Individuals using the Internet (%)	45.0 ^a	64.3 ^a	81.0
Quality			
Population covered by at least a 3G mobile network (%)	..	90 ^a	99
International Internet bandwidth (bit/s per Internet user)	19,099	129,825	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	23.7	20.0	14.2
Fixed-broadband sub-basket (\$ a month)	39.4	26.0	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	20.5	6.1	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	26.5	18.2	14.4
Trade			
ICT goods exports (% of total goods exports)	0.4	0.5	9.5
ICT goods imports (% of total goods imports)	7.9	7.2	11.2
ICT service exports (% of total service exports)	20.2	30.4	32.0
Applications			
Online service index (0-1, 1=highest presence)	0.61	0.82	0.67
Secure Internet servers (per million people)	53.1	145.1	1,194.6

East Asia & Pacific

Upper middle income

	Country data		Upper middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	1,338	1,371	2,594
Urban population (% of total)	49	56	64
GNI per capita, <i>World Bank Atlas</i> method (\$)	4,300	7,820	8,186
GDP growth, 2005–10 and 2010–15 (avg. annual %)	11.1	7.7	4.5
Adult literacy rate (% ages 15 and older)	95	96	..
Gross primary, secondary, and tertiary school enrollment (%)	69	78	81
Sector structure			
Separate telecommunications/ICT regulator	No	No	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	P	P	
Mobile telephone service	..	P	
Internet service	..	C	
Foreign ownership (not allowed, restricted, allowed)	R	R	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	C	No	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	2.2	1.8	2.1
Telecommunications investment (% of revenue)	35.6	34.6	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	21.6	16.5	17.3
Mobile-cellular telephone subscriptions (per 100 people)	63.2	93.2	105.1
Fixed-broadband subscriptions (per 100 people)	9.3	18.6	15.4
Households with a computer (%)	35.4 ^a	49.6 ^a	48.7
Households with Internet access at home (%)	23.7 ^a	54.2 ^a	52.2
Usage			
Int'l. voice traffic, total (minutes/subscriber/month)	1.3	0.8	2.3
Domestic mobile traffic (minutes/subscriber/month)	419.1	189.7	173.1
Individuals using the Internet (%)	34.3	50.3 ^a	52.1
Quality			
Population covered by at least a 3G mobile network (%)	..	57	69
International Internet bandwidth (bit/s per Internet user)	2,356	6,530	26,098
Affordability			
Mobile-cellular sub-basket (\$ a month)	6.0	4.0	8.5
Fixed-broadband sub-basket (\$ a month)	17.8	19.3	15.5
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	4.8	7.7
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	185.4	8.0	11.1
Trade			
ICT goods exports (% of total goods exports)	29.1	25.9	15.7
ICT goods imports (% of total goods imports)	20.4	19.7	14.4
ICT service exports (% of total service exports)	-6.1	28.9	25.7
Applications			
Online service index (0-1, 1=highest presence)	0.37	0.61	0.37
Secure Internet servers (per million people)	1.9	10.1	34.7

Colombia

Latin America & Caribbean

Upper middle income

	Country data		Upper middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	46	48	2,594
Urban population (% of total)	75	76	64
GNI per capita, <i>World Bank Atlas</i> method (\$)	5,540	7,130	8,186
GDP growth, 2005–10 and 2010–15 (avg. annual %)	4.4	4.6	4.5
Adult literacy rate (% ages 15 and older)	93	95	..
Gross primary, secondary, and tertiary school enrollment (%)	89	88	81
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	P	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	4.2	5.0	2.1
Telecommunications investment (% of revenue)	17.8	..	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	15.5	14.4	17.3
Mobile-cellular telephone subscriptions (per 100 people)	95.8	115.7	105.1
Fixed-broadband subscriptions (per 100 people)	5.7	11.2	15.4
Households with a computer (%)	26.1	45.5	48.7
Households with Internet access at home (%)	19.3	41.8	52.2
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	6.2	7.8	2.3
Domestic mobile traffic (minutes/subscription/month)	323.2	364.7	173.1
Individuals using the Internet (%)	36.5	55.9	52.1
Quality			
Population covered by at least a 3G mobile network (%)	100	100	69
International Internet bandwidth (bit/s per Internet user)	10,212	105,050	26,098
Affordability			
Mobile-cellular sub-basket (\$ a month)	22.2	13.3	8.5
Fixed-broadband sub-basket (\$ a month)	35.2	13.5	15.5
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	30.6	15.0	7.7
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	17.8	10.9	11.1
Trade			
ICT goods exports (% of total goods exports)	0.1	0.2	15.7
ICT goods imports (% of total goods imports)	9.6	10.2	14.4
ICT service exports (% of total service exports)	17.1	13.9	25.7
Applications			
Online service index (0-1, 1=highest presence)	0.71	0.79	0.37
Secure Internet servers (per million people)	14.4	57.3	34.7

	Country data		Low-income group
	2010	2015	2015
Economic and social context			
Population (millions)	0.70	0.79	638
Urban population (% of total)	28	28	31
GNI per capita, <i>World Bank Atlas</i> method (\$)	760	790	620
GDP growth, 2005–10 and 2010–15 (avg. annual %)	1.4	2.9	5.4
Adult literacy rate (% ages 15 and older)	..	78	..
Gross primary, secondary, and tertiary school enrollment (%)	..	65	60
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Public	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	M	M	
Mobile telephone service	M	M	
Internet service	M	M	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	B	C	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	4.5	..	..
Telecommunications investment (% of revenue)	13.8	..	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	3.1	3.1	0.9
Mobile-cellular telephone subscriptions (per 100 people)	24.2	54.8	60.0
Fixed-broadband subscriptions (per 100 people)	0.0	0.3	0.3
Households with a computer (%)	5.2 ^a	8.1 ^a	4.8
Households with Internet access at home (%)	2.4 ^a	4.7 ^a	7.1
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	..	..	..
Domestic mobile traffic (minutes/subscription/month)	42.1	..	48.9
Individuals using the Internet (%)	5.1 ^a	7.5 ^a	9.5
Quality			
Population covered by at least a 3G mobile network (%)	..	..	51
International Internet bandwidth (bit/s per Internet user)	4,765	11,664	4,245
Affordability			
Mobile-cellular sub-basket (\$ a month)	13.5	8.9	9.4
Fixed-broadband sub-basket (\$ a month)	80.2	41.7	33.6
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	11.3	8.0
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	16.9	10.8
Trade			
ICT goods exports (% of total goods exports)	0.1	0.0	..
ICT goods imports (% of total goods imports)	1.8	5.9	3.4
ICT service exports (% of total service exports)	22.2	..	..
Applications			
Online service index (0-1, 1=highest presence)	0.03	0.02	0.11
Secure Internet servers (per million people)	1.4	1.3	1.5

Congo, Dem. Rep.

Sub-Saharan Africa

Low income

	Country data		Low-income group
	2010	2015	2015
Economic and social context			
Population (millions)	66	77	638
Urban population (% of total)	40	42	31
GNI per capita, <i>World Bank Atlas</i> method (\$)	300	410	620
GDP growth, 2005–10 and 2010–15 (avg. annual %)	5.4	7.8	5.4
Adult literacy rate (% ages 15 and older)	75	77	..
Gross primary, secondary, and tertiary school enrollment (%)	57	59	60
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Public	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	R	R	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	C	C	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	2.9	3.0	..
Telecommunications investment (% of revenue)	20.3	..	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	0.1	0.0	0.9
Mobile-cellular telephone subscriptions (per 100 people)	19.0	53.0	60.0
Fixed-broadband subscriptions (per 100 people)	0.0	0.0	0.3
Households with a computer (%)	0.7 ^a	2.3 ^a	4.8
Households with Internet access at home (%)	0.6 ^a	2.4 ^a	7.1
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	3.2	2.1	..
Domestic mobile traffic (minutes/subscription/month)	55.1	33.0	48.9
Individuals using the Internet (%)	0.7	3.8 ^a	9.5
Quality			
Population covered by at least a 3G mobile network (%)	0	20	51
International Internet bandwidth (bit/s per Internet user)	246	369	4,245
Affordability			
Mobile-cellular sub-basket (\$ a month)	11.9	9.8	9.4
Fixed-broadband sub-basket (\$ a month)	400.2	397.7	33.6
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	20.0	15.0	8.0
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	50.0	20.0	10.8
Trade			
ICT goods exports (% of total goods exports)	..	..	..
ICT goods imports (% of total goods imports)	..	..	3.4
ICT service exports (% of total service exports)	37.3	10.0	..
Applications			
Online service index (0-1, 1=highest presence)	0.09	0.05	0.11
Secure Internet servers (per million people)	0.1	0.3	1.5

Congo, Rep.

Sub-Saharan Africa

Lower middle income

	Country data		Lower middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	4	5	2,927
Urban population (% of total)	63	65	39
GNI per capita, <i>World Bank Atlas</i> method (\$)	2,230	2,540	2,035
GDP growth, 2005–10 and 2010–15 (avg. annual %)	4.9	4.2	5.4
Adult literacy rate (% ages 15 and older)	79	79	..
Gross primary, secondary, and tertiary school enrollment (%)	67	..	68
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Public	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	..	
Mobile telephone service	C	..	
Internet service	C	..	
Foreign ownership (not allowed, restricted, allowed)	A	R	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	C	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	3.5	..	..
Telecommunications investment (% of revenue)	17.7	..	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	0.3	0.4	3.5
Mobile-cellular telephone subscriptions (per 100 people)	90.4	111.7	90.5
Fixed-broadband subscriptions (per 100 people)	0.0	0.0	1.9
Households with a computer (%)	3.5 ^a	5.2 ^a	19.3
Households with Internet access at home (%)	0.7 ^a	2.3 ^a	24.3
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	8.2	..	7.5
Domestic mobile traffic (minutes/subscription/month)	21.1	..	152.0
Individuals using the Internet (%)	5.0 ^a	7.6 ^a	28.6
Quality			
Population covered by at least a 3G mobile network (%)	..	..	..
International Internet bandwidth (bit/s per Internet user)	117	185	10,372
Affordability			
Mobile-cellular sub-basket (\$ a month)	..	8.2	6.9
Fixed-broadband sub-basket (\$ a month)	..	81.8	14.3
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	24.5	5.0	5.8
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	16.9	10.0
Trade			
ICT goods exports (% of total goods exports)	0.0	0.0	5.7
ICT goods imports (% of total goods imports)	0.9	2.1	7.6
ICT service exports (% of total service exports)	..	..	48.0
Applications			
Online service index (0-1, 1=highest presence)	0.08	0.10	0.26
Secure Internet servers (per million people)	1.2	1.7	7.4

Costa Rica

Latin America & Caribbean

Upper middle income

	Country data		Upper middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	5	5	2,594
Urban population (% of total)	72	77	64
GNI per capita, <i>World Bank Atlas</i> method (\$)	7,100	10,210	8,186
GDP growth, 2005–10 and 2010–15 (avg. annual %)	4.2	3.9	4.5
Adult literacy rate (% ages 15 and older)	97	98	..
Gross primary, secondary, and tertiary school enrollment (%)	90	94	81
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Public	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	P	C	
Mobile telephone service	M	P	
Internet service	P	C	
Foreign ownership (not allowed, restricted, allowed)	R	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	No	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	1.1	3.2	2.1
Telecommunications investment (% of revenue)	68.9	28.9	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	22.7	17.2	17.3
Mobile-cellular telephone subscriptions (per 100 people)	67.0	150.7	105.1
Fixed-broadband subscriptions (per 100 people)	8.5	11.2	15.4
Households with a computer (%)	41.3	53.2	48.7
Households with Internet access at home (%)	24.1	60.2	52.2
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	8.4	8.1	2.3
Domestic mobile traffic (minutes/subscription/month)	100.9	104.0	173.1
Individuals using the Internet (%)	36.5	59.8	52.1
Quality			
Population covered by at least a 3G mobile network (%)	45	99	69
International Internet bandwidth (bit/s per Internet user)	12,657	61,746	26,098
Affordability			
Mobile-cellular sub-basket (\$ a month)	3.4	3.9	8.5
Fixed-broadband sub-basket (\$ a month)	14.7	18.3	15.5
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	17.9	8.2	7.7
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	16.4	11.2	11.1
Trade			
ICT goods exports (% of total goods exports)	19.9	21.9	15.7
ICT goods imports (% of total goods imports)	17.7	18.5	14.4
ICT service exports (% of total service exports)	36.5	44.9	25.7
Applications			
Online service index (0-1, 1=highest presence)	0.30	0.61	0.37
Secure Internet servers (per million people)	110.4	103.6	34.7

Côte d'Ivoire

Sub-Saharan Africa

Lower middle income

	Country data		Lower middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	20	23	2,927
Urban population (% of total)	51	54	39
GNI per capita, <i>World Bank Atlas</i> method (\$)	1,210	1,410	2,035
GDP growth, 2005–10 and 2010–15 (avg. annual %)	2.3	7.2	5.4
Adult literacy rate (% ages 15 and older)	41	43	..
Gross primary, secondary, and tertiary school enrollment (%)	..	52	68
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	M	M	
Mobile telephone service	P	P	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	B	No	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	6.4	5.8	..
Telecommunications investment (% of revenue)	18.2	13.2	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	1.5	1.3	3.5
Mobile-cellular telephone subscriptions (per 100 people)	82.2	119.3	90.5
Fixed-broadband subscriptions (per 100 people)	0.1	0.5	1.9
Households with a computer (%)	1.8 ^a	8.8 ^a	19.3
Households with Internet access at home (%)	1.1 ^a	17.2 ^a	24.3
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	5.9	4.7	7.5
Domestic mobile traffic (minutes/subscription/month)	43.9	67.9	152.0
Individuals using the Internet (%)	2.7 ^a	21.0 ^a	28.6
Quality			
Population covered by at least a 3G mobile network (%)	0	71	..
International Internet bandwidth (bit/s per Internet user)	7,807	5,194	10,372
Affordability			
Mobile-cellular sub-basket (\$ a month)	16.1	14.2	6.9
Fixed-broadband sub-basket (\$ a month)	40.1	34.8	14.3
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	29.4	10.0	5.8
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	29.4	25.4	10.0
Trade			
ICT goods exports (% of total goods exports)	0.2	0.2	5.7
ICT goods imports (% of total goods imports)	3.3	2.5	7.6
ICT service exports (% of total service exports)	28.5	29.9	48.0
Applications			
Online service index (0-1, 1=highest presence)	0.32	0.17	0.26
Secure Internet servers (per million people)	1.0	4.1	7.4

Croatia

Europe & Central Asia

High income

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	4	4	1,187
Urban population (% of total)	58	59	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	13,750	12,690	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	0.3	–0.7	1.5
Adult literacy rate (% ages 15 and older)	99	99	..
Gross primary, secondary, and tertiary school enrollment (%)	84	90	95
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	..	
Mobile telephone service	C	C	
Internet service	C	..	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	4.7	2.8	2.5
Telecommunications investment (% of revenue)	12.6	20.4	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	43.0	34.7	41.2
Mobile-cellular telephone subscriptions (per 100 people)	113.6 ^a	103.8	124.5
Fixed-broadband subscriptions (per 100 people)	19.3	23.2	31.0
Households with a computer (%)	60.0	76.8	83.2
Households with Internet access at home (%)	56.5	76.7	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	11.6	8.5	..
Domestic mobile traffic (minutes/subscription/month)	99.0	158.5	195.9
Individuals using the Internet (%)	56.6	69.8	81.0
Quality			
Population covered by at least a 3G mobile network (%)	79	99	99
International Internet bandwidth (bit/s per Internet user)	22,420	72,381	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	17.1	9.7	14.2
Fixed-broadband sub-basket (\$ a month)	18.2	14.8	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	8.5	5.8	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	11.5	14.4
Trade			
ICT goods exports (% of total goods exports)	2.1	2.0	9.5
ICT goods imports (% of total goods imports)	5.5	4.9	11.2
ICT service exports (% of total service exports)	12.8	13.0	32.0
Applications			
Online service index (0–1, 1=highest presence)	0.42	0.46	0.67
Secure Internet servers (per million people)	168.9	264.4	1,194.6

Latin America & Caribbean

Upper middle income

	Country data		Upper middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	11	11	2,594
Urban population (% of total)	77	77	64
GNI per capita, <i>World Bank Atlas</i> method (\$)	5,570	..	8,186
GDP growth, 2005–10 and 2010–15 (avg. annual %)	5.1	2.9	4.5
Adult literacy rate (% ages 15 and older)	100	100	..
Gross primary, secondary, and tertiary school enrollment (%)	97	81	81
Sector structure			
Separate telecommunications/ICT regulator	No	No	
Status of main fixed-line telephone operator	Private	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	..
Mobile telephone service	M	M	
Internet service	P	P	
Foreign ownership (not allowed, restricted, allowed)	R	R	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	B	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	..	..	2.1
Telecommunications investment (% of revenue)	..	..	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	10.3	11.5	17.3
Mobile-cellular telephone subscriptions (per 100 people)	8.9	29.7	105.1
Fixed-broadband subscriptions (per 100 people)	0.0	0.1	15.4
Households with a computer (%)	3.4 ^a	13.0	48.7
Households with Internet access at home (%)	1.9 ^a	5.6	52.2
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	15.2	12.0	2.3
Domestic mobile traffic (minutes/subscription/month)	29.2	57.7	173.1
Individuals using the Internet (%)	15.9	31.1 ^a	52.1
Quality			
Population covered by at least a 3G mobile network (%)	..	0	69
International Internet bandwidth (bit/s per Internet user)	219	572	26,098
Affordability			
Mobile-cellular sub-basket (\$ a month)	33.9	21.5	8.5
Fixed-broadband sub-basket (\$ a month)	1,752.7	180.0	15.5
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	..	7.7
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	..	11.1
Trade			
ICT goods exports (% of total goods exports)	..	..	15.7
ICT goods imports (% of total goods imports)	..	..	14.4
ICT service exports (% of total service exports)	..	..	25.7
Applications			
Online service index (0-1, 1=highest presence)	0.24	0.23	0.37
Secure Internet servers (per million people)	0.1	0.5	34.7

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	0.15	0.16	1,187
Urban population (% of total)	90	89	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	..	..	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	..	..	1.5
Adult literacy rate (% ages 15 and older)	..	..	..
Gross primary, secondary, and tertiary school enrollment (%)	..	107	95
Sector structure			
Separate telecommunications/ICT regulator	..	..
Status of main fixed-line telephone operator	..	..
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	..
Mobile telephone service	..	..
Internet service	..	..
Foreign ownership (not allowed, restricted, allowed)	..	..
Reg. treatment of VoIP (banned, closed, no framework, allowed)	..	..
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	..	..	2.5
Telecommunications investment (% of revenue)	..	..	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	53.4	38.2	41.2
Mobile-cellular telephone subscriptions (per 100 people)	138.3	114.2	124.5
Fixed-broadband subscriptions (per 100 people)	21.0	24.3	31.0
Households with a computer (%)	62.7	..	83.2
Households with Internet access at home (%)	53.2	..	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	..	..	..
Domestic mobile traffic (minutes/subscription/month)	..	..	195.9
Individuals using the Internet (%)	..	..	81.0
Quality			
Population covered by at least a 3G mobile network (%)	..	82 ^a	99
International Internet bandwidth (bit/s per Internet user)	..	..	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	..	..	14.2
Fixed-broadband sub-basket (\$ a month)	..	..	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	..	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	..	14.4
Trade			
ICT goods exports (% of total goods exports)	..	..	9.5
ICT goods imports (% of total goods imports)	..	..	11.2
ICT service exports (% of total service exports)	21.2	22.2	32.0
Applications			
Online service index (0-1, 1=highest presence)	..	..	0.67
Secure Internet servers (per million people)	39.5	537.8	1,194.6

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	1	1	1,187
Urban population (% of total)	68	67	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	30,910	25,930	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	2.4	-2.4	1.5
Adult literacy rate (% ages 15 and older)	99	99	..
Gross primary, secondary, and tertiary school enrollment (%)	79	83	95
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Public	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	P	P	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	2.7	3.1	2.5
Telecommunications investment (% of revenue)	23.7	10.8	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	37.4	27.8	41.2
Mobile-cellular telephone subscriptions (per 100 people)	93.7	95.4	124.5
Fixed-broadband subscriptions (per 100 people)	17.6	22.4	31.0
Households with a computer (%)	60.5	71.5	83.2
Households with Internet access at home (%)	53.7	71.2	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	52.4	31.5	..
Domestic mobile traffic (minutes/subscription/month)	237.0	214.1	195.9
Individuals using the Internet (%)	53.0	71.7	81.0
Quality			
Population covered by at least a 3G mobile network (%)	85	90	99
International Internet bandwidth (bit/s per Internet user)	51,638	89,791	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	7.7	6.9	14.2
Fixed-broadband sub-basket (\$ a month)	34.8	17.8	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	38.6	22.2	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	23.5	16.6	14.4
Trade			
ICT goods exports (% of total goods exports)	9.2	5.0	9.5
ICT goods imports (% of total goods imports)	4.7	4.3	11.2
ICT service exports (% of total service exports)	8.8	14.6	32.0
Applications			
Online service index (0-1, 1=highest presence)	0.37	0.47	0.67
Secure Internet servers (per million people)	838.1	677.1	1,194.6

Czech Republic

Europe & Central Asia

High income

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	10	11	1,187
Urban population (% of total)	73	73	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	19,210	18,050	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	2.1	1.0	1.5
Adult literacy rate (% ages 15 and older)	..	..	..
Gross primary, secondary, and tertiary school enrollment (%)	87	94	95
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Private	Private	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	..
Mobile telephone service	..	..
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	R	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	3.1	1.8	2.5
Telecommunications investment (% of revenue)	12.4	28.9	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	22.4	18.1	41.2
Mobile-cellular telephone subscriptions (per 100 people)	122.6	129.2	124.5
Fixed-broadband subscriptions (per 100 people)	21.4	27.9	31.0
Households with a computer (%)	64.1	78.9	83.2
Households with Internet access at home (%)	60.5	79.0	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	9.7	10.9	..
Domestic mobile traffic (minutes/subscription/month)	94.5	121.0	195.9
Individuals using the Internet (%)	68.8	81.3	81.0
Quality			
Population covered by at least a 3G mobile network (%)	90	99	99
International Internet bandwidth (bit/s per Internet user)	68,842	119,841	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	28.1	13.3	14.2
Fixed-broadband sub-basket (\$ a month)	31.2	14.2	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	24.4	12.2	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	25.5	14.2	14.4
Trade			
ICT goods exports (% of total goods exports)	15.0	13.4	9.5
ICT goods imports (% of total goods imports)	17.8	14.1	11.2
ICT service exports (% of total service exports)	27.8	31.6	32.0
Applications			
Online service index (0-1, 1=highest presence)	0.45	0.37	0.67
Secure Internet servers (per million people)	319.7	866.8	1,194.6

Denmark

Europe & Central Asia

High income

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	6	6	1,187
Urban population (% of total)	87	88	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	60,820	58,590	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	-0.4	0.5	1.5
Adult literacy rate (% ages 15 and older)	..	..	..
Gross primary, secondary, and tertiary school enrollment (%)	100	105	95
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Private	Private	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	P	P	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	2.3	1.8	2.5
Telecommunications investment (% of revenue)	18.2	18.0	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	47.1	29.9	41.2
Mobile-cellular telephone subscriptions (per 100 people)	115.7	128.3	124.5
Fixed-broadband subscriptions (per 100 people)	38.1	42.5	31.0
Households with a computer (%)	88.0	92.3	83.2
Households with Internet access at home (%)	86.1	91.7	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	18.8	18.1	..
Domestic mobile traffic (minutes/subscription/month)	139.3	142.5	195.9
Individuals using the Internet (%)	88.7	96.3	81.0
Quality			
Population covered by at least a 3G mobile network (%)	70	100	99
International Internet bandwidth (bit/s per Internet user)	142,137	328,018	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	7.9	35.2	14.2
Fixed-broadband sub-basket (\$ a month)	43.9	38.5	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	85.5	44.6	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	17.1	7.3	14.4
Trade			
ICT goods exports (% of total goods exports)	3.7	3.6	9.5
ICT goods imports (% of total goods imports)	7.9	7.3	11.2
ICT service exports (% of total service exports)	..	16.9	32.0
Applications			
Online service index (0-1, 1=highest presence)	0.67	0.66	0.67
Secure Internet servers (per million people)	1,872.1	1,975.9	1,194.6

Djibouti

Middle East & North Africa

Lower middle income

	Country data		Lower middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	0.83	0.89	2,927
Urban population (% of total)	77	77	39
GNI per capita, <i>World Bank Atlas</i> method (\$)	..	..	2,035
GDP growth, 2005–10 and 2010–15 (avg. annual %)	5.0	5.0	5.4
Adult literacy rate (% ages 15 and older)	..	..	..
Gross primary, secondary, and tertiary school enrollment (%)	37	..	68
Sector structure			
Separate telecommunications/ICT regulator	No	No	
Status of main fixed-line telephone operator	Public	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	M	M	
Mobile telephone service	M	M	
Internet service	M	M	
Foreign ownership (not allowed, restricted, allowed)	No	No	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	B	C	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	5.7	..	..
Telecommunications investment (% of revenue)	14.3	..	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	2.2	2.6	3.5
Mobile-cellular telephone subscriptions (per 100 people)	19.9	34.7	90.5
Fixed-broadband subscriptions (per 100 people)	1.0	2.3	1.9
Households with a computer (%)	13.0 ^a	19.1 ^a	19.3
Households with Internet access at home (%)	3.5 ^a	8.1 ^a	24.3
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	124.9	..	7.5
Domestic mobile traffic (minutes/subscription/month)	32.0	..	152.0
Individuals using the Internet (%)	6.5 ^a	11.9 ^a	28.6
Quality			
Population covered by at least a 3G mobile network (%)	0	..	..
International Internet bandwidth (bit/s per Internet user)	15,439	10,255	10,372
Affordability			
Mobile-cellular sub-basket (\$ a month)	13.0	11.3	6.9
Fixed-broadband sub-basket (\$ a month)	41.8	31.6	14.3
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	..	5.8
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	..	10.0
Trade			
ICT goods exports (% of total goods exports)	0.1	..	5.7
ICT goods imports (% of total goods imports)	5.4	..	7.6
ICT service exports (% of total service exports)	4.7	..	48.0
Applications			
Online service index (0-1, 1=highest presence)	0.05	0.06	0.26
Secure Internet servers (per million people)	6.0	9.0	7.4

Dominica

Latin America & Caribbean

Upper middle income

	Country data		Upper middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	0.07	0.07	2,594
Urban population (% of total)	68	70	64
GNI per capita, <i>World Bank Atlas</i> method (\$)	6,700	6,760	8,186
GDP growth, 2005–10 and 2010–15 (avg. annual %)	3.5	1.1	4.5
Adult literacy rate (% ages 15 and older)	..	..	..
Gross primary, secondary, and tertiary school enrollment (%)	..	..	81
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	No	No	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	6.9	..	2.1
Telecommunications investment (% of revenue)	18.5	..	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	21.8	20.8	17.3
Mobile-cellular telephone subscriptions (per 100 people)	148.3	106.3	105.1
Fixed-broadband subscriptions (per 100 people)	11.7	20.9	15.4
Households with a computer (%)	30.0 ^a	50.0 ^a	48.7
Households with Internet access at home (%)	28.0 ^a	58.4 ^a	52.2
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	14.6	..	2.3
Domestic mobile traffic (minutes/subscription/month)	112.1	..	173.1
Individuals using the Internet (%)	47.5	67.6 ^a	52.1
Quality			
Population covered by at least a 3G mobile network (%)	0	60 ^a	69
International Internet bandwidth (bit/s per Internet user)	63,816	193,358	26,098
Affordability			
Mobile-cellular sub-basket (\$ a month)	16.7	21.1	8.5
Fixed-broadband sub-basket (\$ a month)	47.8	32.2	15.5
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	34.1	7.7
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	22.2	11.1
Trade			
ICT goods exports (% of total goods exports)	2.5	..	15.7
ICT goods imports (% of total goods imports)	4.8	..	14.4
ICT service exports (% of total service exports)	22.4	21.0	25.7
Applications			
Online service index (0-1, 1=highest presence)	0.05	0.19	0.37
Secure Internet servers (per million people)	309.1	454.0	34.7

Dominican Republic

Latin America & Caribbean

Upper middle income

	Country data		Upper middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	10	11	2,594
Urban population (% of total)	74	79	64
GNI per capita, <i>World Bank Atlas</i> method (\$)	5,280	6,130	8,186
GDP growth, 2005–10 and 2010–15 (avg. annual %)	5.6	4.9	4.5
Adult literacy rate (% ages 15 and older)	90	92	..
Gross primary, secondary, and tertiary school enrollment (%)	78	78	81
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Private	Private	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	C	P	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	No	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	2.1	2.9	2.1
Telecommunications investment (% of revenue)	17.3	14.3	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	10.1	12.3	17.3
Mobile-cellular telephone subscriptions (per 100 people)	88.8	82.6	105.1
Fixed-broadband subscriptions (per 100 people)	3.9	6.4	15.4
Households with a computer (%)	16.4 ^a	30.1	48.7
Households with Internet access at home (%)	10.2 ^a	23.6	52.2
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	30.2	12.9	2.3
Domestic mobile traffic (minutes/subscription/month)	23.3	30.8	173.1
Individuals using the Internet (%)	31.4 ^a	51.9	52.1
Quality			
Population covered by at least a 3G mobile network (%)	..	99	69
International Internet bandwidth (bit/s per Internet user)	4,451	36,155	26,098
Affordability			
Mobile-cellular sub-basket (\$ a month)	16.9	14.0	8.5
Fixed-broadband sub-basket (\$ a month)	19.0	20.1	15.5
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	105.8	25.0	7.7
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	19.4	17.0	11.1
Trade			
ICT goods exports (% of total goods exports)	2.0	1.0	15.7
ICT goods imports (% of total goods imports)	4.8	3.7	14.4
ICT service exports (% of total service exports)	6.9	5.1	25.7
Applications			
Online service index (0-1, 1=highest presence)	0.37	0.39	0.37
Secure Internet servers (per million people)	15.3	30.7	34.7

Ecuador

Latin America & Caribbean

Upper middle income

	Country data		Upper middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	15	16	2,594
Urban population (% of total)	63	64	64
GNI per capita, <i>World Bank Atlas</i> method (\$)	4,410	6,010	8,186
GDP growth, 2005–10 and 2010–15 (avg. annual %)	3.4	4.4	4.5
Adult literacy rate (% ages 15 and older)	92	95	..
Gross primary, secondary, and tertiary school enrollment (%)	84	89	81
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Public	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	3.4	2.9	2.1
Telecommunications investment (% of revenue)	9.4	10.3	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	13.9	15.5	17.3
Mobile-cellular telephone subscriptions (per 100 people)	98.5	79.4	105.1
Fixed-broadband subscriptions (per 100 people)	1.5	9.2	15.4
Households with a computer (%)	27.0	40.8	48.7
Households with Internet access at home (%)	11.5	32.8	52.2
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	5.3	5.1	2.3
Domestic mobile traffic (minutes/subscription/month)	134.4	78.2	173.1
Individuals using the Internet (%)	29.0	48.9	52.1
Quality			
Population covered by at least a 3G mobile network (%)	66	92	69
International Internet bandwidth (bit/s per Internet user)	7,950	56,561	26,098
Affordability			
Mobile-cellular sub-basket (\$ a month)	17.1	17.2	8.5
Fixed-broadband sub-basket (\$ a month)	22.6	20.2	15.5
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	21.3	20.0	7.7
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	24.0	22.4	11.1
Trade			
ICT goods exports (% of total goods exports)	0.1	0.1	15.7
ICT goods imports (% of total goods imports)	6.3	6.6	14.4
ICT service exports (% of total service exports)	..	..	25.7
Applications			
Online service index (0-1, 1=highest presence)	0.32	0.48	0.37
Secure Internet servers (per million people)	14.1	41.9	34.7

Egypt, Arab Rep.

Middle East & North Africa

Lower middle income

	Country data		Lower middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	82	92	2,927
Urban population (% of total)	43	43	39
GNI per capita, <i>World Bank Atlas</i> method (\$)	2,390	3,340	2,035
GDP growth, 2005–10 and 2010–15 (avg. annual %)	6.2	2.4	5.4
Adult literacy rate (% ages 15 and older)	72	76	..
Gross primary, secondary, and tertiary school enrollment (%)	72	78	68
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	P	P	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	R	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	B	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	3.2	2.2	..
Telecommunications investment (% of revenue)	50.7	33.8	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	12.3	7.4	3.5
Mobile-cellular telephone subscriptions (per 100 people)	90.5	111.0	90.5
Fixed-broadband subscriptions (per 100 people)	1.9	4.5	1.9
Households with a computer (%)	31.3	50.8 ^a	19.3
Households with Internet access at home (%)	25.3	41.8 ^a	24.3
Usage			
Int'l. voice traffic, total (minutes/subscriber/month)	5.6	6.3	7.5
Domestic mobile traffic (minutes/subscriber/month)	122.0	..	152.0
Individuals using the Internet (%)	21.6	35.9	28.6
Quality			
Population covered by at least a 3G mobile network (%)	87	98	..
International Internet bandwidth (bit/s per Internet user)	5,370	11,318	10,372
Affordability			
Mobile-cellular sub-basket (\$ a month)	7.0	4.8	6.9
Fixed-broadband sub-basket (\$ a month)	8.0	6.5	14.3
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	8.3	3.0	5.8
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	4.8	3.3	10.0
Trade			
ICT goods exports (% of total goods exports)	0.1	2.8	5.7
ICT goods imports (% of total goods imports)	3.7	4.2	7.6
ICT service exports (% of total service exports)	8.8	10.5	48.0
Applications			
Online service index (0-1, 1=highest presence)	0.53	0.59	0.26
Secure Internet servers (per million people)	2.3	5.4	7.4

El Salvador

Latin America & Caribbean

Lower middle income

	Country data		Lower middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	6	6	2,927
Urban population (% of total)	64	67	39
GNI per capita, <i>World Bank Atlas</i> method (\$)	3,450	3,940	2,035
GDP growth, 2005–10 and 2010–15 (avg. annual %)	1.2	1.9	5.4
Adult literacy rate (% ages 15 and older)	84	88	..
Gross primary, secondary, and tertiary school enrollment (%)	78	76	68
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	..	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	R	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	No	No	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	3.8	6.4	..
Telecommunications investment (% of revenue)	17.7	16.4	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	16.1	14.7	3.5
Mobile-cellular telephone subscriptions (per 100 people)	123.8	145.3	90.5
Fixed-broadband subscriptions (per 100 people)	2.8	5.5	1.9
Households with a computer (%)	13.3	28.1 ^a	19.3
Households with Internet access at home (%)	8.0	15.0 ^a	24.3
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	27.5	28.1	7.5
Domestic mobile traffic (minutes/subscription/month)	86.9	77.5	152.0
Individuals using the Internet (%)	15.9	26.9 ^a	28.6
Quality			
Population covered by at least a 3G mobile network (%)	..	73	..
International Internet bandwidth (bit/s per Internet user)	2,889	61,959	10,372
Affordability			
Mobile-cellular sub-basket (\$ a month)	12.6	13.8	6.9
Fixed-broadband sub-basket (\$ a month)	24.9	21.2	14.3
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	10.0	14.0	5.8
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	15.0	14.0	10.0
Trade			
ICT goods exports (% of total goods exports)	0.3	0.4	5.7
ICT goods imports (% of total goods imports)	5.4	5.2	7.6
ICT service exports (% of total service exports)	13.2	11.1	48.0
Applications			
Online service index (0-1, 1=highest presence)	0.43	0.54	0.26
Secure Internet servers (per million people)	13.7	25.8	7.4

Equatorial Guinea

Sub-Saharan Africa

Upper middle income

	Country data		Upper middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	0.73	0.85	2,594
Urban population (% of total)	39	40	64
GNI per capita, <i>World Bank Atlas</i> method (\$)	7,880	7,790	8,186
GDP growth, 2005–10 and 2010–15 (avg. annual %)	4.6	-2.1	4.5
Adult literacy rate (% ages 15 and older)	..	95	..
Gross primary, secondary, and tertiary school enrollment (%)	..	..	81
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	P	..	
Mobile telephone service	C	..	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	R	R	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	No	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	..	..	2.1
Telecommunications investment (% of revenue)	..	..	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	1.9	1.4	17.3
Mobile-cellular telephone subscriptions (per 100 people)	57.4	66.7	105.1
Fixed-broadband subscriptions (per 100 people)	0.2	0.5	15.4
Households with a computer (%)	13.0 ^a	19.3 ^a	48.7
Households with Internet access at home (%)	7.0 ^a	8.9 ^a	52.2
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	..	..	2.3
Domestic mobile traffic (minutes/subscription/month)	..	..	173.1
Individuals using the Internet (%)	6.0	21.3 ^a	52.1
Quality			
Population covered by at least a 3G mobile network (%)	..	..	69
International Internet bandwidth (bit/s per Internet user)	4,094	1,320	26,098
Affordability			
Mobile-cellular sub-basket (\$ a month)	..	20.7	8.5
Fixed-broadband sub-basket (\$ a month)	..	101.4	15.5
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	..	7.7
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	..	11.1
Trade			
ICT goods exports (% of total goods exports)	..	..	15.7
ICT goods imports (% of total goods imports)	..	..	14.4
ICT service exports (% of total service exports)	..	..	25.7
Applications			
Online service index (0-1, 1=highest presence)	0.03	0.03	0.37
Secure Internet servers (per million people)	2.7	3.6	34.7

Sub-Saharan Africa

Low income

	Country data		Low-income group
	2010	2015	2015
Economic and social context			
Population (millions)	5	5	638
Urban population (% of total)	21	23	31
GNI per capita, <i>World Bank Atlas</i> method (\$)	380	..	620
GDP growth, 2005-10 and 2010-15 (avg. annual %)	-1.3	..	5.4
Adult literacy rate (% ages 15 and older)	..	74	..
Gross primary, secondary, and tertiary school enrollment (%)	30	..	60
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Public	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	M	M	
Mobile telephone service	P	P	
Internet service	P	P	
Foreign ownership (not allowed, restricted, allowed)	..	..
Reg. treatment of VoIP (banned, closed, no framework, allowed)	B	B	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	3.2	..	..
Telecommunications investment (% of revenue)	10.4	42.9	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	0.9	1.0	0.9
Mobile-cellular telephone subscriptions (per 100 people)	3.2	7.0	60.0
Fixed-broadband subscriptions (per 100 people)	0.0	0.0	0.3
Households with a computer (%)	0.8 ^a	2.8 ^a	4.8
Households with Internet access at home (%)	0.7 ^a	1.7 ^a	7.1
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	77.1	67.4	..
Domestic mobile traffic (minutes/subscription/month)	115.5	11.3	48.9
Individuals using the Internet (%)	0.6 ^a	1.1 ^a	9.5
Quality			
Population covered by at least a 3G mobile network (%)	85	92	51
International Internet bandwidth (bit/s per Internet user)	857	1,391	4,245
Affordability			
Mobile-cellular sub-basket (\$ a month)	12.1	13.0	9.4
Fixed-broadband sub-basket (\$ a month)	204.0	87.3	33.6
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	..	8.0
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	..	10.8
Trade			
ICT goods exports (% of total goods exports)	..	..	..
ICT goods imports (% of total goods imports)	..	..	3.4
ICT service exports (% of total service exports)	..	..	..
Applications			
Online service index (0-1, 1=highest presence)	0.02	0.00	0.11
Secure Internet servers (per million people)	..	..	1.5

Estonia

Europe & Central Asia

High income

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	1	1	1,187
Urban population (% of total)	68	68	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	14,580	18,480	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	-1.6	3.5	1.5
Adult literacy rate (% ages 15 and older)	100	100	..
Gross primary, secondary, and tertiary school enrollment (%)	94	97	95
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	3.2	2.8	2.5
Telecommunications investment (% of revenue)	14.6	16.2	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	37.1	30.3	41.2
Mobile-cellular telephone subscriptions (per 100 people)	127.3	148.7	124.5
Fixed-broadband subscriptions (per 100 people)	26.8	28.7	31.0
Households with a computer (%)	69.2	87.9	83.2
Households with Internet access at home (%)	67.8	87.7	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	9.6	8.3	..
Domestic mobile traffic (minutes/subscription/month)	122.7	125.9	195.9
Individuals using the Internet (%)	74.1	88.4	81.0
Quality			
Population covered by at least a 3G mobile network (%)	95	100	99
International Internet bandwidth (bit/s per Internet user)	23,903	30,924	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	22.3	3.3	14.2
Fixed-broadband sub-basket (\$ a month)	21.0	17.7	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	8.2	2.2	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	7.7	8.3	14.4
Trade			
ICT goods exports (% of total goods exports)	8.0	12.7	9.5
ICT goods imports (% of total goods imports)	9.6	11.5	11.2
ICT service exports (% of total service exports)	25.8	26.7	32.0
Applications			
Online service index (0-1, 1=highest presence)	0.50	0.77	0.67
Secure Internet servers (per million people)	437.1	1,145.6	1,194.6

	Country data		Low-income group
	2010	2015	2015
Economic and social context			
Population (millions)	88	99	638
Urban population (% of total)	17	19	31
GNI per capita, <i>World Bank Atlas</i> method (\$)	380	590	620
GDP growth, 2005–10 and 2010–15 (avg. annual %)	10.7	10.0	5.4
Adult literacy rate (% ages 15 and older)	39	49	..
Gross primary, secondary, and tertiary school enrollment (%)	53	..	60
Sector structure			
Separate telecommunications/ICT regulator	No	No	
Status of main fixed-line telephone operator	Public	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	M	..	
Mobile telephone service	M	M	
Internet service	M	M	
Foreign ownership (not allowed, restricted, allowed)	R	No	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	B	C	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	1.6	1.9	..
Telecommunications investment (% of revenue)	36.2	78.1	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	1.0	0.9	0.9
Mobile-cellular telephone subscriptions (per 100 people)	7.9	42.8	60.0
Fixed-broadband subscriptions (per 100 people)	0.0	0.7	0.3
Households with a computer (%)	1.4 ^a	3.5 ^a	4.8
Households with Internet access at home (%)	1.1 ^a	9.8 ^a	7.1
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	5.4	7.5	..
Domestic mobile traffic (minutes/subscription/month)	111.5	46.5	48.9
Individuals using the Internet (%)	0.8 ^a	11.6 ^a	9.5
Quality			
Population covered by at least a 3G mobile network (%)	4	71	51
International Internet bandwidth (bit/s per Internet user)	5,102	1,959	4,245
Affordability			
Mobile-cellular sub-basket (\$ a month)	4.1	3.1	9.4
Fixed-broadband sub-basket (\$ a month)	294.5	12.1	33.6
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	9.6	8.0
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	16.9	9.6	10.8
Trade			
ICT goods exports (% of total goods exports)	0.2	0.2	..
ICT goods imports (% of total goods imports)	8.4	4.6	3.4
ICT service exports (% of total service exports)	8.9	..	..
Applications			
Online service index (0-1, 1=highest presence)	0.20	0.46	0.11
Secure Internet servers (per million people)	0.1	0.2	1.5

Faroe Islands

Europe & Central Asia

High income

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	0.05	0.05	1,187
Urban population (% of total)	41	42	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	..	..	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	..	..	1.5
Adult literacy rate (% ages 15 and older)	..	..	..
Gross primary, secondary, and tertiary school enrollment (%)	..	..	95
Sector structure			
Separate telecommunications/ICT regulator	..	..
Status of main fixed-line telephone operator	..	..
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	..
Mobile telephone service	..	..
Internet service	..	..
Foreign ownership (not allowed, restricted, allowed)	..	..
Reg. treatment of VoIP (banned, closed, no framework, allowed)	..	..
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	..	..	2.5
Telecommunications investment (% of revenue)	..	..	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	40.7	34.3	41.2
Mobile-cellular telephone subscriptions (per 100 people)	119.9	127.3	124.5
Fixed-broadband subscriptions (per 100 people)	32.6	36.4	31.0
Households with a computer (%)	..	..	83.2
Households with Internet access at home (%)	..	..	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	..	..	..
Domestic mobile traffic (minutes/subscription/month)	82.1	..	195.9
Individuals using the Internet (%)	75.2	94.2 ^a	81.0
Quality			
Population covered by at least a 3G mobile network (%)	..	..	99
International Internet bandwidth (bit/s per Internet user)	..	..	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	..	..	14.2
Fixed-broadband sub-basket (\$ a month)	..	..	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	..	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	..	14.4
Trade			
ICT goods exports (% of total goods exports)	0.0	..	9.5
ICT goods imports (% of total goods imports)	4.3	..	11.2
ICT service exports (% of total service exports)	23.0	..	32.0
Applications			
Online service index (0-1, 1=highest presence)	..	..	0.67
Secure Internet servers (per million people)	926.6	1,656.6	1,194.6

East Asia & Pacific

Upper middle income

	Country data		Upper middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	0.86	0.89	2,594
Urban population (% of total)	52	54	64
GNI per capita, <i>World Bank Atlas</i> method (\$)	3,650	4,800	8,186
GDP growth, 2005–10 and 2010–15 (avg. annual %)	0.4	3.3	4.5
Adult literacy rate (% ages 15 and older)	..	..	..
Gross primary, secondary, and tertiary school enrollment (%)	..	..	81
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	..	..	2.1
Telecommunications investment (% of revenue)	..	..	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	15.1	8.1	17.3
Mobile-cellular telephone subscriptions (per 100 people)	81.1	108.2	105.1
Fixed-broadband subscriptions (per 100 people)	2.7	1.4	15.4
Households with a computer (%)	26.8 ^a	39.2 ^a	48.7
Households with Internet access at home (%)	18.8 ^a	31.3 ^a	52.2
Usage			
Int'l. voice traffic, total (minutes/subscriber/month)	..	..	2.3
Domestic mobile traffic (minutes/subscriber/month)	..	..	173.1
Individuals using the Internet (%)	20.0 ^a	46.3 ^a	52.1
Quality			
Population covered by at least a 3G mobile network (%)	..	68	69
International Internet bandwidth (bit/s per Internet user)	7,553	27,399	26,098
Affordability			
Mobile-cellular sub-basket (\$ a month)	18.8	17.0	8.5
Fixed-broadband sub-basket (\$ a month)	18.3	16.8	15.5
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	14.0	8.6	7.7
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	22.8	12.0	11.1
Trade			
ICT goods exports (% of total goods exports)	0.2	4.3	15.7
ICT goods imports (% of total goods imports)	3.9	5.7	14.4
ICT service exports (% of total service exports)	2.9	4.4	25.7
Applications			
Online service index (0-1, 1=highest presence)	0.18	0.39	0.37
Secure Internet servers (per million people)	30.2	51.6	34.7

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	5	5	1,187
Urban population (% of total)	84	84	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	49,330	46,360	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	0.4	–0.2	1.5
Adult literacy rate (% ages 15 and older)	..	..	..
Gross primary, secondary, and tertiary school enrollment (%)	101	115	95
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	2.0	1.7	2.5
Telecommunications investment (% of revenue)	16.7	15.5	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	23.3	9.8	41.2
Mobile-cellular telephone subscriptions (per 100 people)	156.3	135.5	124.5
Fixed-broadband subscriptions (per 100 people)	29.1	31.7	31.0
Households with a computer (%)	82.0	89.3	83.2
Households with Internet access at home (%)	80.5	89.9	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	..	..	..
Domestic mobile traffic (minutes/subscription/month)	177.5	..	195.9
Individuals using the Internet (%)	86.9	92.7	81.0
Quality			
Population covered by at least a 3G mobile network (%)	95	100	99
International Internet bandwidth (bit/s per Internet user)	107,204	208,526	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	13.1	11.0	14.2
Fixed-broadband sub-basket (\$ a month)	35.4	29.8	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	8.7	7.3	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	12.7	16.5	14.4
Trade			
ICT goods exports (% of total goods exports)	6.4	2.6	9.5
ICT goods imports (% of total goods imports)	8.2	6.2	11.2
ICT service exports (% of total service exports)	39.6	49.5	32.0
Applications			
Online service index (0–1, 1=highest presence)	0.48	0.77	0.67
Secure Internet servers (per million people)	1,245.5	1,781.6	1,194.6

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	65	67	1,187
Urban population (% of total)	78	80	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	43,790	40,580	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	0.5	0.7	1.5
Adult literacy rate (% ages 15 and older)	..	..	..
Gross primary, secondary, and tertiary school enrollment (%)	94	96	95
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	R	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	2.2	1.6	2.5
Telecommunications investment (% of revenue)	14.5	20.5	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	64.2	59.9	41.2
Mobile-cellular telephone subscriptions (per 100 people)	91.4	102.6	124.5
Fixed-broadband subscriptions (per 100 people)	33.7	41.3	31.0
Households with a computer (%)	76.4	81.5	83.2
Households with Internet access at home (%)	73.6	82.6	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	19.5	..	..
Domestic mobile traffic (minutes/subscription/month)	148.5	188.4	195.9
Individuals using the Internet (%)	77.3	84.7	81.0
Quality			
Population covered by at least a 3G mobile network (%)	91	99	99
International Internet bandwidth (bit/s per Internet user)	71,626	129,973	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	49.5	33.7	14.2
Fixed-broadband sub-basket (\$ a month)	30.1	23.3	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	15.4	22.2	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	28.3	11.1	14.4
Trade			
ICT goods exports (% of total goods exports)	4.4	3.9	9.5
ICT goods imports (% of total goods imports)	7.3	6.2	11.2
ICT service exports (% of total service exports)	34.4	40.5	32.0
Applications			
Online service index (0-1, 1=highest presence)	0.68	1.00	0.67
Secure Internet servers (per million people)	296.4	809.3	1,194.6

French Polynesia

East Asia & Pacific

High income

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	0.27	0.28	1,187
Urban population (% of total)	56	56	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	..	..	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	..	..	1.5
Adult literacy rate (% ages 15 and older)	..	..	..
Gross primary, secondary, and tertiary school enrollment (%)	..	..	95
Sector structure			
Separate telecommunications/ICT regulator	..	..
Status of main fixed-line telephone operator	..	..
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	..
Mobile telephone service	..	..
Internet service	..	..
Foreign ownership (not allowed, restricted, allowed)	..	..
Reg. treatment of VoIP (banned, closed, no framework, allowed)	..	..
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	..	..	2.5
Telecommunications investment (% of revenue)	..	..	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	20.5	21.2	41.2
Mobile-cellular telephone subscriptions (per 100 people)	80.5	94.9	124.5
Fixed-broadband subscriptions (per 100 people)	12.0	18.4	31.0
Households with a computer (%)	..	..	83.2
Households with Internet access at home (%)	..	..	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	9.4	5.3	..
Domestic mobile traffic (minutes/subscription/month)	103.8	114.2	195.9
Individuals using the Internet (%)	49.0	64.6 ^a	81.0
Quality			
Population covered by at least a 3G mobile network (%)	45	85	99
International Internet bandwidth (bit/s per Internet user)	13,323	..	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	..	..	14.2
Fixed-broadband sub-basket (\$ a month)	..	..	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	..	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	..	14.4
Trade			
ICT goods exports (% of total goods exports)	0.8	0.9	9.5
ICT goods imports (% of total goods imports)	6.0	5.0	11.2
ICT service exports (% of total service exports)	9.9	4.9	32.0
Applications			
Online service index (0-1, 1=highest presence)	..	..	0.67
Secure Internet servers (per million people)	85.8	180.4	1,194.6

Sub-Saharan Africa

Upper middle income

	Country data		Upper middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	2	2	2,594
Urban population (% of total)	86	87	64
GNI per capita, <i>World Bank Atlas</i> method (\$)	8,250	9,210	8,186
GDP growth, 2005–10 and 2010–15 (avg. annual %)	0.9	5.2	4.5
Adult literacy rate (% ages 15 and older)	82	83	..
Gross primary, secondary, and tertiary school enrollment (%)	..	..	81
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	No	R	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	B	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	..	..	2.1
Telecommunications investment (% of revenue)	..	..	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	2.0	1.1	17.3
Mobile-cellular telephone subscriptions (per 100 people)	103.5	168.9	105.1
Fixed-broadband subscriptions (per 100 people)	0.3	0.6	15.4
Households with a computer (%)	7.6 ^a	13.7 ^a	48.7
Households with Internet access at home (%)	6.0 ^a	18.0 ^a	52.2
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	1.6	..	2.3
Domestic mobile traffic (minutes/subscription/month)	..	..	173.1
Individuals using the Internet (%)	7.2 ^a	23.5 ^a	52.1
Quality			
Population covered by at least a 3G mobile network (%)	..	95	69
International Internet bandwidth (bit/s per Internet user)	6,888	8,505	26,098
Affordability			
Mobile-cellular sub-basket (\$ a month)	23.3	16.7	8.5
Fixed-broadband sub-basket (\$ a month)	31.8	23.7	15.5
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	16.1	7.7
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	23.7	11.1
Trade			
ICT goods exports (% of total goods exports)	0.0	..	15.7
ICT goods imports (% of total goods imports)	3.5	..	14.4
ICT service exports (% of total service exports)	..	..	25.7
Applications			
Online service index (0-1, 1=highest presence)	0.08	0.09	0.37
Secure Internet servers (per million people)	7.8	9.9	34.7

Gambia, The

Sub-Saharan Africa

Low income

	Country data		Low-income group
	2010	2015	2015
Economic and social context			
Population (millions)	2	2	638
Urban population (% of total)	56	60	31
GNI per capita, <i>World Bank Atlas</i> method (\$)	590	460	620
GDP growth, 2005–10 and 2010–15 (avg. annual %)	4.9	2.4	5.4
Adult literacy rate (% ages 15 and older)	..	56	..
Gross primary, secondary, and tertiary school enrollment (%)	56	..	60
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Public	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	M	M	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	B	B	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	..	9.2	..
Telecommunications investment (% of revenue)	..	8.0	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	2.9	2.3	0.9
Mobile-cellular telephone subscriptions (per 100 people)	88.0	131.3	60.0
Fixed-broadband subscriptions (per 100 people)	0.0	0.2	0.3
Households with a computer (%)	5.7 ^a	8.9 ^a	4.8
Households with Internet access at home (%)	3.8 ^a	13.3 ^a	7.1
Usage			
Int'l. voice traffic, total (minutes/subscriber/month)	..	6.7	..
Domestic mobile traffic (minutes/subscriber/month)	..	42.3	48.9
Individuals using the Internet (%)	9.2	17.1 ^a	9.5
Quality			
Population covered by at least a 3G mobile network (%)	50 ^a	86 ^a	51
International Internet bandwidth (bit/s per Internet user)	1,093	13,342	4,245
Affordability			
Mobile-cellular sub-basket (\$ a month)	6.0	5.1	9.4
Fixed-broadband sub-basket (\$ a month)	280.3	21.0	33.6
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	4.1	8.0
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	..	10.8
Trade			
ICT goods exports (% of total goods exports)	0.1	0.1	..
ICT goods imports (% of total goods imports)	1.4	2.2	3.4
ICT service exports (% of total service exports)	..	..	..
Applications			
Online service index (0-1, 1=highest presence)	0.08	0.20	0.11
Secure Internet servers (per million people)	3.0	5.5	1.5

Europe & Central Asia

Upper middle income

	Country data		Upper middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	4	4	2,594
Urban population (% of total)	53	54	64
GNI per capita, <i>World Bank Atlas</i> method (\$)	3,000	4,160	8,186
GDP growth, 2005–10 and 2010–15 (avg. annual %)	4.6	4.8	4.5
Adult literacy rate (% ages 15 and older)	..	100	..
Gross primary, secondary, and tertiary school enrollment (%)	73	83	81
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Private	Private	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	3.6	2.5	2.1
Telecommunications investment (% of revenue)	15.9	25.5	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	25.3	22.1	17.3
Mobile-cellular telephone subscriptions (per 100 people)	90.6	129.0	105.1
Fixed-broadband subscriptions (per 100 people)	4.2	14.6	15.4
Households with a computer (%)	18.2	49.5	48.7
Households with Internet access at home (%)	16.6	44.8	52.2
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	7.7	7.7	2.3
Domestic mobile traffic (minutes/subscription/month)	65.3	133.7	173.1
Individuals using the Internet (%)	26.9	45.2	52.1
Quality			
Population covered by at least a 3G mobile network (%)	..	99	69
International Internet bandwidth (bit/s per Internet user)	21,177	101,468	26,098
Affordability			
Mobile-cellular sub-basket (\$ a month)	11.6	4.5	8.5
Fixed-broadband sub-basket (\$ a month)	8.4	11.9	15.5
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	6.1	1.3	7.7
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	9.1	2.2	11.1
Trade			
ICT goods exports (% of total goods exports)	0.2	0.6	15.7
ICT goods imports (% of total goods imports)	5.3	5.5	14.4
ICT service exports (% of total service exports)	4.5	3.3	25.7
Applications			
Online service index (0-1, 1=highest presence)	0.25	0.60	0.37
Secure Internet servers (per million people)	13.5	63.3	34.7

Germany

Europe & Central Asia

High income

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	82	81	1,187
Urban population (% of total)	74	75	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	44,790	45,790	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	0.8	1.3	1.5
Adult literacy rate (% ages 15 and older)	..	..	..
Gross primary, secondary, and tertiary school enrollment (%)	..	96	95
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	1.5	1.4	2.5
Telecommunications investment (% of revenue)	15.3	17.6	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	63.7	54.9	41.2
Mobile-cellular telephone subscriptions (per 100 people)	106.5	116.7	124.5
Fixed-broadband subscriptions (per 100 people)	31.5	37.2	31.0
Households with a computer (%)	85.7	91.0	83.2
Households with Internet access at home (%)	82.5	90.3	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	..	..	..
Domestic mobile traffic (minutes/subscription/month)	96.5	125.8	195.9
Individuals using the Internet (%)	82.0	87.6	81.0
Quality			
Population covered by at least a 3G mobile network (%)	89	96	99
International Internet bandwidth (bit/s per Internet user)	73,449	117,540	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	22.3	11.1	14.2
Fixed-broadband sub-basket (\$ a month)	39.4	38.8	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	12.8	11.0	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	25.7	16.0	14.4
Trade			
ICT goods exports (% of total goods exports)	5.1	4.5	9.5
ICT goods imports (% of total goods imports)	9.2	7.7	11.2
ICT service exports (% of total service exports)	36.6	39.5	32.0
Applications			
Online service index (0-1, 1=highest presence)	0.55	0.67	0.67
Secure Internet servers (per million people)	872.0	1,762.7	1,194.6

Sub-Saharan Africa

Lower Middle income

	Country data		Lower middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	24	27	2,927
Urban population (% of total)	51	54	39
GNI per capita, <i>World Bank Atlas</i> method (\$)	1,260	1,480	2,035
GDP growth, 2005–10 and 2010–15 (avg. annual %)	6.5	7.4	5.4
Adult literacy rate (% ages 15 and older)	71	77	..
Gross primary, secondary, and tertiary school enrollment (%)	65	69	68
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	P	P	
Mobile telephone service	P	..	
Internet service	C	..	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	C	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	3.6	..	..
Telecommunications investment (% of revenue)	65.5	..	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	1.1	1.0	3.5
Mobile-cellular telephone subscriptions (per 100 people)	71.9	129.7	90.5
Fixed-broadband subscriptions (per 100 people)	0.2	0.3	1.9
Households with a computer (%)	7.9	43.5 ^a	19.3
Households with Internet access at home (%)	5.0 ^a	34.1 ^a	24.3
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	8.0	4.2	7.5
Domestic mobile traffic (minutes/subscription/month)	89.5	..	152.0
Individuals using the Internet (%)	7.8	23.5 ^a	28.6
Quality			
Population covered by at least a 3G mobile network (%)	36	75	..
International Internet bandwidth (bit/s per Internet user)	90	2,841	10,372
Affordability			
Mobile-cellular sub-basket (\$ a month)	7.7	2.9	6.9
Fixed-broadband sub-basket (\$ a month)	31.5	18.3	14.3
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	8.9	5.2	5.8
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	11.1	5.2	10.0
Trade			
ICT goods exports (% of total goods exports)	0.0	0.2	5.7
ICT goods imports (% of total goods imports)	7.1	3.8	7.6
ICT service exports (% of total service exports)	..	..	48.0
Applications			
Online service index (0-1, 1=highest presence)	0.15	0.31	0.26
Secure Internet servers (per million people)	1.7	5.0	7.4

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	0.03	0.03	1,187
Urban population (% of total)	100	100	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	..	..	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	..	..	1.5
Adult literacy rate (% ages 15 and older)	..	..	..
Gross primary, secondary, and tertiary school enrollment (%)	..	..	95
Sector structure			
Separate telecommunications/ICT regulator	..	..
Status of main fixed-line telephone operator	..	..
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	..
Mobile telephone service	..	..
Internet service	..	..
Foreign ownership (not allowed, restricted, allowed)	..	..
Reg. treatment of VoIP (banned, closed, no framework, allowed)	..	..
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	..	..	2.5
Telecommunications investment (% of revenue)	..	..	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	82.0	79.8	41.2
Mobile-cellular telephone subscriptions (per 100 people)	102.6	129.5	124.5
Fixed-broadband subscriptions (per 100 people)	35.7	44.3	31.0
Households with a computer (%)	..	..	83.2
Households with Internet access at home (%)	..	..	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	44.1	..	..
Domestic mobile traffic (minutes/subscription/month)	34.1	..	195.9
Individuals using the Internet (%)	65.0	..	81.0
Quality			
Population covered by at least a 3G mobile network (%)	..	100	99
International Internet bandwidth (bit/s per Internet user)	110,304	..	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	..	..	14.2
Fixed-broadband sub-basket (\$ a month)	..	..	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	..	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	..	14.4
Trade			
ICT goods exports (% of total goods exports)	..	..	9.5
ICT goods imports (% of total goods imports)	..	..	11.2
ICT service exports (% of total service exports)	..	..	32.0
Applications			
Online service index (0-1, 1=highest presence)	..	..	0.67
Secure Internet servers (per million people)	12,690.4	11,002.5	1,194.6

Europe & Central Asia

High income

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	11	11	1,187
Urban population (% of total)	76	78	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	27,680	20,290	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	-0.4	-3.7	1.5
Adult literacy rate (% ages 15 and older)	..	95	..
Gross primary, secondary, and tertiary school enrollment (%)	103	106	95
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	P	P	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	3.1	3.0	2.5
Telecommunications investment (% of revenue)	15.5	17.5	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	53.1	46.5	41.2
Mobile-cellular telephone subscriptions (per 100 people)	110.6	114.0	124.5
Fixed-broadband subscriptions (per 100 people)	20.3	30.7	31.0
Households with a computer (%)	53.4	68.6	83.2
Households with Internet access at home (%)	46.4	68.1	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	12.8	13.8	..
Domestic mobile traffic (minutes/subscription/month)	45.0	176.3	195.9
Individuals using the Internet (%)	44.4	66.8	81.0
Quality			
Population covered by at least a 3G mobile network (%)	96	99	99
International Internet bandwidth (bit/s per Internet user)	31,694	100,861	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	39.2	7.8	14.2
Fixed-broadband sub-basket (\$ a month)	18.9	19.5	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	34.7	16.6	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	19.3	16.6	14.4
Trade			
ICT goods exports (% of total goods exports)	2.0	2.4	9.5
ICT goods imports (% of total goods imports)	4.8	4.2	11.2
ICT service exports (% of total service exports)	7.6	8.1	32.0
Applications			
Online service index (0-1, 1=highest presence)	0.36	0.61	0.67
Secure Internet servers (per million people)	126.4	192.0	1,194.6

Greenland

Europe & Central Asia

High income

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	0.06	0.06	1,187
Urban population (% of total)	84	86	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	19,290	..	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	1.5	..	1.5
Adult literacy rate (% ages 15 and older)	..	..	..
Gross primary, secondary, and tertiary school enrollment (%)	..	..	95
Sector structure			
Separate telecommunications/ICT regulator	..	..
Status of main fixed-line telephone operator	..	..
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	..
Mobile telephone service	..	..
Internet service	..	..
Foreign ownership (not allowed, restricted, allowed)	..	..
Reg. treatment of VoIP (banned, closed, no framework, allowed)	..	..
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	..	..	2.5
Telecommunications investment (% of revenue)	..	..	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	38.6	27.9	41.2
Mobile-cellular telephone subscriptions (per 100 people)	101.4	106.5	124.5
Fixed-broadband subscriptions (per 100 people)	21.9	17.5	31.0
Households with a computer (%)	..	..	83.2
Households with Internet access at home (%)	66.6 ^a	..	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	..	..	..
Domestic mobile traffic (minutes/subscription/month)	95.0	..	195.9
Individuals using the Internet (%)	63.0	67.6 ^a	81.0
Quality			
Population covered by at least a 3G mobile network (%)	25	..	99
International Internet bandwidth (bit/s per Internet user)	12,632	..	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	..	..	14.2
Fixed-broadband sub-basket (\$ a month)	..	..	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	..	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	..	14.4
Trade			
ICT goods exports (% of total goods exports)	0.1	0.0	9.5
ICT goods imports (% of total goods imports)	6.1	4.5	11.2
ICT service exports (% of total service exports)	..	..	32.0
Applications			
Online service index (0-1, 1=highest presence)	..	..	0.67
Secure Internet servers (per million people)	1,089.5	1,318.7	1,194.6

Latin America & Caribbean

Upper middle income

	Country data		Upper middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	0.10	0.11	2,594
Urban population (% of total)	36	36	64
GNI per capita, <i>World Bank Atlas</i> method (\$)	7,050	8,430	8,186
GDP growth, 2005–10 and 2010–15 (avg. annual %)	-0.6	2.2	4.5
Adult literacy rate (% ages 15 and older)	..	..	..
Gross primary, secondary, and tertiary school enrollment (%)	91	..	81
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	..
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	No	No	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	7.0	6.7	2.1
Telecommunications investment (% of revenue)	13.7	11.9	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	27.1	25.3	17.3
Mobile-cellular telephone subscriptions (per 100 people)	116.5	112.3	105.1
Fixed-broadband subscriptions (per 100 people)	13.8	18.5	15.4
Households with a computer (%)	35.0 ^a	48.1 ^a	48.7
Households with Internet access at home (%)	28.0 ^a	42.8 ^a	52.2
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	46.6	42.3	2.3
Domestic mobile traffic (minutes/subscription/month)	200.9	100.4	173.1
Individuals using the Internet (%)	27.0 ^a	53.8 ^a	52.1
Quality			
Population covered by at least a 3G mobile network (%)	..	100	69
International Internet bandwidth (bit/s per Internet user)	123,838	191,597	26,098
Affordability			
Mobile-cellular sub-basket (\$ a month)	16.7	26.2	8.5
Fixed-broadband sub-basket (\$ a month)	29.3	28.3	15.5
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	22.2	7.7
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	17.0	11.1
Trade			
ICT goods exports (% of total goods exports)	2.0	..	15.7
ICT goods imports (% of total goods imports)	4.4	..	14.4
ICT service exports (% of total service exports)	15.5	13.9	25.7
Applications			
Online service index (0-1, 1=highest presence)	0.19	0.35	0.37
Secure Internet servers (per million people)	86.0	46.8	34.7

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	0.16	0.17	1,187
Urban population (% of total)	94	95	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	1.5
Adult literacy rate (% ages 15 and older)	..	100	..
Gross primary, secondary, and tertiary school enrollment (%)	95
Sector structure			
Separate telecommunications/ICT regulator	
Status of main fixed-line telephone operator	
Level of competition (competition, partial comp., monopoly)	
International gateway(s)	
Mobile telephone service	
Internet service	
Foreign ownership (not allowed, restricted, allowed)	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	2.5
Telecommunications investment (% of revenue)	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	41.1	40.0	41.2
Mobile-cellular telephone subscriptions (per 100 people)	124.5
Fixed-broadband subscriptions (per 100 people)	1.9	1.8	31.0
Households with a computer (%)	83.2
Households with Internet access at home (%)	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)
Domestic mobile traffic (minutes/subscription/month)	195.9
Individuals using the Internet (%)	54.0 ^a	73.1 ^a	81.0
Quality			
Population covered by at least a 3G mobile network (%)	99
International Internet bandwidth (bit/s per Internet user)	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	14.2
Fixed-broadband sub-basket (\$ a month)	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	14.4
Trade			
ICT goods exports (% of total goods exports)	9.5
ICT goods imports (% of total goods imports)	11.2
ICT service exports (% of total service exports)	32.0
Applications			
Online service index (0-1, 1=highest presence)	0.67
Secure Internet servers (per million people)	244.6	206.0	1,194.6

Guatemala

Latin America & Caribbean

Lower middle income

	Country data		Lower middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	15	16	2,927
Urban population (% of total)	49	52	39
GNI per capita, <i>World Bank Atlas</i> method (\$)	2,680	3,590	2,035
GDP growth, 2005–10 and 2010–15 (avg. annual %)	3.6	3.8	5.4
Adult literacy rate (% ages 15 and older)	78	79	..
Gross primary, secondary, and tertiary school enrollment (%)	..	69	68
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Private	Private	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	R	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	No	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	..	..	..
Telecommunications investment (% of revenue)	..	..	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	10.4	10.6	3.5
Mobile-cellular telephone subscriptions (per 100 people)	126.0	111.5	90.5
Fixed-broadband subscriptions (per 100 people)	1.8	2.8	1.9
Households with a computer (%)	14.2 ^a	22.2 ^a	19.3
Households with Internet access at home (%)	4.7 ^a	17.4 ^a	24.3
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	15.1	22.6	7.5
Domestic mobile traffic (minutes/subscription/month)	40.2	111.9	152.0
Individuals using the Internet (%)	10.5 ^a	27.1 ^a	28.6
Quality			
Population covered by at least a 3G mobile network (%)	53	92	..
International Internet bandwidth (bit/s per Internet user)	3,984	24,676	10,372
Affordability			
Mobile-cellular sub-basket (\$ a month)	7.8	27.4	6.9
Fixed-broadband sub-basket (\$ a month)	32.5	19.5	14.3
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	18.5	12.9	5.8
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	18.5	19.5	10.0
Trade			
ICT goods exports (% of total goods exports)	0.9	0.2	5.7
ICT goods imports (% of total goods imports)	6.8	5.9	7.6
ICT service exports (% of total service exports)	18.6	21.5	48.0
Applications			
Online service index (0-1, 1=highest presence)	0.31	0.15	0.26
Secure Internet servers (per million people)	9.7	20.7	7.4

Guinea

Sub-Saharan Africa

Low income

	Country data		Low-income group
	2010	2015	2015
Economic and social context			
Population (millions)	11	13	638
Urban population (% of total)	35	37	31
GNI per capita, <i>World Bank Atlas</i> method (\$)	390	470	620
GDP growth, 2005–10 and 2010–15 (avg. annual %)	2.2	2.1	5.4
Adult literacy rate (% ages 15 and older)	25	30	..
Gross primary, secondary, and tertiary school enrollment (%)	51	53	60
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	..	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	R	..	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	No	C	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	..	..	..
Telecommunications investment (% of revenue)	..	..	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	0.2	0.0	0.9
Mobile-cellular telephone subscriptions (per 100 people)	36.8	87.2	60.0
Fixed-broadband subscriptions (per 100 people)	0.0	0.0	0.3
Households with a computer (%)	1.5 ^a	2.6 ^a	4.8
Households with Internet access at home (%)	1.0 ^a	3.7 ^a	7.1
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	..	..	..
Domestic mobile traffic (minutes/subscription/month)	..	..	48.9
Individuals using the Internet (%)	1.0 ^a	4.7 ^a	9.5
Quality			
Population covered by at least a 3G mobile network (%)	..	39	51
International Internet bandwidth (bit/s per Internet user)	1,379	930	4,245
Affordability			
Mobile-cellular sub-basket (\$ a month)	3.1	5.4	9.4
Fixed-broadband sub-basket (\$ a month)	502.5	51.1	33.6
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	3.3	8.0
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	9.4	10.8
Trade			
ICT goods exports (% of total goods exports)	0.0	0.0	..
ICT goods imports (% of total goods imports)	5.2	3.2	3.4
ICT service exports (% of total service exports)	53.7	69.3	..
Applications			
Online service index (0-1, 1=highest presence)	0.03	0.00	0.11
Secure Internet servers (per million people)	0.4	0.5	1.5

Guinea-Bissau

Sub-Saharan Africa

Low income

	Country data		Low-income group
	2010	2015	2015
Economic and social context			
Population (millions)	2	2	638
Urban population (% of total)	45	49	31
GNI per capita, <i>World Bank Atlas</i> method (\$)	540	590	620
GDP growth, 2005–10 and 2010–15 (avg. annual %)	3.3	2.3	5.4
Adult literacy rate (% ages 15 and older)	..	60	..
Gross primary, secondary, and tertiary school enrollment (%)	..	..	60
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	P	P	
Mobile telephone service	P	P	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	B	B	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	..	..	..
Telecommunications investment (% of revenue)	..	..	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	0.0	0.0	0.9
Mobile-cellular telephone subscriptions (per 100 people)	42.7	69.3	60.0
Fixed-broadband subscriptions (per 100 people)	0.1	0.1	0.3
Households with a computer (%)	1.9 ^a	2.7 ^a	4.8
Households with Internet access at home (%)	1.3 ^a	2.1 ^a	7.1
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	..	..	..
Domestic mobile traffic (minutes/subscription/month)	..	..	48.9
Individuals using the Internet (%)	2.5 ^a	3.5 ^a	9.5
Quality			
Population covered by at least a 3G mobile network (%)	..	..	51
International Internet bandwidth (bit/s per Internet user)	2,573	2,923	4,245
Affordability			
Mobile-cellular sub-basket (\$ a month)	..	12.3	9.4
Fixed-broadband sub-basket (\$ a month)	..	49.0	33.6
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	58.3	8.0
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	58.3	10.8
Trade			
ICT goods exports (% of total goods exports)	..	..	..
ICT goods imports (% of total goods imports)	..	..	3.4
ICT service exports (% of total service exports)	55.4	52.3	..
Applications			
Online service index (0-1, 1=highest presence)	0.02	0.01	0.11
Secure Internet servers (per million people)	0.6	1.6	1.5

Guyana

Latin America & Caribbean

Upper middle income

	Country data		Upper middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	0.75	0.77	2,594
Urban population (% of total)	28	29	64
GNI per capita, <i>World Bank Atlas</i> method (\$)	2,900	4,090	8,186
GDP growth, 2005–10 and 2010–15 (avg. annual %)	4.2	4.5	4.5
Adult literacy rate (% ages 15 and older)	85	88	..
Gross primary, secondary, and tertiary school enrollment (%)	70	..	81
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	M	M	
Mobile telephone service	P	P	
Internet service	P	P	
Foreign ownership (not allowed, restricted, allowed)	..	..
Reg. treatment of VoIP (banned, closed, no framework, allowed)	B	C	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	5.3	4.6	2.1
Telecommunications investment (% of revenue)	19.1	10.7	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	19.1	19.1	17.3
Mobile-cellular telephone subscriptions (per 100 people)	71.3	67.2	105.1
Fixed-broadband subscriptions (per 100 people)	1.4	6.6	15.4
Households with a computer (%)	17.5 ^a	29.1 ^a	48.7
Households with Internet access at home (%)	15.7 ^a	26.1 ^a	52.2
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	14.0	15.1	2.3
Domestic mobile traffic (minutes/subscription/month)	36.3	30.2	173.1
Individuals using the Internet (%)	29.9	38.2 ^a	52.1
Quality			
Population covered by at least a 3G mobile network (%)	0	..	69
International Internet bandwidth (bit/s per Internet user)	6,126	25,607	26,098
Affordability			
Mobile-cellular sub-basket (\$ a month)	9.4	13.1	8.5
Fixed-broadband sub-basket (\$ a month)	46.8	24.2	15.5
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	13.6	7.7
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	15.5	11.1
Trade			
ICT goods exports (% of total goods exports)	0.1	0.1	15.7
ICT goods imports (% of total goods imports)	2.9	2.3	14.4
ICT service exports (% of total service exports)	32.1	23.3	25.7
Applications			
Online service index (0-1, 1=highest presence)	0.18	0.24	0.37
Secure Internet servers (per million people)	6.6	16.9	34.7

Latin America & Caribbean

Low income

	Country data		Low-income group
	2010	2015	2015
Economic and social context			
Population (millions)	10	11	638
Urban population (% of total)	52	59	31
GNI per capita, <i>World Bank Atlas</i> method (\$)	650	820	620
GDP growth, 2005–10 and 2010–15 (avg. annual %)	1.2	3.4	5.4
Adult literacy rate (% ages 15 and older)	49	61	..
Gross primary, secondary, and tertiary school enrollment (%)	..	..	60
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	R	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	No	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	3.7	..	..
Telecommunications investment (% of revenue)	..	..	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	0.5	0.4	0.9
Mobile-cellular telephone subscriptions (per 100 people)	40.4	69.9	60.0
Fixed-broadband subscriptions (per 100 people)	..	0.0	0.3
Households with a computer (%)	5.9 ^a	9.4 ^a	4.8
Households with Internet access at home (%)	2.7 ^a	4.4 ^a	7.1
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	..	0.6	..
Domestic mobile traffic (minutes/subscription/month)	..	5.4	48.9
Individuals using the Internet (%)	8.4 ^a	12.2 ^a	9.5
Quality			
Population covered by at least a 3G mobile network (%)	..	40	51
International Internet bandwidth (bit/s per Internet user)	..	..	4,245
Affordability			
Mobile-cellular sub-basket (\$ a month)	12.6	9.3	9.4
Fixed-broadband sub-basket (\$ a month)	47.8	42.8	33.6
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	9.5	8.9	8.0
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	19.1	19.7	10.8
Trade			
ICT goods exports (% of total goods exports)	..	..	..
ICT goods imports (% of total goods imports)	..	..	3.4
ICT service exports (% of total service exports)	..	..	..
Applications			
Online service index (0-1, 1=highest presence)	0.02	0.11	0.11
Secure Internet servers (per million people)	1.0	2.1	1.5

Honduras

Latin America & Caribbean

Lower middle income

	Country data		Lower middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	8	8	2,927
Urban population (% of total)	52	55	39
GNI per capita, <i>World Bank Atlas</i> method (\$)	1,920	2,270	2,035
GDP growth, 2005–10 and 2010–15 (avg. annual %)	3.4	3.4	5.4
Adult literacy rate (% ages 15 and older)	85	88	..
Gross primary, secondary, and tertiary school enrollment (%)	75	69	68
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Public	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	P	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	R	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	B	B	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	6.2	4.7	..
Telecommunications investment (% of revenue)	10.1	12.8	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	8.8	5.9	3.5
Mobile-cellular telephone subscriptions (per 100 people)	124.7	95.5	90.5
Fixed-broadband subscriptions (per 100 people)	0.0	2.3	1.9
Households with a computer (%)	12.9 ^a	23.0 ^a	19.3
Households with Internet access at home (%)	6.8 ^a	22.8 ^a	24.3
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	14.0	27.8	7.5
Domestic mobile traffic (minutes/subscription/month)	31.8	161.8	152.0
Individuals using the Internet (%)	11.1	20.4 ^a	28.6
Quality			
Population covered by at least a 3G mobile network (%)	..	83	..
International Internet bandwidth (bit/s per Internet user)	5,916	23,617	10,372
Affordability			
Mobile-cellular sub-basket (\$ a month)	14.2	14.1	6.9
Fixed-broadband sub-basket (\$ a month)	22.0	31.0	14.3
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	15.4	18.2	5.8
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	13.8	22.0	10.0
Trade			
ICT goods exports (% of total goods exports)	0.2	0.2	5.7
ICT goods imports (% of total goods imports)	5.9	5.2	7.6
ICT service exports (% of total service exports)	10.6	11.4	48.0
Applications			
Online service index (0-1, 1=highest presence)	0.30	0.40	0.26
Secure Internet servers (per million people)	8.4	13.1	7.4

Hong Kong SAR, China

East Asia & Pacific

High income

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	7	7	1,187
Urban population (% of total)	100	100	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	33,620	41,000	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	3.4	2.8	1.5
Adult literacy rate (% ages 15 and older)	..	..	..
Gross primary, secondary, and tertiary school enrollment (%)	91	93	95
Sector structure			
Separate telecommunications/ICT regulator	Yes	..	
Status of main fixed-line telephone operator	..	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	C	
Mobile telephone service	..	C	
Internet service	..	C	
Foreign ownership (not allowed, restricted, allowed)	..	..
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	C	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	3.2	..	2.5
Telecommunications investment (% of revenue)	13.4	..	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	61.9	59.2	41.2
Mobile-cellular telephone subscriptions (per 100 people)	195.7	228.8	124.5
Fixed-broadband subscriptions (per 100 people)	30.7	31.9	31.0
Households with a computer (%)	77.9	80.4	83.2
Households with Internet access at home (%)	76.4	79.0	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	63.8	56.2	..
Domestic mobile traffic (minutes/subscription/month)	139.5	98.6	195.9
Individuals using the Internet (%)	72.0	84.9	81.0
Quality			
Population covered by at least a 3G mobile network (%)	99	99	99
International Internet bandwidth (bit/s per Internet user)	777,030	4,155,651	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	9.8	6.0	14.2
Fixed-broadband sub-basket (\$ a month)	19.1	51.3	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	42.3	9.8	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	27.9	27.9	14.4
Trade			
ICT goods exports (% of total goods exports)	44.2	45.5	9.5
ICT goods imports (% of total goods imports)	42.8	43.5	11.2
ICT service exports (% of total service exports)	16.4	15.1	32.0
Applications			
Online service index (0-1, 1=highest presence)	..	..	0.67
Secure Internet servers (per million people)	456.3	904.5	1,194.6

Hungary

Europe & Central Asia

High income

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	10	10	1,187
Urban population (% of total)	69	71	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	13,090	12,990	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	-0.6	1.6	1.5
Adult literacy rate (% ages 15 and older)	..	99	..
Gross primary, secondary, and tertiary school enrollment (%)	90	92	95
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Private	Private	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	P	P	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	2.8	2.9	2.5
Telecommunications investment (% of revenue)	23.4	17.7	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	29.7	31.2	41.2
Mobile-cellular telephone subscriptions (per 100 people)	119.9	118.9	124.5
Fixed-broadband subscriptions (per 100 people)	21.6	27.4	31.0
Households with a computer (%)	66.4	75.0	83.2
Households with Internet access at home (%)	60.5	75.6	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	8.9	..	..
Domestic mobile traffic (minutes/subscription/month)	121.1	133.5	195.9
Individuals using the Internet (%)	65.0	72.8	81.0
Quality			
Population covered by at least a 3G mobile network (%)	66	98	99
International Internet bandwidth (bit/s per Internet user)	9,985	55,410	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	27.6	21.5	14.2
Fixed-broadband sub-basket (\$ a month)	20.7	21.2	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	8.9	7.1	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	8.9	11.7	14.4
Trade			
ICT goods exports (% of total goods exports)	25.6	12.0	9.5
ICT goods imports (% of total goods imports)	21.2	12.5	11.2
ICT service exports (% of total service exports)	28.6	29.1	32.0
Applications			
Online service index (0-1, 1=highest presence)	0.50	0.56	0.67
Secure Internet servers (per million people)	166.2	366.3	1,194.6

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	0.32	0.33	1,187
Urban population (% of total)	94	94	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	36,670	49,730	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	1.4	2.5	1.5
Adult literacy rate (% ages 15 and older)	..	..	..
Gross primary, secondary, and tertiary school enrollment (%)	98	..	95
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	1.9	1.8	2.5
Telecommunications investment (% of revenue)	17.2	16.4	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	60.9	49.9	41.2
Mobile-cellular telephone subscriptions (per 100 people)	107.2	114.0	124.5
Fixed-broadband subscriptions (per 100 people)	34.3	37.0	31.0
Households with a computer (%)	93.0	98.5 ^a	83.2
Households with Internet access at home (%)	92.0	96.5 ^a	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	19.0	14.7	..
Domestic mobile traffic (minutes/subscription/month)	176.3	173.1	195.9
Individuals using the Internet (%)	93.4	98.2 ^a	81.0
Quality			
Population covered by at least a 3G mobile network (%)	92	99	99
International Internet bandwidth (bit/s per Internet user)	297,960	725,806	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	16.6	21.6	14.2
Fixed-broadband sub-basket (\$ a month)	24.9	28.4	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	5.2	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	8.7	8.3	14.4
Trade			
ICT goods exports (% of total goods exports)	0.1	0.2	9.5
ICT goods imports (% of total goods imports)	4.3	5.1	11.2
ICT service exports (% of total service exports)	..	12.1	32.0
Applications			
Online service index (0-1, 1=highest presence)	0.40	0.61	0.67
Secure Internet servers (per million people)	2,524.8	3,406.7	1,194.6

South Asia	Lower middle income		
	Country data		Lower middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	1,231	1,311	2,927
Urban population (% of total)	31	33	39
GNI per capita, <i>World Bank Atlas</i> method (\$)	1,260	1,590	2,035
GDP growth, 2005–10 and 2010–15 (avg. annual %)	7.7	6.7	5.4
Adult literacy rate (% ages 15 and older)	69	72	..
Gross primary, secondary, and tertiary school enrollment (%)	65	69	68
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	P	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	R	R	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	C	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	2.1	1.8	..
Telecommunications investment (% of revenue)	29.5	16.2	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	2.9	2.0	3.5
Mobile-cellular telephone subscriptions (per 100 people)	62.4	78.8	90.5
Fixed-broadband subscriptions (per 100 people)	0.9	1.3	1.9
Households with a computer (%)	6.7 ^a	14.1 ^a	19.3
Households with Internet access at home (%)	4.5	20.0 ^a	24.3
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	5.7	7.7	7.5
Domestic mobile traffic (minutes/subscription/month)	129.1	168.8	152.0
Individuals using the Internet (%)	7.5 ^a	26.0 ^a	28.6
Quality			
Population covered by at least a 3G mobile network (%)	0	..	..
International Internet bandwidth (bit/s per Internet user)	5,917	5,725	10,372
Affordability			
Mobile-cellular sub-basket (\$ a month)	3.9	2.8	6.9
Fixed-broadband sub-basket (\$ a month)	6.1	6.7	14.3
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	3.7	4.0	5.8
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	4.7	3.9	10.0
Trade			
ICT goods exports (% of total goods exports)	2.0	1.0	5.7
ICT goods imports (% of total goods imports)	6.3	6.3	7.6
ICT service exports (% of total service exports)	68.0	67.5	48.0
Applications			
Online service index (0-1, 1=highest presence)	0.37	0.54	0.26
Secure Internet servers (per million people)	2.1	6.8	7.4

Indonesia

East Asia & Pacific

Lower middle income

	Country data		Lower middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	242	258	2,927
Urban population (% of total)	50	54	39
GNI per capita, <i>World Bank Atlas</i> method (\$)	2,530	3,440	2,035
GDP growth, 2005–10 and 2010–15 (avg. annual %)	5.7	5.5	5.4
Adult literacy rate (% ages 15 and older)	93	95	..
Gross primary, secondary, and tertiary school enrollment (%)	74	77	68
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	P	
Mobile telephone service	C	P	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	..	R	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	1.8	..	..
Telecommunications investment (% of revenue)	20.6	..	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	17.0	8.8	3.5
Mobile-cellular telephone subscriptions (per 100 people)	87.8	132.3	90.5
Fixed-broadband subscriptions (per 100 people)	0.9	1.1	1.9
Households with a computer (%)	10.8	18.7	19.3
Households with Internet access at home (%)	4.6	38.4	24.3
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	..	1.5	7.5
Domestic mobile traffic (minutes/subscription/month)	..	..	152.0
Individuals using the Internet (%)	10.9	22.0	28.6
Quality			
Population covered by at least a 3G mobile network (%)	..	60 ^a	..
International Internet bandwidth (bit/s per Internet user)	2,473	6,584	10,372
Affordability			
Mobile-cellular sub-basket (\$ a month)	7.8	5.4	6.9
Fixed-broadband sub-basket (\$ a month)	21.6	28.8	14.3
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	2.1	4.1	5.8
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	6.4	4.1	10.0
Trade			
ICT goods exports (% of total goods exports)	5.0	3.5	5.7
ICT goods imports (% of total goods imports)	8.5	7.0	7.6
ICT service exports (% of total service exports)	33.3	30.5	48.0
Applications			
Online service index (0-1, 1=highest presence)	0.24	0.36	0.26
Secure Internet servers (per million people)	2.0	8.0	7.4

Iran, Islamic Rep.

Middle East & North Africa

Upper middle income

	Country data		Upper middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	74	79	2,594
Urban population (% of total)	71	73	64
GNI per capita, <i>World Bank Atlas</i> method (\$)	6,020	6,550	8,186
GDP growth, 2005–10 and 2010–15 (avg. annual %)	4.6	-1.0	4.5
Adult literacy rate (% ages 15 and older)	84	87	..
Gross primary, secondary, and tertiary school enrollment (%)	72	88	81
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Public	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	M	M	
Mobile telephone service	C	C	
Internet service	C	P	
Foreign ownership (not allowed, restricted, allowed)	R	R	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	C	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	2.1	1.8	2.1
Telecommunications investment (% of revenue)	91.4	..	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	34.7	38.3	17.3
Mobile-cellular telephone subscriptions (per 100 people)	72.6	93.4	105.1
Fixed-broadband subscriptions (per 100 people)	1.3	10.9	15.4
Households with a computer (%)	35.2	53.4 ^a	48.7
Households with Internet access at home (%)	21.4	52.2 ^a	52.2
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	2.8	1.8	2.3
Domestic mobile traffic (minutes/subscription/month)	210.4	147.6	173.1
Individuals using the Internet (%)	15.9	44.1 ^a	52.1
Quality			
Population covered by at least a 3G mobile network (%)	0	60	69
International Internet bandwidth (bit/s per Internet user)	2,264	8,502	26,098
Affordability			
Mobile-cellular sub-basket (\$ a month)	3.6	1.9	8.5
Fixed-broadband sub-basket (\$ a month)	16.6	3.8	15.5
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	3.8	7.7
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	3.8	11.1
Trade			
ICT goods exports (% of total goods exports)	0.0	..	15.7
ICT goods imports (% of total goods imports)	3.6	..	14.4
ICT service exports (% of total service exports)	..	..	25.7
Applications			
Online service index (0-1, 1=highest presence)	0.27	0.37	0.37
Secure Internet servers (per million people)	0.7	5.5	34.7

Middle East & North Africa

Upper middle income

	Country data		Upper middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	31	36	2,594
Urban population (% of total)	69	69	64
GNI per capita, <i>World Bank Atlas</i> method (\$)	4,410	5,550	8,186
GDP growth, 2005–10 and 2010–15 (avg. annual %)	5.5	5.6	4.5
Adult literacy rate (% ages 15 and older)	..	80	..
Gross primary, secondary, and tertiary school enrollment (%)	..	..	81
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Public	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	M	M	
Mobile telephone service	P	P	
Internet service	P	P	
Foreign ownership (not allowed, restricted, allowed)	R	..	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	B	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	..	..	2.1
Telecommunications investment (% of revenue)	..	..	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	5.6	5.6	17.3
Mobile-cellular telephone subscriptions (per 100 people)	75.1	93.8	105.1
Fixed-broadband subscriptions (per 100 people)	0.0	..	15.4
Households with a computer (%)	20.6 ^a	27.2 ^a	48.7
Households with Internet access at home (%)	11.6 ^a	18.7 ^a	52.2
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	..	..	2.3
Domestic mobile traffic (minutes/subscription/month)	..	..	173.1
Individuals using the Internet (%)	2.5	17.2 ^a	52.1
Quality			
Population covered by at least a 3G mobile network (%)	..	55 ^a	69
International Internet bandwidth (bit/s per Internet user)	103	..	26,098
Affordability			
Mobile-cellular sub-basket (\$ a month)	12.5	10.1	8.5
Fixed-broadband sub-basket (\$ a month)	211.3	28.3	15.5
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	10.3	7.7
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	12.8	11.1
Trade			
ICT goods exports (% of total goods exports)	..	..	15.7
ICT goods imports (% of total goods imports)	..	..	14.4
ICT service exports (% of total service exports)	4.5	..	25.7
Applications			
Online service index (0-1, 1=highest presence)	0.15	0.20	0.37
Secure Internet servers (per million people)	0.1	1.3	34.7

Ireland

Europe & Central Asia

High income

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	5	5	1,187
Urban population (% of total)	62	63	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	44,740	46,680	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	0.3	3.0	1.5
Adult literacy rate (% ages 15 and older)	..	..	..
Gross primary, secondary, and tertiary school enrollment (%)	104	..	95
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Private	Private	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	C	C	
Internet service	C	..	
Foreign ownership (not allowed, restricted, allowed)	R	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	1.7	1.6	2.5
Telecommunications investment (% of revenue)	15.7	18.8	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	46.5	40.9	41.2
Mobile-cellular telephone subscriptions (per 100 people)	105.2	103.7	124.5
Fixed-broadband subscriptions (per 100 people)	22.8	27.7	31.0
Households with a computer (%)	76.5	83.5	83.2
Households with Internet access at home (%)	71.7	84.9	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	..	..	..
Domestic mobile traffic (minutes/subscription/month)	172.8	178.5	195.9
Individuals using the Internet (%)	69.9	80.1	81.0
Quality			
Population covered by at least a 3G mobile network (%)	95	95	99
International Internet bandwidth (bit/s per Internet user)	64,090	155,521	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	37.3	33.3	14.2
Fixed-broadband sub-basket (\$ a month)	32.9	49.9	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	38.6	5.5	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	38.6	14.4	14.4
Trade			
ICT goods exports (% of total goods exports)	7.5	5.7	9.5
ICT goods imports (% of total goods imports)	10.2	9.4	11.2
ICT service exports (% of total service exports)	64.9	65.8	32.0
Applications			
Online service index (0-1, 1=highest presence)	0.50	0.68	0.67
Secure Internet servers (per million people)	980.7	850.7	1,194.6

Isle of Man

Europe & Central Asia

High income

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	0.08	0.09	1,187
Urban population (% of total)	52	52	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	72,040	83,920	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	7.1	5.3	1.5
Adult literacy rate (% ages 15 and older)
Gross primary, secondary, and tertiary school enrollment (%)	95
Sector structure			
Separate telecommunications/ICT regulator	
Status of main fixed-line telephone operator	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	
Mobile telephone service	
Internet service	
Foreign ownership (not allowed, restricted, allowed)	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	2.5
Telecommunications investment (% of revenue)	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	41.2
Mobile-cellular telephone subscriptions (per 100 people)	124.5
Fixed-broadband subscriptions (per 100 people)	31.0
Households with a computer (%)	83.2
Households with Internet access at home (%)	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)
Domestic mobile traffic (minutes/subscription/month)	195.9
Individuals using the Internet (%)	81.0
Quality			
Population covered by at least a 3G mobile network (%)	99
International Internet bandwidth (bit/s per Internet user)	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	14.2
Fixed-broadband sub-basket (\$ a month)	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	14.4
Trade			
ICT goods exports (% of total goods exports)	9.5
ICT goods imports (% of total goods imports)	11.2
ICT service exports (% of total service exports)	32.0
Applications			
Online service index (0-1, 1=highest presence)	0.67
Secure Internet servers (per million people)	818.2	3,201.2	1,194.6

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	8	8	1,187
Urban population (% of total)	92	92	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	29,640	35,440	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	4.1	3.2	1.5
Adult literacy rate (% ages 15 and older)	..	..	..
Gross primary, secondary, and tertiary school enrollment (%)	94	94	95
Sector structure			
Separate telecommunications/ICT regulator	No	No	
Status of main fixed-line telephone operator	Mixed	Private	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	R	R	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	3.4	2.2	2.5
Telecommunications investment (% of revenue)	12.0	12.1	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	45.9	43.1	41.2
Mobile-cellular telephone subscriptions (per 100 people)	122.8	133.5	124.5
Fixed-broadband subscriptions (per 100 people)	23.7	27.4	31.0
Households with a computer (%)	76.6	83.5 ^a	83.2
Households with Internet access at home (%)	68.1	76.0 ^a	85.0
Usage			
Int'l. voice traffic, total (minutes/subscriber/month)	..	..	..
Domestic mobile traffic (minutes/subscriber/month)	..	..	195.9
Individuals using the Internet (%)	67.5	78.9 ^a	81.0
Quality			
Population covered by at least a 3G mobile network (%)	99	99	99
International Internet bandwidth (bit/s per Internet user)	7,986	89,638	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	34.8	32.5	14.2
Fixed-broadband sub-basket (\$ a month)	8.8	33.2	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	15.4	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	32.1	14.4
Trade			
ICT goods exports (% of total goods exports)	12.3	11.2	9.5
ICT goods imports (% of total goods imports)	9.2	9.0	11.2
ICT service exports (% of total service exports)	56.1	65.1	32.0
Applications			
Online service index (0-1, 1=highest presence)	0.58	0.87	0.67
Secure Internet servers (per million people)	396.7	288.8	1,194.6

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	59	61	1,187
Urban population (% of total)	68	69	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	37,700	32,790	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	-0.7	-1.0	1.5
Adult literacy rate (% ages 15 and older)	99	99	..
Gross primary, secondary, and tertiary school enrollment (%)	92	91	95
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Private	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	C	
Mobile telephone service	P	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	1.9	1.4	2.5
Telecommunications investment (% of revenue)	20.0	27.7	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	37.2	33.1	41.2
Mobile-cellular telephone subscriptions (per 100 people)	154.8	151.3	124.5
Fixed-broadband subscriptions (per 100 people)	21.6	23.8	31.0
Households with a computer (%)	64.8	72.5	83.2
Households with Internet access at home (%)	59.0	75.4	85.0
Usage			
Int'l. voice traffic, total (minutes/subscriber/month)	..	..	..
Domestic mobile traffic (minutes/subscriber/month)	102.6	140.3	195.9
Individuals using the Internet (%)	53.7	65.6	81.0
Quality			
Population covered by at least a 3G mobile network (%)	80	99	99
International Internet bandwidth (bit/s per Internet user)	61,574	77,322	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	29.8	18.3	14.2
Fixed-broadband sub-basket (\$ a month)	26.2	27.6	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	12.9	16.6	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	30.9	11.1	14.4
Trade			
ICT goods exports (% of total goods exports)	2.2	1.7	9.5
ICT goods imports (% of total goods imports)	7.7	4.8	11.2
ICT service exports (% of total service exports)	30.8	30.5	32.0
Applications			
Online service index (0-1, 1=highest presence)	0.29	0.75	0.67
Secure Internet servers (per million people)	157.6	288.5	1,194.6

Jamaica

Latin America & Caribbean

Upper middle income

	Country data		Upper middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	3	3	2,594
Urban population (% of total)	54	55	64
GNI per capita, <i>World Bank Atlas</i> method (\$)	4,570	5,010	8,186
GDP growth, 2005–10 and 2010–15 (avg. annual %)	–0.7	0.5	4.5
Adult literacy rate (% ages 15 and older)	..	88	..
Gross primary, secondary, and tertiary school enrollment (%)	..	..	81
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Private	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	No	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	4.3	4.2	2.1
Telecommunications investment (% of revenue)	26.7	26.1	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	9.6	9.0	17.3
Mobile-cellular telephone subscriptions (per 100 people)	116.1	111.5	105.1
Fixed-broadband subscriptions (per 100 people)	4.3	5.8	15.4
Households with a computer (%)	22.7	34.3 ^a	48.7
Households with Internet access at home (%)	14.0	30.3 ^a	52.2
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	71.7	72.1	2.3
Domestic mobile traffic (minutes/subscription/month)	191.9	188.1	173.1
Individuals using the Internet (%)	27.7	43.2 ^a	52.1
Quality			
Population covered by at least a 3G mobile network (%)	..	90	69
International Internet bandwidth (bit/s per Internet user)	10,546	13,261	26,098
Affordability			
Mobile-cellular sub-basket (\$ a month)	12.0	8.5	8.5
Fixed-broadband sub-basket (\$ a month)	29.0	23.4	15.5
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	19.7	15.0	7.7
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	16.9	12.8	11.1
Trade			
ICT goods exports (% of total goods exports)	0.4	0.3	15.7
ICT goods imports (% of total goods imports)	3.9	3.7	14.4
ICT service exports (% of total service exports)	8.4	7.7	25.7
Applications			
Online service index (0–1, 1=highest presence)	0.23	0.31	0.37
Secure Internet servers (per million people)	39.4	65.7	34.7

East Asia & Pacific

High income

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	128	127	1,187
Urban population (% of total)	91	93	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	41,980	36,680	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	-0.2	0.7	1.5
Adult literacy rate (% ages 15 and older)	..	..	..
Gross primary, secondary, and tertiary school enrollment (%)	88	90	95
Sector structure			
Separate telecommunications/ICT regulator	No	No	
Status of main fixed-line telephone operator	Private	Private	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	2.8	..	2.5
Telecommunications investment (% of revenue)	11.1	..	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	51.5	50.2	41.2
Mobile-cellular telephone subscriptions (per 100 people)	96.8	125.1	124.5
Fixed-broadband subscriptions (per 100 people)	26.8	30.5	31.0
Households with a computer (%)	83.4	80.0 ^a	83.2
Households with Internet access at home (%)	81.3	96.5 ^a	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	2.3	..	..
Domestic mobile traffic (minutes/subscription/month)	98.1	..	195.9
Individuals using the Internet (%)	78.2	93.3 ^a	81.0
Quality			
Population covered by at least a 3G mobile network (%)	100	100	99
International Internet bandwidth (bit/s per Internet user)	15,730	62,618	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	52.8	29.4	14.2
Fixed-broadband sub-basket (\$ a month)	23.1	18.0	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	83.0	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	61.9	43.7	14.4
Trade			
ICT goods exports (% of total goods exports)	10.7	8.4	9.5
ICT goods imports (% of total goods imports)	12.0	11.3	11.2
ICT service exports (% of total service exports)	24.9	22.8	32.0
Applications			
Online service index (0-1, 1=highest presence)	0.67	0.94	0.67
Secure Internet servers (per million people)	646.7	971.0	1,194.6

	Country data		Upper middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	7	8	2,594
Urban population (% of total)	82	84	64
GNI per capita, <i>World Bank Atlas</i> method (\$)	3,820	4,680	8,186
GDP growth, 2005–10 and 2010–15 (avg. annual %)	6.5	2.7	4.5
Adult literacy rate (% ages 15 and older)	93	98	..
Gross primary, secondary, and tertiary school enrollment (%)	77	..	81
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Private	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	P	P	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	6.1	4.1	2.1
Telecommunications investment (% of revenue)	19.2	15.4	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	7.5	4.8	17.3
Mobile-cellular telephone subscriptions (per 100 people)	102.6	179.4	105.1
Fixed-broadband subscriptions (per 100 people)	4.5	4.2	15.4
Households with a computer (%)	46.7	47.0 ^a	48.7
Households with Internet access at home (%)	21.6	75.9 ^a	52.2
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	17.0	11.2	2.3
Domestic mobile traffic (minutes/subscription/month)	230.2	256.6	173.1
Individuals using the Internet (%)	27.2	53.4 ^a	52.1
Quality			
Population covered by at least a 3G mobile network (%)	50	99	69
International Internet bandwidth (bit/s per Internet user)	7,405	27,524	26,098
Affordability			
Mobile-cellular sub-basket (\$ a month)	10.5	5.0	8.5
Fixed-broadband sub-basket (\$ a month)	30.1	30.3	15.5
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	8.5	4.9	7.7
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	14.1	9.1	11.1
Trade			
ICT goods exports (% of total goods exports)	1.3	1.9	15.7
ICT goods imports (% of total goods imports)	4.3	3.2	14.4
ICT service exports (% of total service exports)	..	5.6	25.7
Applications			
Online service index (0-1, 1=highest presence)	0.53	0.52	0.37
Secure Internet servers (per million people)	18.4	27.7	34.7

Kazakhstan

Europe & Central Asia

Upper middle income

	Country data		Upper middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	16	18	2,594
Urban population (% of total)	54	53	64
GNI per capita, <i>World Bank Atlas</i> method (\$)	7,440	11,580	8,186
GDP growth, 2005–10 and 2010–15 (avg. annual %)	5.7	4.7	4.5
Adult literacy rate (% ages 15 and older)	100	100	..
Gross primary, secondary, and tertiary school enrollment (%)	86	92	81
Sector structure			
Separate telecommunications/ICT regulator	No	No	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	P	P	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	R	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	No	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	2.2	1.7	2.1
Telecommunications investment (% of revenue)	15.1	17.1	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	25.5	24.7	17.3
Mobile-cellular telephone subscriptions (per 100 people)	121.9	187.2	105.1
Fixed-broadband subscriptions (per 100 people)	5.5	13.0	15.4
Households with a computer (%)	46.0 ^a	73.8	48.7
Households with Internet access at home (%)	44.0 ^a	82.2	52.2
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	2.9	3.8	2.3
Domestic mobile traffic (minutes/subscription/month)	68.4	131.8	173.1
Individuals using the Internet (%)	31.6	72.9	52.1
Quality			
Population covered by at least a 3G mobile network (%)	..	73	69
International Internet bandwidth (bit/s per Internet user)	9,306	69,615	26,098
Affordability			
Mobile-cellular sub-basket (\$ a month)	12.2	6.0	8.5
Fixed-broadband sub-basket (\$ a month)	23.9	8.7	15.5
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	6.6	4.5	7.7
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	6.6	4.5	11.1
Trade			
ICT goods exports (% of total goods exports)	0.0	0.8	15.7
ICT goods imports (% of total goods imports)	5.0	6.0	14.4
ICT service exports (% of total service exports)	11.6	11.1	25.7
Applications			
Online service index (0-1, 1=highest presence)	0.53	0.75	0.37
Secure Internet servers (per million people)	5.2	17.6	34.7

Kenya

Sub-Saharan Africa

Lower middle income

	Country data		Lower middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	40	46	2,927
Urban population (% of total)	24	26	39
GNI per capita, <i>World Bank Atlas</i> method (\$)	1,000	1,340	2,035
GDP growth, 2005–10 and 2010–15 (avg. annual %)	4.5	5.4	5.4
Adult literacy rate (% ages 15 and older)	72	78	..
Gross primary, secondary, and tertiary school enrollment (%)	67	..	68
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	R	R	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	3.4	3.7	..
Telecommunications investment (% of revenue)	52.2	30.2	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	0.9	0.2	3.5
Mobile-cellular telephone subscriptions (per 100 people)	61.0	80.7	90.5
Fixed-broadband subscriptions (per 100 people)	0.0	0.3	1.9
Households with a computer (%)	6.5 ^a	13.1 ^a	19.3
Households with Internet access at home (%)	6.3 ^a	19.6 ^a	24.3
Usage			
Int'l. voice traffic, total (minutes/subscriber/month)	3.3	2.6	7.5
Domestic mobile traffic (minutes/subscriber/month)	84.4	75.6	152.0
Individuals using the Internet (%)	14.0	45.6 ^a	28.6
Quality			
Population covered by at least a 3G mobile network (%)	..	69	..
International Internet bandwidth (bit/s per Internet user)	3,529	40,067	10,372
Affordability			
Mobile-cellular sub-basket (\$ a month)	11.7	3.6	6.9
Fixed-broadband sub-basket (\$ a month)	37.9	43.7	14.3
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	5.9	5.5	5.8
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	11.8	5.5	10.0
Trade			
ICT goods exports (% of total goods exports)	1.4	0.8	5.7
ICT goods imports (% of total goods imports)	7.2	5.3	7.6
ICT service exports (% of total service exports)	..	..	48.0
Applications			
Online service index (0-1, 1=highest presence)	0.24	0.43	0.26
Secure Internet servers (per million people)	2.6	9.1	7.4

East Asia & Pacific

Lower middle income

	Country data		Lower middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	0.10	0.11	2,927
Urban population (% of total)	44	44	39
GNI per capita, <i>World Bank Atlas</i> method (\$)	1,990	3,230	2,035
GDP growth, 2005–10 and 2010–15 (avg. annual %)	1.5	3.1	5.4
Adult literacy rate (% ages 15 and older)	..	..	..
Gross primary, secondary, and tertiary school enrollment (%)	72	..	68
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Public	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	..
Mobile telephone service	P	P	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	..	..
Reg. treatment of VoIP (banned, closed, no framework, allowed)	No	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	..	..	..
Telecommunications investment (% of revenue)	..	..	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	8.6	1.4	3.5
Mobile-cellular telephone subscriptions (per 100 people)	10.8	38.8	90.5
Fixed-broadband subscriptions (per 100 people)	0.9	0.1	1.9
Households with a computer (%)	..	6.7 ^a	19.3
Households with Internet access at home (%)	..	6.3 ^a	24.3
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	..	..	7.5
Domestic mobile traffic (minutes/subscription/month)	..	..	152.0
Individuals using the Internet (%)	9.1	13.0 ^a	28.6
Quality			
Population covered by at least a 3G mobile network (%)	..	63	..
International Internet bandwidth (bit/s per Internet user)	2,256	2,916	10,372
Affordability			
Mobile-cellular sub-basket (\$ a month)	18.7	20.8	6.9
Fixed-broadband sub-basket (\$ a month)	383.1	187.8	14.3
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	22.5	5.8
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	56.3	10.0
Trade			
ICT goods exports (% of total goods exports)	7.3	0.0	5.7
ICT goods imports (% of total goods imports)	1.8	5.0	7.6
ICT service exports (% of total service exports)	..	..	48.0
Applications			
Online service index (0-1, 1=highest presence)	0.03	0.21	0.26
Secure Internet servers (per million people)	9.7	8.9	7.4

Korea, Dem. People's Rep.

East Asia & Pacific

Low income

	Country data		Low-income group
	2010	2015	2015
Economic and social context			
Population (millions)	25	25	638
Urban population (% of total)	60	61	31
GNI per capita, <i>World Bank Atlas</i> method (\$)	..	..	620
GDP growth, 2005–10 and 2010–15 (avg. annual %)	..	..	5.4
Adult literacy rate (% ages 15 and older)	100	100	..
Gross primary, secondary, and tertiary school enrollment (%)	81	..	60
Sector structure			
Separate telecommunications/ICT regulator	No	No	
Status of main fixed-line telephone operator	Public	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	..
Mobile telephone service	..	..
Internet service	..	..
Foreign ownership (not allowed, restricted, allowed)	No	..	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	B	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	..	..	..
Telecommunications investment (% of revenue)	..	..	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	4.8	4.7	0.9
Mobile-cellular telephone subscriptions (per 100 people)	1.8	12.9	60.0
Fixed-broadband subscriptions (per 100 people)	..	..	0.3
Households with a computer (%)	..	..	4.8
Households with Internet access at home (%)	..	..	7.1
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	..	..	..
Domestic mobile traffic (minutes/subscription/month)	..	..	48.9
Individuals using the Internet (%)	0.0 ^a	..	9.5
Quality			
Population covered by at least a 3G mobile network (%)	..	..	51
International Internet bandwidth (bit/s per Internet user)	..	..	4,245
Affordability			
Mobile-cellular sub-basket (\$ a month)	..	..	9.4
Fixed-broadband sub-basket (\$ a month)	..	..	33.6
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	..	8.0
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	..	10.8
Trade			
ICT goods exports (% of total goods exports)	..	..	..
ICT goods imports (% of total goods imports)	..	..	3.4
ICT service exports (% of total service exports)	..	..	..
Applications			
Online service index (0-1, 1=highest presence)	0.02	0.01	0.11
Secure Internet servers (per million people)	0.0	0.0	1.5

Korea, Rep.

East Asia & Pacific

High income

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	49	51	1,187
Urban population (% of total)	82	82	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	21,320	27,440	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	3.8	2.9	1.5
Adult literacy rate (% ages 15 and older)	98	..	..
Gross primary, secondary, and tertiary school enrollment (%)	99	97	95
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Private	Private	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	P	P	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	R	R	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	4.1	3.8	2.5
Telecommunications investment (% of revenue)	12.2	12.1	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	58.9	58.1	41.2
Mobile-cellular telephone subscriptions (per 100 people)	104.8	118.5	124.5
Fixed-broadband subscriptions (per 100 people)	35.5	40.2	31.0
Households with a computer (%)	81.8	77.1	83.2
Households with Internet access at home (%)	96.8	98.8	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	3.5	2.5	..
Domestic mobile traffic (minutes/subscription/month)	175.6	182.1	195.9
Individuals using the Internet (%)	83.7	89.9	81.0
Quality			
Population covered by at least a 3G mobile network (%)	99	99	99
International Internet bandwidth (bit/s per Internet user)	11,812	46,764	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	22.5	18.0	14.2
Fixed-broadband sub-basket (\$ a month)	25.7	29.2	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	4.9	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	23.4	9.7	14.4
Trade			
ICT goods exports (% of total goods exports)	21.4	19.8	9.5
ICT goods imports (% of total goods imports)	11.9	11.4	11.2
ICT service exports (% of total service exports)	15.2	23.3	32.0
Applications			
Online service index (0-1, 1=highest presence)	1.00	0.98	0.67
Secure Internet servers (per million people)	1,128.1	2,319.6	1,194.6

Kosovo

Europe & Central Asia	Lower middle income		
	Country data		Lower middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	2	2	2,927
Urban population (% of total)	39
GNI per capita, <i>World Bank Atlas</i> method (\$)	3,420	3,950	2,035
GDP growth, 2005–10 and 2010–15 (avg. annual %)	4.2	3.0	5.4
Adult literacy rate (% ages 15 and older)
Gross primary, secondary, and tertiary school enrollment (%)	68
Sector structure			
Separate telecommunications/ICT regulator	
Status of main fixed-line telephone operator	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	
Mobile telephone service	
Internet service	
Foreign ownership (not allowed, restricted, allowed)	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)
Telecommunications investment (% of revenue)
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	6.1	..	3.5
Mobile-cellular telephone subscriptions (per 100 people)	32.4	..	90.5
Fixed-broadband subscriptions (per 100 people)	1.9
Households with a computer (%)	19.3
Households with Internet access at home (%)	24.3
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	7.5
Domestic mobile traffic (minutes/subscription/month)	152.0
Individuals using the Internet (%)	28.6
Quality			
Population covered by at least a 3G mobile network (%)
International Internet bandwidth (bit/s per Internet user)	10,372
Affordability			
Mobile-cellular sub-basket (\$ a month)	6.9
Fixed-broadband sub-basket (\$ a month)	14.3
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	5.8
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	10.0
Trade			
ICT goods exports (% of total goods exports)	5.7
ICT goods imports (% of total goods imports)	7.6
ICT service exports (% of total service exports)	22.9	14.5	48.0
Applications			
Online service index (0-1, 1=highest presence)	0.26
Secure Internet servers (per million people)	7.4

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	3	4	1,187
Urban population (% of total)	98	98	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	41,220	40,930	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	1.0	2.7	1.5
Adult literacy rate (% ages 15 and older)	96	96	..
Gross primary, secondary, and tertiary school enrollment (%)	..	75	95
Sector structure			
Separate telecommunications/ICT regulator	No	Yes	
Status of main fixed-line telephone operator	Public	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	M	M	
Mobile telephone service	M	M	
Internet service	P	P	
Foreign ownership (not allowed, restricted, allowed)	R	R	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	B	B	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	..	..	2.5
Telecommunications investment (% of revenue)	..	..	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	17.4	13.4	41.2
Mobile-cellular telephone subscriptions (per 100 people)	133.0	231.8	124.5
Fixed-broadband subscriptions (per 100 people)	1.5	1.4	31.0
Households with a computer (%)	59.5 ^a	89.0 ^a	83.2
Households with Internet access at home (%)	49.9 ^a	80.5 ^a	85.0
Usage			
Int'l. voice traffic, total (minutes/subscriber/month)	..	..	..
Domestic mobile traffic (minutes/subscriber/month)	..	..	195.9
Individuals using the Internet (%)	61.4 ^a	82.1 ^a	81.0
Quality			
Population covered by at least a 3G mobile network (%)	..	100 ^a	99
International Internet bandwidth (bit/s per Internet user)	43,553	48,619	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	7.8	14.2	14.2
Fixed-broadband sub-basket (\$ a month)	19.2	10.5	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	28.6	16.6	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	25.0	36.6	14.4
Trade			
ICT goods exports (% of total goods exports)	0.3	0.1	9.5
ICT goods imports (% of total goods imports)	6.4	7.2	11.2
ICT service exports (% of total service exports)	39.5	45.0	32.0
Applications			
Online service index (0-1, 1=highest presence)	0.46	0.57	0.67
Secure Internet servers (per million people)	124.2	223.3	1,194.6

Kyrgyz Republic

Europe & Central Asia

Lower middle income

	Country data		Lower middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	5	6	2,927
Urban population (% of total)	35	36	39
GNI per capita, <i>World Bank Atlas</i> method (\$)	850	1,170	2,035
GDP growth, 2005–10 and 2010–15 (avg. annual %)	5.1	5.0	5.4
Adult literacy rate (% ages 15 and older)	99	100	..
Gross primary, secondary, and tertiary school enrollment (%)	73	79	68
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	R	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	No	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	7.6	7.0	..
Telecommunications investment (% of revenue)	18.6	3.5	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	9.2	7.1	3.5
Mobile-cellular telephone subscriptions (per 100 people)	98.9	132.8	90.5
Fixed-broadband subscriptions (per 100 people)	0.4	3.7	1.9
Households with a computer (%)	6.1 ^a	19.5 ^a	19.3
Households with Internet access at home (%)	2.2 ^a	16.5 ^a	24.3
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	6.9	16.0	7.5
Domestic mobile traffic (minutes/subscription/month)	78.7	252.4	152.0
Individuals using the Internet (%)	16.3 ^a	30.2 ^a	28.6
Quality			
Population covered by at least a 3G mobile network (%)	32	59	..
International Internet bandwidth (bit/s per Internet user)	1,426	7,357	10,372
Affordability			
Mobile-cellular sub-basket (\$ a month)	2.9	3.2	6.9
Fixed-broadband sub-basket (\$ a month)	48.1	8.9	14.3
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	12.1	4.7	5.8
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	16.3	3.1	10.0
Trade			
ICT goods exports (% of total goods exports)	0.6	0.1	5.7
ICT goods imports (% of total goods imports)	2.7	2.2	7.6
ICT service exports (% of total service exports)	27.7	14.4	48.0
Applications			
Online service index (0-1, 1=highest presence)	0.32	0.28	0.26
Secure Internet servers (per million people)	1.1	11.4	7.4

East Asia & Pacific

Lower middle income

	Country data		Lower middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	6	7	2,927
Urban population (% of total)	33	39	39
GNI per capita, <i>World Bank Atlas</i> method (\$)	1,000	1,730	2,035
GDP growth, 2005–10 and 2010–15 (avg. annual %)	7.9	7.9	5.4
Adult literacy rate (% ages 15 and older)	73	80	..
Gross primary, secondary, and tertiary school enrollment (%)	62	63	68
Sector structure			
Separate telecommunications/ICT regulator	Yes	No	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	M	M	
Mobile telephone service	P	..	
Internet service	P	M	
Foreign ownership (not allowed, restricted, allowed)	R	R	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	No	C	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	1.9	3.2	..
Telecommunications investment (% of revenue)	20.9	0.7	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	1.6	13.7	3.5
Mobile-cellular telephone subscriptions (per 100 people)	62.6	53.1	90.5
Fixed-broadband subscriptions (per 100 people)	0.1	0.5	1.9
Households with a computer (%)	6.9 ^a	11.4 ^a	19.3
Households with Internet access at home (%)	3.4 ^a	11.4 ^a	24.3
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	5.9	10.7	7.5
Domestic mobile traffic (minutes/subscription/month)	8.0	18.2	152.0
Individuals using the Internet (%)	7.0	18.2 ^a	28.6
Quality			
Population covered by at least a 3G mobile network (%)	17	65	..
International Internet bandwidth (bit/s per Internet user)	1,117	16,795	10,372
Affordability			
Mobile-cellular sub-basket (\$ a month)	6.3	6.8	6.9
Fixed-broadband sub-basket (\$ a month)	139.2	18.4	14.3
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	6.1	5.8
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	6.2	6.8	10.0
Trade			
ICT goods exports (% of total goods exports)	..	..	5.7
ICT goods imports (% of total goods imports)	..	..	7.6
ICT service exports (% of total service exports)	..	..	48.0
Applications			
Online service index (0-1, 1=highest presence)	0.08	0.14	0.26
Secure Internet servers (per million people)	0.8	2.5	7.4

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	2	2	1,187
Urban population (% of total)	68	67	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	12,600	14,900	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	-1.2	3.4	1.5
Adult literacy rate (% ages 15 and older)	100	100	..
Gross primary, secondary, and tertiary school enrollment (%)	90	93	95
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	..
Mobile telephone service	P	P	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	3.6	2.2	2.5
Telecommunications investment (% of revenue)	25.9	26.4	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	25.5 ^a	19.5	41.2
Mobile-cellular telephone subscriptions (per 100 people)	110.3 ^a	127.0	124.5
Fixed-broadband subscriptions (per 100 people)	20.8	25.1	31.0
Households with a computer (%)	62.8	76.1	83.2
Households with Internet access at home (%)	59.8	76.0	85.0
Usage			
Int'l. voice traffic, total (minutes/subscriber/month)	..	..	..
Domestic mobile traffic (minutes/subscriber/month)	..	222.2	195.9
Individuals using the Internet (%)	68.4	79.2	81.0
Quality			
Population covered by at least a 3G mobile network (%)	..	..	99
International Internet bandwidth (bit/s per Internet user)	33,559	111,881	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	12.4	4.4	14.2
Fixed-broadband sub-basket (\$ a month)	12.8	12.1	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	6.6	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	9.1	7.8	14.4
Trade			
ICT goods exports (% of total goods exports)	5.8	9.8	9.5
ICT goods imports (% of total goods imports)	6.4	9.0	11.2
ICT service exports (% of total service exports)	20.3	24.3	32.0
Applications			
Online service index (0-1, 1=highest presence)	0.42	0.70	0.67
Secure Internet servers (per million people)	185.0	456.4	1,194.6

Middle East & North Africa

Upper middle income

	Country data		Upper middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	4	6	2,594
Urban population (% of total)	87	88	64
GNI per capita, <i>World Bank Atlas</i> method (\$)	8,450	7,930	8,186
GDP growth, 2005–10 and 2010–15 (avg. annual %)	8.2	1.6	4.5
Adult literacy rate (% ages 15 and older)	90	94	..
Gross primary, secondary, and tertiary school enrollment (%)	77	70	81
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Public	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	M	M	
Mobile telephone service	M	M	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	R	..	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	No	B	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	..	..	2.1
Telecommunications investment (% of revenue)	..	..	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	19.3	19.2	17.3
Mobile-cellular telephone subscriptions (per 100 people)	66.0	87.1	105.1
Fixed-broadband subscriptions (per 100 people)	7.6	22.8	15.4
Households with a computer (%)	61.5 ^a	81.0 ^a	48.7
Households with Internet access at home (%)	50.7 ^a	69.0 ^a	52.2
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	44.4	..	2.3
Domestic mobile traffic (minutes/subscription/month)	189.4	..	173.1
Individuals using the Internet (%)	43.7 ^a	74.0 ^a	52.1
Quality			
Population covered by at least a 3G mobile network (%)	0	96 ^a	69
International Internet bandwidth (bit/s per Internet user)	1,318	27,275	26,098
Affordability			
Mobile-cellular sub-basket (\$ a month)	30.0	15.7	8.5
Fixed-broadband sub-basket (\$ a month)	25.3	17.5	15.5
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	11.0	7.7
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	20.9	11.1
Trade			
ICT goods exports (% of total goods exports)	7.1	1.0	15.7
ICT goods imports (% of total goods imports)	2.8	2.5	14.4
ICT service exports (% of total service exports)	26.7	23.2	25.7
Applications			
Online service index (0-1, 1=highest presence)	0.27	0.35	0.37
Secure Internet servers (per million people)	27.9	48.2	34.7

Lesotho

Sub-Saharan Africa

Lower middle income

	Country data		Lower middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	2	2	2,927
Urban population (% of total)	25	27	39
GNI per capita, <i>World Bank Atlas</i> method (\$)	1,160	1,330	2,035
GDP growth, 2005–10 and 2010–15 (avg. annual %)	5.1	4.4	5.4
Adult literacy rate (% ages 15 and older)	76	79	..
Gross primary, secondary, and tertiary school enrollment (%)	65	63	68
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	P	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	No	No	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	3.0	3.8	..
Telecommunications investment (% of revenue)	16.9	35.0	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	1.9	2.1	3.5
Mobile-cellular telephone subscriptions (per 100 people)	49.2	105.5	90.5
Fixed-broadband subscriptions (per 100 people)	0.0	0.1	1.9
Households with a computer (%)	5.0 ^a	7.5 ^a	19.3
Households with Internet access at home (%)	2.5 ^a	11.5 ^a	24.3
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	1.9	5.4	7.5
Domestic mobile traffic (minutes/subscription/month)	15.4	26.8	152.0
Individuals using the Internet (%)	3.9 ^a	16.1 ^a	28.6
Quality			
Population covered by at least a 3G mobile network (%)	32	95	..
International Internet bandwidth (bit/s per Internet user)	335	3,862	10,372
Affordability			
Mobile-cellular sub-basket (\$ a month)	24.1	8.7	6.9
Fixed-broadband sub-basket (\$ a month)	51.0	7.8	14.3
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	26.8	7.8	5.8
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	31.7	17.2	10.0
Trade			
ICT goods exports (% of total goods exports)	1.2	..	5.7
ICT goods imports (% of total goods imports)	5.6	..	7.6
ICT service exports (% of total service exports)	31.6	33.8	48.0
Applications			
Online service index (0-1, 1=highest presence)	0.26	0.16	0.26
Secure Internet servers (per million people)	0.5	4.2	7.4

Sub-Saharan Africa

Low income

	Country data		Low-income group
	2010	2015	2015
Economic and social context			
Population (millions)	4	5	638
Urban population (% of total)	48	50	31
GNI per capita, <i>World Bank Atlas</i> method (\$)	250	380	620
GDP growth, 2005-10 and 2010-15 (avg. annual %)	7.2	5.4	5.4
Adult literacy rate (% ages 15 and older)	43	48	..
Gross primary, secondary, and tertiary school enrollment (%)	..	..	60
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Public	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	P	P	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	No	..	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	C	C	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	0.1	..	..
Telecommunications investment (% of revenue)	23.1	..	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	0.1	0.2	0.9
Mobile-cellular telephone subscriptions (per 100 people)	39.7	81.1	60.0
Fixed-broadband subscriptions (per 100 people)	0.0	0.2	0.3
Households with a computer (%)	1.1 ^a	2.4 ^a	4.8
Households with Internet access at home (%)	0.9 ^a	2.7 ^a	7.1
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	11.1	8.5	..
Domestic mobile traffic (minutes/subscription/month)	51.6	52.4	48.9
Individuals using the Internet (%)	2.3	5.9 ^a	9.5
Quality			
Population covered by at least a 3G mobile network (%)	25	50	51
International Internet bandwidth (bit/s per Internet user)	604	7,522	4,245
Affordability			
Mobile-cellular sub-basket (\$ a month)	..	14.1	9.4
Fixed-broadband sub-basket (\$ a month)	..	..	33.6
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	4.0	8.0
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	24.0	10.8
Trade			
ICT goods exports (% of total goods exports)	..	..	..
ICT goods imports (% of total goods imports)	..	..	3.4
ICT service exports (% of total service exports)	..	..	..
Applications			
Online service index (0-1, 1=highest presence)	0.06	0.08	0.11
Secure Internet servers (per million people)	0.8	3.6	1.5

Middle East & North Africa

Upper middle income

	Country data		Upper middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	6	6	2,594
Urban population (% of total)	78	79	64
GNI per capita, <i>World Bank Atlas</i> method (\$)	12,250	6,030	8,186
GDP growth, 2005–10 and 2010–15 (avg. annual %)	3.6	–8.7	4.5
Adult literacy rate (% ages 15 and older)	..	91	..
Gross primary, secondary, and tertiary school enrollment (%)	..	..	81
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Public	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	..
Mobile telephone service	M	M	
Internet service	..	..
Foreign ownership (not allowed, restricted, allowed)	..	..
Reg. treatment of VoIP (banned, closed, no framework, allowed)	B	B	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	..	..	2.1
Telecommunications investment (% of revenue)	..	..	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	20.3 ^a	10.0	17.3
Mobile-cellular telephone subscriptions (per 100 people)	180.4 ^a	157.0	105.1
Fixed-broadband subscriptions (per 100 people)	1.2	1.0	15.4
Households with a computer (%)	14.6 ^a	22.0 ^a	48.7
Households with Internet access at home (%)	9.2 ^a	20.4 ^a	52.2
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	..	..	2.3
Domestic mobile traffic (minutes/subscription/month)	..	..	173.1
Individuals using the Internet (%)	14.0 ^a	19.0 ^a	52.1
Quality			
Population covered by at least a 3G mobile network (%)	..	..	69
International Internet bandwidth (bit/s per Internet user)	11,825	11,238	26,098
Affordability			
Mobile-cellular sub-basket (\$ a month)	..	6.4	8.5
Fixed-broadband sub-basket (\$ a month)	..	21.7	15.5
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	41.2	36.2	7.7
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	11.9	10.9	11.1
Trade			
ICT goods exports (% of total goods exports)	..	..	15.7
ICT goods imports (% of total goods imports)	3.6	..	14.4
ICT service exports (% of total service exports)	..	..	25.7
Applications			
Online service index (0–1, 1=highest presence)	0.14	0.02	0.37
Secure Internet servers (per million people)	1.4	3.8	34.7

Liechtenstein

Europe & Central Asia

High income

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	0.04	0.04	1,187
Urban population (% of total)	14	14	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	115,530	..	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	3.0	..	1.5
Adult literacy rate (% ages 15 and older)	..	..	..
Gross primary, secondary, and tertiary school enrollment (%)	86	88	95
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Public	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	M	C	
Mobile telephone service	P	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	..	..
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	..	..	2.5
Telecommunications investment (% of revenue)	..	45.2	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	54.3	45.9	41.2
Mobile-cellular telephone subscriptions (per 100 people)	98.3	108.8	124.5
Fixed-broadband subscriptions (per 100 people)	42.2	42.7	31.0
Households with a computer (%)	..	..	83.2
Households with Internet access at home (%)	..	..	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	..	..	..
Domestic mobile traffic (minutes/subscription/month)	11.6	13.1	195.9
Individuals using the Internet (%)	80.0 ^a	96.6 ^a	81.0
Quality			
Population covered by at least a 3G mobile network (%)	98	99	99
International Internet bandwidth (bit/s per Internet user)	6,022	..	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	..	30.1	14.2
Fixed-broadband sub-basket (\$ a month)	..	35.3	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	..	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	35.9	30.1	14.4
Trade			
ICT goods exports (% of total goods exports)	..	..	9.5
ICT goods imports (% of total goods imports)	..	..	11.2
ICT service exports (% of total service exports)	..	..	32.0
Applications			
Online service index (0-1, 1=highest presence)	0.52	0.51	0.67
Secure Internet servers (per million people)	5,733.8	10,231.5	1,194.6

Lithuania

Europe & Central Asia

High income

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	3	3	1,187
Urban population (% of total)	67	67	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	12,430	15,000	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	0.7	3.6	1.5
Adult literacy rate (% ages 15 and older)	100	100	..
Gross primary, secondary, and tertiary school enrollment (%)	97	95	95
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	No	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	2.1	1.3	2.5
Telecommunications investment (% of revenue)	15.8	17.1	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	24.6	18.7	41.2
Mobile-cellular telephone subscriptions (per 100 people)	159.4	139.5	124.5
Fixed-broadband subscriptions (per 100 people)	22.1	27.8	31.0
Households with a computer (%)	59.2	67.6	83.2
Households with Internet access at home (%)	60.6	68.3	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	5.4	7.0	..
Domestic mobile traffic (minutes/subscription/month)	115.4	158.6	195.9
Individuals using the Internet (%)	62.1	71.4	81.0
Quality			
Population covered by at least a 3G mobile network (%)	46	100	99
International Internet bandwidth (bit/s per Internet user)	49,203	158,030	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	9.6	3.2	14.2
Fixed-broadband sub-basket (\$ a month)	10.3	12.8	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	2.5	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	22.3	4.4	14.4
Trade			
ICT goods exports (% of total goods exports)	2.7	2.9	9.5
ICT goods imports (% of total goods imports)	4.1	4.1	11.2
ICT service exports (% of total service exports)	9.7	12.4	32.0
Applications			
Online service index (0-1, 1=highest presence)	0.48	0.76	0.67
Secure Internet servers (per million people)	188.6	243.6	1,194.6

Luxembourg

Europe & Central Asia

High income

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	0.51	0.57	1,187
Urban population (% of total)	89	90	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	79,520	77,000	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	1.9	2.9	1.5
Adult literacy rate (% ages 15 and older)	..	..	..
Gross primary, secondary, and tertiary school enrollment (%)	78	..	95
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Public	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	1.3	1.0	2.5
Telecommunications investment (% of revenue)	18.6	43.2	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	53.6	51.0	41.2
Mobile-cellular telephone subscriptions (per 100 people)	143.1	148.5	124.5
Fixed-broadband subscriptions (per 100 people)	33.2	36.5	31.0
Households with a computer (%)	90.2	95.3	83.2
Households with Internet access at home (%)	90.3	96.8	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	69.1	59.2	..
Domestic mobile traffic (minutes/subscription/month)	78.9	82.6	195.9
Individuals using the Internet (%)	90.6	97.3	81.0
Quality			
Population covered by at least a 3G mobile network (%)	90	99	99
International Internet bandwidth (bit/s per Internet user)	2,521,959	7,186,378	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	25.8	22.8	14.2
Fixed-broadband sub-basket (\$ a month)	38.1	32.7	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	39.9	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	11.1	14.4
Trade			
ICT goods exports (% of total goods exports)	2.9	2.0	9.5
ICT goods imports (% of total goods imports)	4.9	4.0	11.2
ICT service exports (% of total service exports)	17.3	21.0	32.0
Applications			
Online service index (0-1, 1=highest presence)	0.38	0.62	0.67
Secure Internet servers (per million people)	1,412.4	2,913.9	1,194.6

Macao SAR, China

East Asia & Pacific

High income

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	0.53	0.59	1,187
Urban population (% of total)	100	100	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	45,890	76,300	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	9.7	4.2	1.5
Adult literacy rate (% ages 15 and older)	96	96	..
Gross primary, secondary, and tertiary school enrollment (%)	..	..	95
Sector structure			
Separate telecommunications/ICT regulator	..	..
Status of main fixed-line telephone operator	..	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	..
Mobile telephone service	..	..
Internet service	..	..
Foreign ownership (not allowed, restricted, allowed)	..	..
Reg. treatment of VoIP (banned, closed, no framework, allowed)	No	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	1.8	1.4	2.5
Telecommunications investment (% of revenue)	10.2	11.5	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	31.5	25.0	41.2
Mobile-cellular telephone subscriptions (per 100 people)	209.9	324.4	124.5
Fixed-broadband subscriptions (per 100 people)	24.7	29.1	31.0
Households with a computer (%)	83.0	79.0	83.2
Households with Internet access at home (%)	75.5	86.3	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	35.0	27.8	..
Domestic mobile traffic (minutes/subscription/month)	..	..	195.9
Individuals using the Internet (%)	55.2	77.6	81.0
Quality			
Population covered by at least a 3G mobile network (%)	100	100	99
International Internet bandwidth (bit/s per Internet user)	32,196	111,931	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	5.7	5.7	14.2
Fixed-broadband sub-basket (\$ a month)	17.2	17.3	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	37.6	22.3	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	37.3	43.6	14.4
Trade			
ICT goods exports (% of total goods exports)	4.6	12.2	9.5
ICT goods imports (% of total goods imports)	12.6	12.4	11.2
ICT service exports (% of total service exports)	0.9	0.5	32.0
Applications			
Online service index (0-1, 1=highest presence)	..	..	0.67
Secure Internet servers (per million people)	213.2	466.3	1,194.6

Macedonia, FYR

Europe & Central Asia

Upper middle income

	Country data		Upper middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	2	2	2,594
Urban population (% of total)	57	57	64
GNI per capita, <i>World Bank Atlas</i> method (\$)	4,720	5,140	8,186
GDP growth, 2005–10 and 2010–15 (avg. annual %)	4.0	2.3	4.5
Adult literacy rate (% ages 15 and older)	..	98	..
Gross primary, secondary, and tertiary school enrollment (%)	71	..	81
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	..
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	..	..
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	4.7	3.8	2.1
Telecommunications investment (% of revenue)	14.0	22.2	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	19.7	17.7	17.3
Mobile-cellular telephone subscriptions (per 100 people)	102.4	105.4	105.1
Fixed-broadband subscriptions (per 100 people)	12.3	17.2	15.4
Households with a computer (%)	53.6	68.4	48.7
Households with Internet access at home (%)	46.1	69.4	52.2
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	9.0	7.8	2.3
Domestic mobile traffic (minutes/subscription/month)	102.6	186.3	173.1
Individuals using the Internet (%)	51.9	70.4	52.1
Quality			
Population covered by at least a 3G mobile network (%)	67	98	69
International Internet bandwidth (bit/s per Internet user)	16,498	53,890	26,098
Affordability			
Mobile-cellular sub-basket (\$ a month)	23.4	10.6	8.5
Fixed-broadband sub-basket (\$ a month)	12.8	10.8	15.5
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	6.2	5.4	7.7
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	6.2	5.4	11.1
Trade			
ICT goods exports (% of total goods exports)	0.3	0.4	15.7
ICT goods imports (% of total goods imports)	4.8	3.9	14.4
ICT service exports (% of total service exports)	29.8	22.3	25.7
Applications			
Online service index (0-1, 1=highest presence)	0.32	0.24	0.37
Secure Internet servers (per million people)	24.2	91.4	34.7

Madagascar

Sub-Saharan Africa

Low income

	Country data		Low-income group
	2010	2015	2015
Economic and social context			
Population (millions)	21	24	638
Urban population (% of total)	32	35	31
GNI per capita, <i>World Bank Atlas</i> method (\$)	420	420	620
GDP growth, 2005–10 and 2010–15 (avg. annual %)	3.0	2.6	5.4
Adult literacy rate (% ages 15 and older)	64	65	..
Gross primary, secondary, and tertiary school enrollment (%)	66	..	60
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	..
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	R	R	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	C	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	3.5	3.2	..
Telecommunications investment (% of revenue)	29.0	19.4	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	0.7	1.0	0.9
Mobile-cellular telephone subscriptions (per 100 people)	36.6	46.0	60.0
Fixed-broadband subscriptions (per 100 people)	0.0	0.1	0.3
Households with a computer (%)	1.4	5.3 ^a	4.8
Households with Internet access at home (%)	1.3 ^a	5.8 ^a	7.1
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	1.7	1.0	..
Domestic mobile traffic (minutes/subscription/month)	3.3	2.4	48.9
Individuals using the Internet (%)	1.7 ^a	4.2 ^a	9.5
Quality			
Population covered by at least a 3G mobile network (%)	..	..	51
International Internet bandwidth (bit/s per Internet user)	728	12,420	4,245
Affordability			
Mobile-cellular sub-basket (\$ a month)	15.4	15.2	9.4
Fixed-broadband sub-basket (\$ a month)	90.6	50.8	33.6
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	11.6	10.2	8.0
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	21.0	15.2	10.8
Trade			
ICT goods exports (% of total goods exports)	0.2	0.1	..
ICT goods imports (% of total goods imports)	3.1	2.5	3.4
ICT service exports (% of total service exports)	22.1	15.2	..
Applications			
Online service index (0-1, 1=highest presence)	0.17	0.24	0.11
Secure Internet servers (per million people)	0.5	1.7	1.5

Sub-Saharan Africa

Low income

	Country data		Low-income group
	2010	2015	2015
Economic and social context			
Population (millions)	15	17	638
Urban population (% of total)	16	16	31
GNI per capita, <i>World Bank Atlas</i> method (\$)	440	350	620
GDP growth, 2005–10 and 2010–15 (avg. annual %)	7.7	4.2	5.4
Adult literacy rate (% ages 15 and older)	61	66	..
Gross primary, secondary, and tertiary school enrollment (%)	68	..	60
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	P	C	
Internet service	P	C	
Foreign ownership (not allowed, restricted, allowed)	R	R	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	C	B	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	3.0	2.9	..
Telecommunications investment (% of revenue)	..	..	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	1.0	0.3	0.9
Mobile-cellular telephone subscriptions (per 100 people)	20.8	35.3	60.0
Fixed-broadband subscriptions (per 100 people)	0.0	0.0	0.3
Households with a computer (%)	2.8 ^a	5.8 ^a	4.8
Households with Internet access at home (%)	5.0 ^a	9.1 ^a	7.1
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	..	3.9	..
Domestic mobile traffic (minutes/subscription/month)	5.2	35.7	48.9
Individuals using the Internet (%)	2.3	9.3 ^a	9.5
Quality			
Population covered by at least a 3G mobile network (%)	2	32	51
International Internet bandwidth (bit/s per Internet user)	2,034	2,429	4,245
Affordability			
Mobile-cellular sub-basket (\$ a month)	10.8	10.9	9.4
Fixed-broadband sub-basket (\$ a month)	492.6	10.3	33.6
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	9.4	5.2	8.0
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	7.9	10.8
Trade			
ICT goods exports (% of total goods exports)	0.4	0.6	..
ICT goods imports (% of total goods imports)	5.2	3.4	3.4
ICT service exports (% of total service exports)	12.6	30.6	..
Applications			
Online service index (0-1, 1=highest presence)	0.02	0.17	0.11
Secure Internet servers (per million people)	0.3	1.3	1.5

Malaysia

East Asia & Pacific

Upper middle income

	Country data		Upper middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	28	30	2,594
Urban population (% of total)	71	75	64
GNI per capita, <i>World Bank Atlas</i> method (\$)	8,280	10,570	8,186
GDP growth, 2005–10 and 2010–15 (avg. annual %)	4.1	5.3	4.5
Adult literacy rate (% ages 15 and older)	93	95	..
Gross primary, secondary, and tertiary school enrollment (%)	71	73	81
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	R	R	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	4.7	3.8	2.1
Telecommunications investment (% of revenue)	14.4	18.6	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	16.3	14.3	17.3
Mobile-cellular telephone subscriptions (per 100 people)	119.7	143.9	105.1
Fixed-broadband subscriptions (per 100 people)	7.4	9.0	15.4
Households with a computer (%)	61.8	67.6	48.7
Households with Internet access at home (%)	55.6	70.1	52.2
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	..	..	2.3
Domestic mobile traffic (minutes/subscription/month)	..	..	173.1
Individuals using the Internet (%)	56.3	71.1	52.1
Quality			
Population covered by at least a 3G mobile network (%)	81	92	69
International Internet bandwidth (bit/s per Internet user)	11,495	34,119	26,098
Affordability			
Mobile-cellular sub-basket (\$ a month)	8.8	5.2	8.5
Fixed-broadband sub-basket (\$ a month)	20.5	10.3	15.5
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	8.1	7.7
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	15.5	12.2	11.1
Trade			
ICT goods exports (% of total goods exports)	34.0	28.7	15.7
ICT goods imports (% of total goods imports)	29.8	23.1	14.4
ICT service exports (% of total service exports)	20.2	23.7	25.7
Applications			
Online service index (0-1, 1=highest presence)	0.63	0.68	0.37
Secure Internet servers (per million people)	41.9	103.8	34.7

Maldives

South Asia

Upper middle income

	Country data		Upper middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	0.37	0.41	2,594
Urban population (% of total)	40	46	64
GNI per capita, <i>World Bank Atlas</i> method (\$)	5,360	6,670	8,186
GDP growth, 2005–10 and 2010–15 (avg. annual %)	7.9	4.7	4.5
Adult literacy rate (% ages 15 and older)	98	99	..
Gross primary, secondary, and tertiary school enrollment (%)	..	..	81
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	..
Mobile telephone service	P	P	
Internet service	..	..
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	B	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	..	..	2.1
Telecommunications investment (% of revenue)	..	..	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	8.7	6.1	17.3
Mobile-cellular telephone subscriptions (per 100 people)	151.8	206.7	105.1
Fixed-broadband subscriptions (per 100 people)	4.8	6.5	15.4
Households with a computer (%)	55.5	68.5 ^a	48.7
Households with Internet access at home (%)	23.5	49.6 ^a	52.2
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	32.7	33.9	2.3
Domestic mobile traffic (minutes/subscription/month)	209.3	209.5	173.1
Individuals using the Internet (%)	26.5	54.5 ^a	52.1
Quality			
Population covered by at least a 3G mobile network (%)	57	100 ^a	69
International Internet bandwidth (bit/s per Internet user)	33,447	88,008	26,098
Affordability			
Mobile-cellular sub-basket (\$ a month)	6.8	6.1	8.5
Fixed-broadband sub-basket (\$ a month)	9.3	20.7	15.5
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	10.4	6.4	7.7
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	10.4	19.5	11.1
Trade			
ICT goods exports (% of total goods exports)	..	..	15.7
ICT goods imports (% of total goods imports)	6.5	4.4	14.4
ICT service exports (% of total service exports)	..	..	25.7
Applications			
Online service index (0-1, 1=highest presence)	0.16	0.36	0.37
Secure Internet servers (per million people)	46.3	102.6	34.7

Mali

Sub-Saharan Africa

Low income

	Country data		Low-income group
	2010	2015	2015
Economic and social context			
Population (millions)	15	18	638
Urban population (% of total)	36	40	31
GNI per capita, <i>World Bank Atlas</i> method (\$)	730	790	620
GDP growth, 2005–10 and 2010–15 (avg. annual %)	10.4	8.3	5.4
Adult literacy rate (% ages 15 and older)	31	33	..
Gross primary, secondary, and tertiary school enrollment (%)	50	..	60
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	P	P	
Mobile telephone service	P	P	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	B	B	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	5.3	6.2	..
Telecommunications investment (% of revenue)	34.3	15.8	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	0.8	1.0	0.9
Mobile-cellular telephone subscriptions (per 100 people)	53.2	139.6	60.0
Fixed-broadband subscriptions (per 100 people)	0.1	0.0	0.3
Households with a computer (%)	1.8 ^a	3.3	4.8
Households with Internet access at home (%)	1.2 ^a	8.2	7.1
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	3.9	3.9	..
Domestic mobile traffic (minutes/subscription/month)	2.6	15.6	48.9
Individuals using the Internet (%)	2.0 ^a	10.3 ^a	9.5
Quality			
Population covered by at least a 3G mobile network (%)	..	..	51
International Internet bandwidth (bit/s per Internet user)	2,771	1,279	4,245
Affordability			
Mobile-cellular sub-basket (\$ a month)	16.9	12.4	9.4
Fixed-broadband sub-basket (\$ a month)	50.1	33.6	33.6
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	9.2	7.9	8.0
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	14.7	12.7	10.8
Trade			
ICT goods exports (% of total goods exports)	0.1	..	..
ICT goods imports (% of total goods imports)	2.6	..	3.4
ICT service exports (% of total service exports)	33.9	42.5	..
Applications			
Online service index (0-1, 1=highest presence)	0.18	0.13	0.11
Secure Internet servers (per million people)	0.7	1.3	1.5

Middle East & North Africa

High income

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	0.41	0.43	1,187
Urban population (% of total)	95	95	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	20,090	21,000	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	2.2	1.7	1.5
Adult literacy rate (% ages 15 and older)	93	94	..
Gross primary, secondary, and tertiary school enrollment (%)	83	79	95
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Private	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	3.2	2.8	2.5
Telecommunications investment (% of revenue)	15.8	..	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	58.3	53.4	41.2
Mobile-cellular telephone subscriptions (per 100 people)	107.3	129.3	124.5
Fixed-broadband subscriptions (per 100 people)	29.6	37.8	31.0
Households with a computer (%)	73.1	81.1	83.2
Households with Internet access at home (%)	70.4	81.9	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	11.7	9.3	..
Domestic mobile traffic (minutes/subscription/month)	68.4	106.6	195.9
Individuals using the Internet (%)	63.0	76.2	81.0
Quality			
Population covered by at least a 3G mobile network (%)	..	100	99
International Internet bandwidth (bit/s per Internet user)	464,099	1,220,570	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	20.6	19.7	14.2
Fixed-broadband sub-basket (\$ a month)	18.2	26.1	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	25.7	13.3	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	19.3	11.1	14.4
Trade			
ICT goods exports (% of total goods exports)	30.9	15.2	9.5
ICT goods imports (% of total goods imports)	15.4	6.9	11.2
ICT service exports (% of total service exports)	19.1	25.8	32.0
Applications			
Online service index (0-1, 1=highest presence)	0.47	0.40	0.67
Secure Internet servers (per million people)	1,375.1	1,866.3	1,194.6

Marshall Islands

East Asia & Pacific

Upper middle income

	Country data		Upper middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	0.05	0.05	2,594
Urban population (% of total)	71	73	64
GNI per capita, <i>World Bank Atlas</i> method (\$)	3,720	4,390	8,186
GDP growth, 2005–10 and 2010–15 (avg. annual %)	0.7	1.4	4.5
Adult literacy rate (% ages 15 and older)	98	98	..
Gross primary, secondary, and tertiary school enrollment (%)	..	..	81
Sector structure			
Separate telecommunications/ICT regulator	No	No	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	M	M	
Mobile telephone service	M	M	
Internet service	M	M	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	B	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	..	..	2.1
Telecommunications investment (% of revenue)	..	..	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	..	4.5	17.3
Mobile-cellular telephone subscriptions (per 100 people)	..	29.2	105.1
Fixed-broadband subscriptions (per 100 people)	..	1.9	15.4
Households with a computer (%)	..	..	48.7
Households with Internet access at home (%)	..	..	52.2
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	..	..	2.3
Domestic mobile traffic (minutes/subscription/month)	..	..	173.1
Individuals using the Internet (%)	7.0 ^a	19.3 ^a	52.1
Quality			
Population covered by at least a 3G mobile network (%)	..	..	69
International Internet bandwidth (bit/s per Internet user)	12,262	75,844	26,098
Affordability			
Mobile-cellular sub-basket (\$ a month)	22.2	22.2	8.5
Fixed-broadband sub-basket (\$ a month)	50.0	50.0	15.5
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	..	7.7
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	..	11.1
Trade			
ICT goods exports (% of total goods exports)	..	..	15.7
ICT goods imports (% of total goods imports)	..	..	14.4
ICT service exports (% of total service exports)	..	..	25.7
Applications			
Online service index (0-1, 1=highest presence)	0.03	0.11	0.37
Secure Internet servers (per million people)	114.4	113.2	34.7

Mauritania

Sub-Saharan Africa

Lower middle income

	Country data		Lower middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	4	4	2,927
Urban population (% of total)	57	60	39
GNI per capita, <i>World Bank Atlas</i> method (\$)	1,140	1,370	2,035
GDP growth, 2005–10 and 2010–15 (avg. annual %)	3.9	5.3	5.4
Adult literacy rate (% ages 15 and older)	46	52	..
Gross primary, secondary, and tertiary school enrollment (%)	46	50	68
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	No	C	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	5.1	..	..
Telecommunications investment (% of revenue)	19.4	..	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	2.0	1.3	3.5
Mobile-cellular telephone subscriptions (per 100 people)	76.9	89.3	90.5
Fixed-broadband subscriptions (per 100 people)	0.2	0.2	1.9
Households with a computer (%)	3.0 ^a	4.7 ^a	19.3
Households with Internet access at home (%)	1.6 ^a	15.6 ^a	24.3
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	5.2	..	7.5
Domestic mobile traffic (minutes/subscription/month)	58.7	..	152.0
Individuals using the Internet (%)	4.0 ^a	15.2 ^a	28.6
Quality			
Population covered by at least a 3G mobile network (%)	..	..	..
International Internet bandwidth (bit/s per Internet user)	1,939	1,451	10,372
Affordability			
Mobile-cellular sub-basket (\$ a month)	16.4	15.0	6.9
Fixed-broadband sub-basket (\$ a month)	23.5	10.8	14.3
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	31.5	5.8
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	50.6	31.5	10.0
Trade			
ICT goods exports (% of total goods exports)	..	..	5.7
ICT goods imports (% of total goods imports)	0.9	0.8	7.6
ICT service exports (% of total service exports)	46.8	56.9	48.0
Applications			
Online service index (0-1, 1=highest presence)	0.09	0.05	0.26
Secure Internet servers (per million people)	1.9	2.7	7.4

Mauritius

Sub-Saharan Africa

Upper middle income

	Country data		Upper middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	1	1	2,594
Urban population (% of total)	41	40	64
GNI per capita, <i>World Bank Atlas</i> method (\$)	7,970	9,610	8,186
GDP growth, 2005–10 and 2010–15 (avg. annual %)	4.6	3.4	4.5
Adult literacy rate (% ages 15 and older)	89	91	..
Gross primary, secondary, and tertiary school enrollment (%)	78	83	81
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	No	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	2.4	2.4	2.1
Telecommunications investment (% of revenue)	55.5	..	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	31.5	30.3	17.3
Mobile-cellular telephone subscriptions (per 100 people)	96.8	140.6	105.1
Fixed-broadband subscriptions (per 100 people)	7.6	15.7	15.4
Households with a computer (%)	37.7	57.0	48.7
Households with Internet access at home (%)	29.0	60.0	52.2
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	16.6	9.0	2.3
Domestic mobile traffic (minutes/subscription/month)	119.2	108.9	173.1
Individuals using the Internet (%)	28.3	50.1	52.1
Quality			
Population covered by at least a 3G mobile network (%)	..	93	69
International Internet bandwidth (bit/s per Internet user)	9,723	33,896	26,098
Affordability			
Mobile-cellular sub-basket (\$ a month)	6.8	5.0	8.5
Fixed-broadband sub-basket (\$ a month)	16.4	2.9	15.5
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	11.6	5.6	7.7
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	11.6	8.5	11.1
Trade			
ICT goods exports (% of total goods exports)	1.1	11.8	15.7
ICT goods imports (% of total goods imports)	5.1	9.7	14.4
ICT service exports (% of total service exports)	31.9	30.1	25.7
Applications			
Online service index (0-1, 1=highest presence)	0.30	0.47	0.37
Secure Internet servers (per million people)	88.8	175.8	34.7

Latin America & Caribbean

Upper middle income

	Country data		Upper middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	119	127	2,594
Urban population (% of total)	78	79	64
GNI per capita, <i>World Bank Atlas</i> method (\$)	8,840	9,710	8,186
GDP growth, 2005–10 and 2010–15 (avg. annual %)	1.4	2.7	4.5
Adult literacy rate (% ages 15 and older)	93	95	..
Gross primary, secondary, and tertiary school enrollment (%)	75	78	81
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Private	Private	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	R	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	No	No	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	2.9	2.5	2.1
Telecommunications investment (% of revenue)	19.7	15.0	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	16.9	15.9	17.3
Mobile-cellular telephone subscriptions (per 100 people)	77.5	85.3	105.1
Fixed-broadband subscriptions (per 100 people)	9.0	11.6	15.4
Households with a computer (%)	29.8	44.9	48.7
Households with Internet access at home (%)	22.2	39.2	52.2
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	..	..	2.3
Domestic mobile traffic (minutes/subscription/month)	91.6	114.8	173.1
Individuals using the Internet (%)	31.1	57.4	52.1
Quality			
Population covered by at least a 3G mobile network (%)	..	89 ^a	69
International Internet bandwidth (bit/s per Internet user)	7,039	20,855	26,098
Affordability			
Mobile-cellular sub-basket (\$ a month)	17.4	8.1	8.5
Fixed-broadband sub-basket (\$ a month)	17.3	22.0	15.5
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	17.9	14.9	7.7
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	18.9	15.7	11.1
Trade			
ICT goods exports (% of total goods exports)	20.2	16.0	15.7
ICT goods imports (% of total goods imports)	19.2	16.3	14.4
ICT service exports (% of total service exports)	..	..	25.7
Applications			
Online service index (0-1, 1=highest presence)	0.44	0.66	0.37
Secure Internet servers (per million people)	19.7	39.2	34.7

Micronesia, Fed. Sts.

East Asia & Pacific

Lower middle income

	Country data		Lower middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	0.10	0.10	2,927
Urban population (% of total)	22	22	39
GNI per capita, <i>World Bank Atlas</i> method (\$)	2,870	3,200	2,035
GDP growth, 2005–10 and 2010–15 (avg. annual %)	-0.6	-1.2	5.4
Adult literacy rate (% ages 15 and older)	..	..	..
Gross primary, secondary, and tertiary school enrollment (%)	..	..	68
Sector structure			
Separate telecommunications/ICT regulator	No	No	
Status of main fixed-line telephone operator	Public	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	M	M	
Mobile telephone service	M	M	
Internet service	M	M	
Foreign ownership (not allowed, restricted, allowed)	R	..	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	No	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	..	..	..
Telecommunications investment (% of revenue)	..	..	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	8.2	6.5	3.5
Mobile-cellular telephone subscriptions (per 100 people)	26.6	30.3	90.5
Fixed-broadband subscriptions (per 100 people)	1.0	3.1	1.9
Households with a computer (%)	..	..	19.3
Households with Internet access at home (%)	..	..	24.3
Usage			
Int'l. voice traffic, total (minutes/subscriber/month)	..	..	7.5
Domestic mobile traffic (minutes/subscriber/month)	..	..	152.0
Individuals using the Internet (%)	20.0 ^a	31.5 ^a	28.6
Quality			
Population covered by at least a 3G mobile network (%)	..	15	..
International Internet bandwidth (bit/s per Internet user)	1,930	9,117	10,372
Affordability			
Mobile-cellular sub-basket (\$ a month)	9.1	25.8	6.9
Fixed-broadband sub-basket (\$ a month)	40.0	33.0	14.3
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	31.5	5.8
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	..	10.0
Trade			
ICT goods exports (% of total goods exports)	..	..	5.7
ICT goods imports (% of total goods imports)	1.3	1.9	7.6
ICT service exports (% of total service exports)	11.8	9.6	48.0
Applications			
Online service index (0-1, 1=highest presence)	0.13	0.19	0.26
Secure Internet servers (per million people)	38.6	19.3	7.4

Europe & Central Asia

Lower middle income

	Country data		Lower middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	4	4	2,927
Urban population (% of total)	45	45	39
GNI per capita, <i>World Bank Atlas</i> method (\$)	1,820	2,220	2,035
GDP growth, 2005–10 and 2010–15 (avg. annual %)	2.9	4.1	5.4
Adult literacy rate (% ages 15 and older)	..	99	..
Gross primary, secondary, and tertiary school enrollment (%)	69	71	68
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Public	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	No	No	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	6.0	4.1	..
Telecommunications investment (% of revenue)	40.2	52.0	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	32.5	35.0	3.5
Mobile-cellular telephone subscriptions (per 100 people)	71.4	108.0	90.5
Fixed-broadband subscriptions (per 100 people)	7.6	15.5	1.9
Households with a computer (%)	37.0	46.4 ^a	19.3
Households with Internet access at home (%)	34.7 ^a	49.0 ^a	24.3
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	20.7	13.1	7.5
Domestic mobile traffic (minutes/subscription/month)	115.5	122.7	152.0
Individuals using the Internet (%)	32.3 ^a	49.8 ^a	28.6
Quality			
Population covered by at least a 3G mobile network (%)	99	99	..
International Internet bandwidth (bit/s per Internet user)	81,450	194,898	10,372
Affordability			
Mobile-cellular sub-basket (\$ a month)	12.6	6.9	6.9
Fixed-broadband sub-basket (\$ a month)	12.2	9.4	14.3
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	8.3	2.2	5.8
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	8.3	4.3	10.0
Trade			
ICT goods exports (% of total goods exports)	0.7	0.2	5.7
ICT goods imports (% of total goods imports)	3.9	3.1	7.6
ICT service exports (% of total service exports)	26.4	25.4	48.0
Applications			
Online service index (0-1, 1=highest presence)	0.30	0.53	0.26
Secure Internet servers (per million people)	13.5	61.6	7.4

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	0.04	0.04	1,187
Urban population (% of total)	100	100	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	186,710	..	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	10.3	..	1.5
Adult literacy rate (% ages 15 and older)	..	..	..
Gross primary, secondary, and tertiary school enrollment (%)	..	..	95
Sector structure			
Separate telecommunications/ICT regulator	No	No	
Status of main fixed-line telephone operator	Private	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	P	P	
Mobile telephone service	M	M	
Internet service	M	M	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	..	..
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	..	..	2.5
Telecommunications investment (% of revenue)	..	..	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	116.5	128.1	41.2
Mobile-cellular telephone subscriptions (per 100 people)	63.5	88.8	124.5
Fixed-broadband subscriptions (per 100 people)	37.5	47.5	31.0
Households with a computer (%)	69.6 ^a	74.9 ^a	83.2
Households with Internet access at home (%)	67.1 ^a	76.6 ^a	85.0
Usage			
Int'l. voice traffic, total (minutes/subscriber/month)	114.6	..	..
Domestic mobile traffic (minutes/subscriber/month)	122.5	137.7	195.9
Individuals using the Internet (%)	75.0	93.4 ^a	81.0
Quality			
Population covered by at least a 3G mobile network (%)	100	100	99
International Internet bandwidth (bit/s per Internet user)	47,044	64,287	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	..	40.0	14.2
Fixed-broadband sub-basket (\$ a month)	..	55.3	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	12.2	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	57.1	43.3	14.4
Trade			
ICT goods exports (% of total goods exports)	..	..	9.5
ICT goods imports (% of total goods imports)	..	..	11.2
ICT service exports (% of total service exports)	..	..	32.0
Applications			
Online service index (0-1, 1=highest presence)	0.14	0.22	0.67
Secure Internet servers (per million people)	2,442.7	3,975.5	1,194.6

Mongolia

East Asia & Pacific

Lower middle income

	Country data		Lower middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	3	3	2,927
Urban population (% of total)	68	72	39
GNI per capita, <i>World Bank Atlas</i> method (\$)	2,000	3,830	2,035
GDP growth, 2005–10 and 2010–15 (avg. annual %)	6.4	10.3	5.4
Adult literacy rate (% ages 15 and older)	98	98	..
Gross primary, secondary, and tertiary school enrollment (%)	89	86	68
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	P	..	
Mobile telephone service	P	..	
Internet service	C	..	
Foreign ownership (not allowed, restricted, allowed)	R	R	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	4.8	..	..
Telecommunications investment (% of revenue)	19.1	..	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	7.1	8.7	3.5
Mobile-cellular telephone subscriptions (per 100 people)	92.5	105.0	90.5
Fixed-broadband subscriptions (per 100 people)	2.8	7.1	1.9
Households with a computer (%)	22.3	42.6	19.3
Households with Internet access at home (%)	7.7	24.5	24.3
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	4.5	..	7.5
Domestic mobile traffic (minutes/subscription/month)	121.6	..	152.0
Individuals using the Internet (%)	10.2	21.4	28.6
Quality			
Population covered by at least a 3G mobile network (%)	50	95	..
International Internet bandwidth (bit/s per Internet user)	62,121	159,595	10,372
Affordability			
Mobile-cellular sub-basket (\$ a month)	3.6	2.9	6.9
Fixed-broadband sub-basket (\$ a month)	8.5	6.6	14.3
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	10.3	5.6	5.8
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	8.8	5.1	10.0
Trade			
ICT goods exports (% of total goods exports)	..	0.1	5.7
ICT goods imports (% of total goods imports)	..	3.9	7.6
ICT service exports (% of total service exports)	10.2	22.5	48.0
Applications			
Online service index (0-1, 1=highest presence)	0.56	0.61	0.26
Secure Internet servers (per million people)	10.7	30.1	7.4

Montenegro

Europe & Central Asia

Upper middle income

	Country data		Upper middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	0.62	0.62	2,594
Urban population (% of total)	63	64	64
GNI per capita, <i>World Bank Atlas</i> method (\$)	6,890	7,240	8,186
GDP growth, 2005–10 and 2010–15 (avg. annual %)	4.3	1.6	4.5
Adult literacy rate (% ages 15 and older)	98	99	..
Gross primary, secondary, and tertiary school enrollment (%)	89	..	81
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Private	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	..	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	..	5.5	2.1
Telecommunications investment (% of revenue)	..	..	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	27.5 ^a	24.8	17.3
Mobile-cellular telephone subscriptions (per 100 people)	188.7	162.2	105.1
Fixed-broadband subscriptions (per 100 people)	10.4	18.1	15.4
Households with a computer (%)	38.0 ^a	56.4 ^a	48.7
Households with Internet access at home (%)	35.9 ^a	61.1 ^a	52.2
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	..	..	2.3
Domestic mobile traffic (minutes/subscription/month)	..	141.9	173.1
Individuals using the Internet (%)	37.5 ^a	64.6 ^a	52.1
Quality			
Population covered by at least a 3G mobile network (%)	72	97	69
International Internet bandwidth (bit/s per Internet user)	30,104	102,166	26,098
Affordability			
Mobile-cellular sub-basket (\$ a month)	16.5	9.7	8.5
Fixed-broadband sub-basket (\$ a month)	18.4	15.3	15.5
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	13.2	7.7
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	7.2	11.1
Trade			
ICT goods exports (% of total goods exports)	0.3	0.6	15.7
ICT goods imports (% of total goods imports)	3.6	4.1	14.4
ICT service exports (% of total service exports)	8.0	9.1	25.7
Applications			
Online service index (0-1, 1=highest presence)	0.31	0.53	0.37
Secure Internet servers (per million people)	25.8	72.3	34.7

Middle East & North Africa

Lower middle income

	Country data		Lower middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	32	34	2,927
Urban population (% of total)	58	60	39
GNI per capita, <i>World Bank Atlas</i> method (\$)	2,950	3,040	2,035
GDP growth, 2005–10 and 2010–15 (avg. annual %)	4.9	3.8	5.4
Adult literacy rate (% ages 15 and older)	67	72	..
Gross primary, secondary, and tertiary school enrollment (%)	65	72	68
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	C	B	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	4.6	3.5	..
Telecommunications investment (% of revenue)	17.0	19.9	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	11.8	6.5	3.5
Mobile-cellular telephone subscriptions (per 100 people)	101.1	126.9	90.5
Fixed-broadband subscriptions (per 100 people)	1.6	3.4	1.9
Households with a computer (%)	34.2	54.8	19.3
Households with Internet access at home (%)	25.5	66.5	24.3
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	9.7	9.4	7.5
Domestic mobile traffic (minutes/subscription/month)	35.9	89.6	152.0
Individuals using the Internet (%)	52.0	57.1	28.6
Quality			
Population covered by at least a 3G mobile network (%)	69	80	..
International Internet bandwidth (bit/s per Internet user)	4,558	18,316	10,372
Affordability			
Mobile-cellular sub-basket (\$ a month)	33.1	10.2	6.9
Fixed-broadband sub-basket (\$ a month)	11.7	10.1	14.3
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	46.4	5.1	5.8
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	11.5	10.1	10.0
Trade			
ICT goods exports (% of total goods exports)	3.8	2.7	5.7
ICT goods imports (% of total goods imports)	5.9	3.8	7.6
ICT service exports (% of total service exports)	20.1	19.2	48.0
Applications			
Online service index (0-1, 1=highest presence)	0.24	0.69	0.26
Secure Internet servers (per million people)	3.0	6.2	7.4

Mozambique

Sub-Saharan Africa

Low income

	Country data		Low-income group
	2010	2015	2015
Economic and social context			
Population (millions)	24	28	638
Urban population (% of total)	31	32	31
GNI per capita, <i>World Bank Atlas</i> method (\$)	460	580	620
GDP growth, 2005–10 and 2010–15 (avg. annual %)	7.3	7.1	5.4
Adult literacy rate (% ages 15 and older)	51	59	..
Gross primary, secondary, and tertiary school enrollment (%)	61	59	60
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	R	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	B	B	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	5.6	..	..
Telecommunications investment (% of revenue)	39.0	..	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	0.4	0.3	0.9
Mobile-cellular telephone subscriptions (per 100 people)	30.1	74.2	60.0
Fixed-broadband subscriptions (per 100 people)	0.1	0.1	0.3
Households with a computer (%)	4.9 ^a	6.1 ^a	4.8
Households with Internet access at home (%)	2.4 ^a	13.2 ^a	7.1
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	0.8	..	..
Domestic mobile traffic (minutes/subscription/month)	14.8	..	48.9
Individuals using the Internet (%)	4.2	9.0 ^a	9.5
Quality			
Population covered by at least a 3G mobile network (%)	..	50	51
International Internet bandwidth (bit/s per Internet user)	1,281	6,145	4,245
Affordability			
Mobile-cellular sub-basket (\$ a month)	17.0	8.1	9.4
Fixed-broadband sub-basket (\$ a month)	49.7	16.3	33.6
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	26.4	2.5	8.0
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	26.4	6.1	10.8
Trade			
ICT goods exports (% of total goods exports)	0.1	0.0	..
ICT goods imports (% of total goods imports)	1.8	4.0	3.4
ICT service exports (% of total service exports)	19.7	6.3	..
Applications			
Online service index (0-1, 1=highest presence)	0.17	0.31	0.11
Secure Internet servers (per million people)	0.8	2.2	1.5

Myanmar

East Asia & Pacific

Lower middle income

	Country data		Lower middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	52	54	2,927
Urban population (% of total)	31	34	39
GNI per capita, <i>World Bank Atlas</i> method (\$)	..	1,280	2,035
GDP growth, 2005–10 and 2010–15 (avg. annual %)	..	8.0	5.4
Adult literacy rate (% ages 15 and older)	..	93	..
Gross primary, secondary, and tertiary school enrollment (%)	..	..	68
Sector structure			
Separate telecommunications/ICT regulator	No	No	
Status of main fixed-line telephone operator	Public	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	M	M	
Mobile telephone service	M	C	
Internet service	M	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	C	No	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	..	..	..
Telecommunications investment (% of revenue)	..	..	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	0.9	1.0	3.5
Mobile-cellular telephone subscriptions (per 100 people)	1.1	76.7	90.5
Fixed-broadband subscriptions (per 100 people)	0.0	0.3	1.9
Households with a computer (%)	1.4 ^a	14.0 ^a	19.3
Households with Internet access at home (%)	1.0 ^a	15.0 ^a	24.3
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	..	..	7.5
Domestic mobile traffic (minutes/subscription/month)	..	..	152.0
Individuals using the Internet (%)	0.3	21.8 ^a	28.6
Quality			
Population covered by at least a 3G mobile network (%)	..	79	..
International Internet bandwidth (bit/s per Internet user)	7,702	3,676	10,372
Affordability			
Mobile-cellular sub-basket (\$ a month)	12.8	1.9	6.9
Fixed-broadband sub-basket (\$ a month)	28.5	18.2	14.3
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	2.4	5.8
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	7.3	10.0
Trade			
ICT goods exports (% of total goods exports)	0.0	..	5.7
ICT goods imports (% of total goods imports)	1.7	..	7.6
ICT service exports (% of total service exports)	19.8	11.1	48.0
Applications			
Online service index (0-1, 1=highest presence)	0.08	0.02	0.26
Secure Internet servers (per million people)	0.1	0.7	7.4

Namibia

Sub-Saharan Africa

Upper middle income

	Country data		Upper middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	2	2	2,594
Urban population (% of total)	42	47	64
GNI per capita, <i>World Bank Atlas</i> method (\$)	4,360	5,210	8,186
GDP growth, 2005–10 and 2010–15 (avg. annual %)	4.1	5.6	4.5
Adult literacy rate (% ages 15 and older)	89	91	..
Gross primary, secondary, and tertiary school enrollment (%)	..	..	81
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Public	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	R	R	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	No	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	3.2	2.7	2.1
Telecommunications investment (% of revenue)	12.7	11.8	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	7.2	7.6	17.3
Mobile-cellular telephone subscriptions (per 100 people)	89.5	102.1	105.1
Fixed-broadband subscriptions (per 100 people)	0.4	1.7	15.4
Households with a computer (%)	11.5	17.7 ^a	48.7
Households with Internet access at home (%)	7.0 ^a	24.5 ^a	52.2
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	6.7	1.6	2.3
Domestic mobile traffic (minutes/subscription/month)	96.2	103.8	173.1
Individuals using the Internet (%)	11.6	22.3 ^a	52.1
Quality			
Population covered by at least a 3G mobile network (%)	13	37	69
International Internet bandwidth (bit/s per Internet user)	1,701	22,546	26,098
Affordability			
Mobile-cellular sub-basket (\$ a month)	17.0	4.3	8.5
Fixed-broadband sub-basket (\$ a month)	118.7	27.4	15.5
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	30.5	10.1	7.7
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	29.1	17.2	11.1
Trade			
ICT goods exports (% of total goods exports)	0.5	0.9	15.7
ICT goods imports (% of total goods imports)	3.6	3.0	14.4
ICT service exports (% of total service exports)	11.8	46.3	25.7
Applications			
Online service index (0-1, 1=highest presence)	0.07	0.32	0.37
Secure Internet servers (per million people)	14.6	28.5	34.7

East Asia & Pacific

High income

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	0.01	0.01	1,187
Urban population (% of total)	100	100	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	..	..	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	..	..	1.5
Adult literacy rate (% ages 15 and older)	..	..	..
Gross primary, secondary, and tertiary school enrollment (%)	56	..	95
Sector structure			
Separate telecommunications/ICT regulator	No	No	
Status of main fixed-line telephone operator	Public	..	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	C	
Mobile telephone service	..	C	
Internet service	..	C	
Foreign ownership (not allowed, restricted, allowed)	..	R	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	No	No	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	..	..	2.5
Telecommunications investment (% of revenue)	..	..	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	0.0	0.0	41.2
Mobile-cellular telephone subscriptions (per 100 people)	61.8	..	124.5
Fixed-broadband subscriptions (per 100 people)	9.5	..	31.0
Households with a computer (%)	..	..	83.2
Households with Internet access at home (%)	28.0	..	85.0
Usage			
Int'l. voice traffic, total (minutes/subscriber/month)	..	..	..
Domestic mobile traffic (minutes/subscriber/month)	..	..	195.9
Individuals using the Internet (%)	54.0	..	81.0
Quality			
Population covered by at least a 3G mobile network (%)	98	98 ^a	99
International Internet bandwidth (bit/s per Internet user)	2,402	..	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	..	19.3	14.2
Fixed-broadband sub-basket (\$ a month)	..	60.1	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	..	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	..	14.4
Trade			
ICT goods exports (% of total goods exports)	..	..	9.5
ICT goods imports (% of total goods imports)	..	..	11.2
ICT service exports (% of total service exports)	..	..	32.0
Applications			
Online service index (0-1, 1=highest presence)	0.01	..	0.67
Secure Internet servers (per million people)	..	..	1,194.6

Nepal

South Asia

Low income

	Country data		Low-income group
	2010	2015	2015
Economic and social context			
Population (millions)	27	29	638
Urban population (% of total)	17	19	31
GNI per capita, <i>World Bank Atlas</i> method (\$)	540	730	620
GDP growth, 2005–10 and 2010–15 (avg. annual %)	4.5	4.4	5.4
Adult literacy rate (% ages 15 and older)	60	65	..
Gross primary, secondary, and tertiary school enrollment (%)	75	74	60
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	P	
Mobile telephone service	C	P	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	R	R	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	C	No	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	..	4.5	..
Telecommunications investment (% of revenue)	..	..	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	3.1	3.0	0.9
Mobile-cellular telephone subscriptions (per 100 people)	34.3	96.7	60.0
Fixed-broadband subscriptions (per 100 people)	0.2	1.1	0.3
Households with a computer (%)	4.2 ^a	8.9 ^a	4.8
Households with Internet access at home (%)	2.1 ^a	6.3 ^a	7.1
Usage			
Int'l. voice traffic, total (minutes/subscriber/month)	..	..	..
Domestic mobile traffic (minutes/subscriber/month)	..	..	48.9
Individuals using the Internet (%)	7.9	17.6 ^a	9.5
Quality			
Population covered by at least a 3G mobile network (%)	20	..	51
International Internet bandwidth (bit/s per Internet user)	1,879	2,700	4,245
Affordability			
Mobile-cellular sub-basket (\$ a month)	2.8	2.4	9.4
Fixed-broadband sub-basket (\$ a month)	23.3	6.5	33.6
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	11.4	6.1	8.0
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	7.7	10.8
Trade			
ICT goods exports (% of total goods exports)	0.4	0.0	..
ICT goods imports (% of total goods imports)	6.7	4.7	3.4
ICT service exports (% of total service exports)	29.7	36.9	..
Applications			
Online service index (0-1, 1=highest presence)	0.17	0.16	0.11
Secure Internet servers (per million people)	1.7	3.8	1.5

Netherlands

Europe & Central Asia

High income

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	17	17	1,187
Urban population (% of total)	87	90	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	53,530	48,940	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	1.1	0.4	1.5
Adult literacy rate (% ages 15 and older)	..	..	..
Gross primary, secondary, and tertiary school enrollment (%)	101	..	95
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Private	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	2.0	1.9	2.5
Telecommunications investment (% of revenue)	14.8	22.3	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	43.5	41.3	41.2
Mobile-cellular telephone subscriptions (per 100 people)	115.4	123.5	124.5
Fixed-broadband subscriptions (per 100 people)	38.1	41.7	31.0
Households with a computer (%)	92.0	96.2	83.2
Households with Internet access at home (%)	90.9	96.0	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	..	..	..
Domestic mobile traffic (minutes/subscription/month)	97.9	45.8	195.9
Individuals using the Internet (%)	90.7	93.1	81.0
Quality			
Population covered by at least a 3G mobile network (%)	99	99	99
International Internet bandwidth (bit/s per Internet user)	154,312	242,326	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	33.2	28.0	14.2
Fixed-broadband sub-basket (\$ a month)	32.9	36.0	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	38.6	13.3	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	38.6	12.8	14.4
Trade			
ICT goods exports (% of total goods exports)	12.5	10.8	9.5
ICT goods imports (% of total goods imports)	14.5	12.9	11.2
ICT service exports (% of total service exports)	34.3	34.5	32.0
Applications			
Online service index (0-1, 1=highest presence)	0.68	0.93	0.67
Secure Internet servers (per million people)	2,276.7	2,828.1	1,194.6

New Caledonia

East Asia & Pacific

High income

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	0.25	0.27	1,187
Urban population (% of total)	67	70	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	..	..	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	..	..	1.5
Adult literacy rate (% ages 15 and older)	..	97	..
Gross primary, secondary, and tertiary school enrollment (%)	..	..	95
Sector structure			
Separate telecommunications/ICT regulator	..	..
Status of main fixed-line telephone operator	..	..
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	..
Mobile telephone service	..	..
Internet service	..	..
Foreign ownership (not allowed, restricted, allowed)	..	..
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	B	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	..	..	2.5
Telecommunications investment (% of revenue)	..	..	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	29.3	35.0	41.2
Mobile-cellular telephone subscriptions (per 100 people)	89.6	93.5	124.5
Fixed-broadband subscriptions (per 100 people)	15.5	23.9	31.0
Households with a computer (%)	56.3 ^a	..	83.2
Households with Internet access at home (%)	37.7	..	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	..	..	..
Domestic mobile traffic (minutes/subscription/month)	..	..	195.9
Individuals using the Internet (%)	42.0 ^a	74.0 ^a	81.0
Quality			
Population covered by at least a 3G mobile network (%)	0	..	99
International Internet bandwidth (bit/s per Internet user)	17,395	..	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	..	..	14.2
Fixed-broadband sub-basket (\$ a month)	..	..	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	..	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	..	14.4
Trade			
ICT goods exports (% of total goods exports)	0.1	0.2	9.5
ICT goods imports (% of total goods imports)	3.3	3.4	11.2
ICT service exports (% of total service exports)	19.2	11.5	32.0
Applications			
Online service index (0-1, 1=highest presence)	..	..	0.67
Secure Internet servers (per million people)	100.0	476.2	1,194.6

New Zealand

East Asia & Pacific

High income

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	4	5	1,187
Urban population (% of total)	86	86	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	29,340	40,080	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	0.8	2.6	1.5
Adult literacy rate (% ages 15 and older)	..	..	..
Gross primary, secondary, and tertiary school enrollment (%)	108	105	95
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Private	Private	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	No	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	2.4	2.1	2.5
Telecommunications investment (% of revenue)	31.3	32.7	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	43.0	40.2	41.2
Mobile-cellular telephone subscriptions (per 100 people)	107.8	121.8	124.5
Fixed-broadband subscriptions (per 100 people)	25.0	31.5	31.0
Households with a computer (%)	79.5 ^a	82.3 ^a	83.2
Households with Internet access at home (%)	76.8 ^a	82.8 ^a	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	..	..	..
Domestic mobile traffic (minutes/subscription/month)	78.6	86.6	195.9
Individuals using the Internet (%)	80.5 ^a	88.2 ^a	81.0
Quality			
Population covered by at least a 3G mobile network (%)	97	98	99
International Internet bandwidth (bit/s per Internet user)	34,143	108,506	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	47.2	13.2	14.2
Fixed-broadband sub-basket (\$ a month)	36.1	45.3	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	24.3	13.2	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	40.5	21.6	14.4
Trade			
ICT goods exports (% of total goods exports)	1.2	0.9	9.5
ICT goods imports (% of total goods imports)	8.3	6.9	11.2
ICT service exports (% of total service exports)	15.3	13.0	32.0
Applications			
Online service index (0-1, 1=highest presence)	0.64	0.84	0.67
Secure Internet servers (per million people)	1,495.4	1,298.6	1,194.6

Nicaragua

Latin America & Caribbean

Lower middle income

	Country data		Lower middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	6	6	2,927
Urban population (% of total)	57	59	39
GNI per capita, <i>World Bank Atlas</i> method (\$)	1,480	1,940	2,035
GDP growth, 2005–10 and 2010–15 (avg. annual %)	2.3	5.1	5.4
Adult literacy rate (% ages 15 and older)	78	82	..
Gross primary, secondary, and tertiary school enrollment (%)	..	..	68
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Private	Private	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	M	M	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	R	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	No	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	..	..	..
Telecommunications investment (% of revenue)	..	..	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	4.4	5.7	3.5
Mobile-cellular telephone subscriptions (per 100 people)	68.1	116.1	90.5
Fixed-broadband subscriptions (per 100 people)	1.3	1.9	1.9
Households with a computer (%)	8.2 ^a	11.8 ^a	19.3
Households with Internet access at home (%)	3.8 ^a	14.0 ^a	24.3
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	..	..	7.5
Domestic mobile traffic (minutes/subscription/month)	..	..	152.0
Individuals using the Internet (%)	10.0 ^a	19.7 ^a	28.6
Quality			
Population covered by at least a 3G mobile network (%)	..	75 ^a	..
International Internet bandwidth (bit/s per Internet user)	8,588	21,090	10,372
Affordability			
Mobile-cellular sub-basket (\$ a month)	16.9	27.0	6.9
Fixed-broadband sub-basket (\$ a month)	34.4	24.0	14.3
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	17.0	11.0	5.8
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	13.8	12.0	10.0
Trade			
ICT goods exports (% of total goods exports)	0.1	0.1	5.7
ICT goods imports (% of total goods imports)	4.8	5.2	7.6
ICT service exports (% of total service exports)	13.3	11.7	48.0
Applications			
Online service index (0-1, 1=highest presence)	0.25	0.09	0.26
Secure Internet servers (per million people)	7.8	14.3	7.4

	Country data		Low-income group
	2010	2015	2015
Economic and social context			
Population (millions)	16	20	638
Urban population (% of total)	18	19	31
GNI per capita, <i>World Bank Atlas</i> method (\$)	360	390	620
GDP growth, 2005–10 and 2010–15 (avg. annual %)	5.0	6.5	5.4
Adult literacy rate (% ages 15 and older)	15	19	..
Gross primary, secondary, and tertiary school enrollment (%)	33	..	60
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	..
Mobile telephone service	C	C	
Internet service	M	M	
Foreign ownership (not allowed, restricted, allowed)	R	R	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	B	B	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	4.6	..	..
Telecommunications investment (% of revenue)	..	..	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	0.5	0.6	0.9
Mobile-cellular telephone subscriptions (per 100 people)	23.1	46.5	60.0
Fixed-broadband subscriptions (per 100 people)	0.0	0.1	0.3
Households with a computer (%)	1.2 ^a	2.7 ^a	4.8
Households with Internet access at home (%)	0.6 ^a	2.6 ^a	7.1
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	..	..	..
Domestic mobile traffic (minutes/subscription/month)	18,471.9	..	48.9
Individuals using the Internet (%)	0.8 ^a	2.2 ^a	9.5
Quality			
Population covered by at least a 3G mobile network (%)	..	..	51
International Internet bandwidth (bit/s per Internet user)	1,440	2,688	4,245
Affordability			
Mobile-cellular sub-basket (\$ a month)	16.6	9.5	9.4
Fixed-broadband sub-basket (\$ a month)	59.6	50.3	33.6
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	29.4	8.0	8.0
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	8.5	10.8
Trade			
ICT goods exports (% of total goods exports)	0.3	0.4	..
ICT goods imports (% of total goods imports)	1.9	2.9	3.4
ICT service exports (% of total service exports)	5.4	49.2	..
Applications			
Online service index (0-1, 1=highest presence)	0.04	0.13	0.11
Secure Internet servers (per million people)	0.2	0.3	1.5

Nigeria

Sub-Saharan Africa

Lower middle income

	Country data		Lower middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	159	182	2,927
Urban population (% of total)	43	48	39
GNI per capita, <i>World Bank Atlas</i> method (\$)	1,460	2,820	2,035
GDP growth, 2005–10 and 2010–15 (avg. annual %)	7.0	4.9	5.4
Adult literacy rate (% ages 15 and older)	51	60	..
Gross primary, secondary, and tertiary school enrollment (%)	..	..	68
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Private	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	1.8	..	..
Telecommunications investment (% of revenue)	22.9	..	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	0.7	0.1	3.5
Mobile-cellular telephone subscriptions (per 100 people)	54.7	82.2	90.5
Fixed-broadband subscriptions (per 100 people)	0.1	0.0	1.9
Households with a computer (%)	7.6	9.8 ^a	19.3
Households with Internet access at home (%)	6.1	11.4 ^a	24.3
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	4.6	..	7.5
Domestic mobile traffic (minutes/subscription/month)	60.0	85.7	152.0
Individuals using the Internet (%)	24.0 ^a	47.4 ^a	28.6
Quality			
Population covered by at least a 3G mobile network (%)	..	67 ^a	..
International Internet bandwidth (bit/s per Internet user)	2,348	2,986	10,372
Affordability			
Mobile-cellular sub-basket (\$ a month)	15.4	5.3	6.9
Fixed-broadband sub-basket (\$ a month)	53.1	32.7	14.3
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	12.8	10.9	5.8
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	19.1	18.2	10.0
Trade			
ICT goods exports (% of total goods exports)	0.0	0.0	5.7
ICT goods imports (% of total goods imports)	6.6	3.9	7.6
ICT service exports (% of total service exports)	2.1	7.7	48.0
Applications			
Online service index (0-1, 1=highest presence)	0.10	0.31	0.26
Secure Internet servers (per million people)	1.2	2.6	7.4

Northern Mariana Islands

East Asia & Pacific

High income

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	0.05	0.06	1,187
Urban population (% of total)	89	89	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	1.5
Adult literacy rate (% ages 15 and older)
Gross primary, secondary, and tertiary school enrollment (%)	95
Sector structure			
Separate telecommunications/ICT regulator	
Status of main fixed-line telephone operator	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	
Mobile telephone service	
Internet service	
Foreign ownership (not allowed, restricted, allowed)	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	2.5
Telecommunications investment (% of revenue)	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	47.3	39.9	41.2
Mobile-cellular telephone subscriptions (per 100 people)	124.5
Fixed-broadband subscriptions (per 100 people)	31.0
Households with a computer (%)	83.2
Households with Internet access at home (%)	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)
Domestic mobile traffic (minutes/subscription/month)	195.9
Individuals using the Internet (%)	81.0
Quality			
Population covered by at least a 3G mobile network (%)	99
International Internet bandwidth (bit/s per Internet user)	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	14.2
Fixed-broadband sub-basket (\$ a month)	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	14.4
Trade			
ICT goods exports (% of total goods exports)	9.5
ICT goods imports (% of total goods imports)	11.2
ICT service exports (% of total service exports)	32.0
Applications			
Online service index (0-1, 1=highest presence)	0.67
Secure Internet servers (per million people)	92.8	54.5	1,194.6

Norway

Europe & Central Asia

High income

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	5	5	1,187
Urban population (% of total)	79	80	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	88,430	93,820	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	0.8	1.8	1.5
Adult literacy rate (% ages 15 and older)	..	..	..
Gross primary, secondary, and tertiary school enrollment (%)	98	98	95
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	No	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	1.3	1.0	2.5
Telecommunications investment (% of revenue)	24.3	29.2	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	33.7	20.0	41.2
Mobile-cellular telephone subscriptions (per 100 people)	114.5	113.6	124.5
Fixed-broadband subscriptions (per 100 people)	35.2	38.9	31.0
Households with a computer (%)	90.9	96.5	83.2
Households with Internet access at home (%)	89.8	96.6	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	..	..	..
Domestic mobile traffic (minutes/subscription/month)	170.4	179.3	195.9
Individuals using the Internet (%)	93.4	96.8	81.0
Quality			
Population covered by at least a 3G mobile network (%)	90	99	99
International Internet bandwidth (bit/s per Internet user)	109,459	220,937	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	17.1	18.1	14.2
Fixed-broadband sub-basket (\$ a month)	49.1	40.8	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	68.6	6.1	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	34.2	16.0	14.4
Trade			
ICT goods exports (% of total goods exports)	1.4	0.9	9.5
ICT goods imports (% of total goods imports)	7.5	6.9	11.2
ICT service exports (% of total service exports)	36.4	31.9	32.0
Applications			
Online service index (0-1, 1=highest presence)	0.74	0.76	0.67
Secure Internet servers (per million people)	1,651.2	2,030.4	1,194.6

Middle East & North Africa

High income

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	3	4	1,187
Urban population (% of total)	75	78	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	18,770	16,920	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	6.0	3.6	1.5
Adult literacy rate (% ages 15 and older)	87	94	..
Gross primary, secondary, and tertiary school enrollment (%)	77	..	95
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	C	P	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	No	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	2.8	2.6	2.5
Telecommunications investment (% of revenue)	27.2	27.2	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	10.1	10.5	41.2
Mobile-cellular telephone subscriptions (per 100 people)	164.3	159.9	124.5
Fixed-broadband subscriptions (per 100 people)	2.1	5.6	31.0
Households with a computer (%)	54.3	87.5 ^a	83.2
Households with Internet access at home (%)	35.5	84.0 ^a	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	17.2	16.7	..
Domestic mobile traffic (minutes/subscription/month)	81.7	87.9	195.9
Individuals using the Internet (%)	35.8	74.2 ^a	81.0
Quality			
Population covered by at least a 3G mobile network (%)	49	95	99
International Internet bandwidth (bit/s per Internet user)	5,582	59,784	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	9.1	8.7	14.2
Fixed-broadband sub-basket (\$ a month)	33.6	18.2	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	13.0	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	13.0	13.0	14.4
Trade			
ICT goods exports (% of total goods exports)	0.1	0.1	9.5
ICT goods imports (% of total goods imports)	2.4	3.0	11.2
ICT service exports (% of total service exports)	26.2	16.5	32.0
Applications			
Online service index (0-1, 1=highest presence)	0.37	0.73	0.67
Secure Internet servers (per million people)	26.2	87.7	1,194.6

Pakistan

South Asia

Lower middle income

	Country data		Lower middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	170	189	2,927
Urban population (% of total)	37	39	39
GNI per capita, <i>World Bank Atlas</i> method (\$)	1,080	1,440	2,035
GDP growth, 2005–10 and 2010–15 (avg. annual %)	3.3	4.2	5.4
Adult literacy rate (% ages 15 and older)	55	56	..
Gross primary, secondary, and tertiary school enrollment (%)	46	49	68
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	R	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	No	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	2.3	1.9	..
Telecommunications investment (% of revenue)	0.1	40.4	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	3.5	1.6	3.5
Mobile-cellular telephone subscriptions (per 100 people)	57.3	66.9	90.5
Fixed-broadband subscriptions (per 100 people)	0.5	1.0	1.9
Households with a computer (%)	9.7 ^a	19.0	19.3
Households with Internet access at home (%)	5.7 ^a	24.0	24.3
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	7.6	4.5	7.5
Domestic mobile traffic (minutes/subscription/month)	66.2	227.6	152.0
Individuals using the Internet (%)	8.0 ^a	18.0	28.6
Quality			
Population covered by at least a 3G mobile network (%)	0	46	..
International Internet bandwidth (bit/s per Internet user)	4,332	11,907	10,372
Affordability			
Mobile-cellular sub-basket (\$ a month)	3.0	2.1	6.9
Fixed-broadband sub-basket (\$ a month)	14.2	6.6	14.3
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	2.7	1.9	5.8
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	22.5	5.7	10.0
Trade			
ICT goods exports (% of total goods exports)	0.2	0.2	5.7
ICT goods imports (% of total goods imports)	3.3	4.6	7.6
ICT service exports (% of total service exports)	16.4	29.3	48.0
Applications			
Online service index (0-1, 1=highest presence)	0.25	0.32	0.26
Secure Internet servers (per million people)	1.0	2.4	7.4

East Asia & Pacific

Upper middle income

	Country data		Upper middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	0.02	0.02	2,594
Urban population (% of total)	83	87	64
GNI per capita, <i>World Bank Atlas</i> method (\$)	8,910	12,180	8,186
GDP growth, 2005–10 and 2010–15 (avg. annual %)	–3.5	3.1	4.5
Adult literacy rate (% ages 15 and older)	..	100	..
Gross primary, secondary, and tertiary school enrollment (%)	..	98	81
Sector structure			
Separate telecommunications/ICT regulator	..	No	
Status of main fixed-line telephone operator	Public	..	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	..
Mobile telephone service	..	..
Internet service	..	..
Foreign ownership (not allowed, restricted, allowed)	..	..
Reg. treatment of VoIP (banned, closed, no framework, allowed)	..	..
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	..	4.5	2.1
Telecommunications investment (% of revenue)	..	44.8	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	34.1	33.8	17.3
Mobile-cellular telephone subscriptions (per 100 people)	70.9	111.5	105.1
Fixed-broadband subscriptions (per 100 people)	1.2	5.7	15.4
Households with a computer (%)	..	..	48.7
Households with Internet access at home (%)	19.0	..	52.2
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	30.6	20.0	2.3
Domestic mobile traffic (minutes/subscription/month)	..	..	173.1
Individuals using the Internet (%)	..	..	52.1
Quality			
Population covered by at least a 3G mobile network (%)	..	88	69
International Internet bandwidth (bit/s per Internet user)	..	..	26,098
Affordability			
Mobile-cellular sub-basket (\$ a month)	..	..	8.5
Fixed-broadband sub-basket (\$ a month)	..	..	15.5
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	..	7.7
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	..	11.1
Trade			
ICT goods exports (% of total goods exports)	1.0	4.4	15.7
ICT goods imports (% of total goods imports)	3.3	4.4	14.4
ICT service exports (% of total service exports)	4.2	2.9	25.7
Applications			
Online service index (0–1, 1=highest presence)	0.05	0.17	0.37
Secure Internet servers (per million people)	48.9	140.9	34.7

Panama

Latin America & Caribbean

Upper middle income

	Country data		Upper middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	4	4	2,594
Urban population (% of total)	65	67	64
GNI per capita, <i>World Bank Atlas</i> method (\$)	7,010	12,050	8,186
GDP growth, 2005–10 and 2010–15 (avg. annual %)	8.0	7.7	4.5
Adult literacy rate (% ages 15 and older)	94	95	..
Gross primary, secondary, and tertiary school enrollment (%)	77	76	81
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	P	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	No	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	2.9	1.6	2.1
Telecommunications investment (% of revenue)	32.0	32.2	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	14.7	15.6	17.3
Mobile-cellular telephone subscriptions (per 100 people)	180.7	174.2	105.1
Fixed-broadband subscriptions (per 100 people)	7.0	7.9	15.4
Households with a computer (%)	27.9	39.6	48.7
Households with Internet access at home (%)	20.3	52.7	52.2
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	5.3	7.6	2.3
Domestic mobile traffic (minutes/subscription/month)	48.0	69.9	173.1
Individuals using the Internet (%)	40.1	51.2	52.1
Quality			
Population covered by at least a 3G mobile network (%)	..	79 ^a	69
International Internet bandwidth (bit/s per Internet user)	16,950	75,906	26,098
Affordability			
Mobile-cellular sub-basket (\$ a month)	10.1	12.6	8.5
Fixed-broadband sub-basket (\$ a month)	16.6	16.0	15.5
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	15.0	15.0	7.7
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	20.0	20.0	11.1
Trade			
ICT goods exports (% of total goods exports)	9.6	..	15.7
ICT goods imports (% of total goods imports)	9.6	4.9	14.4
ICT service exports (% of total service exports)	8.7	6.7	25.7
Applications			
Online service index (0-1, 1=highest presence)	0.28	0.37	0.37
Secure Internet servers (per million people)	123.2	121.9	34.7

Papua New Guinea

East Asia & Pacific

Lower middle income

	Country data		Lower middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	7	8	2,927
Urban population (% of total)	13	13	39
GNI per capita, <i>World Bank Atlas</i> method (\$)	1,270	2,240	2,035
GDP growth, 2005–10 and 2010–15 (avg. annual %)	6.1	7.9	5.4
Adult literacy rate (% ages 15 and older)	..	63	..
Gross primary, secondary, and tertiary school enrollment (%)	..	..	68
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Public	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	..
Mobile telephone service	M	M	
Internet service	P	P	
Foreign ownership (not allowed, restricted, allowed)	..	..
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	B	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	..	..	..
Telecommunications investment (% of revenue)	..	..	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	1.8	2.0	3.5
Mobile-cellular telephone subscriptions (per 100 people)	27.8	46.6	90.5
Fixed-broadband subscriptions (per 100 people)	0.1	0.2	1.9
Households with a computer (%)	2.8 ^a	3.8 ^a	19.3
Households with Internet access at home (%)	2.2 ^a	5.3 ^a	24.3
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	..	..	7.5
Domestic mobile traffic (minutes/subscription/month)	..	..	152.0
Individuals using the Internet (%)	1.3	7.9 ^a	28.6
Quality			
Population covered by at least a 3G mobile network (%)	..	..	..
International Internet bandwidth (bit/s per Internet user)	3,166	9,122	10,372
Affordability			
Mobile-cellular sub-basket (\$ a month)	30.5	22.5	6.9
Fixed-broadband sub-basket (\$ a month)	136.1	21.7	14.3
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	60.0	23.8	5.8
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	39.3	10.0
Trade			
ICT goods exports (% of total goods exports)	0.0	..	5.7
ICT goods imports (% of total goods imports)	2.9	..	7.6
ICT service exports (% of total service exports)	49.3	63.5	48.0
Applications			
Online service index (0-1, 1=highest presence)	0.07	0.01	0.26
Secure Internet servers (per million people)	3.2	11.0	7.4

Paraguay

Latin America & Caribbean

Upper middle income

	Country data		Upper middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	6	7	2,594
Urban population (% of total)	58	60	64
GNI per capita, <i>World Bank Atlas</i> method (\$)	2,930	4,220	8,186
GDP growth, 2005–10 and 2010–15 (avg. annual %)	4.4	5.3	4.5
Adult literacy rate (% ages 15 and older)	94	96	..
Gross primary, secondary, and tertiary school enrollment (%)	72	..	81
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Public	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	3.7	..	2.1
Telecommunications investment (% of revenue)	..	..	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	5.6	5.5	17.3
Mobile-cellular telephone subscriptions (per 100 people)	91.7	105.4	105.1
Fixed-broadband subscriptions (per 100 people)	1.4	3.1	15.4
Households with a computer (%)	19.3	34.1 ^a	48.7
Households with Internet access at home (%)	13.8	27.4 ^a	52.2
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	7.2	3.9	2.3
Domestic mobile traffic (minutes/subscription/month)	81.6	93.5	173.1
Individuals using the Internet (%)	19.8	44.4 ^a	52.1
Quality			
Population covered by at least a 3G mobile network (%)	..	66 ^a	69
International Internet bandwidth (bit/s per Internet user)	8,295	17,922	26,098
Affordability			
Mobile-cellular sub-basket (\$ a month)	8.6	4.9	8.5
Fixed-broadband sub-basket (\$ a month)	19.0	28.6	15.5
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	18.1	7.7	7.7
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	13.6	14.4	11.1
Trade			
ICT goods exports (% of total goods exports)	0.1	0.1	15.7
ICT goods imports (% of total goods imports)	27.0	14.6	14.4
ICT service exports (% of total service exports)	3.1	1.9	25.7
Applications			
Online service index (0-1, 1=highest presence)	0.26	0.23	0.37
Secure Internet servers (per million people)	6.9	27.9	34.7

Latin America & Caribbean

Upper middle income

	Country data		Upper middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	29	31	2,594
Urban population (% of total)	77	79	64
GNI per capita, <i>World Bank Atlas</i> method (\$)	4,380	6,200	8,186
GDP growth, 2005–10 and 2010–15 (avg. annual %)	6.8	4.8	4.5
Adult literacy rate (% ages 15 and older)	94	94	..
Gross primary, secondary, and tertiary school enrollment (%)	84	..	81
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Private	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	..
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	R	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	No	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	3.0	3.0	2.1
Telecommunications investment (% of revenue)	19.3	20.7	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	10.8	9.3	17.3
Mobile-cellular telephone subscriptions (per 100 people)	99.5	109.9	105.1
Fixed-broadband subscriptions (per 100 people)	3.2	6.4	15.4
Households with a computer (%)	22.6	32.4	48.7
Households with Internet access at home (%)	13.0	23.2	52.2
Usage			
Int'l. voice traffic, total (minutes/subscriber/month)	9.5	..	2.3
Domestic mobile traffic (minutes/subscriber/month)	58.6	..	173.1
Individuals using the Internet (%)	34.8	40.9	52.1
Quality			
Population covered by at least a 3G mobile network (%)	55	91	69
International Internet bandwidth (bit/s per Internet user)	8,319	43,154	26,098
Affordability			
Mobile-cellular sub-basket (\$ a month)	43.2	11.0	8.5
Fixed-broadband sub-basket (\$ a month)	42.2	11.0	15.5
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	15.2	9.4	7.7
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	7.6	14.1	11.1
Trade			
ICT goods exports (% of total goods exports)	0.1	0.1	15.7
ICT goods imports (% of total goods imports)	7.5	9.0	14.4
ICT service exports (% of total service exports)	14.0	10.6	25.7
Applications			
Online service index (0-1, 1=highest presence)	0.41	0.63	0.37
Secure Internet servers (per million people)	14.1	32.4	34.7

Philippines

East Asia & Pacific

Lower middle income

	Country data		Lower middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	93	101	2,927
Urban population (% of total)	45	44	39
GNI per capita, <i>World Bank Atlas</i> method (\$)	2,750	3,540	2,035
GDP growth, 2005–10 and 2010–15 (avg. annual %)	4.7	6.1	5.4
Adult literacy rate (% ages 15 and older)	95	97	..
Gross primary, secondary, and tertiary school enrollment (%)	78	85	68
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Private	Private	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	..
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	R	R	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	No	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	2.6	1.9	..
Telecommunications investment (% of revenue)	24.4	30.6	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	3.6	3.0	3.5
Mobile-cellular telephone subscriptions (per 100 people)	89.0	118.1	90.5
Fixed-broadband subscriptions (per 100 people)	1.9	3.4	1.9
Households with a computer (%)	13.6	27.0 ^a	19.3
Households with Internet access at home (%)	9.5	28.3 ^a	24.3
Usage			
Int'l. voice traffic, total (minutes/subscriber/month)	..	..	7.5
Domestic mobile traffic (minutes/subscriber/month)	..	..	152.0
Individuals using the Internet (%)	25.0	40.7 ^a	28.6
Quality			
Population covered by at least a 3G mobile network (%)	69	78	..
International Internet bandwidth (bit/s per Internet user)	10,702	37,409	10,372
Affordability			
Mobile-cellular sub-basket (\$ a month)	10.1	10.0	6.9
Fixed-broadband sub-basket (\$ a month)	22.1	22.0	14.3
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	11.8	4.4	5.8
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	23.7	19.7	10.0
Trade			
ICT goods exports (% of total goods exports)	26.8	34.6	5.7
ICT goods imports (% of total goods imports)	31.6	20.9	7.6
ICT service exports (% of total service exports)	74.9	71.4	48.0
Applications			
Online service index (0-1, 1=highest presence)	0.39	0.48	0.26
Secure Internet servers (per million people)	6.7	13.7	7.4

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	38	38	1,187
Urban population (% of total)	61	61	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	12,710	13,370	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	4.7	2.7	1.5
Adult literacy rate (% ages 15 and older)	..	100	..
Gross primary, secondary, and tertiary school enrollment (%)	89	97	95
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Private	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	P	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	No	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	3.0	2.3	2.5
Telecommunications investment (% of revenue)	16.5	17.0	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	20.1	11.1	41.2
Mobile-cellular telephone subscriptions (per 100 people)	122.9	148.7	124.5
Fixed-broadband subscriptions (per 100 people)	15.3	19.5	31.0
Households with a computer (%)	69.0	77.9	83.2
Households with Internet access at home (%)	63.4	75.8	85.0
Usage			
Int'l. voice traffic, total (minutes/subscriber/month)	..	..	..
Domestic mobile traffic (minutes/subscriber/month)	101.4	119.9	195.9
Individuals using the Internet (%)	62.3	68.0	81.0
Quality			
Population covered by at least a 3G mobile network (%)	61	100	99
International Internet bandwidth (bit/s per Internet user)	37,806	86,573	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	15.8	7.6	14.2
Fixed-broadband sub-basket (\$ a month)	18.0	10.3	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	7.7	2.7	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	30.7	8.0	14.4
Trade			
ICT goods exports (% of total goods exports)	9.6	7.7	9.5
ICT goods imports (% of total goods imports)	9.8	8.9	11.2
ICT service exports (% of total service exports)	33.0	33.0	32.0
Applications			
Online service index (0-1, 1=highest presence)	0.39	0.54	0.67
Secure Internet servers (per million people)	211.6	547.1	1,194.6

Portugal

Europe & Central Asia

High income

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	11	10	1,187
Urban population (% of total)	61	63	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	22,960	20,530	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	0.4	–1.1	1.5
Adult literacy rate (% ages 15 and older)	94	95	..
Gross primary, secondary, and tertiary school enrollment (%)	96	99	95
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	No	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	4.2	2.7	2.5
Telecommunications investment (% of revenue)	14.2	13.4	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	42.4	44.1	41.2
Mobile-cellular telephone subscriptions (per 100 people)	115.3	110.4	124.5
Fixed-broadband subscriptions (per 100 people)	20.1	29.6	31.0
Households with a computer (%)	59.5 ^a	71.1	83.2
Households with Internet access at home (%)	53.7	70.2	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	..	..	..
Domestic mobile traffic (minutes/subscription/month)	130.3	162.6	195.9
Individuals using the Internet (%)	53.3	68.6	81.0
Quality			
Population covered by at least a 3G mobile network (%)	84	99	99
International Internet bandwidth (bit/s per Internet user)	141,734	232,080	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	22.9	14.2	14.2
Fixed-broadband sub-basket (\$ a month)	26.3	24.4	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	13.8	8.3	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	19.3	14.4	14.4
Trade			
ICT goods exports (% of total goods exports)	4.0	2.3	9.5
ICT goods imports (% of total goods imports)	5.7	4.7	11.2
ICT service exports (% of total service exports)	18.4	22.5	32.0
Applications			
Online service index (0–1, 1=highest presence)	0.39	0.64	0.67
Secure Internet servers (per million people)	174.7	315.9	1,194.6

Puerto Rico

Latin America & Caribbean

High income

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	4	3	1,187
Urban population (% of total)	94	94	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	16,640	19,320	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	-2.3	-1.9	1.5
Adult literacy rate (% ages 15 and older)	92	93	..
Gross primary, secondary, and tertiary school enrollment (%)	95	85	95
Sector structure			
Separate telecommunications/ICT regulator	..	..
Status of main fixed-line telephone operator	..	..
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	..
Mobile telephone service	..	..
Internet service	..	..
Foreign ownership (not allowed, restricted, allowed)	..	..
Reg. treatment of VoIP (banned, closed, no framework, allowed)	..	..
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	2.1	2.0	2.5
Telecommunications investment (% of revenue)	..	..	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	24.0	22.1	41.2
Mobile-cellular telephone subscriptions (per 100 people)	79.1	87.1	124.5
Fixed-broadband subscriptions (per 100 people)	14.9	18.0	31.0
Households with a computer (%)	55.0	57.3 ^a	83.2
Households with Internet access at home (%)	50.0	51.8 ^a	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	..	..	..
Domestic mobile traffic (minutes/subscription/month)	..	..	195.9
Individuals using the Internet (%)	45.3	79.5 ^a	81.0
Quality			
Population covered by at least a 3G mobile network (%)	..	99	99
International Internet bandwidth (bit/s per Internet user)	136,866	..	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	..	..	14.2
Fixed-broadband sub-basket (\$ a month)	..	..	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	..	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	..	14.4
Trade			
ICT goods exports (% of total goods exports)	..	..	9.5
ICT goods imports (% of total goods imports)	..	..	11.2
ICT service exports (% of total service exports)	..	..	32.0
Applications			
Online service index (0-1, 1=highest presence)	..	..	0.67
Secure Internet servers (per million people)	89.5	139.0	1,194.6

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	2	2	1,187
Urban population (% of total)	99	99	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	66,890	85,430	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	17.8	5.6	1.5
Adult literacy rate (% ages 15 and older)	96	98	..
Gross primary, secondary, and tertiary school enrollment (%)	57	..	95
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	P	P	
Mobile telephone service	P	P	
Internet service	P	P	
Foreign ownership (not allowed, restricted, allowed)	R	R	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	No	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	1.4	1.2	2.5
Telecommunications investment (% of revenue)	20.4	18.8	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	15.4	18.2	41.2
Mobile-cellular telephone subscriptions (per 100 people)	125.0	153.6	124.5
Fixed-broadband subscriptions (per 100 people)	8.3	10.1	31.0
Households with a computer (%)	87.0	88.3	83.2
Households with Internet access at home (%)	81.8	95.8	85.0
Usage			
Int'l. voice traffic, total (minutes/subscriber/month)	..	..	..
Domestic mobile traffic (minutes/subscriber/month)	..	..	195.9
Individuals using the Internet (%)	69.0	92.9	81.0
Quality			
Population covered by at least a 3G mobile network (%)	98	98	99
International Internet bandwidth (bit/s per Internet user)	20,295	71,566	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	18.4	18.7	14.2
Fixed-broadband sub-basket (\$ a month)	54.9	64.0	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	27.5	22.0	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	27.5	16.5	14.4
Trade			
ICT goods exports (% of total goods exports)	0.0	0.0	9.5
ICT goods imports (% of total goods imports)	4.3	5.6	11.2
ICT service exports (% of total service exports)	..	..	32.0
Applications			
Online service index (0-1, 1=highest presence)	0.28	0.65	0.67
Secure Internet servers (per million people)	85.0	296.6	1,194.6

Romania

Europe & Central Asia

Upper middle income

	Country data		Upper middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	20	20	2,594
Urban population (% of total)	54	55	64
GNI per capita, <i>World Bank Atlas</i> method (\$)	8,590	9,500	8,186
GDP growth, 2005–10 and 2010–15 (avg. annual %)	3.0	2.4	4.5
Adult literacy rate (% ages 15 and older)	99	99	..
Gross primary, secondary, and tertiary school enrollment (%)	90	..	81
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	2.2	1.7	2.1
Telecommunications investment (% of revenue)	23.8	19.1	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	20.6	19.8	17.3
Mobile-cellular telephone subscriptions (per 100 people)	111.4	107.1	105.1
Fixed-broadband subscriptions (per 100 people)	13.7	19.8	15.4
Households with a computer (%)	47.9	68.7	48.7
Households with Internet access at home (%)	42.2	67.7	52.2
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	8.9	17.5	2.3
Domestic mobile traffic (minutes/subscription/month)	177.9	243.4	173.1
Individuals using the Internet (%)	39.9	55.8	52.1
Quality			
Population covered by at least a 3G mobile network (%)	91	100	69
International Internet bandwidth (bit/s per Internet user)	50,405	146,012	26,098
Affordability			
Mobile-cellular sub-basket (\$ a month)	21.8	6.7	8.5
Fixed-broadband sub-basket (\$ a month)	9.1	7.2	15.5
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	12.8	5.5	7.7
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	4.3	3.7	11.1
Trade			
ICT goods exports (% of total goods exports)	8.4	3.8	15.7
ICT goods imports (% of total goods imports)	9.3	7.1	14.4
ICT service exports (% of total service exports)	35.0	36.7	25.7
Applications			
Online service index (0-1, 1=highest presence)	0.42	0.44	0.37
Secure Internet servers (per million people)	42.2	229.3	34.7

Russian Federation

Europe & Central Asia

Upper middle income

	Country data		Upper middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	143	144	2,594
Urban population (% of total)	74	74	64
GNI per capita, <i>World Bank Atlas</i> method (\$)	9,980	11,400	8,186
GDP growth, 2005–10 and 2010–15 (avg. annual %)	3.1	1.3	4.5
Adult literacy rate (% ages 15 and older)	100	100	..
Gross primary, secondary, and tertiary school enrollment (%)	88	92	81
Sector structure			
Separate telecommunications/ICT regulator	No	No	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	..
Mobile telephone service	C	C	
Internet service	..	..
Foreign ownership (not allowed, restricted, allowed)	..	R	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	No	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	2.7	1.9	2.1
Telecommunications investment (% of revenue)	15.3	19.6	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	31.3	25.7	17.3
Mobile-cellular telephone subscriptions (per 100 people)	165.5	160.0	105.1
Fixed-broadband subscriptions (per 100 people)	10.9	18.8	15.4
Households with a computer (%)	55.0	72.5	48.7
Households with Internet access at home (%)	41.3	72.1	52.2
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	..	..	2.3
Domestic mobile traffic (minutes/subscription/month)	112.2	151.1	173.1
Individuals using the Internet (%)	43.0	73.4	52.1
Quality			
Population covered by at least a 3G mobile network (%)	..	73	69
International Internet bandwidth (bit/s per Internet user)	17,812	26,845	26,098
Affordability			
Mobile-cellular sub-basket (\$ a month)	9.2	3.7	8.5
Fixed-broadband sub-basket (\$ a month)	9.9	6.6	15.5
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	16.2	3.3	7.7
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	16.2	5.7	11.1
Trade			
ICT goods exports (% of total goods exports)	0.2	0.8	15.7
ICT goods imports (% of total goods imports)	8.5	7.9	14.4
ICT service exports (% of total service exports)	30.4	32.0	25.7
Applications			
Online service index (0-1, 1=highest presence)	0.33	0.71	0.37
Secure Internet servers (per million people)	20.2	126.4	34.7

	Country data		Low-income group
	2010	2015	2015
Economic and social context			
Population (millions)	10	12	638
Urban population (% of total)	24	29	31
GNI per capita, <i>World Bank Atlas</i> method (\$)	550	700	620
GDP growth, 2005–10 and 2010–15 (avg. annual %)	8.4	6.9	5.4
Adult literacy rate (% ages 15 and older)	66	71	..
Gross primary, secondary, and tertiary school enrollment (%)	69	73	60
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	..	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	P	P	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	No	No	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	2.9	2.8	..
Telecommunications investment (% of revenue)	108.6	28.9	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	0.4	0.1	0.9
Mobile-cellular telephone subscriptions (per 100 people)	32.7	70.5	60.0
Fixed-broadband subscriptions (per 100 people)	0.0	0.2	0.3
Households with a computer (%)	1.3	4.0 ^a	4.8
Households with Internet access at home (%)	1.3 ^a	6.7 ^a	7.1
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	3.7	1.7	..
Domestic mobile traffic (minutes/subscription/month)	50.5	79.5	48.9
Individuals using the Internet (%)	8.0	18.0 ^a	9.5
Quality			
Population covered by at least a 3G mobile network (%)	..	88	51
International Internet bandwidth (bit/s per Internet user)	1,895	5,661	4,245
Affordability			
Mobile-cellular sub-basket (\$ a month)	14.7	5.9	9.4
Fixed-broadband sub-basket (\$ a month)	163.5	97.1	33.6
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	8.1	1.4	8.0
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	8.2	10.8
Trade			
ICT goods exports (% of total goods exports)	0.6	1.1	..
ICT goods imports (% of total goods imports)	7.1	9.2	3.4
ICT service exports (% of total service exports)	2.1	3.2	..
Applications			
Online service index (0-1, 1=highest presence)	0.17	0.51	0.11
Secure Internet servers (per million people)	0.7	4.1	1.5

Samoa

East Asia & Pacific

Lower middle income

	Country data		Lower middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	0.19	0.19	2,927
Urban population (% of total)	20	19	39
GNI per capita, <i>World Bank Atlas</i> method (\$)	3,230	3,930	2,035
GDP growth, 2005–10 and 2010–15 (avg. annual %)	0.9	0.9	5.4
Adult literacy rate (% ages 15 and older)	99	99	..
Gross primary, secondary, and tertiary school enrollment (%)	..	..	68
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Public	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	No	No	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	..	..	..
Telecommunications investment (% of revenue)	..	..	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	4.3	5.6	3.5
Mobile-cellular telephone subscriptions (per 100 people)	48.4	58.5	90.5
Fixed-broadband subscriptions (per 100 people)	0.1	1.1	1.9
Households with a computer (%)	13.0 ^a	22.6 ^a	19.3
Households with Internet access at home (%)	10.0 ^a	25.5 ^a	24.3
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	20.8	21.1	7.5
Domestic mobile traffic (minutes/subscription/month)	..	..	152.0
Individuals using the Internet (%)	7.0 ^a	25.4 ^a	28.6
Quality			
Population covered by at least a 3G mobile network (%)	..	1	..
International Internet bandwidth (bit/s per Internet user)	3,840	7,842	10,372
Affordability			
Mobile-cellular sub-basket (\$ a month)	17.6	16.5	6.9
Fixed-broadband sub-basket (\$ a month)	60.0	38.7	14.3
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	39.3	19.5	5.8
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	32.7	20.2	10.0
Trade			
ICT goods exports (% of total goods exports)	0.1	0.4	5.7
ICT goods imports (% of total goods imports)	2.4	3.8	7.6
ICT service exports (% of total service exports)	10.1	9.5	48.0
Applications			
Online service index (0-1, 1=highest presence)	0.14	0.24	0.26
Secure Internet servers (per million people)	21.5	41.4	7.4

San Marino

Europe & Central Asia

High income

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	0.03	0.03	1,187
Urban population (% of total)	94	94	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	52,140	..	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	3.1	..	1.5
Adult literacy rate (% ages 15 and older)	..	..	..
Gross primary, secondary, and tertiary school enrollment (%)	88	..	95
Sector structure			
Separate telecommunications/ICT regulator	No	No	
Status of main fixed-line telephone operator	Mixed	Private	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	..
Mobile telephone service	C	C	
Internet service	..	..
Foreign ownership (not allowed, restricted, allowed)	..	..
Reg. treatment of VoIP (banned, closed, no framework, allowed)	..	..
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	..	..	2.5
Telecommunications investment (% of revenue)	..	..	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	63.4	52.0	41.2
Mobile-cellular telephone subscriptions (per 100 people)	99.1	115.2	124.5
Fixed-broadband subscriptions (per 100 people)	19.4	36.6	31.0
Households with a computer (%)	..	..	83.2
Households with Internet access at home (%)	..	..	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	..	..	..
Domestic mobile traffic (minutes/subscription/month)	..	..	195.9
Individuals using the Internet (%)	49.6	..	81.0
Quality			
Population covered by at least a 3G mobile network (%)	..	86	99
International Internet bandwidth (bit/s per Internet user)	649,359	..	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	..	24.1	14.2
Fixed-broadband sub-basket (\$ a month)	..	18.5	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	25.7	27.7	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	37.3	11.1	14.4
Trade			
ICT goods exports (% of total goods exports)	..	..	9.5
ICT goods imports (% of total goods imports)	..	..	11.2
ICT service exports (% of total service exports)	..	..	32.0
Applications			
Online service index (0-1, 1=highest presence)	0.18	0.28	0.67
Secure Internet servers (per million people)	1,270.8	1,636.2	1,194.6

São Tomé and Príncipe

Sub-Saharan Africa

Lower middle income

	Country data		Lower middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	0.17	0.19	2,927
Urban population (% of total)	62	65	39
GNI per capita, <i>World Bank Atlas</i> method (\$)	1,190	1,670	2,035
GDP growth, 2005–10 and 2010–15 (avg. annual %)	5.7	4.5	5.4
Adult literacy rate (% ages 15 and older)	90	92	..
Gross primary, secondary, and tertiary school enrollment (%)	69	80	68
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	..
Mobile telephone service	M	M	
Internet service	M	M	
Foreign ownership (not allowed, restricted, allowed)	..	..
Reg. treatment of VoIP (banned, closed, no framework, allowed)	No	No	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	8.6	..	..
Telecommunications investment (% of revenue)	60.0	..	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	4.4	3.5	3.5
Mobile-cellular telephone subscriptions (per 100 people)	57.6	65.1	90.5
Fixed-broadband subscriptions (per 100 people)	0.3	0.5	1.9
Households with a computer (%)	..	..	19.3
Households with Internet access at home (%)	..	..	24.3
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	9.1	..	7.5
Domestic mobile traffic (minutes/subscription/month)	26.2	..	152.0
Individuals using the Internet (%)	18.8	25.8 ^a	28.6
Quality			
Population covered by at least a 3G mobile network (%)	2	..	..
International Internet bandwidth (bit/s per Internet user)	1,197	8,594	10,372
Affordability			
Mobile-cellular sub-basket (\$ a month)	12.7	11.7	6.9
Fixed-broadband sub-basket (\$ a month)	285.4	27.7	14.3
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	163.9	4.5	5.8
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	115.5	29.1	10.0
Trade			
ICT goods exports (% of total goods exports)	0.7	0.1	5.7
ICT goods imports (% of total goods imports)	5.8	4.3	7.6
ICT service exports (% of total service exports)	9.9	19.3	48.0
Applications			
Online service index (0-1, 1=highest presence)	0.09	0.01	0.26
Secure Internet servers (per million people)	17.6	10.5	7.4

Saudi Arabia

Middle East & North Africa

High income

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	28	32	1,187
Urban population (% of total)	82	83	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	18,470	23,550	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	5.4	4.6	1.5
Adult literacy rate (% ages 15 and older)	..	95	..
Gross primary, secondary, and tertiary school enrollment (%)	79	96	95
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	..
Mobile telephone service	P	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	No	R	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	B	C	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	3.1	2.1	2.5
Telecommunications investment (% of revenue)	19.1	13.5	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	15.3	12.5	41.2
Mobile-cellular telephone subscriptions (per 100 people)	189.2	176.6	124.5
Fixed-broadband subscriptions (per 100 people)	6.3	12.0	31.0
Households with a computer (%)	57.3 ^a	67.0	83.2
Households with Internet access at home (%)	54.4 ^a	94.0	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	29.2	35.9	..
Domestic mobile traffic (minutes/subscription/month)	101.5	106.5	195.9
Individuals using the Internet (%)	41.0	69.6	81.0
Quality			
Population covered by at least a 3G mobile network (%)	90	97	99
International Internet bandwidth (bit/s per Internet user)	11,095	88,669	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	15.4	14.1	14.2
Fixed-broadband sub-basket (\$ a month)	26.6	39.7	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	18.7	18.7	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	26.4	11.7	14.4
Trade			
ICT goods exports (% of total goods exports)	0.1	0.2	9.5
ICT goods imports (% of total goods imports)	7.2	7.4	11.2
ICT service exports (% of total service exports)	3.4	1.9	32.0
Applications			
Online service index (0-1, 1=highest presence)	0.31	0.77	0.67
Secure Internet servers (per million people)	17.1	53.7	1,194.6

Senegal

Sub-Saharan Africa

Low income

	Country data		Low-income group
	2010	2015	2015
Economic and social context			
Population (millions)	13	15	638
Urban population (% of total)	42	44	31
GNI per capita, <i>World Bank Atlas</i> method (\$)	1,040	1,000	620
GDP growth, 2005–10 and 2010–15 (avg. annual %)	3.6	4.1	5.4
Adult literacy rate (% ages 15 and older)	52	56	..
Gross primary, secondary, and tertiary school enrollment (%)	47	..	60
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	P	C	
Mobile telephone service	P	C	
Internet service	P	C	
Foreign ownership (not allowed, restricted, allowed)	A	..	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	No	No	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	9.9	9.7	..
Telecommunications investment (% of revenue)	25.5	12.3	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	2.6	2.0	0.9
Mobile-cellular telephone subscriptions (per 100 people)	64.4	99.9	60.0
Fixed-broadband subscriptions (per 100 people)	0.6	0.7	0.3
Households with a computer (%)	5.7 ^a	12.9 ^a	4.8
Households with Internet access at home (%)	4.2 ^a	15.7 ^a	7.1
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	13.5	7.6	..
Domestic mobile traffic (minutes/subscription/month)	69.9	96.3	48.9
Individuals using the Internet (%)	8.0 ^a	21.7 ^a	9.5
Quality			
Population covered by at least a 3G mobile network (%)	..	..	51
International Internet bandwidth (bit/s per Internet user)	5,212	6,931	4,245
Affordability			
Mobile-cellular sub-basket (\$ a month)	13.7	13.8	9.4
Fixed-broadband sub-basket (\$ a month)	36.1	30.4	33.6
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	29.4	8.0	8.0
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	8.5	10.8
Trade			
ICT goods exports (% of total goods exports)	0.4	0.4	..
ICT goods imports (% of total goods imports)	3.3	2.8	3.4
ICT service exports (% of total service exports)	33.6	..	..
Applications			
Online service index (0-1, 1=highest presence)	0.18	0.31	0.11
Secure Internet servers (per million people)	1.1	5.2	1.5

Europe & Central Asia

Upper middle income

	Country data		Upper middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	7	7	2,594
Urban population (% of total)	55	56	64
GNI per capita, <i>World Bank Atlas</i> method (\$)	5,850	5,500	8,186
GDP growth, 2005–10 and 2010–15 (avg. annual %)	2.7	0.3	4.5
Adult literacy rate (% ages 15 and older)	98	98	..
Gross primary, secondary, and tertiary school enrollment (%)	79	84	81
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	..
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	R	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	4.9	4.6	2.1
Telecommunications investment (% of revenue)	18.4	12.4	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	39.3	36.5	17.3
Mobile-cellular telephone subscriptions (per 100 people)	125.3	120.5	105.1
Fixed-broadband subscriptions (per 100 people)	10.9	16.8	15.4
Households with a computer (%)	50.9 ^a	64.4	48.7
Households with Internet access at home (%)	40.2 ^a	63.8	52.2
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	8.6	7.0	2.3
Domestic mobile traffic (minutes/subscription/month)	73.3	131.3	173.1
Individuals using the Internet (%)	40.9	65.3	52.1
Quality			
Population covered by at least a 3G mobile network (%)	69	97	69
International Internet bandwidth (bit/s per Internet user)	45,597	20,478	26,098
Affordability			
Mobile-cellular sub-basket (\$ a month)	8.6	14.3	8.5
Fixed-broadband sub-basket (\$ a month)	15.3	14.2	15.5
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	6.9	4.6	7.7
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	4.6	6.4	11.1
Trade			
ICT goods exports (% of total goods exports)	1.6	1.4	15.7
ICT goods imports (% of total goods imports)	4.2	3.2	14.4
ICT service exports (% of total service exports)	34.0	36.7	25.7
Applications			
Online service index (0-1, 1=highest presence)	0.22	0.39	0.37
Secure Internet servers (per million people)	19.9	63.5	34.7

Seychelles

Sub-Saharan Africa

High income

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	0.09	0.09	1,187
Urban population (% of total)	52	54	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	10,190	14,760	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	3.6	5.4	1.5
Adult literacy rate (% ages 15 and older)	94	95	..
Gross primary, secondary, and tertiary school enrollment (%)	71	77	95
Sector structure			
Separate telecommunications/ICT regulator	No	No	
Status of main fixed-line telephone operator	Private	Private	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	P	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	3.8	..	2.5
Telecommunications investment (% of revenue)	..	..	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	24.2	22.8	41.2
Mobile-cellular telephone subscriptions (per 100 people)	128.9	158.1	124.5
Fixed-broadband subscriptions (per 100 people)	7.4	14.3	31.0
Households with a computer (%)	37.8	66.8 ^a	83.2
Households with Internet access at home (%)	26.1	59.4 ^a	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	9.1	4.1	..
Domestic mobile traffic (minutes/subscription/month)	42.3	59.9	195.9
Individuals using the Internet (%)	41.0 ^a	58.1 ^a	81.0
Quality			
Population covered by at least a 3G mobile network (%)	90	90	99
International Internet bandwidth (bit/s per Internet user)	4,961	38,395	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	15.9	13.2	14.2
Fixed-broadband sub-basket (\$ a month)	48.1	15.1	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	29.9	16.9	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	21.8	18.7	14.4
Trade			
ICT goods exports (% of total goods exports)	0.0	..	9.5
ICT goods imports (% of total goods imports)	2.1	..	11.2
ICT service exports (% of total service exports)	7.5	28.1	32.0
Applications			
Online service index (0-1, 1=highest presence)	0.06	0.33	0.67
Secure Internet servers (per million people)	1,114.0	484.4	1,194.6

Sierra Leone

Sub-Saharan Africa

Low income

	Country data		Low-income group
	2010	2015	2015
Economic and social context			
Population (millions)	6	6	638
Urban population (% of total)	38	40	31
GNI per capita, <i>World Bank Atlas</i> method (\$)	470	630	620
GDP growth, 2005–10 and 2010–15 (avg. annual %)	5.8	6.9	5.4
Adult literacy rate (% ages 15 and older)	..	48	..
Gross primary, secondary, and tertiary school enrollment (%)	..	..	60
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Public	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	P	P	
Mobile telephone service	P	P	
Internet service	P	P	
Foreign ownership (not allowed, restricted, allowed)	..	..
Reg. treatment of VoIP (banned, closed, no framework, allowed)	B	B	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	..	..	..
Telecommunications investment (% of revenue)	..	..	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	0.2	0.3	0.9
Mobile-cellular telephone subscriptions (per 100 people)	34.8	89.5	60.0
Fixed-broadband subscriptions (per 100 people)	..	..	0.3
Households with a computer (%)	..	..	4.8
Households with Internet access at home (%)	..	..	7.1
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	..	..	..
Domestic mobile traffic (minutes/subscription/month)	..	..	48.9
Individuals using the Internet (%)	0.6 ^a	2.5 ^a	9.5
Quality			
Population covered by at least a 3G mobile network (%)	..	..	51
International Internet bandwidth (bit/s per Internet user)	5,096	..	4,245
Affordability			
Mobile-cellular sub-basket (\$ a month)	..	12.0	9.4
Fixed-broadband sub-basket (\$ a month)	..	24.4	33.6
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	28.3	13.6	8.0
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	22.8	10.8
Trade			
ICT goods exports (% of total goods exports)	..	0.0	..
ICT goods imports (% of total goods imports)	..	1.8	3.4
ICT service exports (% of total service exports)	5.8	60.1	..
Applications			
Online service index (0-1, 1=highest presence)	0.00	0.05	0.11
Secure Internet servers (per million people)	0.2	0.9	1.5

Singapore

East Asia & Pacific

High income

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	5	6	1,187
Urban population (% of total)	100	100	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	44,790	52,090	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	5.7	4.0	1.5
Adult literacy rate (% ages 15 and older)	96	97	..
Gross primary, secondary, and tertiary school enrollment (%)	..	..	95
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	3.5	3.6	2.5
Telecommunications investment (% of revenue)	..	..	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	39.3	36.0	41.2
Mobile-cellular telephone subscriptions (per 100 people)	145.4	146.1	124.5
Fixed-broadband subscriptions (per 100 people)	26.4	26.5	31.0
Households with a computer (%)	84.0	87.5 ^a	83.2
Households with Internet access at home (%)	82.0	89.5 ^a	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	89.1	79.2	..
Domestic mobile traffic (minutes/subscription/month)	..	..	195.9
Individuals using the Internet (%)	71.0	82.1 ^a	81.0
Quality			
Population covered by at least a 3G mobile network (%)	100	100	99
International Internet bandwidth (bit/s per Internet user)	172,404	737,006	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	8.1	8.0	14.2
Fixed-broadband sub-basket (\$ a month)	26.7	29.0	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	7.3	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	14.5	14.4
Trade			
ICT goods exports (% of total goods exports)	34.3	30.0	9.5
ICT goods imports (% of total goods imports)	27.9	24.5	11.2
ICT service exports (% of total service exports)	22.9	27.7	32.0
Applications			
Online service index (0-1, 1=highest presence)	0.69	0.99	0.67
Secure Internet servers (per million people)	529.7	932.1	1,194.6

Sint Maarten (Dutch part)

Latin America & Caribbean

High income

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	0.04	0.04	1,187
Urban population (% of total)	100	100	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	41,366
GDP growth, 2005-10 and 2010-15 (avg. annual %)	1.5
Adult literacy rate (% ages 15 and older)
Gross primary, secondary, and tertiary school enrollment (%)	95
Sector structure			
Separate telecommunications/ICT regulator	
Status of main fixed-line telephone operator	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	
Mobile telephone service	
Internet service	
Foreign ownership (not allowed, restricted, allowed)	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	2.5
Telecommunications investment (% of revenue)	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	41.2
Mobile-cellular telephone subscriptions (per 100 people)	155.2	..	124.5
Fixed-broadband subscriptions (per 100 people)	31.0
Households with a computer (%)	83.2
Households with Internet access at home (%)	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)
Domestic mobile traffic (minutes/subscription/month)	195.9
Individuals using the Internet (%)	81.0
Quality			
Population covered by at least a 3G mobile network (%)	99
International Internet bandwidth (bit/s per Internet user)	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	14.2
Fixed-broadband sub-basket (\$ a month)	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	14.4
Trade			
ICT goods exports (% of total goods exports)	9.5
ICT goods imports (% of total goods imports)	11.2
ICT service exports (% of total service exports)	14.3	13.1	32.0
Applications			
Online service index (0-1, 1=highest presence)	0.67
Secure Internet servers (per million people)	..	180.3	1,194.6

Slovak Republic

Europe & Central Asia

High income

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	5	5	1,187
Urban population (% of total)	55	54	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	17,590	17,310	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	4.4	2.2	1.5
Adult literacy rate (% ages 15 and older)	..	..	..
Gross primary, secondary, and tertiary school enrollment (%)	82	82	95
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	P	C	
Mobile telephone service	P	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	No	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	2.9	2.2	2.5
Telecommunications investment (% of revenue)	18.1	18.7	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	20.2	15.9	41.2
Mobile-cellular telephone subscriptions (per 100 people)	109.0	122.3	124.5
Fixed-broadband subscriptions (per 100 people)	16.1	23.3	31.0
Households with a computer (%)	72.2	85.2 ^a	83.2
Households with Internet access at home (%)	67.5	78.8 ^a	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	11.2	13.6	..
Domestic mobile traffic (minutes/subscription/month)	113.0	129.6	195.9
Individuals using the Internet (%)	75.7	85.0 ^a	81.0
Quality			
Population covered by at least a 3G mobile network (%)	69	93	99
International Internet bandwidth (bit/s per Internet user)	12,155	17,240	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	38.2	13.4	14.2
Fixed-broadband sub-basket (\$ a month)	25.9	16.6	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	10.3	7.8	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	21.2	11.1	14.4
Trade			
ICT goods exports (% of total goods exports)	19.1	17.6	9.5
ICT goods imports (% of total goods imports)	15.6	14.5	11.2
ICT service exports (% of total service exports)	19.9	29.8	32.0
Applications			
Online service index (0-1, 1=highest presence)	0.35	0.49	0.67
Secure Internet servers (per million people)	128.5	392.5	1,194.6

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	2	2	1,187
Urban population (% of total)	50	50	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	24,540	22,610	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	1.5	0.3	1.5
Adult literacy rate (% ages 15 and older)	..	100	..
Gross primary, secondary, and tertiary school enrollment (%)	95	98	95
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	2.2	2.1	2.5
Telecommunications investment (% of revenue)	18.7	22.9	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	44.3	36.2	41.2
Mobile-cellular telephone subscriptions (per 100 people)	103.3	113.2	124.5
Fixed-broadband subscriptions (per 100 people)	22.9	27.6	31.0
Households with a computer (%)	70.5	77.8	83.2
Households with Internet access at home (%)	68.1	77.6	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	11.2	10.1	..
Domestic mobile traffic (minutes/subscription/month)	140.2	142.3	195.9
Individuals using the Internet (%)	70.0	73.1	81.0
Quality			
Population covered by at least a 3G mobile network (%)	85	100	99
International Internet bandwidth (bit/s per Internet user)	55,634	154,627	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	20.8	7.7	14.2
Fixed-broadband sub-basket (\$ a month)	34.2	21.1	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	15.4	8.9	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	14.1	7.7	14.4
Trade			
ICT goods exports (% of total goods exports)	2.2	1.9	9.5
ICT goods imports (% of total goods imports)	4.7	3.7	11.2
ICT service exports (% of total service exports)	21.0	22.3	32.0
Applications			
Online service index (0-1, 1=highest presence)	0.40	0.43	0.67
Secure Internet servers (per million people)	303.6	806.8	1,194.6

Solomon Islands

East Asia & Pacific

Lower middle income

	Country data		Lower middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	0.53	0.58	2,927
Urban population (% of total)	20	22	39
GNI per capita, <i>World Bank Atlas</i> method (\$)	910	1,940	2,035
GDP growth, 2005–10 and 2010–15 (avg. annual %)	4.3	4.4	5.4
Adult literacy rate (% ages 15 and older)	..	..	..
Gross primary, secondary, and tertiary school enrollment (%)	..	..	68
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	..
Mobile telephone service	..	..
Internet service	..	..
Foreign ownership (not allowed, restricted, allowed)	..	..
Reg. treatment of VoIP (banned, closed, no framework, allowed)	B	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	..	..	..
Telecommunications investment (% of revenue)	..	..	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	1.6	1.3	3.5
Mobile-cellular telephone subscriptions (per 100 people)	21.9	72.7	90.5
Fixed-broadband subscriptions (per 100 people)	0.5	0.2	1.9
Households with a computer (%)	3.8 ^a	6.7 ^a	19.3
Households with Internet access at home (%)	2.9 ^a	6.3 ^a	24.3
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	..	..	7.5
Domestic mobile traffic (minutes/subscription/month)	..	..	152.0
Individuals using the Internet (%)	5.0 ^a	10.0 ^a	28.6
Quality			
Population covered by at least a 3G mobile network (%)	..	12	..
International Internet bandwidth (bit/s per Internet user)	3,799	4,277	10,372
Affordability			
Mobile-cellular sub-basket (\$ a month)	14.5	15.6	6.9
Fixed-broadband sub-basket (\$ a month)	259.2	275.2	14.3
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	31.6	5.8
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	72.6	10.0
Trade			
ICT goods exports (% of total goods exports)	0.0	0.0	5.7
ICT goods imports (% of total goods imports)	1.9	2.1	7.6
ICT service exports (% of total service exports)	5.3	19.0	48.0
Applications			
Online service index (0–1, 1=highest presence)	0.04	0.06	0.26
Secure Internet servers (per million people)	3.8	10.3	7.4

	Country data		Low-income group
	2010	2015	2015
Economic and social context			
Population (millions)	10	11	638
Urban population (% of total)	37	40	31
GNI per capita, <i>World Bank Atlas</i> method (\$)	..	..	620
GDP growth, 2005-10 and 2010-15 (avg. annual %)	..	..	5.4
Adult literacy rate (% ages 15 and older)	..	..	..
Gross primary, secondary, and tertiary school enrollment (%)	..	..	60
Sector structure			
Separate telecommunications/ICT regulator	No	No	
Status of main fixed-line telephone operator	Private	..	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	..
Mobile telephone service	..	C	
Internet service	..	C	
Foreign ownership (not allowed, restricted, allowed)	..	..
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	B	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	..	..	..
Telecommunications investment (% of revenue)	..	..	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	1.0	0.5	0.9
Mobile-cellular telephone subscriptions (per 100 people)	6.7	52.5	60.0
Fixed-broadband subscriptions (per 100 people)	0.4	0.7	0.3
Households with a computer (%)	..	..	4.8
Households with Internet access at home (%)	..	..	7.1
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	..	..	..
Domestic mobile traffic (minutes/subscription/month)	..	..	48.9
Individuals using the Internet (%)	1.3 ^a	1.8 ^a	9.5
Quality			
Population covered by at least a 3G mobile network (%)	0	..	51
International Internet bandwidth (bit/s per Internet user)	356	1,022	4,245
Affordability			
Mobile-cellular sub-basket (\$ a month)	..	2.9	9.4
Fixed-broadband sub-basket (\$ a month)	..	30.0	33.6
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	15.4	8.0
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	25.0	10.8
Trade			
ICT goods exports (% of total goods exports)	..	..	..
ICT goods imports (% of total goods imports)	..	..	3.4
ICT service exports (% of total service exports)	..	..	..
Applications			
Online service index (0-1, 1=highest presence)	0.00	0.02	0.11
Secure Internet servers (per million people)	0.1	0.1	1.5

South Africa

Sub-Saharan Africa

Upper middle income

	Country data		Upper middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	51	55	2,594
Urban population (% of total)	62	65	64
GNI per capita, <i>World Bank Atlas</i> method (\$)	6,250	6,050	8,186
GDP growth, 2005–10 and 2010–15 (avg. annual %)	2.9	2.1	4.5
Adult literacy rate (% ages 15 and older)	93	95	..
Gross primary, secondary, and tertiary school enrollment (%)	74	75	81
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	P	M	
Mobile telephone service	P	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	R	R	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	No	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	4.5	..	2.1
Telecommunications investment (% of revenue)	10.7	..	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	9.4	7.7	17.3
Mobile-cellular telephone subscriptions (per 100 people)	97.9	159.3	105.1
Fixed-broadband subscriptions (per 100 people)	1.4	5.3	15.4
Households with a computer (%)	18.3 ^a	23.4 ^a	48.7
Households with Internet access at home (%)	10.1	50.6 ^a	52.2
Usage			
Int'l. voice traffic, total (minutes/subscriber/month)	..	3.4	2.3
Domestic mobile traffic (minutes/subscriber/month)	..	79.7	173.1
Individuals using the Internet (%)	24.0 ^a	51.9 ^a	52.1
Quality			
Population covered by at least a 3G mobile network (%)	..	98	69
International Internet bandwidth (bit/s per Internet user)	202,453	147,630	26,098
Affordability			
Mobile-cellular sub-basket (\$ a month)	23.3	7.1	8.5
Fixed-broadband sub-basket (\$ a month)	27.4	12.9	15.5
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	19.4	7.8	7.7
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	30.3	6.7	11.1
Trade			
ICT goods exports (% of total goods exports)	1.2	1.6	15.7
ICT goods imports (% of total goods imports)	9.2	7.8	14.4
ICT service exports (% of total service exports)	13.2	16.9	25.7
Applications			
Online service index (0-1, 1=highest presence)	0.31	0.39	0.37
Secure Internet servers (per million people)	61.6	130.0	34.7

South Sudan

Sub-Saharan Africa

Low income

	Country data		Low-income group
	2010	2015	2015
Economic and social context			
Population (millions)	10	12	638
Urban population (% of total)	18	19	31
GNI per capita, <i>World Bank Atlas</i> method (\$)	1,060	790	620
GDP growth, 2005–10 and 2010–15 (avg. annual %)	..	-11.1	5.4
Adult literacy rate (% ages 15 and older)	27	32	..
Gross primary, secondary, and tertiary school enrollment (%)	..	..	60
Sector structure			
Separate telecommunications/ICT regulator	No	No	
Status of main fixed-line telephone operator	<i>Mixed</i>	..	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	..
Mobile telephone service	..	..
Internet service	..	..
Foreign ownership (not allowed, restricted, allowed)	..	..
Reg. treatment of VoIP (banned, closed, no framework, allowed)	C	C	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	..	2.9	..
Telecommunications investment (% of revenue)	..	21.1	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	0.0	0.0	0.9
Mobile-cellular telephone subscriptions (per 100 people)	14.4	23.9	60.0
Fixed-broadband subscriptions (per 100 people)	0.0	0.0	0.3
Households with a computer (%)	4.0 ^a	11.7 ^a	4.8
Households with Internet access at home (%)	3.0 ^a	11.2 ^a	7.1
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	4.3	..	..
Domestic mobile traffic (minutes/subscription/month)	6.7	42.1	48.9
Individuals using the Internet (%)	7.0 ^a	17.9 ^a	9.5
Quality			
Population covered by at least a 3G mobile network (%)	..	20 ^a	51
International Internet bandwidth (bit/s per Internet user)	4	28	4,245
Affordability			
Mobile-cellular sub-basket (\$ a month)	..	7.0	9.4
Fixed-broadband sub-basket (\$ a month)	..	7.7	33.6
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	20.3	8.0
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	42.9	10.8
Trade			
ICT goods exports (% of total goods exports)	..	..	..
ICT goods imports (% of total goods imports)	..	..	3.4
ICT service exports (% of total service exports)	..	20.4	..
Applications			
Online service index (0-1, 1=highest presence)	0.14	0.01	0.11
Secure Internet servers (per million people)	..	0.2	1.5

Spain

Europe & Central Asia

High income

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	47	46	1,187
Urban population (% of total)	78	80	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	32,130	28,520	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	0.9	–0.4	1.5
Adult literacy rate (% ages 15 and older)	98	98	..
Gross primary, secondary, and tertiary school enrollment (%)	104	109	95
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Private	Private	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	2.5	1.8	2.5
Telecommunications investment (% of revenue)	14.7	24.8	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	43.7	40.6	41.2
Mobile-cellular telephone subscriptions (per 100 people)	111.3	107.9	124.5
Fixed-broadband subscriptions (per 100 people)	23.1	28.3	31.0
Households with a computer (%)	68.7	75.9	83.2
Households with Internet access at home (%)	59.1	78.7	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	..	..	..
Domestic mobile traffic (minutes/subscription/month)	115.8	130.8	195.9
Individuals using the Internet (%)	65.8	78.7	81.0
Quality			
Population covered by at least a 3G mobile network (%)	95	99	99
International Internet bandwidth (bit/s per Internet user)	55,944	105,006	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	47.0	31.6	14.2
Fixed-broadband sub-basket (\$ a month)	30.9	26.7	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	37.3	7.8	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	31.1	14.4	14.4
Trade			
ICT goods exports (% of total goods exports)	2.2	1.1	9.5
ICT goods imports (% of total goods imports)	6.7	4.6	11.2
ICT service exports (% of total service exports)	..	27.1	32.0
Applications			
Online service index (0–1, 1=highest presence)	0.77	0.94	0.67
Secure Internet servers (per million people)	230.9	362.5	1,194.6

Sri Lanka

South Asia

Lower middle income

	Country data		Lower middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	20	21	2,927
Urban population (% of total)	18	18	39
GNI per capita, <i>World Bank Atlas</i> method (\$)	2,430	3,800	2,035
GDP growth, 2005–10 and 2010–15 (avg. annual %)	6.1	5.9	5.4
Adult literacy rate (% ages 15 and older)	91	93	..
Gross primary, secondary, and tertiary school enrollment (%)	76	79	68
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	P	P	
Mobile telephone service	P	P	
Internet service	P	P	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	C	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	1.7	1.7	..
Telecommunications investment (% of revenue)	33.4	..	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	17.2	12.0	3.5
Mobile-cellular telephone subscriptions (per 100 people)	83.6	112.8	90.5
Fixed-broadband subscriptions (per 100 people)	1.1	3.1	1.9
Households with a computer (%)	12.3 ^a	24.2 ^a	19.3
Households with Internet access at home (%)	5.9 ^a	18.1 ^a	24.3
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	10.0	9.6	7.5
Domestic mobile traffic (minutes/subscription/month)	160.5	158.7	152.0
Individuals using the Internet (%)	12.0	30.0 ^a	28.6
Quality			
Population covered by at least a 3G mobile network (%)	72	74 ^a	..
International Internet bandwidth (bit/s per Internet user)	3,332	13,886	10,372
Affordability			
Mobile-cellular sub-basket (\$ a month)	1.9	0.9	6.9
Fixed-broadband sub-basket (\$ a month)	5.0	4.1	14.3
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	2.9	1.4	5.8
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	2.9	1.6	10.0
Trade			
ICT goods exports (% of total goods exports)	0.5	0.6	5.7
ICT goods imports (% of total goods imports)	2.9	3.4	7.6
ICT service exports (% of total service exports)	24.0	13.2	48.0
Applications			
Online service index (0-1, 1=highest presence)	0.26	0.65	0.26
Secure Internet servers (per million people)	4.6	13.8	7.4

St. Kitts and Nevis

Latin America & Caribbean

High income

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	0.05	0.06	1,187
Urban population (% of total)	32	32	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	12,650	15,560	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	0.7	3.6	1.5
Adult literacy rate (% ages 15 and older)	..	..	..
Gross primary, secondary, and tertiary school enrollment (%)	75	85	95
Sector structure			
Separate telecommunications/ICT regulator	No	Yes	
Status of main fixed-line telephone operator	Private	Private	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	..
Mobile telephone service	..	..
Internet service	..	..
Foreign ownership (not allowed, restricted, allowed)	..	..
Reg. treatment of VoIP (banned, closed, no framework, allowed)	No	No	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	6.2	4.8	2.5
Telecommunications investment (% of revenue)	12.1	6.3	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	37.8	35.7	41.2
Mobile-cellular telephone subscriptions (per 100 people)	152.8	131.8	124.5
Fixed-broadband subscriptions (per 100 people)	27.9	29.6	31.0
Households with a computer (%)	64.0	70.8 ^a	83.2
Households with Internet access at home (%)	56.5	70.5 ^a	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	63.5	..	..
Domestic mobile traffic (minutes/subscription/month)	32.3	56.4	195.9
Individuals using the Internet (%)	63.0	75.7 ^a	81.0
Quality			
Population covered by at least a 3G mobile network (%)	..	100	99
International Internet bandwidth (bit/s per Internet user)	81,863	131,203	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	15.1	19.0	14.2
Fixed-broadband sub-basket (\$ a month)	36.7	35.2	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	13.7	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	14.4	14.4
Trade			
ICT goods exports (% of total goods exports)	19.3	..	9.5
ICT goods imports (% of total goods imports)	4.5	..	11.2
ICT service exports (% of total service exports)	14.7	10.7	32.0
Applications			
Online service index (0-1, 1=highest presence)	0.10	0.13	0.67
Secure Internet servers (per million people)	1,260.7	449.9	1,194.6

Latin America & Caribbean

Upper middle income

	Country data		Upper middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	0.18	0.18	2,594
Urban population (% of total)	18	19	64
GNI per capita, <i>World Bank Atlas</i> method (\$)	6,600	7,390	8,186
GDP growth, 2005–10 and 2010–15 (avg. annual %)	1.6	0.2	4.5
Adult literacy rate (% ages 15 and older)	..	..	..
Gross primary, secondary, and tertiary school enrollment (%)	..	..	81
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Private	Private	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	No	No	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	7.3	6.3	2.1
Telecommunications investment (% of revenue)	7.8	20.4	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	21.1	18.9	17.3
Mobile-cellular telephone subscriptions (per 100 people)	111.7	101.5	105.1
Fixed-broadband subscriptions (per 100 people)	11.6	15.4	15.4
Households with a computer (%)	38.6	41.1 ^a	48.7
Households with Internet access at home (%)	26.5	39.7 ^a	52.2
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	30.1	..	2.3
Domestic mobile traffic (minutes/subscription/month)	102.2	75.1	173.1
Individuals using the Internet (%)	43.3	52.4 ^a	52.1
Quality			
Population covered by at least a 3G mobile network (%)	0	65 ^a	69
International Internet bandwidth (bit/s per Internet user)	52,075	134,277	26,098
Affordability			
Mobile-cellular sub-basket (\$ a month)	22.2	27.5	8.5
Fixed-broadband sub-basket (\$ a month)	29.3	36.2	15.5
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	14.8	7.7
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	17.0	11.1
Trade			
ICT goods exports (% of total goods exports)	4.2	11.7	15.7
ICT goods imports (% of total goods imports)	3.9	4.5	14.4
ICT service exports (% of total service exports)	8.6	7.6	25.7
Applications			
Online service index (0-1, 1=highest presence)	0.11	0.24	0.37
Secure Internet servers (per million people)	124.0	86.5	34.7

St. Martin (French part)

Latin America & Caribbean

High income

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	0.03	0.03	1,187
Urban population (% of total)	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	1.5
Adult literacy rate (% ages 15 and older)
Gross primary, secondary, and tertiary school enrollment (%)	95
Sector structure			
Separate telecommunications/ICT regulator	
Status of main fixed-line telephone operator	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	
Mobile telephone service	
Internet service	
Foreign ownership (not allowed, restricted, allowed)	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	2.5
Telecommunications investment (% of revenue)	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	41.2
Mobile-cellular telephone subscriptions (per 100 people)	124.5
Fixed-broadband subscriptions (per 100 people)	31.0
Households with a computer (%)	83.2
Households with Internet access at home (%)	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)
Domestic mobile traffic (minutes/subscription/month)	195.9
Individuals using the Internet (%)	81.0
Quality			
Population covered by at least a 3G mobile network (%)	99
International Internet bandwidth (bit/s per Internet user)	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	14.2
Fixed-broadband sub-basket (\$ a month)	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	14.4
Trade			
ICT goods exports (% of total goods exports)	9.5
ICT goods imports (% of total goods imports)	11.2
ICT service exports (% of total service exports)	32.0
Applications			
Online service index (0-1, 1=highest presence)	0.67
Secure Internet servers (per million people)	98.0	31.5	1,194.6

St. Vincent and the Grenadines

Latin America & Caribbean

Upper middle income

	Country data		Upper middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	0.11	0.11	2,594
Urban population (% of total)	49	51	64
GNI per capita, <i>World Bank Atlas</i> method (\$)	6,030	6,670	8,186
GDP growth, 2005-10 and 2010-15 (avg. annual %)	1.4	1.0	4.5
Adult literacy rate (% ages 15 and older)	..	..	..
Gross primary, secondary, and tertiary school enrollment (%)	..	..	81
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Private	Private	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	No	No	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	7.3	6.1	2.1
Telecommunications investment (% of revenue)	8.2	23.1	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	19.9	22.7	17.3
Mobile-cellular telephone subscriptions (per 100 people)	120.6	103.7	105.1
Fixed-broadband subscriptions (per 100 people)	11.4	15.5	15.4
Households with a computer (%)	50.5 ^a	61.8 ^a	48.7
Households with Internet access at home (%)	37.1 ^a	49.4 ^a	52.2
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	34.7	31.8	2.3
Domestic mobile traffic (minutes/subscription/month)	82.2	92.0	173.1
Individuals using the Internet (%)	33.7 ^a	51.8 ^a	52.1
Quality			
Population covered by at least a 3G mobile network (%)	0	100	69
International Internet bandwidth (bit/s per Internet user)	81,434	194,268	26,098
Affordability			
Mobile-cellular sub-basket (\$ a month)	16.8	25.8	8.5
Fixed-broadband sub-basket (\$ a month)	33.6	40.4	15.5
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	14.8	7.7
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	18.5	11.1
Trade			
ICT goods exports (% of total goods exports)	1.4	..	15.7
ICT goods imports (% of total goods imports)	3.7	..	14.4
ICT service exports (% of total service exports)	26.6	25.1	25.7
Applications			
Online service index (0-1, 1=highest presence)	0.13	0.16	0.37
Secure Internet servers (per million people)	109.8	210.1	34.7

Sudan

Sub-Saharan Africa

Lower middle income

	Country data		Lower middle-income group
	2010	2015	2015
Economic and social context			
Population (millions) ^b	36	40	2,927
Urban population (% of total) ^b	33	34	39
GNI per capita, <i>World Bank Atlas</i> method (\$)	1,200	1,840	2,035
GDP growth, 2005–10 and 2010–15 (avg. annual %) ^c	7.3	1.2	5.4
Adult literacy rate (% ages 15 and older) ^b	..	59	..
Gross primary, secondary, and tertiary school enrollment ^b (%)	47	48	68
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	P	P	
Mobile telephone service	P	P	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	R	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	No	C	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	3.3	1.6	..
Telecommunications investment (% of revenue)	291.8	39.7	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	1.3	0.3	3.5
Mobile-cellular telephone subscriptions (per 100 people)	41.5	70.5	90.5
Fixed-broadband subscriptions (per 100 people)	0.0	0.1	1.9
Households with a computer (%)	9.0 ^a	17.9 ^a	19.3
Households with Internet access at home (%)	15.0 ^a	33.5 ^a	24.3
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	6.2	6.7	7.5
Domestic mobile traffic (minutes/subscription/month)	55.3	76.9	152.0
Individuals using the Internet (%)	16.7 ^a	26.6 ^a	28.6
Quality			
Population covered by at least a 3G mobile network (%)	42	46	..
International Internet bandwidth (bit/s per Internet user)	1,829	2,189	10,372
Affordability			
Mobile-cellular sub-basket (\$ a month)	7.1	3.2	6.9
Fixed-broadband sub-basket (\$ a month)	28.6	4.1	14.3
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	5.6	3.3	5.8
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	18.2	9.1	10.0
Trade			
ICT goods exports (% of total goods exports)	0.0	..	5.7
ICT goods imports (% of total goods imports)	4.0	..	7.6
ICT service exports (% of total service exports)	31.0	5.7	48.0
Applications			
Online service index (0-1, 1=highest presence)	0.16	0.29	0.26
Secure Internet servers (per million people)	0.0	0.1	7.4

Suriname

Latin America & Caribbean

Upper middle income

	Country data		Upper middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	0.52	0.54	2,594
Urban population (% of total)	66	66	64
GNI per capita, <i>World Bank Atlas</i> method (\$)	7,780	9,300	8,186
GDP growth, 2005–10 and 2010–15 (avg. annual %)	4.2	2.8	4.5
Adult literacy rate (% ages 15 and older)	95	96	..
Gross primary, secondary, and tertiary school enrollment (%)	..	..	81
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Public	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	R	R	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	No	No	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	5.6	..	2.1
Telecommunications investment (% of revenue)	8.8	..	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	16.2	15.5	17.3
Mobile-cellular telephone subscriptions (per 100 people)	99.3	180.7	105.1
Fixed-broadband subscriptions (per 100 people)	2.9	9.5	15.4
Households with a computer (%)	29.0	45.2 ^a	48.7
Households with Internet access at home (%)	14.4	44.2 ^a	52.2
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	29.0	..	2.3
Domestic mobile traffic (minutes/subscription/month)	69.8	..	173.1
Individuals using the Internet (%)	31.6	42.8 ^a	52.1
Quality			
Population covered by at least a 3G mobile network (%)	12	80 ^a	69
International Internet bandwidth (bit/s per Internet user)	3,099	51,164	26,098
Affordability			
Mobile-cellular sub-basket (\$ a month)	14.3	17.0	8.5
Fixed-broadband sub-basket (\$ a month)	42.1	37.1	15.5
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	29.6	25.4	7.7
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	37.9	21.2	11.1
Trade			
ICT goods exports (% of total goods exports)	0.1	0.0	15.7
ICT goods imports (% of total goods imports)	3.0	4.2	14.4
ICT service exports (% of total service exports)	44.2	24.5	25.7
Applications			
Online service index (0-1, 1=highest presence)	0.02	0.14	0.37
Secure Internet servers (per million people)	21.2	81.0	34.7

Swaziland

Sub-Saharan Africa

Lower middle income

	Country data		Lower middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	1	1	2,927
Urban population (% of total)	21	21	39
GNI per capita, <i>World Bank Atlas</i> method (\$)	2,600	3,230	2,035
GDP growth, 2005–10 and 2010–15 (avg. annual %)	2.4	2.4	5.4
Adult literacy rate (% ages 15 and older)	83	87	..
Gross primary, secondary, and tertiary school enrollment (%)	67	67	68
Sector structure			
Separate telecommunications/ICT regulator	No	Yes	
Status of main fixed-line telephone operator	Public	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	<i>M</i>	<i>M</i>	
Mobile telephone service	<i>M</i>	<i>M</i>	
Internet service	<i>P</i>	<i>P</i>	
Foreign ownership (not allowed, restricted, allowed)	<i>No</i>	<i>No</i>	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	B	B	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	5.0	..	..
Telecommunications investment (% of revenue)	17.5	..	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	4.4	3.3	3.5
Mobile-cellular telephone subscriptions (per 100 people)	60.8	73.2	90.5
Fixed-broadband subscriptions (per 100 people)	0.3	0.5	1.9
Households with a computer (%)	8.3 ^a	19.8 ^a	19.3
Households with Internet access at home (%)	6.2 ^a	22.3 ^a	24.3
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	38.0	..	7.5
Domestic mobile traffic (minutes/subscription/month)	36.5	..	152.0
Individuals using the Internet (%)	11.0	30.4 ^a	28.6
Quality			
Population covered by at least a 3G mobile network (%)	0	..	..
International Internet bandwidth (bit/s per Internet user)	1,215	2,053	10,372
Affordability			
Mobile-cellular sub-basket (\$ a month)	25.5	12.1	6.9
Fixed-broadband sub-basket (\$ a month)	874.6	49.1	14.3
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	17.9	5.8
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	31.3	10.0
Trade			
ICT goods exports (% of total goods exports)	..	..	5.7
ICT goods imports (% of total goods imports)	..	..	7.6
ICT service exports (% of total service exports)	29.0	54.5	48.0
Applications			
Online service index (0-1, 1=highest presence)	0.00	0.13	0.26
Secure Internet servers (per million people)	10.1	15.5	7.4

Sweden

Europe & Central Asia

High income

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	9	10	1,187
Urban population (% of total)	85	86	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	53,900	57,810	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	0.9	1.7	1.5
Adult literacy rate (% ages 15 and older)	..	..	..
Gross primary, secondary, and tertiary school enrollment (%)	93	105	95
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	No	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	1.5	1.3	2.5
Telecommunications investment (% of revenue)	13.5	20.6	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	50.5	36.7	41.2
Mobile-cellular telephone subscriptions (per 100 people)	117.2	130.4	124.5
Fixed-broadband subscriptions (per 100 people)	32.0	36.1	31.0
Households with a computer (%)	89.5	88.3	83.2
Households with Internet access at home (%)	88.3	91.0	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	..	..	..
Domestic mobile traffic (minutes/subscription/month)	162.7	180.3	195.9
Individuals using the Internet (%)	90.0	90.6	81.0
Quality			
Population covered by at least a 3G mobile network (%)	100	100	99
International Internet bandwidth (bit/s per Internet user)	236,853	421,237	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	13.0	11.7	14.2
Fixed-broadband sub-basket (\$ a month)	34.5	43.7	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	7.4	5.8	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	14.6	11.7	14.4
Trade			
ICT goods exports (% of total goods exports)	9.7	6.9	9.5
ICT goods imports (% of total goods imports)	11.3	9.9	11.2
ICT service exports (% of total service exports)	46.0	45.6	32.0
Applications			
Online service index (0-1, 1=highest presence)	0.53	0.70	0.67
Secure Internet servers (per million people)	1,268.4	1,755.4	1,194.6

Switzerland

Europe & Central Asia

High income

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	8	8	1,187
Urban population (% of total)	74	74	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	77,360	84,180	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	2.0	1.5	1.5
Adult literacy rate (% ages 15 and older)	..	..	..
Gross primary, secondary, and tertiary school enrollment (%)	86	88	95
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	2.3	2.3	2.5
Telecommunications investment (% of revenue)	15.2	20.2	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	62.7	50.3	41.2
Mobile-cellular telephone subscriptions (per 100 people)	123.2	142.0	124.5
Fixed-broadband subscriptions (per 100 people)	37.2	44.8	31.0
Households with a computer (%)	83.7	88.4 ^a	83.2
Households with Internet access at home (%)	80.7	84.7 ^a	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	..	..	..
Domestic mobile traffic (minutes/subscription/month)	82.3	80.9	195.9
Individuals using the Internet (%)	83.9	88.0	81.0
Quality			
Population covered by at least a 3G mobile network (%)	96	100	99
International Internet bandwidth (bit/s per Internet user)	152,211	275,957	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	45.2	34.3	14.2
Fixed-broadband sub-basket (\$ a month)	32.7	35.3	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	22.4	19.7	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	40.5	40.5	14.4
Trade			
ICT goods exports (% of total goods exports)	1.6	1.0	9.5
ICT goods imports (% of total goods imports)	5.9	4.1	11.2
ICT service exports (% of total service exports)	21.5	29.5	32.0
Applications			
Online service index (0-1, 1=highest presence)	0.44	0.50	0.67
Secure Internet servers (per million people)	1,867.6	3,100.0	1,194.6

Syrian Arab Republic

Middle East & North Africa

Lower middle income

	Country data		Lower middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	21	19	2,927
Urban population (% of total)	56	58	39
GNI per capita, <i>World Bank Atlas</i> method (\$)	..	..	2,035
GDP growth, 2005–10 and 2010–15 (avg. annual %)	..	..	5.4
Adult literacy rate (% ages 15 and older)	..	86	..
Gross primary, secondary, and tertiary school enrollment (%)	73	54	68
Sector structure			
Separate telecommunications/ICT regulator	No	Yes	
Status of main fixed-line telephone operator	Public	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	M	
Mobile telephone service	P	P	
Internet service	P	..	
Foreign ownership (not allowed, restricted, allowed)	No	R	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	B	B	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	..	..	..
Telecommunications investment (% of revenue)	17.1	5.1	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	18.9	18.3	3.5
Mobile-cellular telephone subscriptions (per 100 people)	54.3	62.4	90.5
Fixed-broadband subscriptions (per 100 people)	0.3	3.1	1.9
Households with a computer (%)	40.4 ^a	49.9 ^a	19.3
Households with Internet access at home (%)	35.2 ^a	42.3 ^a	24.3
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	11.7	13.8	7.5
Domestic mobile traffic (minutes/subscription/month)	83.3	64.6	152.0
Individuals using the Internet (%)	20.7	30.0 ^a	28.6
Quality			
Population covered by at least a 3G mobile network (%)	1	70	..
International Internet bandwidth (bit/s per Internet user)	1,287	3,146	10,372
Affordability			
Mobile-cellular sub-basket (\$ a month)	21.3	95.3	6.9
Fixed-broadband sub-basket (\$ a month)	21.6	80.2	14.3
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	267.3	5.8
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	89.1	133.6	10.0
Trade			
ICT goods exports (% of total goods exports)	0.0	..	5.7
ICT goods imports (% of total goods imports)	2.2	..	7.6
ICT service exports (% of total service exports)	2.5	..	48.0
Applications			
Online service index (0-1, 1=highest presence)	0.04	0.16	0.26
Secure Internet servers (per million people)	0.1	0.9	7.4

Tajikistan

Europe & Central Asia

Lower middle income

	Country data		Lower middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	8	8	2,927
Urban population (% of total)	27	27	39
GNI per capita, <i>World Bank Atlas</i> method (\$)	730	1,240	2,035
GDP growth, 2005–10 and 2010–15 (avg. annual %)	6.6	6.8	5.4
Adult literacy rate (% ages 15 and older)	..	100	..
Gross primary, secondary, and tertiary school enrollment (%)	69	70	68
Sector structure			
Separate telecommunications/ICT regulator	No	No	
Status of main fixed-line telephone operator	Mixed	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	..
Mobile telephone service	..	..
Internet service	..	..
Foreign ownership (not allowed, restricted, allowed)	..	..
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	..	..	..
Telecommunications investment (% of revenue)	..	..	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	4.8	5.3	3.5
Mobile-cellular telephone subscriptions (per 100 people)	77.9	98.6	90.5
Fixed-broadband subscriptions (per 100 people)	0.1	0.1	1.9
Households with a computer (%)	2.9 ^a	11.5 ^a	19.3
Households with Internet access at home (%)	2.3 ^a	8.8 ^a	24.3
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	..	..	7.5
Domestic mobile traffic (minutes/subscription/month)	..	..	152.0
Individuals using the Internet (%)	11.6 ^a	19.0 ^a	28.6
Quality			
Population covered by at least a 3G mobile network (%)	..	..	..
International Internet bandwidth (bit/s per Internet user)	1,249	4,283	10,372
Affordability			
Mobile-cellular sub-basket (\$ a month)	8.5	4.3	6.9
Fixed-broadband sub-basket (\$ a month)	362.5	11.2	14.3
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	15.4	11.1	5.8
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	15.4	11.1	10.0
Trade			
ICT goods exports (% of total goods exports)	..	..	5.7
ICT goods imports (% of total goods imports)	..	..	7.6
ICT service exports (% of total service exports)	75.1	6.0	48.0
Applications			
Online service index (0-1, 1=highest presence)	0.09	0.06	0.26
Secure Internet servers (per million people)	0.4	2.8	7.4

Tanzania

Sub-Saharan Africa

Low income

	Country data		Low-income group
	2010	2015	2015
Economic and social context			
Population (millions)	46	53	638
Urban population (% of total)	28	32	31
GNI per capita, <i>World Bank Atlas</i> method (\$)	700	910	620
GDP growth, 2005–10 and 2010–15 (avg. annual %)	6.2	6.8	5.4
Adult literacy rate (% ages 15 and older)	68	80	..
Gross primary, secondary, and tertiary school enrollment (%)	56	52	60
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	M	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	R	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	No	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	..	..	..
Telecommunications investment (% of revenue)	..	..	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	0.4	0.3	0.9
Mobile-cellular telephone subscriptions (per 100 people)	46.7	75.9	60.0
Fixed-broadband subscriptions (per 100 people)	0.0	0.2	0.3
Households with a computer (%)	2.6 ^a	4.0 ^a	4.8
Households with Internet access at home (%)	2.1 ^a	4.5 ^a	7.1
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	0.7	1.9	..
Domestic mobile traffic (minutes/subscription/month)	56.7	108.9	48.9
Individuals using the Internet (%)	2.9 ^a	5.4 ^a	9.5
Quality			
Population covered by at least a 3G mobile network (%)	70	85	51
International Internet bandwidth (bit/s per Internet user)	2,652	4,107	4,245
Affordability			
Mobile-cellular sub-basket (\$ a month)	16.4	6.7	9.4
Fixed-broadband sub-basket (\$ a month)	31.3	22.6	33.6
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	5.1	7.5	8.0
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	4.5	10.8
Trade			
ICT goods exports (% of total goods exports)	0.4	0.4	..
ICT goods imports (% of total goods imports)	3.8	3.1	3.4
ICT service exports (% of total service exports)	12.5	10.3	..
Applications			
Online service index (0-1, 1=highest presence)	0.17	0.30	0.11
Secure Internet servers (per million people)	0.4	2.0	1.5

Thailand

East Asia & Pacific

Upper middle income

	Country data		Upper middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	67	68	2,594
Urban population (% of total)	44	50	64
GNI per capita, <i>World Bank Atlas</i> method (\$)	4,610	5,620	8,186
GDP growth, 2005–10 and 2010–15 (avg. annual %)	3.3	3.0	4.5
Adult literacy rate (% ages 15 and older)	96	94	..
Gross primary, secondary, and tertiary school enrollment (%)	78	79	81
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Public	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	C	P	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	R	R	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	2.1	2.3	2.1
Telecommunications investment (% of revenue)	17.3	22.3	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	10.3	7.9	17.3
Mobile-cellular telephone subscriptions (per 100 people)	108.0	125.8	105.1
Fixed-broadband subscriptions (per 100 people)	4.9	9.2	15.4
Households with a computer (%)	22.8	29.5	48.7
Households with Internet access at home (%)	11.4	52.2	52.2
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	1.4	1.5	2.3
Domestic mobile traffic (minutes/subscription/month)	43.1	81.2	173.1
Individuals using the Internet (%)	22.4	39.3	52.1
Quality			
Population covered by at least a 3G mobile network (%)	..	97	69
International Internet bandwidth (bit/s per Internet user)	12,791	64,907	26,098
Affordability			
Mobile-cellular sub-basket (\$ a month)	8.7	4.5	8.5
Fixed-broadband sub-basket (\$ a month)	18.9	18.7	15.5
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	5.8	7.7
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	5.8	11.1
Trade			
ICT goods exports (% of total goods exports)	18.9	16.0	15.7
ICT goods imports (% of total goods imports)	14.2	12.6	14.4
ICT service exports (% of total service exports)	20.5	15.4	25.7
Applications			
Online service index (0-1, 1=highest presence)	0.33	0.44	0.37
Secure Internet servers (per million people)	13.7	30.4	34.7

Timor-Leste

East Asia & Pacific

Lower middle income

	Country data		Lower middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	1	1	2,927
Urban population (% of total)	30	33	39
GNI per capita, <i>World Bank Atlas</i> method (\$)	2,770	1,920	2,035
GDP growth, 2005–10 and 2010–15 (avg. annual %)	9.5	5.4	5.4
Adult literacy rate (% ages 15 and older)	58	64	..
Gross primary, secondary, and tertiary school enrollment (%)	82	..	68
Sector structure			
Separate telecommunications/ICT regulator	No	Yes	
Status of main fixed-line telephone operator	..	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	..
Mobile telephone service	..	..
Internet service	..	..
Foreign ownership (not allowed, restricted, allowed)	..	..
Reg. treatment of VoIP (banned, closed, no framework, allowed)	B	C	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	6.1	6.8	..
Telecommunications investment (% of revenue)	28.6	..	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	0.3	0.2	3.5
Mobile-cellular telephone subscriptions (per 100 people)	43.8	117.4	90.5
Fixed-broadband subscriptions (per 100 people)	0.0	0.1	1.9
Households with a computer (%)	2.0	18.9	19.3
Households with Internet access at home (%)	0.7	21.7	24.3
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	..	..	7.5
Domestic mobile traffic (minutes/subscription/month)	36.8	94.5	152.0
Individuals using the Internet (%)	0.2 ^a	13.4 ^a	28.6
Quality			
Population covered by at least a 3G mobile network (%)	..	96	..
International Internet bandwidth (bit/s per Internet user)	25,145	2,546	10,372
Affordability			
Mobile-cellular sub-basket (\$ a month)	16.6	14.0	6.9
Fixed-broadband sub-basket (\$ a month)	99.0	49.0	14.3
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	10.0	5.8
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	99.0	12.5	10.0
Trade			
ICT goods exports (% of total goods exports)	..	11.0	5.7
ICT goods imports (% of total goods imports)	..	6.4	7.6
ICT service exports (% of total service exports)	..	..	48.0
Applications			
Online service index (0-1, 1=highest presence)	0.13	0.20	0.26
Secure Internet servers (per million people)	0.9	3.2	7.4

	Country data		Low-income group
	2010	2015	2015
Economic and social context			
Population (millions)	6	7	638
Urban population (% of total)	38	40	31
GNI per capita, <i>World Bank Atlas</i> method (\$)	450	540	620
GDP growth, 2005–10 and 2010–15 (avg. annual %)	3.0	5.0	5.4
Adult literacy rate (% ages 15 and older)	60	67	..
Gross primary, secondary, and tertiary school enrollment (%)	72	..	60
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Public	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	P	P	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	R	R	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	No	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	9.9	8.5	..
Telecommunications investment (% of revenue)	30.6	10.1	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	1.0	0.7	0.9
Mobile-cellular telephone subscriptions (per 100 people)	41.3	64.9	60.0
Fixed-broadband subscriptions (per 100 people)	0.4	0.9	0.3
Households with a computer (%)	2.1 ^a	3.4 ^a	4.8
Households with Internet access at home (%)	1.0	6.2 ^a	7.1
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	8.8	6.3	..
Domestic mobile traffic (minutes/subscription/month)	21.0	30.8	48.9
Individuals using the Internet (%)	3.0 ^a	7.1 ^a	9.5
Quality			
Population covered by at least a 3G mobile network (%)	0	50	51
International Internet bandwidth (bit/s per Internet user)	7,337	7,310	4,245
Affordability			
Mobile-cellular sub-basket (\$ a month)	20.9	13.3	9.4
Fixed-broadband sub-basket (\$ a month)	165.6	37.7	33.6
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	8.5	8.0
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	30.9	8.5	10.8
Trade			
ICT goods exports (% of total goods exports)	0.2	0.0	..
ICT goods imports (% of total goods imports)	5.1	1.3	3.4
ICT service exports (% of total service exports)	23.2	16.0	..
Applications			
Online service index (0-1, 1=highest presence)	0.07	0.11	0.11
Secure Internet servers (per million people)	1.9	6.3	1.5

East Asia & Pacific

Lower middle income

	Country data		Lower middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	0.10	0.11	2,927
Urban population (% of total)	23	24	39
GNI per capita, <i>World Bank Atlas</i> method (\$)	3,550	4,260	2,035
GDP growth, 2005–10 and 2010–15 (avg. annual %)	0.2	0.2	5.4
Adult literacy rate (% ages 15 and older)	99	99	..
Gross primary, secondary, and tertiary school enrollment (%)	..	..	68
Sector structure			
Separate telecommunications/ICT regulator	No	No	
Status of main fixed-line telephone operator	Public	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	C	C	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	..	..	..
Telecommunications investment (% of revenue)	..	..	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	29.8	12.4	3.5
Mobile-cellular telephone subscriptions (per 100 people)	52.2	65.6	90.5
Fixed-broadband subscriptions (per 100 people)	1.1	1.9	1.9
Households with a computer (%)	23.3 ^a	37.1 ^a	19.3
Households with Internet access at home (%)	10.0 ^a	39.5 ^a	24.3
Usage			
Int'l. voice traffic, total (minutes/subscriber/month)	..	..	7.5
Domestic mobile traffic (minutes/subscriber/month)	..	..	152.0
Individuals using the Internet (%)	16.0 ^a	45.0 ^a	28.6
Quality			
Population covered by at least a 3G mobile network (%)	..	70	..
International Internet bandwidth (bit/s per Internet user)	3,002	14,623	10,372
Affordability			
Mobile-cellular sub-basket (\$ a month)	11.0	11.7	6.9
Fixed-broadband sub-basket (\$ a month)	62.3	32.2	14.3
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	8.2	5.8
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	..	10.0
Trade			
ICT goods exports (% of total goods exports)	0.0	0.8	5.7
ICT goods imports (% of total goods imports)	6.4	10.2	7.6
ICT service exports (% of total service exports)	9.4	13.0	48.0
Applications			
Online service index (0-1, 1=highest presence)	0.07	0.35	0.26
Secure Internet servers (per million people)	19.2	9.4	7.4

Trinidad and Tobago

Latin America & Caribbean

High income

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	1	1	1,187
Urban population (% of total)	9	8	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	15,770	18,600	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	2.7	1.1	1.5
Adult literacy rate (% ages 15 and older)	..	99	..
Gross primary, secondary, and tertiary school enrollment (%)	..	..	95
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	C	
Mobile telephone service	P	C	
Internet service	P	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	No	No	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	2.5	2.5	2.5
Telecommunications investment (% of revenue)	8.7	9.2	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	22.1	20.1	41.2
Mobile-cellular telephone subscriptions (per 100 people)	142.6	157.7	124.5
Fixed-broadband subscriptions (per 100 people)	12.3	20.7	31.0
Households with a computer (%)	53.1 ^a	67.9 ^a	83.2
Households with Internet access at home (%)	29.0 ^a	65.0	85.0
Usage			
Int'l. voice traffic, total (minutes/subscriber/month)	20.9	18.4	..
Domestic mobile traffic (minutes/subscriber/month)	225.6	175.4	195.9
Individuals using the Internet (%)	48.5	69.2 ^a	81.0
Quality			
Population covered by at least a 3G mobile network (%)	75	75	99
International Internet bandwidth (bit/s per Internet user)	29,808	122,703	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	13.7	16.5	14.2
Fixed-broadband sub-basket (\$ a month)	12.5	21.8	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	21.3	26.9	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	15.4	8.8	14.4
Trade			
ICT goods exports (% of total goods exports)	0.1	..	9.5
ICT goods imports (% of total goods imports)	3.1	..	11.2
ICT service exports (% of total service exports)	6.5	..	32.0
Applications			
Online service index (0-1, 1=highest presence)	0.34	0.33	0.67
Secure Internet servers (per million people)	73.0	127.2	1,194.6

Middle East & North Africa

Lower middle income

	Country data		Lower middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	11	11	2,927
Urban population (% of total)	66	67	39
GNI per capita, <i>World Bank Atlas</i> method (\$)	4,170	3,970	2,035
GDP growth, 2005–10 and 2010–15 (avg. annual %)	4.6	1.7	5.4
Adult literacy rate (% ages 15 and older)	79	81	..
Gross primary, secondary, and tertiary school enrollment (%)	78	80	68
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	P	P	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	R	R	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	C	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	4.4	3.4	..
Telecommunications investment (% of revenue)	21.2	16.5	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	12.1	8.4	3.5
Mobile-cellular telephone subscriptions (per 100 people)	104.5	129.9	90.5
Fixed-broadband subscriptions (per 100 people)	4.5	4.3	1.9
Households with a computer (%)	19.1	38.7 ^a	19.3
Households with Internet access at home (%)	11.4	36.1 ^a	24.3
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	5.8	5.2	7.5
Domestic mobile traffic (minutes/subscription/month)	61.7	151.8	152.0
Individuals using the Internet (%)	36.8	48.5 ^a	28.6
Quality			
Population covered by at least a 3G mobile network (%)	65	94	..
International Internet bandwidth (bit/s per Internet user)	13,086	33,812	10,372
Affordability			
Mobile-cellular sub-basket (\$ a month)	10.0	3.4	6.9
Fixed-broadband sub-basket (\$ a month)	10.5	4.2	14.3
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	3.2	4.6	5.8
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	6.4	6.4	10.0
Trade			
ICT goods exports (% of total goods exports)	6.5	5.8	5.7
ICT goods imports (% of total goods imports)	6.3	5.0	7.6
ICT service exports (% of total service exports)	8.2	10.1	48.0
Applications			
Online service index (0-1, 1=highest presence)	0.48	0.64	0.26
Secure Internet servers (per million people)	14.1	13.2	7.4

Turkey

Europe & Central Asia

Upper middle income

	Country data		Upper middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	72	79	2,594
Urban population (% of total)	71	73	64
GNI per capita, <i>World Bank Atlas</i> method (\$)	9,960	9,950	8,186
GDP growth, 2005–10 and 2010–15 (avg. annual %)	2.3	4.1	4.5
Adult literacy rate (% ages 15 and older)	93	96	..
Gross primary, secondary, and tertiary school enrollment (%)	81	96	81
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	..
Mobile telephone service	..	P	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	No	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	No	No	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	2.0	1.9	2.1
Telecommunications investment (% of revenue)	17.3	16.8	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	22.5	15.0	17.3
Mobile-cellular telephone subscriptions (per 100 people)	85.6	96.0	105.1
Fixed-broadband subscriptions (per 100 people)	9.8	12.4	15.4
Households with a computer (%)	44.2	55.6	48.7
Households with Internet access at home (%)	41.6	69.5	52.2
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	5.6	5.8	2.3
Domestic mobile traffic (minutes/subscription/month)	169.7	237.8	173.1
Individuals using the Internet (%)	39.8	53.7	52.1
Quality			
Population covered by at least a 3G mobile network (%)	0	95 ^a	69
International Internet bandwidth (bit/s per Internet user)	13,577	59,034	26,098
Affordability			
Mobile-cellular sub-basket (\$ a month)	43.9	18.2	8.5
Fixed-broadband sub-basket (\$ a month)	19.2	8.8	15.5
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	16.2	5.1	7.7
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	11.1	7.3	11.1
Trade			
ICT goods exports (% of total goods exports)	1.8	1.5	15.7
ICT goods imports (% of total goods imports)	4.5	5.1	14.4
ICT service exports (% of total service exports)	2.0	1.0	25.7
Applications			
Online service index (0-1, 1=highest presence)	0.35	0.56	0.37
Secure Internet servers (per million people)	99.6	67.1	34.7

Turkmenistan

Europe & Central Asia

Upper middle income

	Country data		Upper middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	5	5	2,594
Urban population (% of total)	48	50	64
GNI per capita, <i>World Bank Atlas</i> method (\$)	4,110	7,510	8,186
GDP growth, 2005–10 and 2010–15 (avg. annual %)	10.5	10.5	4.5
Adult literacy rate (% ages 15 and older)	..	100	..
Gross primary, secondary, and tertiary school enrollment (%)	..	61	81
Sector structure			
Separate telecommunications/ICT regulator	No	No	
Status of main fixed-line telephone operator	Public	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	..
Mobile telephone service	C	C	
Internet service	..	..
Foreign ownership (not allowed, restricted, allowed)	..	..
Reg. treatment of VoIP (banned, closed, no framework, allowed)	B	B	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	..	..	2.1
Telecommunications investment (% of revenue)	..	..	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	10.3	12.1	17.3
Mobile-cellular telephone subscriptions (per 100 people)	63.4	145.9	105.1
Fixed-broadband subscriptions (per 100 people)	0.0	0.1	15.4
Households with a computer (%)	7.0 ^a	..	48.7
Households with Internet access at home (%)	4.0 ^a	..	52.2
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	..	..	2.3
Domestic mobile traffic (minutes/subscription/month)	..	..	173.1
Individuals using the Internet (%)	3.0 ^a	15.0 ^a	52.1
Quality			
Population covered by at least a 3G mobile network (%)	..	..	69
International Internet bandwidth (bit/s per Internet user)	2,578	..	26,098
Affordability			
Mobile-cellular sub-basket (\$ a month)	..	4.9	8.5
Fixed-broadband sub-basket (\$ a month)	..	14.6	15.5
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	8.6	7.7
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	15.7	11.1
Trade			
ICT goods exports (% of total goods exports)	..	..	15.7
ICT goods imports (% of total goods imports)	..	..	14.4
ICT service exports (% of total service exports)	..	..	25.7
Applications			
Online service index (0-1, 1=highest presence)	0.03	0.09	0.37
Secure Internet servers (per million people)	0.2	0.7	34.7

Turks and Caicos Islands

Latin America & Caribbean

High income

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	0.03	0.03	1,187
Urban population (% of total)	90	92	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	1.5
Adult literacy rate (% ages 15 and older)
Gross primary, secondary, and tertiary school enrollment (%)	95
Sector structure			
Separate telecommunications/ICT regulator	
Status of main fixed-line telephone operator	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	
Mobile telephone service	
Internet service	
Foreign ownership (not allowed, restricted, allowed)	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	2.5
Telecommunications investment (% of revenue)	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	11.9	11.6	41.2
Mobile-cellular telephone subscriptions (per 100 people)	124.5
Fixed-broadband subscriptions (per 100 people)	31.0
Households with a computer (%)	83.2
Households with Internet access at home (%)	85.0
Usage			
Int'l. voice traffic, total (minutes/subscriber/month)
Domestic mobile traffic (minutes/subscriber/month)	195.9
Individuals using the Internet (%)	81.0
Quality			
Population covered by at least a 3G mobile network (%)	99
International Internet bandwidth (bit/s per Internet user)	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	14.2
Fixed-broadband sub-basket (\$ a month)	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	14.4
Trade			
ICT goods exports (% of total goods exports)	1.7	..	9.5
ICT goods imports (% of total goods imports)	2.6	..	11.2
ICT service exports (% of total service exports)	32.0
Applications			
Online service index (0-1, 1=highest presence)	0.67
Secure Internet servers (per million people)	419.4	291.2	1,194.6

East Asia & Pacific	Upper middle income		
	Country data		Upper middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	0.01	0.01	2,594
Urban population (% of total)	55	60	64
GNI per capita, <i>World Bank Atlas</i> method (\$)	4,720	5,720	8,186
GDP growth, 2005–10 and 2010–15 (avg. annual %)	2.3	2.5	4.5
Adult literacy rate (% ages 15 and older)	..	..	..
Gross primary, secondary, and tertiary school enrollment (%)	..	..	81
Sector structure			
Separate telecommunications/ICT regulator	No	No	
Status of main fixed-line telephone operator	Public	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	..
Mobile telephone service	..	..
Internet service	M	M	
Foreign ownership (not allowed, restricted, allowed)	R	R	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	..	..
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	..	..	2.1
Telecommunications investment (% of revenue)	..	..	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	12.2	20.2	17.3
Mobile-cellular telephone subscriptions (per 100 people)	16.3	40.3	105.1
Fixed-broadband subscriptions (per 100 people)	2.4	10.1	15.4
Households with a computer (%)	18.3 ^a	..	48.7
Households with Internet access at home (%)	14.0 ^a	..	52.2
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	..	..	2.3
Domestic mobile traffic (minutes/subscription/month)	..	..	173.1
Individuals using the Internet (%)	25.0 ^a	42.7 ^a	52.1
Quality			
Population covered by at least a 3G mobile network (%)	..	..	69
International Internet bandwidth (bit/s per Internet user)	1,628	..	26,098
Affordability			
Mobile-cellular sub-basket (\$ a month)	..	38.1	8.5
Fixed-broadband sub-basket (\$ a month)	..	40.2	15.5
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	..	7.7
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	..	11.1
Trade			
ICT goods exports (% of total goods exports)	..	..	15.7
ICT goods imports (% of total goods imports)	..	..	14.4
ICT service exports (% of total service exports)	10.3	10.7	25.7
Applications			
Online service index (0-1, 1=highest presence)	0.01	0.04	0.37
Secure Internet servers (per million people)	102.2	..	34.7

Uganda

Sub-Saharan Africa

Low income

	Country data		Low-income group
	2010	2015	2015
Economic and social context			
Population (millions)	33	39	638
Urban population (% of total)	14	16	31
GNI per capita, <i>World Bank Atlas</i> method (\$)	550	670	620
GDP growth, 2005–10 and 2010–15 (avg. annual %)	8.1	5.0	5.4
Adult literacy rate (% ages 15 and older)	73	74	..
Gross primary, secondary, and tertiary school enrollment (%)	67	..	60
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	No	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	3.1	..	..
Telecommunications investment (% of revenue)	15.9	..	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	1.0	0.8	0.9
Mobile-cellular telephone subscriptions (per 100 people)	37.7	50.4	60.0
Fixed-broadband subscriptions (per 100 people)	0.0	0.3	0.3
Households with a computer (%)	2.2 ^a	6.7 ^a	4.8
Households with Internet access at home (%)	1.9 ^a	7.2 ^a	7.1
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	..	..	..
Domestic mobile traffic (minutes/subscription/month)	65.2	60.9	48.9
Individuals using the Internet (%)	12.5	19.2 ^a	9.5
Quality			
Population covered by at least a 3G mobile network (%)	42	45	51
International Internet bandwidth (bit/s per Internet user)	849	4,633	4,245
Affordability			
Mobile-cellular sub-basket (\$ a month)	13.4	6.1	9.4
Fixed-broadband sub-basket (\$ a month)	16.3	300.0	33.6
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	10.0	6.2	8.0
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	10.8	10.8
Trade			
ICT goods exports (% of total goods exports)	5.7	0.7	..
ICT goods imports (% of total goods imports)	7.4	4.3	3.4
ICT service exports (% of total service exports)	13.0	18.2	..
Applications			
Online service index (0-1, 1=highest presence)	0.10	0.15	0.11
Secure Internet servers (per million people)	0.9	1.9	1.5

Ukraine

Europe & Central Asia

Lower middle income

	Country data		Lower middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	46	45	2,927
Urban population (% of total)	69	70	39
GNI per capita, <i>World Bank Atlas</i> method (\$)	2,990	2,620	2,035
GDP growth, 2005–10 and 2010–15 (avg. annual %)	0.3	-2.3	5.4
Adult literacy rate (% ages 15 and older)	..	100	..
Gross primary, secondary, and tertiary school enrollment (%)	94	96	68
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Public	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	No	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	4.0	2.6	..
Telecommunications investment (% of revenue)	13.6	13.7	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	28.1	21.6	3.5
Mobile-cellular telephone subscriptions (per 100 people)	117.1	144.0	90.5
Fixed-broadband subscriptions (per 100 people)	6.4	11.8	1.9
Households with a computer (%)	25.2	59.2 ^a	19.3
Households with Internet access at home (%)	22.2	51.1 ^a	24.3
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	..	..	7.5
Domestic mobile traffic (minutes/subscription/month)	..	..	152.0
Individuals using the Internet (%)	23.3	49.3 ^a	28.6
Quality			
Population covered by at least a 3G mobile network (%)	1	35 ^a	..
International Internet bandwidth (bit/s per Internet user)	14,912	45,743	10,372
Affordability			
Mobile-cellular sub-basket (\$ a month)	6.5	3.0	6.9
Fixed-broadband sub-basket (\$ a month)	7.6	2.7	14.3
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	2.5	5.8
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	2.7	10.0
Trade			
ICT goods exports (% of total goods exports)	1.1	1.0	5.7
ICT goods imports (% of total goods imports)	3.2	3.6	7.6
ICT service exports (% of total service exports)	17.3	31.6	48.0
Applications			
Online service index (0-1, 1=highest presence)	0.35	0.27	0.26
Secure Internet servers (per million people)	13.2	65.5	7.4

United Arab Emirates

Middle East & North Africa

High income

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	8	9	1,187
Urban population (% of total)	84	86	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	34,140	43,170	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	1.9	4.9	1.5
Adult literacy rate (% ages 15 and older)	90	93	..
Gross primary, secondary, and tertiary school enrollment (%)	..	..	95
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Mixed	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	P	P	
Mobile telephone service	P	P	
Internet service	P	P	
Foreign ownership (not allowed, restricted, allowed)	R	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	B	C	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	2.4	2.3	2.5
Telecommunications investment (% of revenue)	30.8	15.7	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	17.5	23.1	41.2
Mobile-cellular telephone subscriptions (per 100 people)	129.4	187.3	124.5
Fixed-broadband subscriptions (per 100 people)	9.3	12.8	31.0
Households with a computer (%)	76.0	89.3 ^a	83.2
Households with Internet access at home (%)	65.0	95.4 ^a	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	53.1	52.9	..
Domestic mobile traffic (minutes/subscription/month)	128.0	95.7	195.9
Individuals using the Internet (%)	68.0	91.2 ^a	81.0
Quality			
Population covered by at least a 3G mobile network (%)	100	100	99
International Internet bandwidth (bit/s per Internet user)	18,309	107,904	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	8.6	6.7	14.2
Fixed-broadband sub-basket (\$ a month)	40.6	40.6	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	27.0	16.3	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	39.5	27.0	14.4
Trade			
ICT goods exports (% of total goods exports)	2.0	..	9.5
ICT goods imports (% of total goods imports)	4.5	..	11.2
ICT service exports (% of total service exports)	..	..	32.0
Applications			
Online service index (0-1, 1=highest presence)	0.25	0.88	0.67
Secure Internet servers (per million people)	137.5	354.7	1,194.6

United Kingdom

Europe & Central Asia

High income

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	63	65	1,187
Urban population (% of total)	81	83	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	40,480	43,340	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	0.1	2.1	1.5
Adult literacy rate (% ages 15 and older)	..	..	..
Gross primary, secondary, and tertiary school enrollment (%)	90	100	95
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Private	Private	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	..
Mobile telephone service	C	C	
Internet service	..	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	2.0	1.7	2.5
Telecommunications investment (% of revenue)	11.5	..	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	53.8	52.6	41.2
Mobile-cellular telephone subscriptions (per 100 people)	123.6	125.8	124.5
Fixed-broadband subscriptions (per 100 people)	30.9	37.7	31.0
Households with a computer (%)	82.6	89.9	83.2
Households with Internet access at home (%)	79.6	91.3	85.0
Usage			
Int'l. voice traffic, total (minutes/subscriber/month)	..	..	..
Domestic mobile traffic (minutes/subscriber/month)	135.4	145.9	195.9
Individuals using the Internet (%)	85.0	92.0	81.0
Quality			
Population covered by at least a 3G mobile network (%)	95	99	99
International Internet bandwidth (bit/s per Internet user)	132,685	374,554	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	34.9	15.3	14.2
Fixed-broadband sub-basket (\$ a month)	24.6	15.3	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	9.5	9.2	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	16.1	15.3	14.4
Trade			
ICT goods exports (% of total goods exports)	5.8	4.2	9.5
ICT goods imports (% of total goods imports)	9.5	7.8	11.2
ICT service exports (% of total service exports)	34.5	38.3	32.0
Applications			
Online service index (0-1, 1=highest presence)	0.77	0.90	0.67
Secure Internet servers (per million people)	1,384.1	1,382.6	1,194.6

United States

North America

High income

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	309	321	1,187
Urban population (% of total)	81	82	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	48,950	54,960	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	0.4	2.0	1.5
Adult literacy rate (% ages 15 and older)	..	..	..
Gross primary, secondary, and tertiary school enrollment (%)	97	96	95
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Private	Private	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	A	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	3.4	3.4	2.5
Telecommunications investment (% of revenue)	13.9	..	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	47.9	37.5	41.2
Mobile-cellular telephone subscriptions (per 100 people)	91.3	117.6	124.5
Fixed-broadband subscriptions (per 100 people)	27.1	31.5	31.0
Households with a computer (%)	75.5 ^a	87.3 ^a	83.2
Households with Internet access at home (%)	71.1	82.2 ^a	85.0
Usage			
Int'l. voice traffic, total (minutes/subscriber/month)	16.8	..	..
Domestic mobile traffic (minutes/subscriber/month)	347.6	316.6	195.9
Individuals using the Internet (%)	71.7	74.6	81.0
Quality			
Population covered by at least a 3G mobile network (%)	99	100	99
International Internet bandwidth (bit/s per Internet user)	40,206	99,017	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	35.7	35.7	14.2
Fixed-broadband sub-basket (\$ a month)	20.0	16.3	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	54.4	38.1	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	21.8	16.5	14.4
Trade			
ICT goods exports (% of total goods exports)	10.6	9.0	9.5
ICT goods imports (% of total goods imports)	14.4	13.1	11.2
ICT service exports (% of total service exports)	22.4	22.7	32.0
Applications			
Online service index (0-1, 1=highest presence)	0.94	0.94	0.67
Secure Internet servers (per million people)	1,445.0	1,649.9	1,194.6

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	3	3	1,187
Urban population (% of total)	94	95	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	10,390	15,720	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	6.0	3.6	1.5
Adult literacy rate (% ages 15 and older)	98	98	..
Gross primary, secondary, and tertiary school enrollment (%)	90	..	95
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Public	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	..
Mobile telephone service	C	C	
Internet service	P	C	
Foreign ownership (not allowed, restricted, allowed)	..	..
Reg. treatment of VoIP (banned, closed, no framework, allowed)	No	No	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	2.9	2.4	2.5
Telecommunications investment (% of revenue)	50.1	47.9	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	28.5	32.3	41.2
Mobile-cellular telephone subscriptions (per 100 people)	131.6	160.2	124.5
Fixed-broadband subscriptions (per 100 people)	11.4	26.3	31.0
Households with a computer (%)	53.4	68.0	83.2
Households with Internet access at home (%)	33.5	59.7	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	6.4	4.5	..
Domestic mobile traffic (minutes/subscription/month)	89.5	92.7	195.9
Individuals using the Internet (%)	46.4	64.6	81.0
Quality			
Population covered by at least a 3G mobile network (%)	..	90 ^a	99
International Internet bandwidth (bit/s per Internet user)	24,115	73,151	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	21.4	17.0	14.2
Fixed-broadband sub-basket (\$ a month)	19.3	17.9	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	9.9	3.7	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	9.8	8.0	14.4
Trade			
ICT goods exports (% of total goods exports)	0.0	0.1	9.5
ICT goods imports (% of total goods imports)	5.6	6.9	11.2
ICT service exports (% of total service exports)	19.1	24.3	32.0
Applications			
Online service index (0-1, 1=highest presence)	0.48	0.85	0.67
Secure Internet servers (per million people)	44.7	106.7	1,194.6

Uzbekistan

Europe & Central Asia

Lower middle income

	Country data		Lower middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	29	31	2,927
Urban population (% of total)	36	36	39
GNI per capita, <i>World Bank Atlas</i> method (\$)	1,300	2,150	2,035
GDP growth, 2005–10 and 2010–15 (avg. annual %)	8.7	8.1	5.4
Adult literacy rate (% ages 15 and older)	..	100	..
Gross primary, secondary, and tertiary school enrollment (%)	68	..	68
Sector structure			
Separate telecommunications/ICT regulator	No	No	
Status of main fixed-line telephone operator	Public	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	..
Mobile telephone service	C	C	
Internet service	..	..
Foreign ownership (not allowed, restricted, allowed)	..	..
Reg. treatment of VoIP (banned, closed, no framework, allowed)	No	No	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	2.9	2.2	..
Telecommunications investment (% of revenue)	17.3	24.3	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	6.8	8.4	3.5
Mobile-cellular telephone subscriptions (per 100 people)	75.5	73.3	90.5
Fixed-broadband subscriptions (per 100 people)	0.4	3.6	1.9
Households with a computer (%)	17.0 ^a	43.2	19.3
Households with Internet access at home (%)	21.0 ^a	52.6 ^a	24.3
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	22.1	9.4	7.5
Domestic mobile traffic (minutes/subscription/month)	154.3	48.2	152.0
Individuals using the Internet (%)	15.9 ^a	42.8 ^a	28.6
Quality			
Population covered by at least a 3G mobile network (%)	40	44	..
International Internet bandwidth (bit/s per Internet user)	580	2,075	10,372
Affordability			
Mobile-cellular sub-basket (\$ a month)	3.4	4.5	6.9
Fixed-broadband sub-basket (\$ a month)	200.0	6.6	14.3
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	6.0	10.0	5.8
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	6.3	10.0	10.0
Trade			
ICT goods exports (% of total goods exports)	..	..	5.7
ICT goods imports (% of total goods imports)	..	..	7.6
ICT service exports (% of total service exports)	..	..	48.0
Applications			
Online service index (0-1, 1=highest presence)	0.38	0.45	0.26
Secure Internet servers (per million people)	0.2	2.7	7.4

East Asia & Pacific

Lower middle income

	Country data		Lower middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	0.24	0.26	2,927
Urban population (% of total)	25	26	39
GNI per capita, <i>World Bank Atlas</i> method (\$)	2,690	3,160	2,035
GDP growth, 2005–10 and 2010–15 (avg. annual %)	5.0	1.8	5.4
Adult literacy rate (% ages 15 and older)	..	85	..
Gross primary, secondary, and tertiary school enrollment (%)	..	..	68
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Mixed	Private	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	R	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	No	No	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	5.1	4.8	..
Telecommunications investment (% of revenue)	36.5	..	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	3.0	1.8	3.5
Mobile-cellular telephone subscriptions (per 100 people)	71.9	66.2	90.5
Fixed-broadband subscriptions (per 100 people)	0.2	1.6	1.9
Households with a computer (%)	8.7 ^a	24.8 ^a	19.3
Households with Internet access at home (%)	5.4 ^a	34.5 ^a	24.3
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	..	..	7.5
Domestic mobile traffic (minutes/subscription/month)	73.6	..	152.0
Individuals using the Internet (%)	8.0	22.4 ^a	28.6
Quality			
Population covered by at least a 3G mobile network (%)	23	51 ^a	..
International Internet bandwidth (bit/s per Internet user)	2,804	8,477	10,372
Affordability			
Mobile-cellular sub-basket (\$ a month)	23.3	21.9	6.9
Fixed-broadband sub-basket (\$ a month)	171.0	54.9	14.3
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	7.8	5.8
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	36.9	10.0
Trade			
ICT goods exports (% of total goods exports)	0.4	..	5.7
ICT goods imports (% of total goods imports)	5.4	..	7.6
ICT service exports (% of total service exports)	4.1	2.8	48.0
Applications			
Online service index (0-1, 1=highest presence)	0.01	0.08	0.26
Secure Internet servers (per million people)	215.8	71.8	7.4

Venezuela, RB

Latin America & Caribbean

Upper middle income

	Country data		Upper middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	29	31	2,594
Urban population (% of total)	89	89	64
GNI per capita, <i>World Bank Atlas</i> method (\$)	11,530	11,780	8,186
GDP growth, 2005–10 and 2010–15 (avg. annual %)	3.7	0.4	4.5
Adult literacy rate (% ages 15 and older)	95	95	..
Gross primary, secondary, and tertiary school enrollment (%)	88	..	81
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Public	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	R	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	C	C	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	3.3	3.0	2.1
Telecommunications investment (% of revenue)	11.2	17.5	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	24.4	24.9	17.3
Mobile-cellular telephone subscriptions (per 100 people)	96.0	93.0	105.1
Fixed-broadband subscriptions (per 100 people)	5.8	8.2	15.4
Households with a computer (%)	19.4 ^a	46.9 ^a	48.7
Households with Internet access at home (%)	14.3 ^a	34.7 ^a	52.2
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	3.8	4.4	2.3
Domestic mobile traffic (minutes/subscription/month)	99.5	118.0	173.1
Individuals using the Internet (%)	37.4	61.9 ^a	52.1
Quality			
Population covered by at least a 3G mobile network (%)	..	..	69
International Internet bandwidth (bit/s per Internet user)	6,450	16,310	26,098
Affordability			
Mobile-cellular sub-basket (\$ a month)	22.3	12.7	8.5
Fixed-broadband sub-basket (\$ a month)	14.2	23.1	15.5
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	13.8	36.7	7.7
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	18.4	58.4	11.1
Trade			
ICT goods exports (% of total goods exports)	0.0	0.0	15.7
ICT goods imports (% of total goods imports)	7.6	4.2	14.4
ICT service exports (% of total service exports)	10.6	13.0	25.7
Applications			
Online service index (0-1, 1=highest presence)	0.30	0.55	0.37
Secure Internet servers (per million people)	7.4	12.7	34.7

Vietnam

East Asia & Pacific

Lower middle income

	Country data		Lower middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	87	92	2,927
Urban population (% of total)	30	34	39
GNI per capita, <i>World Bank Atlas</i> method (\$)	1,270	1,980	2,035
GDP growth, 2005–10 and 2010–15 (avg. annual %)	6.2	5.8	5.4
Adult literacy rate (% ages 15 and older)	94	95	..
Gross primary, secondary, and tertiary school enrollment (%)	..	..	68
Sector structure			
Separate telecommunications/ICT regulator	No	Yes	
Status of main fixed-line telephone operator	Public	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	R	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	C	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	6.5	..	..
Telecommunications investment (% of revenue)	..	..	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	16.1	6.3	3.5
Mobile-cellular telephone subscriptions (per 100 people)	125.3	130.6	90.5
Fixed-broadband subscriptions (per 100 people)	4.1	8.1	1.9
Households with a computer (%)	14.2 ^a	22.0 ^a	19.3
Households with Internet access at home (%)	12.5 ^a	24.1 ^a	24.3
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	..	..	7.5
Domestic mobile traffic (minutes/subscription/month)	..	..	152.0
Individuals using the Internet (%)	30.7	52.7 ^a	28.6
Quality			
Population covered by at least a 3G mobile network (%)	..	..	..
International Internet bandwidth (bit/s per Internet user)	4,925	24,374	10,372
Affordability			
Mobile-cellular sub-basket (\$ a month)	5.6	4.4	6.9
Fixed-broadband sub-basket (\$ a month)	10.5	2.8	14.3
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	1.9	3.5	5.8
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	38.4	5.5	10.0
Trade			
ICT goods exports (% of total goods exports)	7.9	24.0	5.7
ICT goods imports (% of total goods imports)	8.4	19.1	7.6
ICT service exports (% of total service exports)	..	..	48.0
Applications			
Online service index (0-1, 1=highest presence)	0.30	0.42	0.26
Secure Internet servers (per million people)	3.1	14.8	7.4

Virgin Islands (U.S.)

Latin America & Caribbean

High income

	Country data		High-income group
	2010	2015	2015
Economic and social context			
Population (millions)	0.11	0.10	1,187
Urban population (% of total)	95	95	81
GNI per capita, <i>World Bank Atlas</i> method (\$)	41,366
GDP growth, 2005–10 and 2010–15 (avg. annual %)	1.5
Adult literacy rate (% ages 15 and older)
Gross primary, secondary, and tertiary school enrollment (%)	95
Sector structure			
Separate telecommunications/ICT regulator	
Status of main fixed-line telephone operator	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	
Mobile telephone service	
Internet service	
Foreign ownership (not allowed, restricted, allowed)	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	2.5
Telecommunications investment (% of revenue)	18.8
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	71.3	71.1	41.2
Mobile-cellular telephone subscriptions (per 100 people)	124.5
Fixed-broadband subscriptions (per 100 people)	8.6	8.4	31.0
Households with a computer (%)	83.2
Households with Internet access at home (%)	85.0
Usage			
Int'l. voice traffic, total (minutes/subscription/month)
Domestic mobile traffic (minutes/subscription/month)	195.9
Individuals using the Internet (%)	31.2 ^a	54.8 ^a	81.0
Quality			
Population covered by at least a 3G mobile network (%)	99
International Internet bandwidth (bit/s per Internet user)	134,761
Affordability			
Mobile-cellular sub-basket (\$ a month)	14.2
Fixed-broadband sub-basket (\$ a month)	25.2
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	10.4
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	14.4
Trade			
ICT goods exports (% of total goods exports)	9.5
ICT goods imports (% of total goods imports)	11.2
ICT service exports (% of total service exports)	32.0
Applications			
Online service index (0-1, 1=highest presence)	0.67
Secure Internet servers (per million people)	385.8	453.8	1,194.6

West Bank and Gaza

Middle East & North Africa	Lower middle income		
	Country data		Lower middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	4	4	2,927
Urban population (% of total)	74	75	39
GNI per capita, <i>World Bank Atlas</i> method (\$)	2,310	3,090	2,035
GDP growth, 2005–10 and 2010–15 (avg. annual %)	1.3	4.6	5.4
Adult literacy rate (% ages 15 and older)	95	97	..
Gross primary, secondary, and tertiary school enrollment (%)	78	75	68
Sector structure			
Separate telecommunications/ICT regulator	..	..
Status of main fixed-line telephone operator	..	..
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	..	..
Mobile telephone service	..	..
Internet service	..	..
Foreign ownership (not allowed, restricted, allowed)	..	..
Reg. treatment of VoIP (banned, closed, no framework, allowed)	A	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	..	..	..
Telecommunications investment (% of revenue)	..	..	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	9.0	8.9	3.5
Mobile-cellular telephone subscriptions (per 100 people)	64.9	77.6	90.5
Fixed-broadband subscriptions (per 100 people)	3.8	6.0	1.9
Households with a computer (%)	50.1 ^a	66.7 ^a	19.3
Households with Internet access at home (%)	29.4 ^a	52.4 ^a	24.3
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	..	..	7.5
Domestic mobile traffic (minutes/subscription/month)	..	..	152.0
Individuals using the Internet (%)	37.4 ^a	57.4 ^a	28.6
Quality			
Population covered by at least a 3G mobile network (%)	0	0	..
International Internet bandwidth (bit/s per Internet user)	10,906	13,399	10,372
Affordability			
Mobile-cellular sub-basket (\$ a month)	..	14.5	6.9
Fixed-broadband sub-basket (\$ a month)	..	17.2	14.3
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	..	14.6	5.8
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	12.6	10.0
Trade			
ICT goods exports (% of total goods exports)	1.3	0.4	5.7
ICT goods imports (% of total goods imports)	2.8	2.6	7.6
ICT service exports (% of total service exports)	9.1	28.6	48.0
Applications			
Online service index (0-1, 1=highest presence)	..	..	0.26
Secure Internet servers (per million people)	3.9	5.7	7.4

Yemen, Rep.

Middle East & North Africa

Lower middle income

	Country data		Lower middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	24	27	2,927
Urban population (% of total)	32	35	39
GNI per capita, <i>World Bank Atlas</i> method (\$)	1,250	1,300	2,035
GDP growth, 2005–10 and 2010–15 (avg. annual %)	3.7	-2.7	5.4
Adult literacy rate (% ages 15 and older)	..	70	..
Gross primary, secondary, and tertiary school enrollment (%)	53	..	68
Sector structure			
Separate telecommunications/ICT regulator	No	No	
Status of main fixed-line telephone operator	Public	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	M	M	
Mobile telephone service	C	C	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	No	No	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	B	B	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	2.9	..	..
Telecommunications investment (% of revenue)	29.4	..	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	4.6	4.7	3.5
Mobile-cellular telephone subscriptions (per 100 people)	48.7	68.0	90.5
Fixed-broadband subscriptions (per 100 people)	0.4	1.5	1.9
Households with a computer (%)	4.0 ^a	6.5 ^a	19.3
Households with Internet access at home (%)	2.9 ^a	5.5 ^a	24.3
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	13.4	..	7.5
Domestic mobile traffic (minutes/subscription/month)	..	..	152.0
Individuals using the Internet (%)	12.4	25.1 ^a	28.6
Quality			
Population covered by at least a 3G mobile network (%)	..	..	..
International Internet bandwidth (bit/s per Internet user)	1,138	2,496	10,372
Affordability			
Mobile-cellular sub-basket (\$ a month)	9.8	8.4	6.9
Fixed-broadband sub-basket (\$ a month)	16.7	7.3	14.3
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	23.3	13.5	5.8
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	13.5	10.0
Trade			
ICT goods exports (% of total goods exports)	0.0	0.1	5.7
ICT goods imports (% of total goods imports)	1.3	1.3	7.6
ICT service exports (% of total service exports)	7.3	13.1	48.0
Applications			
Online service index (0-1, 1=highest presence)	0.05	0.31	0.26
Secure Internet servers (per million people)	0.3	0.6	7.4

Sub-Saharan Africa

Lower middle income

	Country data		Lower middle-income group
	2010	2015	2015
Economic and social context			
Population (millions)	14	16	2,927
Urban population (% of total)	39	41	39
GNI per capita, <i>World Bank Atlas</i> method (\$)	1,310	1,500	2,035
GDP growth, 2005–10 and 2010–15 (avg. annual %)	8.6	5.5	5.4
Adult literacy rate (% ages 15 and older)	83	85	..
Gross primary, secondary, and tertiary school enrollment (%)	..	..	68
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Public	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	C	C	
Mobile telephone service	C	P	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	R	A	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	B	B	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	0.1	2.0	..
Telecommunications investment (% of revenue)	..	4.2	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	0.9	0.7	3.5
Mobile-cellular telephone subscriptions (per 100 people)	41.2	74.5	90.5
Fixed-broadband subscriptions (per 100 people)	0.1	0.1	1.9
Households with a computer (%)	3.7	7.4 ^a	19.3
Households with Internet access at home (%)	3.1 ^a	12.7 ^a	24.3
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	1.9	2.1	7.5
Domestic mobile traffic (minutes/subscription/month)	47.3	83.8	152.0
Individuals using the Internet (%)	10.0	21.0 ^a	28.6
Quality			
Population covered by at least a 3G mobile network (%)	15	53	..
International Internet bandwidth (bit/s per Internet user)	378	3,187	10,372
Affordability			
Mobile-cellular sub-basket (\$ a month)	16.9	8.0	6.9
Fixed-broadband sub-basket (\$ a month)	58.0	29.0	14.3
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	20.4	9.3	5.8
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	..	14.0	10.0
Trade			
ICT goods exports (% of total goods exports)	0.0	0.1	5.7
ICT goods imports (% of total goods imports)	2.3	2.5	7.6
ICT service exports (% of total service exports)	4.7	4.2	48.0
Applications			
Online service index (0-1, 1=highest presence)	0.10	0.14	0.26
Secure Internet servers (per million people)	1.1	4.3	7.4

Zimbabwe

Sub-Saharan Africa

Low income

	Country data		Low-income group
	2010	2015	2015
Economic and social context			
Population (millions)	14	16	638
Urban population (% of total)	33	32	31
GNI per capita, <i>World Bank Atlas</i> method (\$)	500	850	620
GDP growth, 2005–10 and 2010–15 (avg. annual %)	–3.4	6.2	5.4
Adult literacy rate (% ages 15 and older)	84	87	..
Gross primary, secondary, and tertiary school enrollment (%)	60	59	60
Sector structure			
Separate telecommunications/ICT regulator	Yes	Yes	
Status of main fixed-line telephone operator	Public	Public	
Level of competition (competition, partial comp., monopoly)			
International gateway(s)	P	P	
Mobile telephone service	P	P	
Internet service	C	C	
Foreign ownership (not allowed, restricted, allowed)	R	R	
Reg. treatment of VoIP (banned, closed, no framework, allowed)	No	A	
Sector efficiency and capacity			
Telecommunications revenue (% of GDP)	..	8.8	..
Telecommunications investment (% of revenue)	..	15.8	..
Sector performance			
Access			
Fixed-telephone subscriptions (per 100 people)	2.9	2.2	0.9
Mobile-cellular telephone subscriptions (per 100 people)	58.9	84.8	60.0
Fixed-broadband subscriptions (per 100 people)	0.3	1.1	0.3
Households with a computer (%)	5.3	11.8 ^a	4.8
Households with Internet access at home (%)	4.0	18.1 ^a	7.1
Usage			
Int'l. voice traffic, total (minutes/subscription/month)	4.9	3.7	..
Domestic mobile traffic (minutes/subscription/month)	36.0	29.0	48.9
Individuals using the Internet (%)	6.4 ^a	16.4 ^a	9.5
Quality			
Population covered by at least a 3G mobile network (%)	5	55	51
International Internet bandwidth (bit/s per Internet user)	519	6,380	4,245
Affordability			
Mobile-cellular sub-basket (\$ a month)	20.6	12.9	9.4
Fixed-broadband sub-basket (\$ a month)	30.0	15.0	33.6
Mobile-b'band, prepaid handset-based, 500 MB (\$ a month)	54.0	10.0	8.0
Mobile-b'band, postpaid computer-based, 1 GB (\$ a month)	90.0	80.0	10.8
Trade			
ICT goods exports (% of total goods exports)	0.0	0.1	..
ICT goods imports (% of total goods imports)	5.5	3.9	3.4
ICT service exports (% of total service exports)	..	..	..
Applications			
Online service index (0–1, 1=highest presence)	0.13	0.31	0.11
Secure Internet servers (per million people)	0.9	6.6	1.5

Notes

- a. ITU estimate.
- b. Excludes South Sudan.
- c. Excludes South Sudan after July 9, 2011.

Glossary

Adult literacy rate is the percentage of people ages 15 and older who can, with understanding, read and write a short, simple statement about their everyday life. (United Nations Educational, Scientific, and Cultural Organization Institute for Statistics) (w)

Domestic mobile traffic refers to the total number of minutes of calls made by mobile subscribers within a country (including minutes to fixed-telephone and minutes to mobile-phone subscribers). Data listed for 2015 are for 2014. (International Telecommunication Union) (w)

Fixed-broadband sub-basket refers to the price of the monthly subscription to an entry-level fixed broadband plan. For comparability reasons, the fixed broadband sub-basket is based on a monthly usage of (a minimum of) 1 gigabyte (GB). For plans that limit the monthly amount of data transferred by including caps below 1 GB, the cost for additional bytes is added to the sub-basket. The minimum speed of a broadband connection is 256 kbit/s. (International Telecommunication Union) (m)

Fixed-broadband subscriptions refers to fixed subscriptions to high-speed access to the public Internet (a TCP/IP connection), at downstream speeds equal to, or greater than, 256 kbit/s. This includes cable modem, DSL, fiber-to-the-home/building, other fixed (wired)-broadband subscriptions, satellite broadband, and terrestrial fixed wireless broadband. 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. It should include fixed WiMAX and any other fixed wireless technologies. It includes both residential subscriptions and subscriptions for organization (International Telecommunication Union) (w)

Fixed-telephone subscriptions refers to the sum of active number of analog fixed-telephone lines, Voice over Internet Protocol (VoIP) subscriptions, fixed wireless local loop (WLL) subscriptions, ISDN voice-channel equivalents, and fixed public payphones. (International Telecommunication Union) (w)

Foreign ownership refers to the allowance of foreign participation or ownership in facility-based and spectrum-based operators as well as in Internet Service Providers (ISPs). (No = not allowed, R = allowed with restrictions, A = allowed without restrictions). Data are based on self-reported information submitted by country administrations. (International Telecommunication Union)

GDP growth is the annual percentage growth rate of gross domestic product (GDP) at market prices based on constant local currency. Aggregates are based on constant 2010 U.S. dollars. GDP is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources. (World Bank and Organisation for Economic Co-operation and Development) (w)

GNI per capita, World Bank Atlas method, is gross national income (GNI) converted to U.S. dollars using the *World Bank Atlas* method divided by the midyear population. GNI is the sum of value added by all resident producers plus any product taxes (less subsidies) not included in the valuation of output plus net receipts of primary income (compensation of employees and property income) from abroad. GNI, calculated in national currency, is usually converted to U.S. dollars at official exchange rates for comparisons across economies. The *World Bank Atlas* method is used to smooth fluctuations in prices and exchange rates. It averages the exchange rate for a given year and the two preceding years, adjusted for differences in rates of inflation between the country and the Euro area, Japan, the United Kingdom, and the United States. (World Bank) (w)

Gross primary, secondary, and tertiary school enrollment is the combined number of students enrolled in primary, secondary, and tertiary levels of education, regardless of age, as a percentage of the population of official school age for the three levels. (United Nations Educational, Scientific and Cultural Organization Institute for Statistics) (w)

Households with a computer refers to the percentage of households with a computer at home. A computer includes a desktop computer, a laptop (portable) computer, or a tablet (or similar handheld computer). It does not include equipment with some embedded computing abilities such as smart TV sets, and devices with telephony as their primary function, such as smartphones. (International Telecommunication Union) (w)

Households with Internet access at home refers to the percentage of households with Internet access at home. Access is not assumed to be only via a computer—it may also be by mobile phone, tablet, PDA, games machine, digital TV, etc. (International Telecommunication Union) (w)

ICT goods exports and imports are goods that are intended to fulfill the function of information processing and communication by electronic means, including transmission and display, or that use electronic processing to detect, measure, or record physical phenomena or to control a physical process. They include computers and peripheral equipment, communication equipment, consumer electronic equipment, electronic components, and other information and technology goods. Software is generally excluded. Re-exports (exports of foreign goods in the same state as previously imported) are included. Data listed for 2015 are for 2014. (United Nations Conference on Trade and Development) (w)

ICT service exports comprise communications services (telecommunications, business network services, teleconferencing, support services, and postal services) and computer and information services (database, data processing, software design and development, maintenance and repair, and news-related service transactions). (International Monetary Fund) (w)

Individuals using the Internet refers to the percentage of individuals who have used the Internet (from any location) in the last three months. Internet

Glossary

can be used via a computer, mobile phone, personal digital assistant, games machine, digital TV, etc. (International Telecommunication Union) (w)

International Internet bandwidth refers to the total used capacity of international Internet bandwidth, in bits per second per Internet user. Used international Internet bandwidth refers to the average traffic load (expressed in Mbit/s) of international fiber-optic cables and radio links for carrying Internet traffic. The average should be calculated over the 12-month period of the reference year, and should take into consideration the traffic of all international Internet links. If the traffic is asymmetric (i.e., more incoming [downlink] than outgoing [uplink] traffic), then the average incoming (downlink) traffic load should be provided. The combined average traffic load of different international Internet links can be reported as the addition of the average traffic load of each link. (International Telecommunication Union) (w)

International voice traffic, total is the sum of international incoming and outgoing telephone fixed and mobile telephone traffic (in minutes). Data listed for 2015 are for 2014. (International Telecommunication Union) (w)

Level of competition, international gateway, is the level of competition for international gateway(s). International gateway is any facility that provides an interface to send and receive electronic communications traffic (i.e., voice, data, and multimedia images/video) between one country's domestic network facilities and those in another country. (C = full competition, M = monopoly, P = partial competition). Data are based on self-reported information submitted by country administrations. (International Telecommunication Union)

Level of competition, Internet service, is the level of competition for retail Internet access service. (C = full competition, M = monopoly, P = partial competition). Data are based on self-reported information submitted by country administrations. (International Telecommunication Union)

Level of competition, mobile telephone service, is the level of competition for digital cellular mobile services. (C = full competition, M = monopoly, P = partial competition). Data are based on self-reported information submitted by country administrations. (International Telecommunication Union)

Mobile-broadband, prepaid handset-based 500MB: This basket refers to the price of a plan for a mobile-broadband handset-based prepaid usage of 500 MB of data per month. Data listed for 2010 refer to 2012. (International Telecommunication Union)

Mobile-broadband, postpaid computer-based (USB/dongle) 1GB: This basket refers to the price of a plan for a mobile-broadband computer-based postpaid usage of 1GB of data per month. Data listed for 2010 refer to 2012. (International Telecommunication Union)

Mobile-cellular sub-basket refers to the price of a standard basket of mobile monthly usage for 30 outgoing calls per month (on-net, off-net,

to a fixed line, and for peak and off-peak times) in predetermined ratios, plus 100 short message service (SMS) messages. The mobile-cellular sub-basket is based on prepaid tariffs although postpaid tariffs may be used for countries where prepaid subscriptions make up less than 3 percent of all mobile-cellular subscriptions. The mobile-cellular prepaid sub-basket is largely based, but does not entirely follow, the 2009 methodology of the OECD low-user basket. (International Telecommunication Union) (m)

Mobile-cellular telephone subscriptions refers to the number of subscriptions to a public mobile-telephone service that provide access to the PSTN (public switched telephone network) using cellular technology. The indicator includes (and is split into) the number of postpaid subscriptions and the number of active prepaid accounts (i.e., that have been used during the last three months). The indicator applies to all mobile-cellular subscriptions that offer voice communications. It excludes subscriptions via data cards or USB modems, subscriptions to public mobile data services, private trunked mobile radio, telepoint, radio paging, and telemetry services. (International Telecommunication Union) (w)

Online service index is one of the three component indicators for the United Nation's e-Government Development Index (EGDI). Online service index measures the level of sophistication and usability of each country's national website, including the national portal, e-service portal, e-participation portal, and government ministries' websites. Given the global trends of citizen-centric approach, the score takes account of the demand side of e-service (user uptake). A value of 0 indicates the lowest presence, a value of 1 the highest. Data listed for 2015 are for 2016. (United Nations Department of Economic and Social Affairs and United Nations Division for Public Administration and Development Management) (m)

Population is based on the de facto definition of population, which counts all residents regardless of legal status or citizenship. Data are midyear estimates. (World Bank) (s)

Population covered by at least a 3G mobile network refers to the percentage of inhabitants that are within range of at least a 3G mobile-cellular signal, irrespective of whether or not they are subscribers. This is calculated by dividing the number of inhabitants that are covered by at least a 3G mobile-cellular signal by the total population and multiplying by 100. (International Telecommunication Union) (w)

Regulatory treatment of VoIP indicates whether the country has any regulatory treatment on Voice over Internet Protocol (VoIP). The status is categorized as banned, closed, no framework, or allowed. "Closed" means that wholesale IP voice is permitted, but retail VoIP is banned, as well as cases where only the incumbent is licensed to provide VoIP. (A = allowed, B = banned, C = closed, No = no framework). Data are based on self-reported information submitted by country administrations. (International Telecommunication Union)

Glossary

Secure Internet servers are the number of servers using encryption technology for Internet transactions. (Netcraft) (w)

Separate telecommunications/ICT regulator indicates whether the country has a separate telecommunications/ICT regulatory authority independent in terms of finance, structure, and decision making from the operators and the sector ministry. Data are based on self-reported information submitted by country administrations. (International Telecommunication Union)

Status of main fixed-line telephone operator indicates whether the incumbent fixed-line operator is a public or private entity. Public refers to a fully state-owned operator that has remained 100 percent government-owned since its creation or has been re/nationalized; private refers to an operator that is 100 percent private, either as a result of a privatization or created as such; and mixed refers to a partially private operator that has a portion of its shares sold to either a private operator or to the public (e.g., through initial public offerings or employee stock ownership plan), with the government remaining one of its shareholders. Data are based on self-reported information submitted by country administrations. (International Telecommunication Union)

Telecommunications investment refers to the investment during the financial year in telecommunication services (including fixed, mobile, and Internet services) for acquiring or upgrading property and networks. Property includes tangible assets such as plant, intellectual, and nontangible assets such as computer software. The indicator is a measure of investment in telecommunication infrastructure in the country, and includes expenditure on initial installations and additions to existing installations where the usage is expected to be over an extended period. It excludes expenditure on research and development (R&D), annual fees for operating licenses, and the use of radio spectrum. Data listed for 2015 are for 2014. (International Telecommunication Union) (m)

Telecommunications revenue refers to revenue earned from retail fixed telephone, mobile-cellular, Internet, and data services offered by telecommunication operators (both network and virtual) offering services within the country. Revenue (turnover) consists of retail telecommunication service earnings (therefore excluding revenue from wholesaling activities) during the financial year under review. It is calculated as percentage of GDP. Data listed for 2015 are for 2014. (International Telecommunication Union) (w)

Urban population refers to people living in urban areas as defined by national statistical offices. It is calculated using World Bank population estimates and urban ratios from the United Nations World Urbanization Prospects. Aggregation of urban and rural population may not add up to total population because of different country coverages. (United Nations) (s)

VoIP is Voice over Internet Protocol, a generic term to describe the techniques used to carry voice traffic over IP.



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