

## 7. Cellular subscribers

WTI

	Cellular mobile subscribers				As % of total telephone subscribers 2005
	(k)		CAGR (%)	Per 100 inhabitants	
	2000	2005	2000-05	2005	
1 Algeria	86.0	13'661.0	175.5	41.58	81.0
2 Angola	25.8	1'094.1	111.6	6.86	92.1
3 Benin	55.5	75.1	6.2	1.00	49.6
4 Botswana	200.0	823.1	32.7	46.63	86.2
5 Burkina Faso	25.2	572.2	86.7	4.33	85.5
6 Burundi	16.3	153.0	56.5	2.03	84.7
7 Cameroon	103.3	2'259.0	85.3	13.84	95.8
8 Cape Verde	19.7	81.7	32.9	16.12	53.4
9 Central African Rep.	5.0	60.0	86.4	1.53	85.7
10 Chad	5.5	210.0	107.2	2.15	94.2
11 Comoros	-	16.1	-	2.01	48.7
12 Congo	70.0	490.0	47.6	12.25	97.3
13 Côte d'Ivoire	473.0	2'190.0	35.9	12.06	90.2
14 D.R. Congo	15.0	2'600.0	180.4	0.83	...
15 Djibouti	0.2	34.5	249.9	5.07	75.6
16 Egypt	1'359.9	13'629.6	58.6	18.41	56.7
17 Equatorial Guinea	5.0	96.9	80.9	19.26	90.6
18 Eritrea	-	40.4	-	0.92	51.7
19 Ethiopia	17.8	178.0	77.9	0.25	29.0
20 Gabon	120.0	649.8	40.2	46.95	94.3
21 Gambia	5.6	247.5	113.3	16.31	84.9
22 Ghana	130.0	1'765.0	68.5	7.98	84.9
23 Guinea	42.1	189.0	35.0	2.36	87.8
24 Guinea-Bissau	-	67.0	-	5.01	86.4
25 Kenya	127.4	4'612.0	105.0	13.46	94.2
26 Lesotho	21.6	245.1	62.5	13.65	83.6
27 Liberia	1.5	160.0	154.5	4.87	...
28 Libya	40.0	234.8	55.7	4.15	23.8
29 Madagascar	63.1	504.7	51.6	2.71	88.3
30 Malawi	49.0	429.3	54.4	3.33	80.7
31 Mali	10.4	869.6	142.4	7.66	92.1
32 Mauritania	15.3	615.0	109.3	20.04	94.0
33 Mauritius	180.0	713.3	31.7	57.29	66.5
34 Mayotte	-	48.1	-	28.80	...
35 Morocco	2'342.0	12'392.8	39.5	39.37	90.2
36 Mozambique	51.1	1'220.0	88.6	6.16	94.6
37 Namibia	82.0	495.0	43.3	24.37	79.5
38 Niger	2.1	228.0	156.4	1.63	90.4
39 Nigeria	30.0	18'600.0	261.8	14.14	93.8
40 Réunion	276.1	579.2	20.3	75.51	...
41 Rwanda	39.0	290.0	49.4	3.21	92.7
42 S. Tomé & Príncipe	-	12.0	-	7.64	63.3
43 Senegal	250.3	1'730.1	47.2	14.84	86.6
44 Seychelles	26.0	57.0	17.0	70.37	72.7
45 Sierra Leone	11.9	113.2	111.7	2.28	...
46 Somalia	80.0	500.0	44.3	4.17	83.3
47 South Africa	8'339.0	31'000.0	30.0	65.36	86.5
48 Sudan	23.0	1'986.0	143.9	5.48	65.9
49 Swaziland	33.0	200.0	43.4	19.36	85.1
50 Tanzania	110.5	1'942.0	104.7	5.16	92.9
51 Togo	50.0	690.0	69.0	11.23	91.9
52 Tunisia	119.2	5'680.7	116.6	56.55	81.9
53 Uganda	126.9	1'525.1	64.4	5.29	93.8
54 Zambia	98.9	735.0	49.4	6.30	88.9
55 Zimbabwe	266.4	699.0	21.3	5.87	68.1
<b>Africa</b>	<b>15'646.5</b>	<b>130'289.9</b>	<b>52.8</b>	<b>11.29</b>	<b>82.2</b>

	<i>Cellular mobile subscribers</i>				<i>As % of total telephone subscribers 2005</i>
	<i>(k)</i>		<i>CAGR</i>	<i>Per 100</i>	
	<i>2000</i>	<i>2005</i>	<i>(%) 2000-05</i>	<i>inhabitants 2005</i>	
56 Antigua & Barbuda	22.0	54.0	25.2	70.13	58.7
57 Argentina	6'487.9	22'100.0	27.8	57.27	71.5
58 Aruba	15.0	98.4	60.0	89.44	...
59 Bahamas	31.5	186.0	55.9	58.68	57.1
60 Barbados	28.5	200.1	62.8	73.85	59.6
61 Belize	16.8	93.1	40.8	34.48	73.7
62 Bermuda	13.0	49.0	39.3	79.03	...
63 Bolivia	582.6	2'421.4	33.0	26.37	78.9
64 Brazil	23'188.2	86'210.0	30.0	46.25	67.0
65 Canada	8'727.0	16'600.0	13.7	51.44	47.6
66 Chile	3'401.5	10'569.6	25.5	67.79	75.5
67 Colombia	2'256.8	21'800.0	57.4	47.81	73.7
68 Costa Rica	211.6	1'101.0	39.1	25.45	44.2
69 Cuba	6.5	134.5	83.1	1.19	13.7
70 Dominica	1.2	41.8	143.0	58.68	66.6
71 Dominican Rep.	705.4	3'623.3	38.7	40.68	80.2
72 Ecuador	482.2	6'246.3	66.9	47.22	78.6
73 El Salvador	743.6	2'411.8	26.5	35.05	71.3
74 French Guiana	39.8	98.0	25.2	53.55	...
75 Grenada	4.3	43.3	78.2	42.05	57.0
76 Guadeloupe	169.8	314.7	16.7	71.04	...
77 Guatemala	856.8	3'168.3	38.7	25.02	73.7
78 Guyana	39.8	250.0	44.4	33.29	69.4
79 Haiti	55.0	400.0	64.2	4.87	74.1
80 Honduras	155.3	1'281.5	52.5	17.79	72.2
81 Jamaica	367.0	2'700.0	49.1	101.85	88.8
82 Martinique	162.1	295.4	16.2	74.78	...
83 Mexico	14'077.9	47'462.1	27.5	44.34	70.9
84 Neth. Antilles	...	200.0	...	90.09	...
85 Nicaragua	90.3	1'119.4	65.4	19.69	83.5
86 Panama	410.4	1'351.9	26.9	41.88	75.4
87 Paraguay	820.8	1'887.0	18.1	30.64	85.5
88 Peru	1'273.9	5'583.4	34.4	19.96	71.3
89 Puerto Rico	926.4	2'682.0	30.4	68.82	70.7
90 St. Kitts and Nevis	1.2	10.0	69.9	20.00	28.6
91 St. Lucia	2.5	93.0	147.0	62.00	...
92 St. Vincent	2.4	70.6	97.3	59.34	75.8
93 Suriname	41.0	232.8	41.5	51.85	74.2
94 Trinidad & Tobago	161.9	800.0	37.7	61.26	71.2
95 United States	109'478.0	201'650.0	13.0	67.62	53.1
96 Uruguay	410.8	600.0	9.9	18.51	37.5
97 Venezuela	5'447.2	12'495.7	18.1	46.71	77.6
98 Virgin Islands (US)	35.0	64.2	16.4	57.84	47.5
<b>Americas</b>	<b>181'951.1</b>	<b>458'793.5</b>	<b>20.3</b>	<b>51.51</b>	<b>60.7</b>

## 7. Cellular subscribers

WTI

	Cellular mobile subscribers				As % of total telephone subscribers 2005
	(k)		CAGR (%)	Per 100 inhabitants	
	2000	2005	2000-05	2005	
99 Afghanistan	-	1'200.0	-	4.80	92.3
100 Armenia	17.5	320.0	78.9	8.42	35.5
101 Azerbaijan	420.4	2'242.0	39.8	26.66	67.3
102 Bahrain	205.7	748.7	29.5	102.99	79.2
103 Bangladesh	279.0	9'000.0	100.3	6.35	91.5
104 Bhutan	-	37.8	-	4.85	53.6
105 Brunei Darussalam	95.0	205.9	21.3	56.26	...
106 Cambodia	130.5	1'062.0	52.1	7.55	96.7
107 China	85'260.0	393'428.0	35.8	29.90	52.9
108 D.P.R. Korea	-	...	-	...	...
109 Georgia	194.7	1'459.2	49.6	32.61	68.1
110 Hong Kong, China	5'447.3	8'635.5	9.7	122.65	69.5
111 India	3'577.1	76'000.0	84.3	6.89	60.9
112 Indonesia	3'669.3	46'910.0	66.5	21.06	78.6
113 Iran (I.R.)	962.6	7'222.5	49.6	10.39	27.6
114 Iraq	-	574.0	-	2.22	35.7
115 Israel	4'400.0	7'800.0	12.1	113.04	72.5
116 Japan	66'784.4	94'745.0	7.2	73.97	61.7
117 Jordan	388.9	1'594.5	42.3	28.41	72.1
118 Kazakhstan	197.3	4'955.2	90.5	33.42	66.5
119 Korea (Rep.)	26'816.4	38'342.3	7.4	79.39	61.8
120 Kuwait	476.0	2'379.8	38.0	88.57	82.3
121 Kyrgyzstan	9.0	541.7	126.9	10.29	55.3
122 Lao P.D.R.	12.7	638.2	119.0	10.77	89.4
123 Lebanon	743.0	990.0	5.9	27.68	50.0
124 Macao, China	141.1	532.8	30.4	115.82	75.3
125 Malaysia	5'121.7	19'545.0	30.7	75.17	81.7
126 Maldives	7.6	153.4	82.2	46.77	82.6
127 Mongolia	154.6	557.2	29.2	21.05	78.1
128 Myanmar	13.4	183.4	68.8	0.34	27.8
129 Nepal	10.2	248.8	89.3	0.92	35.7
130 Oman	164.3	1'333.2	52.0	51.94	83.4
131 Pakistan	306.5	12'771.2	110.8	8.30	70.8
132 Palestine	175.9	1'094.6	44.1	29.57	75.8
133 Philippines	6'454.4	32'810.0	38.4	39.50	90.5
134 Qatar	120.9	716.8	42.8	92.15	77.7
135 Saudi Arabia	1'375.9	13'300.0	57.4	54.12	77.8
136 Singapore	2'747.4	4'384.6	9.8	101.38	70.4
137 Sri Lanka	430.2	3'361.8	50.9	16.21	73.0
138 Syria	30.0	2'950.0	150.3	15.49	50.4
139 Taiwan, China	17'873.8	22'170.7	4.4	96.99	62.0
140 Tajikistan	1.2	240.0	190.5	3.69	49.5
141 Thailand	3'056.0	16'158.9	39.5	26.06	69.7
142 Turkmenistan	7.5	50.1	60.8	1.01	11.8
143 United Arab Emirates	1'428.1	4'534.5	26.0	100.86	78.6
144 Uzbekistan	53.1	720.0	68.4	2.71	29.5
145 Viet Nam	788.6	9'000.0	62.7	10.68	36.3
146 Yemen	32.0	2'000.0	128.7	9.54	71.5
<b>Asia</b>	<b>240'581.4</b>	<b>849'849.4</b>	<b>28.7</b>	<b>22.24</b>	<b>58.8</b>

	Cellular mobile subscribers				As % of total telephone subscribers 2005
	(k)		CAGR (%)	Per 100 inhabitants	
	2000	2005	2000-05	2005	
147 Albania	29.8	1'259.6	155.0	39.45	83.2
148 Andorra	23.5	64.6	22.4	96.36	64.6
149 Austria	6'117.0	8'160.0	5.9	99.82	68.8
150 Belarus	49.4	4'098.0	142.0	42.00	55.5
151 Belgium	5'629.0	9'460.0	10.9	90.56	66.3
152 Bosnia	93.4	1'594.4	76.4	40.81	62.2
153 Bulgaria	738.0	6'244.7	53.3	80.83	71.5
154 Croatia	1'033.0	2'983.9	23.6	65.55	61.2
155 Cyprus	218.3	718.8	26.9	86.09	63.1
156 Czech Republic	4'346.0	11'775.9	22.1	115.22	78.5
157 Denmark	3'363.6	5'469.3	10.2	100.71	62.0
158 Estonia	557.0	1'445.3	21.0	108.75	76.6
159 Faroe Islands	17.0	42.5	20.2	88.35	64.1
160 Finland	3'728.6	5'231.0	7.0	99.66	71.2
161 France	29'052.4	48'058.4	10.6	79.44	57.4
162 Germany	48'202.0	79'200.0	10.4	95.78	59.0
163 Greece	5'932.4	10'042.6	11.1	90.31	61.4
164 Greenland	16.0	32.2	19.1	56.20	...
165 Guernsey	21.9	43.8	19.0	78.54	44.3
166 Hungary	3'076.3	9'320.0	24.8	92.30	73.5
167 Iceland	214.9	304.0	7.2	103.40	61.1
168 Ireland	2'461.0	4'210.0	11.3	101.49	67.4
169 Italy	42'246.0	71'535.0	11.1	123.14	74.1
170 Jersey	44.7	83.9	17.0	95.34	...
171 Latvia	401.3	1'871.6	36.1	81.13	74.5
172 Lithuania	524.0	4'353.4	52.7	127.10	84.5
173 Luxembourg	303.3	634.2	20.3	138.17	63.8
174 Malta	114.4	324.0	23.1	80.79	61.6
175 Moldova	139.0	1'089.8	51.0	25.92	54.0
176 Netherlands	10'755.0	15'834.0	8.0	97.15	67.6
177 Norway	3'367.8	4'754.5	7.1	102.89	69.1
178 Poland	6'747.0	29'260.0	34.1	75.94	70.1
179 Portugal	6'665.0	11'447.7	11.4	109.09	73.0
180 Romania	2'499.0	13'354.1	39.8	61.51	75.3
181 Russia	3'263.2	120'000.0	105.6	83.62	75.0
182 Serbia and Montenegro	1'303.6	5'229.0	32.0	63.99	66.1
183 Slovak Republic	1'243.7	4'540.4	29.6	84.07	79.1
184 Slovenia	1'215.6	1'759.2	7.7	89.44	68.3
185 Spain	24'265.1	41'327.9	11.2	96.81	69.3
186 Sweden	6'372.3	8'436.5	5.8	93.31	56.7
187 Switzerland	4'638.5	6'847.0	8.1	91.77	57.2
188 TFYR Macedonia	115.7	1'250.0	60.9	61.46	69.9
189 Turkey	16'133.4	43'609.0	22.0	59.58	69.7
190 Ukraine	818.5	17'214.3	83.9	37.04	58.6
191 United Kingdom	43'452.0	61'091.0	8.9	102.16	64.4
<b>Europe</b>	<b>291'548.5</b>	<b>675'605.5</b>	<b>18.3</b>	<b>84.42</b>	<b>67.3</b>

## 7. Cellular subscribers

WTI

		<i>Cellular mobile subscribers</i>				<i>As % of total</i>
		<i>(k)</i>		<i>CAGR</i>	<i>Per 100</i>	<i>telephone</i>
		<i>2000</i>	<i>2005</i>	<i>(%)</i>	<i>inhabitants</i>	<i>subscribers</i>
				<i>2000-05</i>	<i>2005</i>	<i>2005</i>
192	Australia	8'562.0	18'420.0	16.6	91.39	61.6
193	Fiji	55.1	142.2	26.8	16.79	58.2
194	French Polynesia	39.9	87.0	16.9	33.98	62.0
195	Guam	27.2	98.0	37.8	59.39	...
196	Kiribati	0.3	0.6	19.7	0.72	...
197	Marshall Islands	0.4	0.6	9.6	1.13	12.6
198	Micronesia	-	12.8	-	11.52	51.6
199	New Caledonia	49.9	134.3	21.9	56.65	70.8
200	New Zealand	1'542.0	3'530.0	18.0	87.61	66.2
201	Northern Marianas	3.0	20.5	61.6	26.59	...
202	Papua New Guinea	8.6	26.0	24.9	0.44	...
203	Samoa	2.5	24.0	57.2	12.97	64.4
204	Solomon Islands	1.2	6.0	39.1	1.26	44.8
205	Tonga	0.2	16.4	209.0	16.43	...
206	Vanuatu	0.4	12.7	103.4	5.82	65.3
<b>Oceania</b>		<b>10'292.6</b>	<b>22'531.1</b>	<b>17.0</b>	<b>68.51</b>	<b>62.5</b>

	<i>Cellular mobile subscribers</i>			<i>As % of total telephone subscribers 2005</i>
	<i>(k)</i>		<i>CAGR</i>	
	<i>2000</i>	<i>2005</i>	<i>(%) 2000-05</i>	
<b>WTI</b>	<b>740'020.1</b>	<b>2'137'069.4</b>	<b>23.6</b>	<b>31.90</b>

*Note:* For data comparability and coverage, see the technical notes.  
 Figures in italics are estimates or refer to years other than those specified.

*Source:* ITU.

# **WORLD TELECOMMUNICATION/ICT INDICATORS**



**May 2006**

**INTERNATIONAL TELECOMMUNICATION UNION**





# INTRODUCTION

Data are presented for 206 economies with populations greater than 40'000 and where sufficient data are available.

The data cover the public telecommunications sector. Due to differing regulatory obligations for the provision of data, a complete measurement of the sector for some economies cannot be achieved. Data for major telecommunication operators covering at least 90 per cent of the market are shown for all economies. More detailed information about coverage and country specific notes together with a full time-series from 1960, 1965, 1970, 1975-2004 is contained in a CD-ROM version available separately.

Data refer to the reporting period that is closest to the end of year indicated. See Table A for the fiscal year reporting period used in each country.

Communication data come from an annual questionnaire sent to telecommunication authorities and operating companies. These data are supplemented by annual reports and statistical yearbooks of telecommunication ministries, regulators, operators and industry associations. In some cases, estimates are derived from ITU background documents or other references. Other data are provided by the relevant international and national organizations identified in the *Technical notes*.

The following signs and symbols are used in the tables:

<i>italic</i>	Year other than that specified or estimate.
000s	Thousands (i.e. 1'000).

M	Millions (i.e. 1'000'000).
B	Billions (i.e. 1'000'000'000).
US\$	United States dollars. See the <i>Technical notes</i> for how US\$ figures are obtained.
%	Per cent.
–	Zero or a quantity less than half the unit shown. Also used for data items that are not applicable.
...	Data not available.
CAGR	Compound Annual Growth Rate. See the <i>Technical notes</i> for how this is computed.

The absence of any sign or symbol indicates that data are in units.

Comments and suggestions relating to the World Telecommunication Indicators/ICT should be addressed to:

Market, Economics and Finance Unit  
Telecommunication Development Bureau  
International Telecommunication Union  
Place des Nations  
CH-1211 Geneva 20, Switzerland

Fax: +41 22 730 6449  
E-mail: [indicators@itu.int](mailto:indicators@itu.int)

Additional information about Telecommunication Indicators/ICT can be found at: <http://www.itu.int/ITU-D/ict>.

**TABLE A: LIST OF ECONOMIES**

<i>Economy</i>	<i>Location</i>	<i>Fiscal year</i>	<i>Region</i>	<i>Economy</i>	<i>Location</i>	<i>Fiscal year</i>	<i>Region</i>
Afghanistan	1	Ending 31.12	Asia	Estonia	124	Ending 31.12	Europe
Albania	59	Ending 31.12	Europe	Ethiopia	17	Ending 31.12	Africa
Algeria	60	Ending 31.12	Africa	Faroe Islands	164	Ending 31.12	Europe
Andorra	152	Ending 31.12	Europe	Fiji	78	Ending 31.12	Oceania
Angola	61	Ending 31.12	Africa	Finland	165	Ending 31.12	Europe
Antigua & Barbuda	113	Beginning 01.04	Americas	France	166	Ending 31.12	Europe
Argentina	114	Ending 30.09	Americas	French Guiana	167	Ending 31.12	Americas
Armenia	62	Ending 31.12	Asia	French Polynesia	168	Ending 31.12	Oceania
Aruba	153	Ending 31.12	Americas	Gabon	125	Ending 31.12	Africa
Australia	154	Ending 30.06	Oceania	Gambia	18	Beginning 01.04	Africa
Austria	155	Ending 31.12	Europe	Georgia	79	Ending 31.12	Asia
Azerbaijan	63	Ending 31.12	Asia	Germany	169	Ending 31.12	Europe
Bahamas	156	Ending 31.12	Americas	Ghana	19	Ending 31.12	Africa
Bahrain	157	Ending 31.12	Asia	Greece	170	Ending 31.12	Europe
Bangladesh	2	Ending 30.06	Asia	Greenland	171	Ending 31.12	Europe
Barbados	115	Beginning 01.04	Americas	Grenada	126	Ending 31.12	Americas
Belarus	64	Ending 31.12	Europe	Guadeloupe	127	Ending 31.12	Americas
Belgium	158	Ending 31.12	Europe	Guam	172	Ending 31.12	Oceania
Belize	116	Beginning 01.04	Americas	Guatemala	80	Ending 31.12	Americas
Benin	3	Ending 31.12	Africa	Guernsey	173	Ending 31.12	Europe
Bermuda	159	Beginning 01.04	Americas	Guinea	20	Ending 31.12	Africa
Bhutan	4	Ending 31.12	Asia	Guinea-Bissau	21	Ending 31.12	Africa
Bolivia	65	Ending 31.12	Americas	Guyana	81	Ending 31.12	Americas
Bosnia	66	Ending 31.12.	Europe	Haiti	22	Ending 31.12	Americas
Botswana	117	Beginning 01.04	Africa	Honduras	82	Ending 31.12	Americas
Brazil	67	Ending 31.12	Americas	Hong Kong, China	174	Beginning 01.04	Asia
Brunei Darussalam	160	Ending 31.12	Asia	Hungary	128	Ending 31.12	Europe
Bulgaria	68	Ending 31.12	Europe	Iceland	175	Ending 31.12	Europe
Burkina Faso	5	Ending 31.12	Africa	India	23	Beginning 01.04	Asia
Burundi	6	Ending 31.12	Africa	Indonesia	83	Ending 31.12	Asia
Cambodia	7	Ending 31.12	Asia	Iran (I.R.)	84	Beginning 22.03	Asia
Cameroon	8	Ending 31.12	Africa	Iraq	85	Ending 30.06	Asia
Canada	161	Ending 31.12	Americas	Ireland	176	Beginning 01.04	Europe
Cape Verde	69	Ending 31.12	Africa	Israel	177	Ending 31.12	Asia
Central African Rep.	9	Ending 31.12	Africa	Italy	178	Ending 31.12	Europe
Chad	10	Ending 31.12	Africa	Jamaica	86	Beginning 01.04	Americas
Chile	118	Ending 31.12	Americas	Japan	179	Beginning 01.04	Asia
China	70	Ending 31.12	Asia	Jersey	180	Ending 31.12	Europe
Colombia	71	Ending 31.12.	Americas	Jordan	87	Ending 31.12	Asia
Comoros	11	Ending 31.12.	Africa	Kazakhstan	88	Ending 31.12	Asia
Congo	12	Ending 31.12	Africa	Kenya	24	Ending 30.06	Africa
Costa Rica	119	Ending 31.12	Americas	Kiribati	89	Ending 31.12	Oceania
Côte d'Ivoire	13	Ending 31.12	Africa	Korea (Rep.)	181	Ending 31.12	Asia
Croatia	120	Ending 31.12	Europe	Kuwait	182	Ending 31.12	Asia
Cuba	72	Ending 31.12	Americas	Kyrgyzstan	25	Ending 31.12	Asia
Cyprus	162	Ending 31.12	Europe	Lao P.D.R.	26	Ending 31.12	Asia
Czech Republic	121	Ending 31.12	Europe	Latvia	129	Ending 31.12	Europe
D.P.R. Korea	14	Ending 31.12	Asia	Lebanon	130	Ending 31.12	Asia
D.R. Congo	15	Ending 31.12	Africa	Lesotho	27	Beginning 01.04	Africa
Denmark	163	Ending 31.12	Europe	Liberia	28	Ending 31.12	Africa
Djibouti	73	Ending 31.12	Africa	Libya	131	Ending 31.12	Africa
Dominica	122	Beginning 01.04	Americas	Lithuania	132	Ending 31.12	Europe
Dominican Rep.	74	Ending 31.12	Americas	Luxembourg	183	Ending 31.12	Europe
Ecuador	75	Ending 31.12	Americas	Macao, China	184	Ending 31.12	Asia
Egypt	76	Ending 30.06	Africa	Madagascar	29	Ending 31.12	Africa
El Salvador	77	Ending 31.12	Americas	Malawi	30	Ending 31.12	Africa
Equatorial Guinea	123	Ending 31.12	Africa	Malaysia	133	Ending 31.12	Asia
Eritrea	16	Ending 31.12	Africa	Maldives	90	Ending 31.12	Asia

<i>Economy</i>	<i>Location</i>	<i>Fiscal year</i>	<i>Region</i>	<i>Economy</i>	<i>Location</i>	<i>Fiscal year</i>	<i>Region</i>
Mali	31	Ending 31.12	Africa	Serbia and Montenegro	101	Ending 31.12	Europe
Malta	185	Ending 31.12	Europe	Seychelles	142	Beginning 01.04	Africa
Marshall Islands	91	Ending 31.12	Oceania	Sierra Leone	46	Ending 31.12	Africa
Martinique	186	Ending 31.12	Americas	Singapore	197	Beginning 01.04	Asia
Mauritania	32	Ending 31.12	Africa	Slovak Republic	143	Ending 31.12	Europe
Mauritius	134	Ending 31.12	Africa	Slovenia	198	Ending 31.12	Europe
Mayotte	135	Ending 31.12	Africa	Solomon Islands	47	Beginning 01.04	Oceania
Mexico	136	Ending 31.12	Americas	Somalia	48	Ending 31.12	Africa
Micronesia	92	Ending 31.12	Oceania	South Africa	144	Beginning 01.04	Africa
Moldova	33	Ending 31.12	Europe	Spain	199	Ending 31.12	Europe
Mongolia	34	Ending 31.12	Asia	Sri Lanka	102	Ending 31.12	Asia
Morocco	93	Ending 31.12	Africa	St. Kitts and Nevis	145	Beginning 01.04	Americas
Mozambique	35	Ending 31.12	Africa	St. Lucia	146	Beginning 01.04	Americas
Myanmar	36	Ending 31.12	Asia	St. Vincent	147	Beginning 01.04	Americas
Namibia	94	Ending 30.09	Africa	Sudan	49	Ending 31.12	Africa
Nepal	37	Ending 15.07	Asia	Suriname	103	Ending 31.12	Americas
Neth. Antilles	187	Ending 31.12	Americas	Swaziland	104	Beginning 01.04	Africa
Netherlands	188	Ending 31.12	Europe	Sweden	200	Ending 31.12	Europe
New Caledonia	189	Ending 31.12	Oceania	Switzerland	201	Ending 31.12	Europe
New Zealand	190	Beginning 01.04	Oceania	Syria	105	Ending 31.12	Asia
Nicaragua	38	Ending 31.12	Americas	Taiwan, China	202	Ending 31.12	Asia
Niger	39	Ending 31.12	Africa	Tajikistan	50	Ending 31.12	Asia
Nigeria	40	Ending 31.12	Africa	Tanzania	51	Ending 31.12	Africa
Northern Marianas	137	Ending 31.12	Oceania	TFYR Macedonia	106	Ending 31.12	Europe
Norway	191	Ending 31.12	Europe	Thailand	107	Ending 30.09	Asia
Oman	138	Ending 31.12	Asia	Togo	52	Ending 31.12	Africa
Pakistan	41	Ending 30.06	Asia	Tonga	108	Ending 31.12	Oceania
Palestine	95	Ending 31.12	Asia	Trinidad & Tobago	148	Beginning 01.04	Americas
Panama	139	Ending 31.12	Americas	Tunisia	109	Ending 31.12	Africa
Papua New Guinea	42	Ending 31.12	Oceania	Turkey	149	Ending 31.12	Europe
Paraguay	96	Ending 31.12	Americas	Turkmenistan	110	Ending 31.12	Asia
Peru	97	Ending 31.12	Americas	Uganda	53	Ending 30.06	Africa
Philippines	98	Ending 31.12	Asia	Ukraine	111	Ending 31.12	Europe
Poland	140	Ending 31.12	Europe	United Arab Emirates	203	Ending 31.12	Asia
Portugal	192	Ending 31.12	Europe	United Kingdom	204	Beginning 01.04	Europe
Puerto Rico	193	Ending 31.12	Americas	United States	205	Ending 31.12	Americas
Qatar	194	Ending 31.12	Asia	Uruguay	150	Ending 31.12	Americas
Réunion	195	Ending 31.12	Africa	Uzbekistan	54	Ending 31.12	Asia
Romania	99	Ending 31.12	Europe	Vanuatu	112	Ending 31.12	Oceania
Russia	141	Ending 31.12	Europe	Venezuela	151	Ending 31.12	Americas
Rwanda	43	Ending 31.12	Africa	Viet Nam	55	Ending 31.12	Asia
S. Tomé & Príncipe	44	Ending 31.12	Africa	Virgin Islands (US)	206	Ending 31.12	Americas
Samoa	100	Ending 31.12	Oceania	Yemen	56	Ending 31.12	Asia
Saudi Arabia	196	Ending 31.12	Asia	Zambia	57	Beginning 01.04	Africa
Senegal	45	Ending 31.12	Africa	Zimbabwe	58	Ending 30.06	Africa

# TECHNICAL NOTES

## General methodology

The compound annual growth rate (CAGR) is computed by the formula:

$$[(P_v / P_0)^{(1/n)}] - 1$$

where  $P_v$  = Present value  
 $P_0$  = Beginning value  
n = Number of periods

The result is multiplied by 100 to obtain a percentage.

United States dollar figures are reached by applying the average annual exchange rate (from the International Monetary Fund, IMF) to the figure reported in national currency. For countries where the IMF rate is unavailable or where the exchange rate typically applied to foreign exchange transactions differs markedly from the official IMF rate, a World Bank conversion rate is used. For the few countries where neither the IMF nor World Bank rates are available, a United Nations end-of-period rate was used.

Group figures are either *totals* or weighted *averages* depending on the indicator. For example, for main telephone lines, the total number of *main telephone lines* for each grouping is shown, while for *main lines per 100 inhabitants* the weighted average is shown. Group figures are shown in bold in the tables. In cases of significant missing data, group totals are not shown. Group growth rates generally refer to countries for which data is available for both years.

## 1. Basic indicators

The data for *Population* are mid-year estimates from national statistical offices or the United Nations (UN). *Population Density* is based on land area data from the UN; the land area does not include any overseas dependencies but does include inland waters. The data for *Gross Domestic Product* (GDP) are generally from the IMF. They are current price data in national currency converted to United States dollars by the method identified above. *Total telephone subscribers* refer to the sum of main telephone lines and cellular mobile subscribers (see below for definitions). *Total telephone subscribers per 100 inhabitants* is calculated by dividing the total telephone subscribers by the population and multiplying by 100.

## 2. Main telephone lines

This table shows the number of *Main telephone lines* and *Main telephone lines per 100 inhabitants* for the years indicated and corresponding annual growth rates. *Main*

*telephone lines* refer to telephone lines connecting a customer's equipment (e.g., telephone set, facsimile machine) to the Public Switched Telephone Network (PSTN) and which have a dedicated port on a telephone exchange. Note that for most countries, main lines also include public payphones. Many countries also include ISDN channels in main lines (see 9. ISDN and ADSL). *Main telephone lines per 100 inhabitants* is calculated by dividing the number of main lines by the population and multiplying by 100.

## 3. Mobile cellular subscribers

*Mobile cellular telephone subscribers* refer to users of portable telephones subscribing to an automatic public mobile telephone service using cellular technology that provides access to the PSTN. *Per 100 inhabitants* is obtained by dividing the number of cellular subscribers by the population and multiplying by 100. *As a % of total telephone subscribers* is obtained by dividing the number of cellular subscribers by the total number of telephone subscribers (sum of the main telephone lines and the cellular subscribers).

## 4. Information technology

*Internet hosts* refer to the number of computers directly connected to the worldwide Internet network. Note that Internet host computers are identified by a two-digit country code or a three-digit code generally reflecting the nature of the organization using the Internet computer. The number of hosts is assigned to economies based on the country code although this does not necessarily indicate that the host is actually physically located in the economy. In addition, all other hosts for which there are no country code identification are assigned to the United States. Therefore the number of Internet hosts shown for each country can only be considered an approximation. Data on Internet host computers are from Internet Software Consortium and RIPE (Réseaux IP Européens). *Internet Users* is based on nationally reported data. In some cases, surveys have been carried out that give a more precise figure for the number of Internet users. However surveys differ across countries in the age and frequency of use they cover. The reported figure for Internet users—which may refer to only users above a certain age—is divided by the total population and multiplied by 100 to obtain *users per 100 inhabitants*. Countries that do not have surveys generally base their estimates on derivations from reported Internet Service Provider subscriber counts, calculated by multiplying the number of subscribers by a multiplier. *PCs* shows the estimated number of Personal Computers (PCs), both in absolute numbers and in terms of PCs per 100 inhabitants. The figures for PCs come from the annual questionnaire supplemented by other sources.