

## Basic indicators

World

	Population		GDP		Total telephone subscribers	
	Total	Density	Total	per capita	Total	per 100
	(M)	(per km <sup>2</sup> )	(B US\$)	(US\$)	(k)	inhabitants
	2002	2002	2001	2001	2002	2002
1 Algeria	31.29	13	54.2 [00]	1'784	2'308.0	7.38
2 Angola	13.94	11	9.0	664	215.0	1.54
3 Benin	6.59	59	2.4	368	184.3 [01]	2.86
4 Botswana	1.72	3	4.9	2'921	458.6 [01]	27.28
5 Burkina Faso	11.96	44	2.3	200	124.3	1.04
6 Burundi	6.99	251	0.7	96	74.1	1.06
7 Cameroon	15.75	33	9.6	623	411.4 [01]	2.67
8 Cape Verde	0.44	109	0.5	1'239	113.1	25.77
9 Central African Rep.	3.96	6	1.0	265	19.9 [01]	0.53
10 Chad	7.87	6	1.5	194	46.0	0.58
11 Comoros	0.76	409	0.2	303	10.3	1.35
12 Congo	3.29	10	2.8	887	243.8	7.41
13 Côte d'Ivoire	16.49	51	9.2	563	1'363.2	8.27
14 D.R. Congo	52.65	22	7.5	143	170.0 [01]	0.32
15 Djibouti	0.66	30	0.6	894	25.1	3.83
16 Egypt	65.64	66	91.1	1'412	11'924.7	18.17
17 Equatorial Guinea	0.49	17	1.8	3'789	35.8	7.34
18 Eritrea	3.98	42	0.7 [99]	196	35.9	0.90
19 Ethiopia	67.35	55	6.3	96	404.2	0.60
20 Gabon	1.30	5	4.6	3'611	312.7	24.07
21 Gambia	1.37	128	0.4 [00]	333	138.3	10.08
22 Ghana	21.67	91	4.4	209	723.8	3.34
23 Guinea	7.67	31	2.9	381	116.8	1.52
24 Guinea-Bissau	1.25	35	0.2	162	11.2	0.89
25 Kenya	31.93	55	11.4	364	1'653.3	5.18
26 Lesotho	2.17	71	0.8	377	126.0	5.82
27 Libya	5.55	3	34.8 [00]	6'207	710.0 [01]	12.72
28 Madagascar	15.91	27	4.5	292	222.5	1.40
29 Malawi	10.44	111	1.6 [00]	158	159.1	1.52
30 Mali	10.63	9	2.5	236	102.4	0.96
31 Mauritania	2.68	3	0.9	360	278.8	10.39
32 Mauritius	1.21	649	4.5	3'771	677.2	55.95
33 Mayotte	0.15	394	...	...	10.0 [01]	6.98
34 Morocco	29.64	45	33.9	1'162	7'326.1	24.71
35 Mozambique	18.23	23	3.6	202	338.5	1.86
36 Namibia	1.88	2	3.1	1'697	271.4	14.48
37 Niger	11.75	10	1.7	155	23.8 [01]	0.21
38 Nigeria	120.08	130	51.3	438	2'335.1	1.94
39 Rwanda	8.17	310	1.7	208	86.5 [01]	1.09
40 S. Tomé & Príncipe	0.15	157	...	...	8.2	5.44
41 Senegal	9.80	50	4.6	477	778.0	7.94
42 Seychelles	0.08	205	0.6	7'571	65.5 [01]	79.97
43 Sierra Leone	4.95	68	0.7	152	49.6 [01]	1.01
44 South Africa	45.45	38	113.3	2'542	18'658.0	41.05
45 Sudan	32.54	13	12.6	396	862.6	2.65
46 Swaziland	1.03	59	1.3	1'249	98.1	9.50
47 Tanzania	34.57	37	9.1	271	831.6	2.41
48 Togo	5.02	88	1.2	265	221.2	4.41
49 Tunisia	9.81	60	20.0	2'064	1'651.9	16.83
50 Uganda	24.70	102	5.3	224	448.3	1.81
51 Zambia	10.70	14	3.2 [00]	312	226.8	2.12
52 Zimbabwe	11.63	30	7.4 [00]	654	640.9	5.51
<b>Africa</b>	<b>805.93</b>	<b>27</b>	<b>554.5</b>	<b>705</b>	<b>58'332.0</b>	<b>7.25</b>
53 Antigua & Barbuda	0.08	176	0.7 [00]	8'629	62.3 [01]	80.42
54 Argentina	36.60	13	268.7	7'418	14'509.4	39.64
55 Aruba	0.11	570	1.5	17'109	90.1 [01]	85.03
56 Bahamas	0.31	23	...	...	248.3	79.59
57 Barbados	0.27	626	2.5	9'500	182.1 [01]	67.86
58 Belize	0.25	11	0.8	3'264	83.8	33.12
59 Bermuda	0.07	1'204	2.1	33'469	86.0	132.31
60 Bolivia	8.34	8	8.0	963	1'436.6	17.22
61 Brazil	173.88	20	508.5	2'959	73'691.0	42.38
62 Canada	31.41	3	714.5	22'966	31'811.1	101.26
63 Chile	15.05	20	66.5	4'314	9'912.7	65.86
64 Colombia	43.29	38	82.4	1'925	12'363.0	28.56
65 Costa Rica	4.14	81	16.4	3'983	1'497.7	36.15
66 Cuba	11.28	98	17.1	1'518	583.0 [01]	5.19

## World

## Basic indicators

	Population		GDP		Total telephone subscribers		
	Total	Density	Total	per capita	Total	per 100	
	(M)	(per km <sup>2</sup> )	(B US\$)	(US\$)	(k)	inhabitants	
	2002	2002	2001	2001	2002	2002	
67	Dominica	0.08	104	0.3 [00]	3'478	34.8	44.57
68	Dominican Rep.	8.71	180	21.2	2'447	2'609.6	29.97
69	Ecuador	12.94	28	13.6 [00]	1'076	2'987.0	23.08
70	El Salvador	6.46	302	13.7	2'147	1'556.5	24.10
71	Grenada	0.11	307	0.4 [00]	4'348	41.1	38.77
72	Guadeloupe	0.46	272	...	...	502.5 [01]	109.24
73	Guatemala	12.00	110	20.5	1'757	2'423.1	20.20
74	Guyana	0.88	4	0.7 [00]	828	167.7	19.08
75	Haiti	8.30	299	3.5	423	270.0	3.25
76	Honduras	6.71	60	6.4	980	649.0	9.67
77	Jamaica	2.62	229	7.8	2'994	1'850.0	70.66
78	Martinique	0.41	368	0.9 [99]	2'296	458.1 [01]	114.53
79	Mexico	101.88	52	574.2 [00]	5'807	40'869.9	40.12
80	Nicaragua	5.37	44	2.6	490	411.6	7.66
81	Panama	3.01	38	11.0	3'812	936.4	31.15
82	Paraguay	5.78	14	6.8	1'215	1'940.2	33.56
83	Peru	26.75	21	54.0	2'071	4'073.1	15.23
84	Puerto Rico	3.86	431	44.2	11'519	2'540.6 [01]	66.20
85	St. Kitts and Nevis	0.05	180	0.3	7'494	28.5	60.64
86	St. Vincent	0.12	301	0.3	3'028	37.3	31.88
87	Suriname	0.45	3	0.8 [98]	1'921	164.4 [01]	37.36
88	Trinidad & Tobago	1.30	254	9.0	6'892	687.0	52.78
89	United States	288.37	31	10'208.1	35'843	330'766.8	114.70
90	Uruguay	3.38	18	18.7	5'554	1'598.5	47.22
91	Venezuela	25.20	28	126.2	5'105	9'305.3	36.92
92	Virgin Islands (US)	0.11	319	...	...	110.4 [01]	101.01
	<b>Americas</b>	<b>850.37</b>	<b>21</b>	<b>12'835.0</b>	<b>15'329</b>	<b>553'576.7</b>	<b>65.10</b>
93	Armenia	3.80	127	2.1	558	614.8	16.17
94	Azerbaijan	8.14	94	4.0 [00]	507	1'824.9	22.42
95	Bahrain	0.67	941	7.9	12'068	564.4	84.64
96	Bangladesh	133.13	925	45.4	346	1'757.0	1.32
97	Bhutan	0.69	15	0.5 [00]	734	19.6	2.84
98	Brunei Darussalam	0.35	61	4.3	12'447	225.4 [01]	65.92
99	Cambodia	13.79	76	3.4	254	415.4	3.01
100	China	1'284.53	134	1'191.0	907	421'040.0	32.78
101	Georgia	4.93	71	3.2	643	1'152.1	23.35
102	Hong Kong, China	6.77	6'378	164.0	24'383	10'238.7	151.17
103	India	1'041.85	329	486.6	474	53'903.0	5.17
104	Indonesia	212.11	111	145.3	695	19'450.0	9.17
105	Iran (I.R.)	65.37	40	379.6	5'876	14'387.1	22.01
106	Israel	6.64	300	111.7	17'160	9'434.0	142.17
107	Japan	127.44	337	4'143.8	32'554	152'267.0	119.49
108	Jordan	5.33	56	8.8	1'701	1'894.1	35.54
109	Kazakhstan	15.97	6	22.1	1'370	2'910.1	18.22
110	Korea (Rep.)	47.60	484	422.2	9'023	55'599.0	116.80
111	Kuwait	2.36	97	32.4	14'260	1'708.9	72.29
112	Kyrgyzstan	5.09	26	1.5	306	447.9	8.79
113	Lao P.D.R.	5.53	23	1.7	324	117.1	2.12
114	Lebanon	3.42	328	16.7	4'988	1'453.9	42.58
115	Macao, China	0.44	18'391	6.2	13'838	452.2	103.32
116	Malaysia	24.53	74	88.0	3'684	13'911.3	56.72
117	Maldives	0.28	943	0.6	2'258	70.5	25.11
118	Mongolia	2.43	2	1.1	439	344.0	14.16
119	Myanmar	48.98	72	7.1 [00]	148	309.0 [01]	0.64
120	Nepal	23.20	164	5.5	241	349.6	1.51
121	Oman	2.71	10	20.2	7'693	692.5	25.54
122	Pakistan	145.96	182	55.2	387	4'893.6	3.35
123	Palestine	3.46	574	...	...	618.5	17.90
124	Philippines	79.48	265	71.4	913	18'511.9	23.29
125	Qatar	0.61	53	16.2	26'479	443.2	72.66
126	Saudi Arabia	23.06	10	186.2	8'343	8'325.5	36.10
127	Singapore	4.16	6'099	85.7	20'752	5'239.8	125.84
128	Sri Lanka	18.95	289	15.7	836	1'814.7	9.58
129	Syria	17.04	92	19.2 [00]	1'185	2'499.3	14.67
130	Taiwan, China	22.46	624	281.3	12'553	37'004.8	164.78
131	Tajikistan	6.38	45	0.8	129	250.8	3.93
132	Thailand	61.89	120	114.8	1'874	22'616.8	36.55

## Basic indicators

## World

	Population		GDP		Total telephone subscribers	
	Total	Density	Total	per capita	Total	per 100
	(M)	(per km <sup>2</sup> )	(B US\$)	(US\$)	(k)	inhabitants
	2002	2002	2001	2001	2002	2002
133 Turkmenistan	4.85	10	4.4 [00]	988	395.8 [01]	8.19
134 United Arab Emirates	3.20	38	46.5 [98]	19'750	3'521.7	110.05
135 Uzbekistan	25.29	57	11.6	463	1'856.9	7.34
136 Viet Nam	81.25	247	32.9	406	5'567.1	6.85
137 Yemen	19.50	103	9.3	493	953.3	4.89
<b>Asia</b>	<b>3'615.60</b>	<b>122</b>	<b>8'277.8</b>	<b>2'296</b>	<b>882'067.4</b>	<b>24.40</b>
138 Albania	4.03	140	4.1	1'036	1'071.0	26.57
139 Andorra	0.08	176	1.2	16'990	57.8 [00]	74.05
140 Austria	8.16	97	189.2	23'243	10'588.0	129.77
141 Belarus	9.91	48	12.2	1'223	3'432.4	34.63
142 Belgium	10.35	338	227.0	22'022	13'267.9	128.24
143 Bosnia	4.10	80	4.7	1'150	1'239.0	30.22
144 Bulgaria	7.80	70	13.6	1'672	4'463.9 [01]	55.06
145 Croatia	4.84	86	20.3	4'352	4'157.0	85.82
146 Cyprus	0.70	76	9.2	13'290	845.4	120.77
147 Czech Republic	10.14	129	57.2	5'593	12'285.6	121.11
148 Denmark	5.37	125	159.3	29'745	8'217.4	152.90
149 Estonia	1.36	30	5.4	3'794	1'356.0	100.07
150 Finland	5.21	14	121.2	23'338	7'250.0	139.24
151 France	59.64	110	1'317.5	22'201	72'579.7	121.70
152 Germany	82.54	231	1'835.5	22'265	113'763.0	137.83
153 Greece	11.02	83	116.9	11'033	13'569.7 [01]	128.06
154 Greenland	0.06	-	...	...	45.3	79.85
155 Guernsey	0.06	862	1.8	32'428	86.5 [01]	153.83
156 Hungary	10.15	109	51.9	5'207	10'228.4	100.75
157 Iceland	0.29	3	7.6	26'617	436.7	151.63
158 Ireland	3.93	57	103.0	26'829	4'944.0	125.77
159 Italy	56.46	187	1'089.4	18'777	79'767.9	141.27
160 Jersey	0.09	755	...	...	135.3 [01]	155.24
161 Latvia	2.33	37	7.6	3'249	1'618.4	69.49
162 Lithuania	3.46	53	12.0	3'257	2'567.5	74.20
163 Luxembourg	0.45	174	19.2	43'193	755.8 [01]	169.99
164 Malta	0.40	1'253	3.6	9'226	484.1	122.25
165 Moldova	4.40	131	1.5	337	864.2 [01]	19.68
166 Netherlands	16.20	393	383.2	23'793	22'100.0	136.46
167 Norway	4.56	14	168.1	37'116	7'167.0	157.31
168 Poland	38.61	123	176.6	4'572	21'404.7 [01]	55.41
169 Portugal	10.41	113	109.7	10'651	12'889.9	123.83
170 Romania	22.33	94	39.7	1'774	7'961.1 [01]	35.56
171 Russia	146.59	9	251.1 [00]	1'709	53'168.1	36.27
172 Serbia and Montenegro	10.72	105	11.3 [98]	1'067	5'243.4	48.91
173 Slovak Republic	5.38	110	20.5	3'804	4'326.1	80.44
174 Slovenia	2.00	99	19.5	9'790	2'478.4	124.17
175 Spain	40.68	81	581.8	14'392	52'180.6	128.26
176 Sweden	8.94	20	219.4	24'626	14'528.0	162.45
177 Switzerland	7.28	176	245.5	33'884	11'069.0	152.02
178 TFYR Macedonia	2.06	80	3.4 [99]	1'705	761.8 [01]	37.27
179 Turkey	67.27	86	145.2	2'191	42'289.2	62.86
180 Ukraine	50.14	83	30.8 [99]	608	12'894.2 [01]	25.64
181 United Kingdom	59.09	241	1'416.1 [00]	23'694	85'066.0	143.96
<b>Europe</b>	<b>799.56</b>	<b>31</b>	<b>9'214.2</b>	<b>11'515</b>	<b>725'605.5</b>	<b>90.74</b>
182 Australia	19.66	3	358.3	18'481	23'169.0	117.83
183 Fiji	0.83	45	1.7	2'049	187.4	22.47
184 French Polynesia	0.24	61	3.9	16'613	142.5	59.37
185 Guam	0.16	356	3.4 [00]	22'086	112.6 [01]	71.63
186 Kiribati	0.09	128	-	464	4.1 [01]	4.79
187 Marshall Islands	0.06	31	0.1	1'817	4.9	8.72
188 Micronesia	0.12	85	0.2	2'064	10.1 [01]	8.67
189 New Caledonia	0.22	12	3.1	13'940	118.6 [01]	54.09
190 New Zealand	3.94	15	50.4	13'197	4'201.0	106.65
191 Northern Marianas	0.05	105	...	...	24.0 [00]	45.25
192 Papua New Guinea	5.46	12	4.0 [00]	777	72.7 [01]	1.37
193 Samoa	0.18	63	0.3	1'428	13.0	7.20
194 Solomon Islands	0.44	15	0.3	611	7.6	1.71
195 Tonga	0.10	142	0.1	1'322	14.6	14.70
196 Vanuatu	0.20	14	0.2	1'090	11.5	5.62
<b>Oceania</b>	<b>31.76</b>	<b>4</b>	<b>426.0</b>	<b>13'771</b>	<b>28'093.6</b>	<b>88.94</b>
<b>World Geographic from WTDR</b>	<b>6'103.22</b>	<b>46</b>	<b>31'307.5</b>	<b>5'166</b>	<b>2'247'675.2</b>	<b>36.84</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.

9-Oct-03

©ITU,2003

# **WORLD TELECOMMUNICATION INDICATORS**



**INTERNATIONAL TELECOMMUNICATION UNION**

# INTRODUCTION

Data are presented for 196 economies with populations greater than 40'000 and where sufficient data are available. Summary data for economies not listed in main tables are shown in Box 1.

Economies are grouped by 2000 United States dollar (US\$) income levels: *low*, Gross National Income (GNI) per capita of US\$ 755 or less; *lower middle*, US\$ 756–2'995; *upper middle*, US\$ 2'996–9'265; and *high*, US\$ 9'266 or more. The income level classification is based on World Bank methodology whereas the Gross Domestic Product (GDP) per capita shown in Table 1 is based on the methodology described in the *Technical notes*. Economies are shown in alphabetical order within their income group in the tables. See Table A for a list of economies in alphabetical order and their location in the tables.

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, 1975–2001 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.

Telecommunication data are supplied by 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; estimates are shown in *italic*. Broadcasting data are supplied by annual questionnaire sent to national broadcasting authorities or industry associations. Demographic and

macro-economic data are provided by the relevant international 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.
k	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 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 can be found at the ITU's World Wide Web site 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>
Albania	60	Ending 31.12	Europe	Equatorial Guinea	76	Ending 31.12	Africa
Algeria	61	Ending 31.12	Africa	Eritrea	17	Ending 31.12	Africa
Andorra	148	Ending 31.12	Europe	Estonia	123	Ending 31.12	Europe
Angola	1	Ending 31.12	Africa	Ethiopia	18	Ending 31.12	Africa
Antigua & Barbuda	113	Beginning 01.04	Americas	Fiji	77	Ending 31.12	Oceania
Argentina	114	Ending 30.09	Americas	Finland	160	Ending 31.12	Europe
Armenia	2	Ending 31.12	Asia	France	161	Ending 31.12	Europe
Aruba	149	Ending 31.12	Americas	French Polynesia	162	Ending 31.12	Oceania
Australia	150	Ending 30.06	Oceania	Gabon	124	Ending 31.12	Africa
Austria	151	Ending 31.12	Europe	Gambia	19	Beginning 01.04	Africa
Azerbaijan	3	Ending 31.12	Asia	Georgia	20	Ending 31.12	Asia
Bahamas	152	Ending 31.12	Americas	Germany	163	Ending 31.12	Europe
Bahrain	115	Ending 31.12	Asia	Ghana	21	Ending 31.12	Africa
Bangladesh	4	Ending 30.06	Asia	Greece	164	Ending 31.12	Europe
Barbados	153	Beginning 01.04	Americas	Greenland	165	Ending 31.12	Europe
Belarus	62	Ending 31.12	Europe	Grenada	125	Ending 31.12	Americas
Belgium	154	Ending 31.12	Europe	Guadeloupe	126	Ending 31.12	Americas
Belize	63	Beginning 01.04	Americas	Guam	166	Ending 31.12	Oceania
Benin	5	Ending 31.12	Africa	Guatemala	78	Ending 31.12	Americas
Bermuda	155	Beginning 01.04	Americas	Guernsey	167	Ending 31.12	Europe
Bhutan	6	Ending 31.12	Asia	Guinea	22	Ending 31.12	Africa
Bolivia	64	Ending 31.12	Americas	Guinea-Bissau	23	Ending 31.12	Africa
Bosnia	65	Ending 31.12.	Europe	Guyana	79	Ending 31.12	Americas
Botswana	116	Beginning 01.04	Africa	Haiti	24	Ending 31.12	Americas
Brazil	117	Ending 31.12	Americas	Honduras	80	Ending 31.12	Americas
Brunei Darussalam	156	Ending 31.12	Asia	Hongkong SAR	168	Beginning 01.04	Asia
Bulgaria	66	Ending 31.12	Europe	Hungary	127	Ending 31.12	Europe
Burkina Faso	7	Ending 31.12	Africa	Iceland	169	Ending 31.12	Europe
Burundi	8	Ending 31.12	Africa	India	25	Beginning 01.04	Asia
Cambodia	9	Ending 31.12	Asia	Indonesia	26	Ending 31.12	Asia
Cameroon	10	Ending 31.12	Africa	Iran (I.R.)	81	Beginning 22.03	Asia
Canada	157	Ending 31.12	Americas	Ireland	170	Beginning 01.04	Europe
Cape Verde	67	Ending 31.12	Africa	Israel	171	Ending 31.12	Asia
Central African Rep.	11	Ending 31.12	Africa	Italy	172	Ending 31.12	Europe
Chad	12	Ending 31.12	Africa	Jamaica	82	Beginning 01.04	Americas
Chile	118	Ending 31.12	Americas	Japan	173	Beginning 01.04	Asia
China	68	Ending 31.12	Asia	Jersey	174	Ending 31.12	Europe
Colombia	69	Ending 31.12.	Americas	Jordan	83	Ending 31.12	Asia
Comoros	13	Ending 31.12.	Africa	Kazakhstan	84	Ending 31.12	Asia
Congo	14	Ending 31.12	Africa	Kenya	27	Ending 30.06	Africa
Costa Rica	119	Ending 31.12	Americas	Kiribati	85	Ending 31.12	Oceania
Côte d'Ivoire	15	Ending 31.12	Africa	Korea (Rep.)	128	Ending 31.12	Asia
Croatia	120	Ending 31.12	Europe	Kuwait	175	Ending 31.12	Asia
Cuba	70	Ending 31.12	Americas	Kyrgyzstan	28	Ending 31.12	Asia
Cyprus	158	Ending 31.12	Europe	Lao P.D.R.	29	Ending 31.12	Asia
Czech Republic	121	Ending 31.12	Europe	Latvia	86	Ending 31.12	Europe
D. R. of Congo	16	Ending 31.12	Africa	Lebanon	129	Ending 31.12	Asia
Denmark	159	Ending 31.12	Europe	Lesotho	30	Beginning 01.04	Africa
Djibouti	71	Ending 31.12	Africa	Libya	130	Ending 31.12	Africa
Dominica	122	Beginning 01.04	Americas	Lithuania	87	Ending 31.12	Europe
Dominican Rep.	72	Ending 31.12	Americas	Luxembourg	176	Ending 31.12	Europe
Ecuador	73	Ending 31.12	Americas	Macao SAR	177	Ending 31.12	Asia
Egypt	74	Ending 30.06	Africa	Madagascar	31	Ending 31.12	Africa
El Salvador	75	Ending 31.12	Americas	Malawi	32	Ending 31.12	Africa

<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>
Malaysia	131	Ending 31.12	Asia	Senegal	46	Ending 31.12	Africa
Maldives	88	Ending 31.12	Asia	Seychelles	140	Beginning 01.04	Africa
Mali	33	Ending 31.12	Africa	Sierra Leone	47	Ending 31.12	Africa
Malta	178	Ending 31.12	Europe	Singapore	187	Beginning 01.04	Asia
Marshall Islands	89	Ending 31.12	Oceania	Slovak Republic	141	Ending 31.12	Europe
Martinique	179	Ending 31.12	Americas	Slovenia	188	Ending 31.12	Europe
Mauritania	34	Ending 31.12	Africa	Solomon Islands	48	Beginning 01.04	Oceania
Mauritius	132	Ending 31.12	Africa	South Africa	142	Beginning 01.04	Africa
Mayotte	133	Ending 31.12	Africa	Spain	189	Ending 31.12	Europe
Mexico	134	Ending 31.12	Americas	Sri Lanka	101	Ending 31.12	Asia
Micronesia	90	Ending 31.12	Oceania	St. Kitts and Nevis	143	Beginning 01.04	Americas
Moldova	35	Ending 31.12	Europe	St. Vincent	102	Beginning 01.04	Americas
Mongolia	36	Ending 31.12	Asia	Sudan	49	Ending 31.12	Africa
Morocco	91	Ending 31.12	Africa	Suriname	103	Ending 31.12	Americas
Mozambique	37	Ending 31.12	Africa	Swaziland	104	Beginning 01.04	Africa
Myanmar	38	Ending 31.12	Asia	Sweden	190	Ending 31.12	Europe
Namibia	92	Ending 30.09	Africa	Switzerland	191	Ending 31.12	Europe
Nepal	39	Ending 15.07	Asia	Syria	105	Ending 31.12	Asia
Netherlands	180	Ending 31.12	Europe	Taiwan-China	192	Ending 31.12	Asia
New Caledonia	181	Ending 31.12	Oceania	Tajikistan	50	Ending 31.12	Asia
New Zealand	182	Beginning 01.04	Oceania	Tanzania	51	Ending 31.12	Africa
Nicaragua	40	Ending 31.12	Americas	TFYR Macedonia	106	Ending 31.12	Europe
Niger	41	Ending 31.12	Africa	Thailand	107	Ending 30.09	Asia
Nigeria	42	Ending 31.12	Africa	Togo	52	Ending 31.12	Africa
Northern Marianas	183	Ending 31.12	Asia	Tonga	108	Ending 31.12	Oceania
Norway	184	Ending 31.12	Europe	Trinidad & Tobago	144	Beginning 01.04	Americas
Oman	135	Ending 31.12	Asia	Tunisia	109	Ending 31.12	Africa
Palestine	93	Ending 31.12	Asia	Turkey	145	Ending 31.12	Europe
Pakistan	43	Ending 30.06	Asia	Turkmenistan	110	Ending 31.12	Asia
Panama	136	Ending 31.12	Americas	Uganda	53	Ending 30.06	Africa
Papua New Guinea	94	Ending 31.12	Oceania	Ukraine	54	Ending 31.12	Europe
Paraguay	95	Ending 31.12	Americas	United Arab Emirates	193	Ending 31.12	Asia
Peru	96	Ending 31.12	Americas	United Kingdom	194	Beginning 01.04	Europe
Philippines	97	Ending 31.12	Asia	United States	195	Ending 31.12	Americas
Poland	137	Ending 31.12	Europe	Uruguay	146	Ending 31.12	Americas
Portugal	185	Ending 31.12	Europe	Uzbekistan	55	Ending 31.12	Asia
Puerto Rico	138	Ending 31.12.	Americas	Vanuatu	111	Ending 31.12	Oceania
Qatar	186	Ending 31.12	Asia	Venezuela	147	Ending 31.12	Americas
Romania	98	Ending 31.12	Europe	Viet Nam	56	Ending 31.12	Asia
Russia	99	Ending 31.12	Europe	Virgin Islands (US)	196	Ending 31.12	Americas
Rwanda	44	Ending 31.12	Africa	Yemen	57	Ending 31.12	Asia
S. Tomé&Principe	45	Ending 31.12	Africa	Yugoslavia	112	Ending 31.12	Europe
Samoa	100	Ending 31.12	Oceania	Zambia	58	Beginning 01.04	Africa
Saudi Arabia	139	Ending 31.12	Asia	Zimbabwe	59	Ending 30.06	Africa

**Note:** Countries for which recent data is not available are shown in italic. Key indicators for these countries have been estimated.





# 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 the United Nations (UN). National statistics have been used for some countries. *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, the Organization for Economic Co-operation and Development (OECD) or the World Bank. They are current price data in national currency converted to United States dollars by the method identified above. Readers are advised to consult the publications of the international organisations listed in *Sources* for precise definitions of the demographic and macro-economic data. *Total telephone subscribers* refer to the sum of main telephone lines and cellular mobile subscribers. *Total telephone subscribers per 100 inhabitants* is calculated by dividing the total number of 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. *Main telephone lines per 100 inhabitants* is calculated by dividing the number of main lines by the population and multiplying by 100.

## 8. Cellular subscribers

*Cellular mobile 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. *% digital* is the number of mobile cellular subscribers who use a digital cellular service (e.g., GSM, CDMA, DAMPS, PCS, PHS) by the total number of cellular subscribers. *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) and multiplying by 100.

## 16. Information technology

*Internet hosts* refer to the number of computers in the economy that are directly linked 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 are assigned to countries based on the country code although this does not necessarily indicate that the host is actually physically in the country. In addition, all other hosts for which there is 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 come from Internet Software Consortium (<http://www.isc.org>) and RIPE (<http://www.ripe.net>). *Users* is based on reported estimates, derivations based on reported Internet Access Provider subscriber counts, or calculated by multiplying the number of hosts by an estimated multiplier. *Estimated PCs* shows the number of Personal Computers (PCs), both in absolute numbers and in terms of PC ownership per 100 inhabitants. These numbers are derived from the annual questionnaire supplemented by other sources.

## **22. Gender Internet**

The indicator *Female Internet Users* refers to the number of women using the Internet compared to the total number of people using the Internet within a country. It is calculated by dividing the number of female Internet users by the total number of Internet users (as described in *Information Technology*) and then multiplied by 100. The numbers on which the indicator is based are derived from various sources, including national statistical agencies, government reports and analysis, media analysis and other Internet surveys, such as Nielsen/NetRatings.