

Economic and Social Indicators

Information and Communication Technologies (ICT) statistics - 2007

1. Introduction

This is the second issue of the Economic and Social Indicators on Information and Communication Technologies (ICT) statistics compiled by the Central Statistics Office. It contains statistics on the ICT sector, including ICT infrastructure, access and usage based on information gathered from various administrative sources as well as from surveys conducted by the office.

Data presented in this report relate to the Republic of Mauritius and, unless otherwise stated, refer to the period 2003 to 2007. The definitions used are given at Annex.

2. ICT infrastructure and access

ICT infrastructure and access are essential prerequisites for benefiting from ICT. The indicators on ICT infrastructure and access give an indication on the availability of the necessary physical networks and the level of connectivity to these technologies.

2.1. Service providers and available infrastructure

At the end of 2007, there were two fixed telephone service providers and three mobile cellular service providers, same as at the end of 2006. The number of internet service providers which was seven in 2006 increased to eight in 2007, following the cessation of operation of one and the coming into operation of two new ones (Table 1).

International internet bandwidth capacity indicates the amount of information that can be transmitted to or from the country in a given time and hence the quality of internet access in the country. In 2007 the incoming capacity increased by 48.7% to 285.5 megabits per second (mbps) from 192.0 mbps in 2006. Similarly, the outgoing capacity increased by 86.6% to 285.5 mbps from 153.0 mbps in 2006.

The International Internet Bandwidth capacity for incoming traffic per inhabitant increased by 47.8% to 225.8 bits per second in 2007 from 152.8 bits per second in 2006, while that for outgoing traffic increased by 85.4% to 225.8 per second in 2007 from 121.8 bits per second in 2006.

2.2. Fixed telephone lines

The number of fixed telephone lines was 361,300 in 2007, 1.1% higher than the 2006 figure of 357,300 (Table 2). It is noted that with the availability of the mobile cellular prepaid service, the number of fixed telephone lines registered low growths since 2003.

Teledensity defined as the number of fixed telephone lines per 100 inhabitants which was 28.4 in 2006 edged up to 28.6 in 2007.

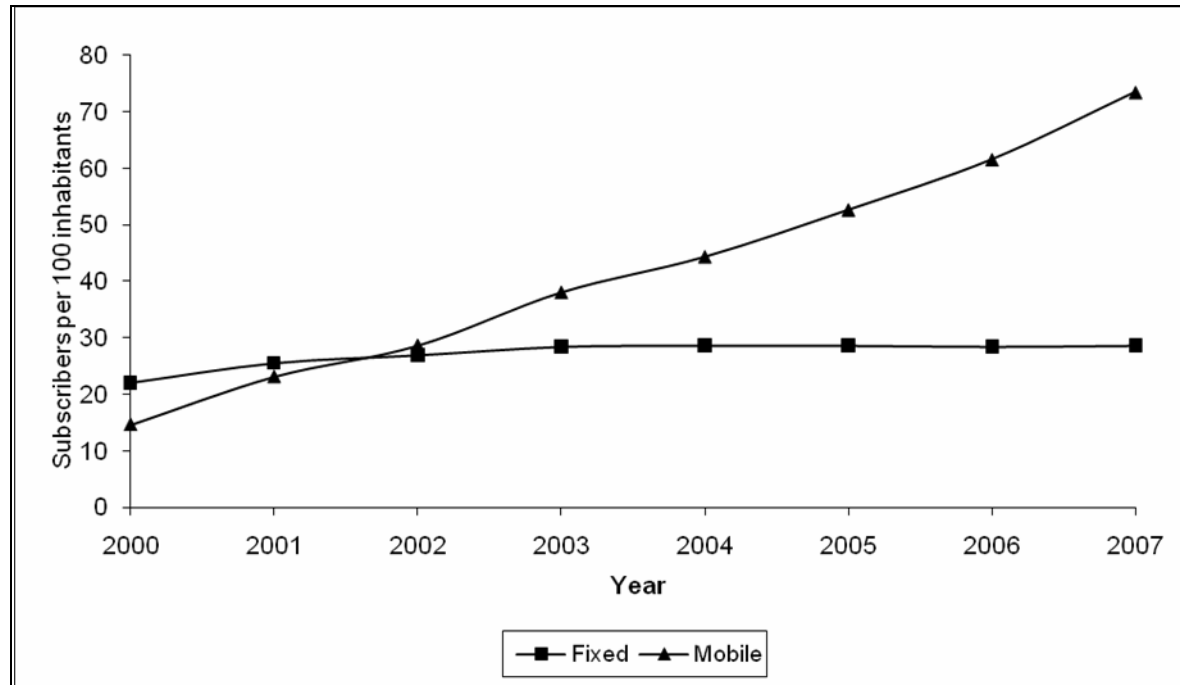
2.3. Mobile cellular subscribers

The population covered by mobile cellular telephony is defined as the number of inhabitants who live within areas covered by a mobile cellular network, irrespective of whether or not they subscribe to the service. In 2007, 99.0% of the population was covered by mobile cellular telephony compared to 98.0% in 2006.

Comparatively, the number of mobile cellular subscribers went up by 20.2% to attain 928,600 in 2007 from 772,400 in 2006. Similarly, the number of cellular prepaid subscribers increased by 20.4% to 871,400 in 2007 from 723,600 in 2006 whereas the number of mobile cellular postpaid subscribers increased by 17.2% to 57,200 in 2007 from 48,800 in 2006. Mobidensity or the number of mobile cellular phones per 100 inhabitants increased by 19.3% reaching 73.4 in 2007 from 61.5 in 2006.

The evolution of Teledensity and Mobidensity during the period 2000 to 2007 is shown in Figure 1.

Figure 1 – Fixed telephone lines and mobile cellular subscribers per 100 inhabitants, 2000 - 2007



2.4 Internet subscribers

The number of internet subscribers at the end of 2007 reached 166,000, representing an increase of 15.7% over the figure of 143,500 in 2006 (Table 2). The number of internet subscribers per 100 inhabitants worked out to 13.1 in 2007 compared to 11.4 in 2006. It is noted that the number of internet subscribers registered a jump of 64.9% in 2005 to 128,600 from 78,000 in 2004, as a result of the introduction of mobile internet services towards the end of 2004.

In 2007, the number of mobile internet subscribers increased by 28.3% to 78,400 from 61,100 in 2006, while the number of fixed internet subscribers increased by 6.3% to 87,600 from 82,400 in 2006.

As a percentage of total internet subscribers, mobile internet subscribers increased to 47.2% in 2007 from 42.6% in 2006 while fixed internet subscribers declined to 52.8% in 2007 from 57.4% in 2006.

2.5 Type of internet access

Broadband internet, defined as internet connectivity at speed of at least 128 kilobits per second, was introduced in 2002. In 2007, broadband internet subscribers increased by 36.7% to 119,048 from 87,069 in 2006. Conversely, narrowband internet subscribers (those with an Internet connection of

less than 128 kilobits per second) declined by 16.7% to 47,011 in 2007 from 56,410 in 2006 (Table 3).

In 2007, the proportion of subscribers with broadband connection increased to 71.7% from 60.7% in 2006, while that with narrowband connection declined to 28.3% from 39.3%.

In 2007, 40,614 or 34.1% of the broadband internet subscribers had access to the service through a fixed line (including wireless), of which 27,630 through a Digital Subscriber Line (DSL) connection. The remaining 78,434 broadband internet subscribers or 65.9% had access through a mobile cellular telephone. Among the latter group, 39,304 were using General Packet Radio Service (GPRS) including the Wireless Application Protocol (WAP), and 39,130 the third Generation of Mobile telephony (3G).

2.6 Tariffs

Selected telephone and internet tariffs are shown in Table 4. Data presented are from the main service provider as at end of year. No changes in tariffs were noted in 2007.

In 2007, the tariff for a three minute local call from a fixed telephone stood at R1.80, same as in 2006. Similarly, the tariff for a three minute call to London or Johannesburg from a fixed telephone using the international direct dialing service remained unchanged at **R28.80** in 2007.

Charges for the mobile cellular prepaid service were similar to those in 2006. Thus, the tariff for a three minute local call using the mobile cellular prepaid service was R 3.60 on the same network and R 11.70 to a different network while that to a fixed telephone was R13.05.

The tariff for internet connection per minute using dial up access (off peak time) was R 0.27 while internet access by household using DSL technology (128 kbps) cost R750 per month in 2007, same as in 2006.

The average mobile cellular tariff for 100 minutes of use (average of 100 minutes of use to each of the following: same network, different network and fixed telephone) during a month as a percentage of GNI per capita was 2.2% in 2007, compared to 2.6% in 2006. Similarly, internet access tariff for 20 hours of use (10 hours dial up access during peak time and 10 hours dial up access off peak time) during a month as a percentage of GNI per capita declined to 3.6% in 2007 from 4.1% in 2006.

2.7 Communication traffic

2.7.1 Local calls

In 2007, the number of local calls made from fixed telephone decreased by 4.4%, to 516.0 million from 539.9 million in 2006. The volume of calls which was 1,391.2 million minutes in 2006 declined by 5.9% to reach 1,309.8 million minutes in 2007.

Conversely, during the same period, the total number of calls from mobile cellular telephone increased by 86.3% to 624.4 million from 335.1 million and the volume of calls by 29.7% to 1,106.9 million minutes from 853.3 million minutes (Table 5).

2.7.2 International calls

The volume of international outgoing telephone calls in 2007 was 71.4 million minutes, 19.6% more than the figure of 59.7 million minutes for 2006. The volume of international incoming calls during the same period increased by 20.1% to 170.9 million minutes from 142.3 million minutes.

2.7.3 Short Message Service (SMS)

Available data indicate that in 2006, the number of messages sent through the Short Message Service (SMS) increased by 120.1% to 738.3 million from 335.5 million in 2005. In 2007, it increased by 19.3% to reach 880.6 million.

3. ICT access and use by households and individuals

Available data on ICT access and use by households and individuals are from the Continuous Multi-Purpose Household Survey (CMPHS) conducted in 2006.

In 2006, 77.4% of households had a fixed telephone, 68.7% had mobile cellular telephone and 95.7% had television set. Households owning a computer represented 24.2% of all households while those having internet access were 16.6% (Table 6).

In 2006, 31.0% of persons aged 12 years and above reported using a computer and 18.0% reported using the internet.

Figures indicate that the use of computer and internet was highest among the young age groups and lowest among the higher age groups (Table 7). Thus some 68.7% of persons aged 12 to 19 years were using a computer in 2006 and 32.8% the internet, 38.1% of persons aged 20 to 29 years were using a computer and 25.9% the internet. Among those aged 50-59 years, 15.7% and 10.1% were using a computer and the internet respectively.

4. ICT usage in education

4.1 Primary schools

At the end of March 2007, the percentage of primary schools providing Internet access to students for study purposes increased to 5.9% from 4.8% in 2006. The number of students per computer registered a marked improvement to attain 63 in 2007 compared to 163 in 2006 (Table 8).

4.2 Secondary schools

At the end of March 2007, the percentage of secondary schools providing Internet access to students increased to 94.1% from 92.1% in 2006. The number of students per computer worked out to 24 in 2007, same as in 2006 (Table 8).

The number of students examined in ICT at School Certificate (SC) level increased by 9.4% to 4,571 in 2007 from 4,177 in 2006. The percentage of students examined in ICT at SC level grew slightly to 26.4% in 2007 from 25.4% in 2006.

The number of students examined in ICT at Higher School Certificate (HSC) level in 2007 was 920 representing 10.8% of all students examined at HSC level compared to 822 or 10.2% in 2006.

4.3 Tertiary education level

The number of students enrolled in ICT or an ICT-dominated field at tertiary level was 3,707 in 2007/2008 compared to 3,971 in 2006/2007. As a percentage of total students enrolled at tertiary level, this represents 10.8% in 2007/2008 lower than the figure of 12.0% in 2006/2007 (Table 8).

5. ICT usage in business

Latest data collected through the Survey of Employment and Earnings among “large establishments”, that is those employing 10 or more persons, showed that in 2006, 91.4% of large establishments had computers and 84.7% used Internet/Email. Some 38.6% had a website and 35.7% had intranet. Large establishments placing orders over the internet was 29.5% and those receiving orders over the internet were 27.8% (Table 9).

The results also showed that ICT usage was highest among establishments in the tertiary sector comprising trade, hotels & restaurants, transport and all other service industries, and lowest in the primary sector which covers agriculture, and mining & quarrying.

6. ICT sector (see Annex for definition)

6.1 Employment

The number of large establishments (that is those employing 10 or more persons) operating in the ICT sector was 125, up by 7.8% compared to the figure of 116 in 2006.

The number of employees in these establishments expanded by 27.0% to 10,390 (5,690 males and 4,700 females) in 2007 from 8,180 (4,600 males and 3,580 females) in 2006. Employment in the ICT sector as a percentage of total employment in large establishments increased to 3.5% in 2007 from 2.8% in 2006.

6.2 Contribution of ICT to Gross Domestic Product (GDP)

The ICT sector comprises activities of Manufacturing, Telecommunications, Wholesale and retail trade, and other activities such as call centers, software development, website development and hosting, multimedia, IT consulting and disaster recovery.

In 2007, value added generated by the ICT sector was R 11.7 billion, 18.2% higher than the figure of R 9.9 billion in 2006, while the contribution to the Gross Domestic Product was 5.7% in 2007 compared to 5.5% in 2006 (Table 10). The real growth rate in 2007 was 14.6% compared to 12.9% in 2006.

In 2007, around 66% of value added of the sector was generated by activities of telecommunications, 13% by wholesale and retail trade and 21% by the remaining activities.

6.3 Trade in ICT goods and services

Available data indicate that the imports of ICT goods decreased by 57.9% to R 5.9 billion in 2007 from R 14.0 billion in 2006 while imports of ICT services was R 1.0 billion, the same level as in 2006. Exports of ICT goods including re-exports decreased by 88.9% to R 1.1 billion in 2007 from R 9.9 billion in 2006 whereas exports of ICT services went up by 20.0% to R 1.8 billion from R 1.5 billion during the same period.

It is to be noted that the decline in both imports and exports of ICT goods in 2007 were due to lower imports and exports of cellular phones compared to 2006.

The share of imports of ICT goods and services in total imports worked out to 4.3% in 2007 compared to 10.0% in 2006, and that of exports of ICT goods and services in total exports to 2.1% in 2007 compared to 9.0% in 2006.

7. Digital Opportunity Index (DOI)

The DOI is a composite index that measures “digital opportunity” or the possibility for citizens of a country to benefit from access to information that is universal, equitable and affordable. The index is based on a set of eleven indicators grouped in three sub-indices; it is measured on a scale of 0 to 1, where a value of one indicates highest digital opportunity and a value of zero indicates least digital opportunity. More details are given in Annex.

Broadband internet as defined by the Information and Communication Technology Authority (ICTA) is “connectivity at a speed equal to or greater than 128 kbps, as the sum of capacity in both directions”. However, for comparability purposes, the DOI has been computed based on broadband internet connection of speed equal to or greater than 256 kbps.

The DOI for Mauritius improved to 0.56 in 2007 from 0.50 in 2006. Improvements were noted in all the three sub-indices constituting the DOI. Thus, the “Opportunity” sub-index increased to 0.98 from 0.97, the “Infrastructure” sub-index to 0.42 from 0.38 and the “Utilization” sub-index to 0.27 from 0.16 (Table 11).

According to latest DOI figures for 181 countries compiled by the International Telecommunication Union (ITU), in 2006 Mauritius ranked 58th with a DOI of 0.50 while Republic of Korea with the highest DOI of 0.80 ranked first (Table 12). It is noted that Mauritius ranked highest among African countries.

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Table 1 - ICT infrastructure as at end of year, 2003 - 2007

ICT infrastructure	2003	2004	2005	2006	2007
1. Fixed-line telephone service providers (number)	1	1	1	2	2
2. Mobile cellular service providers (number)	2	2	2	3	3
3. Internet service providers (number) ¹	2	6	7	7	8
4. Percentage of population covered by mobile telephony (%)	95.0	96.0	97.0	98.0	99.0
5. Internet hosts (number)	3,985	4,819	4,974	9,654	9,591
6. Internet hosts per 10,000 inhabitants (number)	32.5	38.9	39.8	76.8	75.9
7. International Internet bandwidth capacity (Megabits per second)					
Incoming	63.0	71.0	153.0	192.0	285.5
Outgoing	63.0	71.0	116.0	153.0	285.5
8. International Internet bandwidth (bits per second) per inhabitant					
Incoming	51.3	57.4	122.5	152.8	225.8
Outgoing	51.3	57.4	92.9	121.8	225.8

¹ revised

Source: Information and Communication Technologies Authority (ICTA) and National Computer Board (NCB)

Table 2 - ICT access as at end of year, 2003 - 2007

ICT access	2003	2004	2005	2006 ¹	2007
1. Fixed telephone lines ('000)	348.2	353.8	357.5	357.3	361.3
2. Fixed telephone lines per 100 inhabitants	28.4	28.6	28.6	28.4	28.6
3. Mobile cellular subscribers ('000)	466.3	547.8	656.8	772.4	928.6
<i>of which pre-paid</i>	420.5	503.3	610.5	723.6	871.4
<i>postpaid</i>	45.8	44.5	46.3	48.8	57.2
4. Mobile cellular subscribers per 100 inhabitants	38.0	44.3	52.6	61.5	73.4
5. Internet subscribers ('000)	61.3	78.0	128.6	143.5	166.0
<i>of which fixed</i> ²	61.3	78.0	85.5	82.4	87.6
<i>mobile</i>	na	...	43.1	61.1	78.4
6. Internet subscribers per 100 inhabitants	5.0	6.3	10.3	11.4	13.1
<i>of which fixed</i> ²	5.0	6.3	6.8	6.6	6.9
<i>mobile</i>	na	...	3.5	4.9	6.2
7. Broadband Internet ³ subscribers ('000)	1.2	2.8	51.4	87.1	119.0
<i>of which fixed</i> ²	1.2	2.8	8.3	26.0	40.6
<i>mobile</i>	na	...	43.1	61.1	78.4
8. Broadband Internet ³ subscribers per 100 inhabitants	0.1	0.2	4.1	6.9	9.4
<i>of which fixed</i> ²	0.1	0.2	0.7	2.1	3.2
<i>mobile</i>	na	...	3.5	4.8	6.2

¹ revised ² includes wireless as from 2005

³ Broadband Internet refers to connection to the internet at a speed equal to or greater than 128 kbps, as the sum of capacity in both directions

Source: Information and Communication Technologies Authority (ICTA)

Table 4 - Selected telephone and Internet tariffs as at end of year, 2003- 2007

Rupees

Telephone and internet	2003	2004	2005	2006	2007
1. Fixed telephone					
A three-minute local call (off-peak time)	2.05	2.05	2.05	1.80	1.80
Residential monthly line rental	90.00	90.00	90.00	90.00	90.00
Business monthly line rental	225.00	225.00	225.00	225.00	225.00
2. International Direct Dialling - 3 minutes call from fixed telephone (off-peak) to:					
Reunion Island	21.60	21.60	21.60	21.60	21.60
London/Johannesburg	36.00	36.00	36.00	28.80	28.80
New York	36.00	36.00	36.00	28.80	28.80
China	36.00	36.00	36.00	28.80	28.80
3. Mobile Cellular telephone - 3 minutes local call on prepaid service					
On same network	3.60	3.60	3.60	3.60	3.60
To a different network	9.00	11.70	11.70	11.70	11.70
To a fixed telephone	12.75	12.75	12.75	13.05	13.05
4. Internet					
Dial up Peak time (per minute)	0.57	0.57	0.57	0.57	0.57
Dial up Off Peak time (per minute)	0.27	0.27	0.27	0.27	0.27
ADSL 128 kbps					
Residential use	1,499	1,316	990	750	750
Business use ¹	2,500	2,500	1,900	1,860	1,860
ADSL 512 kbps					
Residential use	2,500	2,178	1,590	1,360	1,360
Business use	5,500	5,500	3,600	3,190	3,190
5. Mobile cellular tariffs for 100 minutes of use during a month² as a percentage of GNI per capita (%)	3.0	3.0	2.9	2.6	2.2
6. Internet access tariff for 20 hours of use per month³ as a percentage of GNI per capita (%)	5.4	4.9	4.6	4.1	3.6

¹ upgraded to 256 kbps in 2006,

² refers to 100 minutes of use (average of 100 minutes of use on same network, 100 minutes of use on a different network and 100 minutes of use to a fixed telephone) on a prepaid package

³ refers to 10 hours dial up access during peak time and 10 hours dial up access off peak time.

Table 5 - Local and International telephone calls, 2005 - 2007

		Mn		
Telephone calls		2005	2006	2007
1	Local calls:			
	Number of calls from fixed telephone	546.0	539.9	516.0
	Volume of calls from fixed telephone (minutes)	1,440.1	1,391.2	1,309.8
	Number of calls from mobile cellular telephone	304.4	335.1	624.4
	Volume of calls from mobile cellular telephone (minutes)	702.9	853.3	1,106.9
2	International calls			
	Volume of outgoing calls (minutes)	58.4	59.7	71.4
	<i>from fixed telephone</i>	42.4	40.8	49.4
	<i>from mobile cellular telephone</i>	16.0	18.9	22.0
	Volume of incoming calls (minutes)	117.8	142.3	170.9
	<i>to fixed telephone</i>	95.4	94.1	114.2
	<i>to mobile cellular telephone</i>	22.4	48.2	56.7
3	Short Message Service (SMS)			
	<i>Number of SMS sent</i>	335.5	738.3	880.6

Source: Information and Communication Technologies Authority (ICTA)

Table 6: Availability of ICT to households, 2006

Households with:	%
Fixed telephone	77.4
Cellular mobile telephone	68.7
Television set	95.7
Computer	24.2
Internet access	16.6

Source: Continuous Multi Purpose Household Survey (CMPHS)

Table 7: Percentage distribution of persons aged 12 years and above using computer and internet by age-group , 2006

age-group (years)	% using	
	computer	internet
12 - 19	68.7	32.8
20 - 29	38.1	25.9
30 - 39	26.8	16.1
40 - 49	22.5	13.9
50 - 59	15.7	10.1
>=60	4.5	3.1
Total	31.0	18.0

Source: Continuous Multi Purpose Household Survey (CMPHS)

Table 8 - ICT usage in education, 2005 - 2007

Educational level	2005	2006	2007
1. Primary education			
(i) Percentage of primary schools having Internet access for students	4.5	4.8	5.9
(ii) Number of students per computer in primary schools	185	163	63
2. Secondary education			
(i) Percentage of secondary schools having Internet access for students for study purposes (%)	72.3	92.1	94.1.
(ii) Students per computer in secondary schools (Number)	25	24	24
(iii) Students examined in ICT at School Certificate level (Number)	4,018	4,177	4,571
(iv) Percentage of students examined in ICT at School Certificate level (%) ¹	25.9	25.4	26.4
(v) Number of students examined in ICT at Higher School Certificate level	658	822	920
(vi) Percentage of students examined in ICT at Higher School Certificate level (%)	9.0	10.2	10.8
3. Tertiary education²			
(i) Number of students enrolled in ICT or an ICT- dominated field at tertiary level	4,134	3,971	3,707
(ii) Percentage of students enrolled in ICT or an ICT- dominated field at tertiary level (%)	14.3	12.0	10.8

¹ revised ² Includes also distance education and institutions abroad, and relates to school years 2005/2006, 2006/2007 and 2007/2008

Source: Annual Survey in Primary and Secondary Schools in March, Mauritius Examination Syndicate (MES) and Tertiary Education Commission (TEC)

Table 9 - ICT usage in business ¹ by industrial sector ², 2006

Use of ICT	% of establishments			
	Primary sector	Secondary sector	Tertiary sector	All
1. Computer	68.3	92.4	96.7	91.4
2. Website	12.2	26.5	53.3	38.6
3. Internet/Email	57.3	86.7	89.7	84.7
4. Intranet	22.0	31.7	42.3	35.7
5. Receiving orders over the Internet	11.0	31.2	28.6	27.8
6. Placing orders over the Internet	9.8	32.7	30.8	29.5

¹ Covers establishments employing 10 or more persons, and excludes Government Ministries & Departments, Municipalities and District Councils

² Primary sector covers "Agriculture, hunting, forestry & fishing" and "Mining & quarrying", the Secondary sector includes "Manufacturing", "Electricity, gas & water supply" and "Construction" and the tertiary sector covers "trade, hotels & restaurants, transport and all the other service industries"

Source: Survey of Employment and Earnings in large establishments, March 2006

Table 10 - Establishments, employment and value added in the ICT sector, 2003 - 2007

	2003	2004	2005 ³	2006 ³	2007 ⁴
1. Number of establishments ¹	71	91	111	116	125
2. Employment ¹ (number)	5,560	6,240	7,640	8,180	10,390
<i>Male</i>	(3,490)	(3,780)	(4,350)	(4,600)	(5,690)
<i>Female</i>	(2,070)	(2,460)	(3,290)	(3,580)	(4,700)
3. Employment in the ICT sector as a % of total employment	1.9	2.1	2.6	2.8	3.5
4. Value added in the ICT sector (Rs Million)	6,832	7635 ³	8,675	9,940	11,690
5. Value added in the ICT sector as a % of GDP	5.0	5.0 ³	5.3	5.5	5.7
6. Growth rate in the ICT sector (%)	12.8	22.7 ³	18.2	12.9	14.6
7. Imports of ICT goods and services (Rs Million)	4,463	5,563	12,944	15,000	6,926
<i>goods (c.i.f)</i>	3,627	4,811	12,277	13,958	5,915
<i>services</i> ²	836	752	667	1,042	1,011
8. Exports of ICT goods and services ² (Rs Million)	1,635	2,336	9,485	11,435	2,881
<i>goods (f.o.b)</i>	849	1,549	8,484	9,920	1,082
<i>services</i> ²	786	787	1,001	1,515	1,799
9. Imports of ICT goods and services as a % of total imports	5.1	5.9	10.6	10.0	4.3
10. Exports of ICT goods and services as a % of total exports	1.8	2.2	7.4	9.0	2.1

¹ Large establishments, that is employing 10 or more persons

² Source: Bank of Mauritius

³ Revised

⁴ Provisional

Table 11 - Digital Opportunity Index, 2003 - 2007

Category	Index				
	2003	2004	2005	2006	2007
Opportunity	0.95	0.96	0.97	0.97	0.98
Infrastructure	0.33	0.34	0.38	0.38	0.42
Utilization	0.06	0.06	0.08	0.16	0.27
Digital Opportunity Index	0.45	0.46	0.48	0.50	0.56

Table 12 - Digital Opportunity Index (DOI) for selected countries, 2005-2006

Category	2006	
	DOI	rank
Korea Republic of	0.80	1
Singapore	0.72	5
Sweden	0.70	9
United Kingdom	0.69	10
Australia	0.65	22
Mauritius	0.50	58
Seychelles	0.48	62
South Africa	0.42	86
India	0.31	124

Source: International Telecommunication Union (ITU)

Broadband internet as defined by the Information and Communication Technology Authority (ICTA) as “connectivity at a speed equal to or greater than 128 kbps, as the sum of capacity in both directions”. However, for comparability purposes, the DOI has been computed based on broadband internet connection of speed equal to or greater than 256 kbps

Concepts and definitions

Concepts	Definitions								
1. ICT Sector	<p>The definition of the ICT sector is according to the recommendations of the Global Partnership on Measuring ICT for Development of the United Nations.</p> <p>The ICT sector consists of manufacturing and services industries whose products capture, transmit or display data and information electronically</p> <p>It includes related activities of “Manufacturing”, “Wholesale and retail trade”, “Communications”, “Business services (such as call centres, software development, website development and hosting, multimedia, IT consulting and disaster recovery)” and “Education”.</p>								
2. ICT goods	<p>Comprise telecommunications equipment, computer and related equipments, electronic components, audio and video equipments and other ICT goods.</p>								
3. Digital Opportunity Index (DOI)	<p>DOI is computed using the methodology of the International Telecommunications Union (ITU). It is based on 11 variables organized in three categories, as follows:</p> <table border="0" style="margin-left: 20px;"> <thead> <tr> <th style="text-align: left;">Category</th> <th style="text-align: left;">Variables</th> </tr> </thead> <tbody> <tr> <td style="vertical-align: top;">Opportunity</td> <td> Percentage of population covered by mobile cellular telephony Mobile cellular tariffs as a % of per capita income Internet access tariffs as a % of per capita income </td> </tr> <tr> <td style="vertical-align: top;">Infrastructure</td> <td> Proportion of households with a fixed line telephone Mobile cellular subscribers per 100 inhabitants Proportion of households with Internet access at home Mobile Internet subscribers per 100 inhabitants Proportion of households with a computer </td> </tr> <tr> <td style="vertical-align: top;">Utilization</td> <td> Internet users per 100 inhabitants Ratio of fixed broadband internet subscribers to total internet subscribers Ratio of mobile broadband internet subscribers to mobile internet subscribers </td> </tr> </tbody> </table> <p>Each variable is converted to a variable index with a value between zero and one by dividing it by the maximum value or “goal post”. The category index is an average of the variable indices. The DOI is obtained by averaging the category indices.</p> <p>The value of the DOI varies from 0 to 1, with the value 1 indicating highest digital opportunity and 0 the lowest digital opportunity.</p>	Category	Variables	Opportunity	Percentage of population covered by mobile cellular telephony Mobile cellular tariffs as a % of per capita income Internet access tariffs as a % of per capita income	Infrastructure	Proportion of households with a fixed line telephone Mobile cellular subscribers per 100 inhabitants Proportion of households with Internet access at home Mobile Internet subscribers per 100 inhabitants Proportion of households with a computer	Utilization	Internet users per 100 inhabitants Ratio of fixed broadband internet subscribers to total internet subscribers Ratio of mobile broadband internet subscribers to mobile internet subscribers
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4. Teledensity	<p>Number of fixed telephone lines per 100 inhabitants</p>								
5. Mobidensity	<p>Number of mobile cellular phones per 100 inhabitants</p>								

Concepts	Definitions
6. Narrowband	Connection to the internet at speed less than 128 kilobits per second, as the sum of capacity in both directions
7. Broadband	Connection to the internet at speed equal to or greater than 128 kilobits per second, as the sum of capacity in both directions
8. Digital Subscriber Line (DSL)	Technologies that provide digital data transmission
9. Asymmetric Digital Subscriber Line (ADSL)	DSL with different speed for upstream and downstream
10. Peak time domestic call	6.30 hours to 20.30 hours
11. Peak time international call	Monday to Friday – 6.00 hours to 22.00 hours Saturday – 6.00 hours to 12.00 hours
12. International Internet bandwidth	The amount of information (megabits) that could be transmitted to or from the country per second
13. Mobile cellular tariff for 100 minutes of use	refers to 100 minutes of use (average of 100 minutes of use on same network, 100 minutes of use on a different network and 100 minutes of use to a fixed telephone) on a prepaid package
14. Internet access tariff for 20 hours of use	10 hours dial up connection during peak time and 10 hours dial up connection during off peak time