

## **Economic and Social Indicators**

### **Information and Communication Technologies (ICT) statistics - 2008**

#### **1. Introduction**

This is the third 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 2004 to 2008. 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 2008, there were two fixed telephone service providers and three mobile cellular service providers, same as at the end of 2007. The number of internet service providers which was eight in 2007 increased to nine in 2008 with the coming into operation of a new service provider (Table 1). It is to be noted that since 2007 two internet service providers are not providing service to the public.

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 2008 the incoming capacity increased by 61.8% to 462.0 megabits per second (mbps) from 285.5 mbps in the preceding year. Similarly, the outgoing capacity increased by 61.8% to 462.0 mbps from 285.5 mbps in 2007.

The International Internet Bandwidth capacity for incoming traffic per inhabitant increased by 60.9% to 363.2 bits per second in 2008 from 225.8 bits per second in 2007, similarly, the outgoing traffic increased by 60.9% to 363.2% per second in 2008 from 225.8 bits per second in 2007.

##### **2.2. Fixed telephone lines**

The number of fixed telephone lines was 363,400 in 2008, 0.6% higher than the 2007 figure of 361,300 (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 28.6 in 2007 remained the same in 2008.

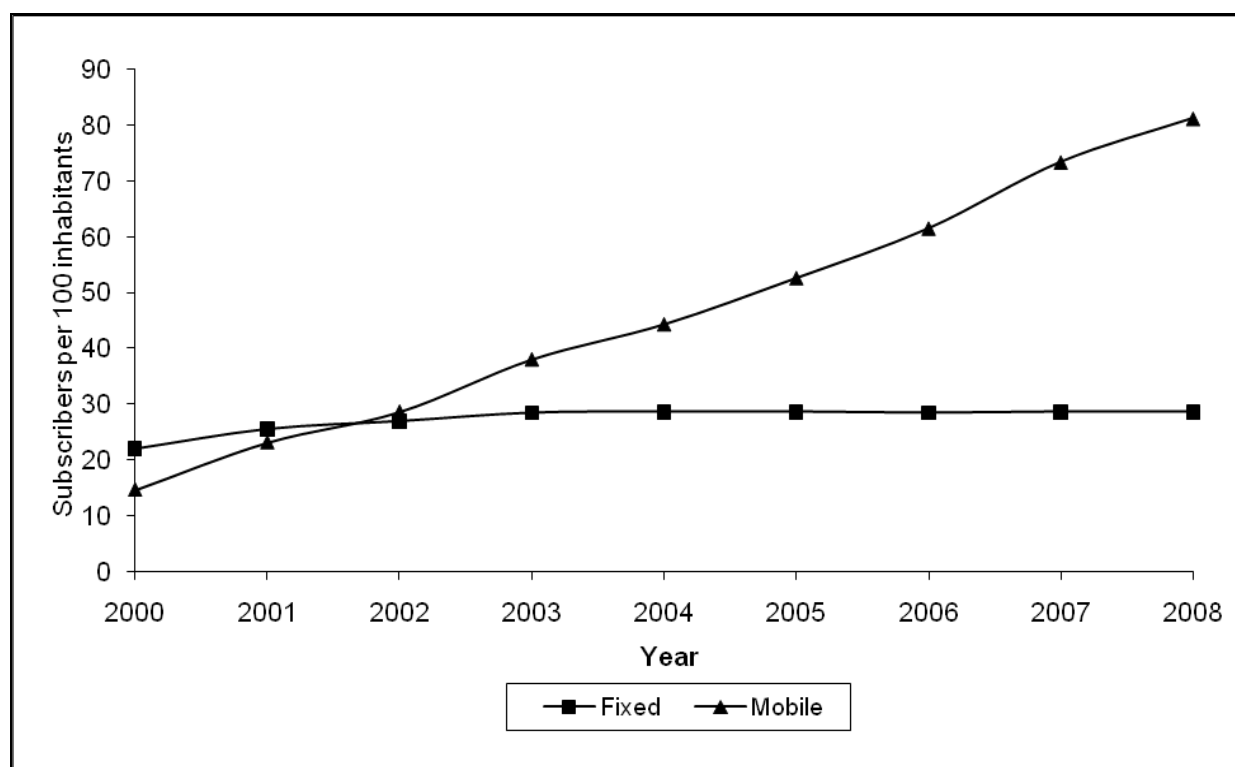
##### **2.3. Mobile cellular subscriptions**

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 2008, 99.0% of the population was covered by mobile cellular telephony, same level as in 2007 (Table 1).

Comparatively, the number of mobile cellular subscribers went up by 11.3% to attain 1,033,300 in 2008 from 928,600 in 2007. Similarly, the number of cellular prepaid subscribers increased by 1.3% to 969,800 in 2008 from 871,400 in 2007 and that of mobile cellular postpaid subscribers grew by 11.0% to 63,500 in 2008 from 57,200 in 2007. Mobidensity or the number of mobile cellular phones per 100 inhabitants increased by 10.6% reaching 81.2 in 2008 from 73.4 in 2007 (Table 2).

The evolution of Teledensity and Mobidensity during the period 2000 to 2008 is shown in Figure 1.

**Figure 1 – Fixed telephone lines and mobile cellular subscribers per 100 inhabitants, 2000 -2008**



## 2.4 Internet subscribers

The number of internet subscribers at the end of 2008 attained 199,500, representing an increase of 20.2% over the figure of 166,000 in 2007 (Table 2). The number of internet subscribers per 100 inhabitants worked out to 15.7 in 2008 compared to 13.1 in 2007. 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 2008, the number of mobile internet subscribers increased by 33.7% to 104,800 from 78,400 in 2007, and that of fixed internet subscribers increased by 8.1% to 94,700 from 87,600 in 2007.

As a percentage of total internet subscribers, mobile internet subscribers went up to 52.5% in 2008 from 47.2% in 2007 while fixed internet subscribers declined to 47.5% in 2008 from 52.8% in 2007.

## 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 2008, broadband internet subscribers increased by 32.1% to 157,320 from 119,048 in 2007. Conversely, narrowband internet subscribers (those with an Internet connection of less than 128 kilobits per second) declined by 10.3% to 42,191 in 2008 from 47,011 in 2007 (Table 3).

In 2008, the proportion of subscribers with broadband connection increased to 78.9% from 71.7% in 2007, while that with narrowband connection declined to 21.1% from 28.3%.

In 2008, 52,511 or 33.4% of the broadband internet subscribers had access to the service through a fixed line (including wireless), of which 46,517 through a Digital Subscriber Line (DSL) connection. The remaining 104,809 broadband internet subscribers or 66.6% had access through a mobile cellular telephone. Among the latter group, 53,509 were using General Packet Radio Service (GPRS) including the Wireless Application Protocol (WAP), and 51,300 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.

In 2008, the tariff for a three minute local call from a fixed telephone stood at R1.80, same as in 2007. The tariff for a three minute call to London or Johannesburg from a fixed telephone using the international direct dialing service decreased to R27.90 in 2008 from R28.80 in 2007.

Charges for a three minutes local call from the mobile cellular prepaid service on the same network or to a different network remained the same as in 2007. Thus, the tariff for a three minutes local call using the mobile cellular prepaid service was R 3.60 on the same network and R 11.70 to a different network. On the other hand, the tariff for a three minute local call using the mobile cellular prepaid service to a fixed telephone decreased to R 10.44 in 2008 from R 13.05 in 2007.

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 unlimited volume usage) cost R750 per month in 2008, same as in the preceding year.

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 1.8% in 2008, compared to 2.2% in 2007. 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 3.2% in 2008 from 3.6% in 2007.

## 2.7 Communication traffic

### 2.7.1 Local calls

In 2008, the number of local calls made from fixed telephone decreased by 12.6%, to 451.2 million from 516.0 million in 2007. The volume of calls which was 1,309.8 million minutes in 2007 declined by 8.0% to reach 1,205.5 million minutes in 2008.

Conversely, during the same period, the total number of calls from mobile cellular telephone increased by 5.7% to 660.2 million from 624.4 million and the volume of calls by 22.0% to 1,350.3 million minutes from 1,106.9 million minutes (Table 5).

### **2.7.2 International calls**

The volume of international outgoing telephone calls in 2008 was 107.0 million minutes, up by 49.9% compared to the figure of 71.4 million minutes for 2007. The volume of international incoming calls during the same period decreased by 3.3% to 165.5 million minutes from 170.9 million minutes in 2007 (Table 5).

### **2.7.3 Short Message Service (SMS)**

Available data indicate that in 2008, the number of messages sent through the Short Message Service (SMS) went down by 3.0% to 854.6 million from 880.6 million in 2007 (Table 5).

## **3. ICT access and use by households and individuals**

Data on ICT access and use by households and individuals are from the Continuous Multi-Purpose Household Survey (CMPHS) conducted in 2006 and 2008.

### **3.1 ICT access by households**

In 2008, the percentage of households with fixed telephone decreased to 73.6 from 77.4 in 2006. Conversely, the percentage of households with mobile cellular telephone increased to 82.8 in 2008 from 66.7 in 2006. Households with television increased slightly to 96.4% from 95.7% two years ago. Some 9.7% of households had more than one television set in 2008 compared to 8.3% in 2006. Some 16.9% of households reported having paid TV channels (other than MBC) in 2008 against 11.1% in 2006. Households owning computer increased to 29.9% and those having internet access increased to 20.2% in 2008 compared to 24.2% and 16.6% respectively two years ago (Table 6).

In 2008 some 64.3% of households with no computer at home reported that a computer was not necessary, while a further 31.3% considered the cost of a computer too expensive for not buying one. Around 72.1% of households with no computer did not have the intention to buy one; 5.5% intended to buy one in the next twelve months and 22.4% to buy one after a year.

Among households with computer, 67.5% had access to internet. The two most common mode of internet access were dial-up (48.0%) and ADSL (40.5%). Among households not having Internet connection some 79.0% reported that they do not intend to obtain Internet connection; 15.3% intend to have access after one year and 5.4% within the next twelve months.

### **3.2 ICT access and use by individuals**

In 2008, around 44% of persons aged between 12 years and above reported that they could use a computer. The percentage among those aged between 12 and 19 years was 75.5%, while among those aged 60 years and above was 6.0% (Table 7).

In 2008, among persons aged 12 years and above who could use computer, 77.7% reported that they did not have any IT qualification. Some 8.7% held the Ordinary level Certificate in computer studies

and a further 1.3% the Advanced level Certificate in computer studies. Some 3.2% had a diploma or degree in IT, and 9.1% had some other certificate in IT (Table 8).

In 2008, 35.4% of persons aged 12 years and above reported using a computer compared to 31.0% two years ago (Table 9).

Figures indicate that both in 2008 and 2006 the use of computer and internet was highest among the young age groups and lowest among the higher age groups (Table 9). Thus, in 2008, 67.1% of persons aged 12 to 19 were using a computer and 36.4% the internet, and 44.9% of persons aged 20 to 29 were using a computer and 32.3% the internet. Among those aged 50 to 59 years, 25.0% and 16.5% were using a computer and the internet respectively.

In 2008, some 51.5% of persons aged 12 years and above reported using a computer at least once a day while another 37.1% used it at least once a week but not everyday and 10.4% less than once a week. The place of use was: at home (64.0%), school/educational institution (31.7%), workplace (33.3%), cybercafé/other commercial facility (6.0%), free public facility (1.6%), another person's place (6.7%) and other (0.1%) (Table 10). It is to be noted that some persons may use a computer from more than one place.

### **3.3 Frequency and purpose of internet use by individuals**

In 2008, the percentage of persons aged 12 years and above who used the Internet from any place increased to 21.8% compared to 18.0 in 2006.

Among internet users, in 2008, 43.5% used at least once a day while another 42.5% used it at least once a week but not everyday and 14.0% less than once a week. The place of use was: at home (65.8%), school/educational institution (20.8%), workplace (31.3%), cybercafé/other commercial facility (10.0%), free public facility (1.7%) and another person's place (5.1%) (Table 11). The main purposes of internet use were: Email/chat (71.6%), Search for information from Government (29.2%), search for information from other sources (82.5%) and entertainment (54.3%) (Table 12). It is to be noted that some persons may use the internet at more than one place, and for more than one purpose.

## **4. ICT usage in education**

### **4.1 Primary schools**

At the end of March 2008, the percentage of primary schools providing Internet access to students for study purposes increased to 6.0% from 5.9% in 2007. The number of students per computer registered a marked improvement to attain 38 in 2008 compared to 63 in 2007 (Table 13).

### **4.2 Secondary schools**

At the end of March 2008, the percentage of secondary schools providing Internet access to students decreased slightly to 93.6% from 94.1% in 2007. The number of students per computer worked out to 24 in 2008, same as in 2007 (Table 13).

The number of students examined in ICT at School Certificate (SC) level increased by 1.2% to 4,624 in 2008 from 4,571 in 2007. The percentage of students examined in ICT at SC level decreased slightly to 26.0% in 2008 from 26.4% in 2007.

The number of students examined in ICT at Higher School Certificate (HSC) level in 2008 was 933 representing 10.5% of all students examined at HSC level compared to 920 or 10.8% in 2007.

### **4.3 Tertiary education level**

The number of students enrolled in ICT or an ICT-dominated field at tertiary level was 3,448 in 2008/2009 compared to 3,700 in 2007/2008. As a percentage of total students enrolled at tertiary level, this represents 8.9% in 2008/2009 lower than the figure of 10.6% in 2007/2008 (Table 13).

## **5. ICT usage in business**

Data collected through the Survey of Employment and Earnings among “large establishments”, that is those employing 10 or more persons in 2008, showed that there has been a general increase in ICT usage since 2006. In 2008, 96.6% of large establishments had computers against 91.4% in 2006. The percentage of establishments having website was 43.9% in 2008 compared to 38.6% in 2006. Establishments using Internet/Email reached 90.4 in 2008 compared to 84.7 in 2006. Some 36.9% had intranet, 34.0% placed orders over the internet and 33.5% were receiving orders over the internet against the corresponding figures of 35.7%, 27.8% and 29.5% respectively in 2006 (Table 14).

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)**

The task force on ICT indicators in 2008 revised the definition of the ICT sector by removing ‘training in ICT’ from the existing definition. Figures presented in this report are based on the revised definition of the ICT sector.

### **6.1 Employment**

The number of large establishments (that is those employing 10 or more persons) operating in the ICT sector was 129, up by 11.2% compared to the figure of 116 in 2007.

The number of employees in these establishments expanded by 10.6% to 11,250 (5,970 males and 5,280 females) in 2008 from 10,170 (5,560 males and 4,610 females) in 2007. Employment in the ICT sector as a percentage of total employment in large establishments increased to 3.7% in 2008 from 3.5% in 2007.

### **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 2008, value added generated by the ICT sector was R 12.7 billion, 10.4% higher than the figure of R 11.5 billion in 2007, while the contribution to the Gross Domestic Product was 5.4% in 2008 compared to 5.6% in 2007 (Table 15). The real growth rate in 2008 was 12.6% compared to 14.9% in 2007.

In 2008, around 61% of value added of the sector was generated by activities of telecommunications, 12% by wholesale and retail trade and 27% by the remaining activities.

### **6.3 Trade in ICT goods and services**

Available data indicate that the imports of ICT goods decreased by 6.3% to R 7.5 billion in 2008 from R 8.0 billion in 2007 while imports of ICT services was R 1.0 billion, the same level as in 2007. Exports of ICT goods including re-exports decreased by 13.3% to R 2.6 billion in 2008 from R 3.0 billion in 2007 whereas exports of ICT services went up by 38.9% to R 2.5 billion from R 1.8 billion during the same period.

The share of imports of ICT goods and services in total imports worked out to 4.7% in 2008 compared to 4.3% in 2007, and that of exports of ICT goods and services in total exports to 3.6% in 2008 compared to 2.1% in 2007.

## **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 0.58 in 2008 from 0.56 in 2007. Improvements were noted in the two sub-indices, “Infrastructure” and “Utilization”. Thus, the “Opportunity” sub-index remained at the high value of 0.98, as in 2007, the “Infrastructure” sub-index increased to 0.45 from 0.42 and the “Utilization” sub-index to 0.30 from 0.28 (Table 16).

According to latest DOI figures for 181 countries compiled by the International Telecommunication Union (ITU), in 2006 Mauritius ranked 58<sup>th</sup> with a DOI of 0.50 while Republic of Korea with the highest DOI of 0.80 ranked first (Table 17). It is noted that Mauritius ranked highest among African countries.

**The Central Statistics Office  
Ministry of Finance and Economic Empowerment  
Port Louis  
August 2009**

<p>Contact Person: Mr. A. Bundhoo (Statistician) Information and Communication Technologies (ICT) Unit Central Statistics Office 5<sup>th</sup> Floor, LIC Centre, P. Louis Tel: 211 2316 Email: <a href="mailto:cso@mail.gov.mu">cso@mail.gov.mu</a></p>
---

**Table 1 - ICT infrastructure as at end of year, 2004 - 2008**

<b>ICT infrastructure</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
1. Fixed-line telephone service providers (number)	1	1	2	2	2
2. Mobile cellular service providers (number)	2	2	3	3	3
3. Internet service providers (number)	6	7	7	8	9
4. Percentage of population covered by mobile telephony (%)	96.0	97.0	98.0	99.0	99.0
5. Internet hosts (number)	4,819	4,974	9,654	9,591	9,685
6. Internet hosts per 10,000 inhabitants (number)	38.9	39.8	76.8	75.9	76.1
7. International Internet bandwidth capacity (Megabits per second)					
Incoming	71.0	153.0	192.0	285.5	462.0
Outgoing	71.0	116.0	153.0	285.5	462.0
8. International Internet bandwidth (bits per second) per inhabitant					
Incoming	57.4	122.5	152.8	225.8	363.2
Outgoing	57.4	92.9	121.8	225.8	363.2

∞

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



**Table 2 - ICT access as at end of year, 2004 - 2008**

ICT access	2004	2005	2006	2007 <sup>1</sup>	2008
1. Fixed telephone lines ('000)	353.8	357.5	357.3	361.3	363.4
2. Fixed telephone lines per 100 inhabitants	28.6	28.6	28.4	28.6	28.6
3. Mobile cellular subscriptions ('000)	547.8	656.8	772.4	928.6	1,033.3
<i>of which pre-paid</i>	503.3	610.5	723.6	871.4	969.8
<i>postpaid</i>	44.5	46.3	48.8	57.2	63.5
4. Mobile cellular subscriptions per 100 inhabitants	44.3	52.6	61.5	73.4	81.2
5. Internet subscriptions ('000)	78.0	128.6	143.5	166.0	199.5
<i>of which fixed</i> <sup>2</sup>	78.0	85.5	82.4	87.6	94.7
<i>mobile</i>	...	43.1	61.1	78.4	104.8
6. Internet subscriptions per 100 inhabitants	6.3	10.3	11.4	13.1	15.7
<i>of which fixed</i> <sup>2</sup>	6.3	6.8	6.6	6.9	7.5
<i>mobile</i>	...	3.5	4.9	6.2	8.2
7. Broadband Internet <sup>3</sup> subscriptions ('000)	2.8	51.4	87.1	119.0	157.3
<i>of which fixed</i> <sup>2</sup>	2.8	8.3	26.0	40.6	52.5
<i>mobile</i>	...	43.1	61.1	78.4	104.8
8. Broadband Internet <sup>3</sup> subscriptions per 100 inhabitants	0.2	4.1	6.9	9.4	12.4
<i>of which fixed</i> <sup>2</sup>	0.2	0.7	2.1	3.2	4.1
<i>mobile</i>	...	3.5	4.8	6.2	8.2

<sup>1</sup> revised      <sup>2</sup> includes wireless as from 2005

<sup>3</sup> 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 3 - Internet subscribers by type of access as at end of year, 2004 - 2008**

Type of internet subscribers	Number				
	2004	2005	2006	2007	2008
<b>TOTAL SUBSCRIBERS</b>	<b>78,023</b>	<b>128,555</b>	<b>143,479</b>	<b>166,059</b>	<b>199,511</b>
<b>Narrowband Internet subscribers (dial-up)</b>	<b>75,237</b>	<b>77,160</b>	<b>56,410</b>	<b>47,011</b>	<b>42,191</b>
<b>Broadband<sup>1</sup> Internet subscribers</b>	<b>2,786</b>	<b>51,395</b>	<b>87,069</b>	<b>119,048</b>	<b>157,320</b>
Fixed (including wireless)	2,786	8,339	25,948	40,614	52,511
<i>DSL (Digital Subscriber Line)</i>	2,786	8,114	16,582	27,630	46,517
<i>Wireless</i>	<i>na</i>	...	9,125	12,765	5,757
<i>Other</i>	<i>na</i>	229	241	219	237
Mobile	...	43,056	61,121	78,434	104,809
<i>GPRS (including WAP)</i>	...	40,804	44,471	39,304	53,509
<i>3G</i>	...	2,252	16,650	39,130	51,300

<sup>1</sup> 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

na: Not applicable                      .... Nil or negligible

GPRS - General Packet Radio Service,

Source: Information and Communication Technologies Authority (ICTA)

Table 4 - Selected telephone and Internet tariffs as at end of year, 2004 - 2008

Rupees

Telephone and internet	2004	2005	2006	2007	2008
<b>1. Fixed telephone</b>					
A three-minute local call (off-peak time)	2.05	2.05	1.80	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
<b>2. International Direct Dialling - 3 minutes call from fixed telephone (off-peak) to:</b>					
Reunion Island	21.60	21.60	21.60	21.60	20.70
London/Johannesburg	36.00	36.00	28.80	28.80	27.90
New York	36.00	36.00	28.80	28.80	27.90
China	36.00	36.00	28.80	28.80	27.90
<b>3 Mobile Cellular telephone - 3 minutes local call on prepaid service</b>					
On same network	3.60	3.60	3.60	3.60	3.60
To a different network	11.70	11.70	11.70	11.70	11.70
To a fixed telephone	12.75	12.75	13.05	13.05	10.44
<b>4 Internet</b>					
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 (Unlimited Volume Usage)					
Residential use	1,316	990	750	750	750
Business use <sup>1</sup>	2,500	1,900	1,860	1,860	1,860
ADSL 512 kbps (Unlimited Volume Usage)					
Residential use	2,178	1,590	1,360	1,360	1,360
Business use	5,500	3,600	3,190	3,190	3,190
ADSL 1 Mbps Home & Business (Unlimited Volume Usage)	...	...	...	...	5,990
<b>5. Mobile cellular tariffs for 100 minutes of use during a month<sup>2</sup> as a percentage of GNI per capita (%)</b>	3.0	2.9	2.6	2.2	1.8
<b>6. Internet access tariff for 20 hours of use per month<sup>3</sup> as a percentage of GNI per capita (%)</b>	4.9	4.6	4.1	3.6	3.2

<sup>1</sup> upgraded to 256 kbps in 2006.<sup>2</sup> 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<sup>3</sup> 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 - 2008**

Mn

Telephone calls	2005	2006	2007	2008
<b>1 Local calls:</b>				
Number of calls from fixed telephone	546.0	539.9	516.0	451.2
Volume of calls from fixed telephone (minutes)	1,440.1	1,391.2	1,309.8	1,205.5
Number of calls from mobile cellular telephone	304.4	335.1	624.4	660.2
Volume of calls from mobile cellular telephone (minutes)	702.9	853.3	1,106.9	1,350.3
<b>2 International calls</b>				
Volume of outgoing calls (minutes)	<b>58.4</b>	<b>59.7</b>	<b>71.4</b>	<b>107.0</b>
<i>from fixed telephone</i>	42.4	40.8	49.4	50.2
<i>from mobile cellular telephone</i>	16.0	18.9	22.0	56.8
Volume of incoming calls (minutes)	<b>117.8</b>	<b>142.3</b>	<b>170.9</b>	<b>165.5</b>
<i>to fixed telephone</i>	95.4	94.1	114.2	76.3
<i>to mobile cellular telephone</i>	22.4	48.2	56.7	89.2
<b>3 Short Message Service (SMS)</b>				
<i>Number of SMS sent</i>	335.5	738.3	880.6	854.6

Source: Information and Communication Technologies Authority (ICTA)

**Table 6: Availability of ICT to households, 2006 and 2008**

Households with:	Percentage of households (%)	
	2006	2008
Fixed telephone	77.4	73.6
Cellular mobile telephone	66.7	82.8
Television set	95.7	96.4
More than one television set	8.3	9.7
Paid TV channels <sup>1</sup>	11.1	16.9
Computer	24.2	29.9
Internet access	16.6	20.2

<sup>1</sup> Channels, other than those from the Mauritius Broadcasting Corporation (MBC)

Source: Continuous Multi Purpose Household Survey (CMPHS)

**Table 7: Persons aged 12 years and above who can use computer by age-group and sex, 2008**

age-group (years)	Male (%)	Female (%)	Both Sexes (%)
12 - 19	74.0	77.2	75.5
20 - 29	59.3	57.6	58.1
30 - 39	41.3	41.0	41.1
40 - 49	38.1	31.1	34.6
50 - 59	44.8	19.8	31.7
>=60	9.4	3.2	6.0
Total	47.1	40.9	43.9

Source: Continuous Multi Purpose Household Survey (CMPHS)

**Table 8: Persons aged 12 years and above who can use computer with highest IT qualification by age group, 2008**

Age group (years)	Highest IT qualification (%)					
	None (can use computer)	O Level in Computer Studies	A level in computer Studies	Other Certificate in IT	Diploma in IT or equivalent	Degree in IT or equivalent
<b>12 - 19</b>	88.7	7.4	0.3	3.4	0.1	0.1
<b>20 - 29</b>	63.5	13.5	3.0	13.4	4.4	2.2
<b>30 - 39</b>	71.7	7.8	1.4	13.7	3.5	1.9
<b>40 - 49</b>	83.5	5.3	0.5	8.3	1.4	1.0
<b>50 - 59</b>	82.0	5.6	1.1	9.8	1.3	0.2
<b>&gt;= 60</b>	86.3	6.2	0.0	6.1	0.3	1.1
<b>Total</b>	77.7	8.7	1.3	9.1	2.1	1.1

Source: Continuous Multi Purpose Household Survey (CMPHS)

**Table 9: Persons aged 12 years and above using computer and internet by age-group , 2006 and 2008**

age-group (years)	Percentage of persons 12 years and above (%) using			
	computer		internet	
	2006	2008	2006	2008
12 - 19	68.7	67.1	32.8	36.4
20 - 29	38.1	44.9	25.9	32.3
30 - 39	26.8	30.7	16.1	19.0
40 - 49	22.5	27.6	13.9	15.8
50 - 59	15.7	25.0	10.1	16.5
>=60	4.5	3.6	3.1	2.7
Total	31.0	35.4	18.0	21.8

**Table10: Persons aged 12 years and above using computer by place of use<sup>1</sup>, 2006 and 2008**

Place of use of computer	%	
	2006	2008
At home	63.5	64.0
School/Educational institution	33.8	31.7
Workplace	33.5	33.3
Cybercafe/ Other commercial facility	6.1	6.0
Free public access facility	2.1	1.6
Another person's place	3.6	6.7

<sup>1</sup> Persons may report more than one answer

**Table 11: Persons aged 12 years and above using internet by place of use<sup>1</sup>, 2006 and 2008**

Place of use of internet	%	
	2006	2008
At home	72.2	65.8
School/Educational institution	21.7	20.8
Workplace	29.9	31.3
Cybercafé/Other commercial facility	8.7	10.0
Free public access facility	2.2	1.7
Another person's place	2.2	5.1

**Table 12: Persons aged 12 years and above using internet by purpose of use<sup>1</sup> and sex, 2008**

Purpose of use of internet	2008 (%)		
	Male	Female	Both Sexes
Email/chat	71.1	72.2	71.6
Make transactions with government: on-line	8.2	6.4	7.3
Search for information: Government	31.4	26.6	29.2
Search for information: Other	83.1	81.9	82.5
Education purposes	31.7	33.2	32.4
Overseas calls	16.1	15.5	15.9
Banking	7.9	5.6	6.8
Purchase of goods and/or services	7.2	4.3	5.8
Entertainment	58.2	49.9	54.3
Other	1.3	1.6	1.4

<sup>1</sup> Persons may report more than one answer



**Table 13 - ICT usage in education, 2005 - 2008**

<b>Educational level</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
<b>1. Primary education</b>				
(i) Percentage of primary schools having Internet access for students	4.5	4.8	5.9	6.0
(ii) Number of students per computer in primary schools	185	163	63	38
<b>2. Secondary education</b>				
(i) Percentage of secondary schools having Internet access for students for study purposes (%)	72.3	92.1	94.1	93.6
(ii) Students per computer in secondary schools (Number)	25	24	24	24
(iii) Students examined in ICT at School Certificate level (Number)	4,018	4,177	4,571	4,624
(iv) Percentage of students examined in ICT at School Certificate level (%)	25.9	25.4	26.4	26.0
(v) Number of students examined in ICT at Higher School Certificate level	658	822	920	933
(vi) Percentage of students examined in ICT at Higher School Certificate level (%)	9.0	10.2	10.8	10.5
<b>3. Tertiary education<sup>2</sup></b>				
(i) Number of students enrolled in ICT or an ICT- dominated field at tertiary level	4,134	3,971	3700 <sup>1</sup>	3,448
(ii) Percentage of students enrolled in ICT or an ICT- dominated field at tertiary level (%)	14.3	12.0	10.6 <sup>1</sup>	8.9

<sup>1</sup> revised <sup>2</sup> Includes also distance education and institutions abroad, and relates to school years 2005/2006, 2006/2007, 2007/2008 and 2008/2009

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

**Table 14 - ICT usage in business <sup>1</sup> by industrial sector <sup>2</sup>, 2006 and 2008**

Use of ICT	% of establishments							
	2006				2008			
	Primary sector	Secondary sector	Tertiary sector	All	Primary sector	Secondary sector	Tertiary sector	All
1. Computer	68.3	92.4	96.7	91.4	86.1	96.8	98.2	96.6
2. Website	12.2	26.5	53.3	38.6	26.4	32.4	55.7	43.9
3. Internet/Email	57.3	86.7	89.7	84.7	78.4	89.7	93.0	90.4
4. Intranet	22.0	31.7	42.3	35.7	31.7	29.7	43.3	36.9
5. Receiving orders over the Internet	11.0	31.2	28.6	27.8	10.1	38.3	34.8	34.0
6. Placing orders over the Internet	9.8	32.7	30.8	29.5	10.1	36.4	35.5	33.5

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

<sup>2</sup> 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 and 2008

**Table 15 - Establishments, employment and value added in the ICT sector, 2004 - 2008 (ICT sector def: without training)**

	2004	2005	2006	2007	2008
1. Number of establishments <sup>1</sup>	88 <sup>3</sup>	102 <sup>3</sup>	108 <sup>3</sup>	116 <sup>3</sup>	129
2. Employment <sup>1</sup> (number)	6,150 <sup>3</sup>	7,410 <sup>3</sup>	7,970 <sup>3</sup>	10,170 <sup>3</sup>	11,250
<i>Male</i>	(3,740)	(4,220)	(4,470)	(5,560)	(5,970)
<i>Female</i>	(2,410)	(3,190)	(3,500)	(4,610)	(5,280)
3. Employment in the ICT sector as a % of total employment	2.1	2.6	2.8	3.5	3.7
4. Value added in the ICT sector (Rs Million)	7,565	8,600	9,960	11,510	12,700
5. Value added in the ICT sector as a % of GDP	5.0	5.3	5.5	5.6	5.4
6. Growth rate in the ICT sector (%)	22.7	18.2	12.9	14.9	12.6
7. Imports of ICT goods and services (Rs Million)	5,563	12,944	15,000	9,005 <sup>3</sup>	8,512
<i>goods (c.i.f)</i>	4,811	12,277	13,958	7,994 <sup>3</sup>	7,505
<i>services</i> <sup>2</sup>	752	667	1,042	1,011	1,007
8. Exports of ICT goods and services <sup>2</sup> (Rs Million)	2,336	9,485	11,435	4,764 <sup>3</sup>	5,127
<i>goods (f.o.b)</i>	1,549	8,484	9,920	2,965 <sup>3</sup>	2,601
<i>services</i> <sup>2</sup>	787	1,001	1,515	1,799	2,526
9. Imports of ICT goods and services as a % of total imports	5.9	10.6	10.0	4.3	4.7
10. Exports of ICT goods and services as a % of total exports	2.2	7.4	9.0	2.1	3.6

<sup>1</sup> Large establishments, that is employing 10 or more persons

<sup>2</sup> Source: Bank of Mauritius

<sup>3</sup> Revised

**Table 16 - Digital Opportunity Index, 2004 - 2008**

Category					
	2004	2005	2006	2007	2008
Opportunity	0.96	0.97	0.98	0.98	0.98
Infrastructure	0.34	0.38	0.39	0.42	0.45
Utilization	0.06	0.08	0.18	0.28	0.30
<b>Digital Opportunity Index</b>	<b>0.46</b>	<b>0.48</b>	<b>0.50</b>	<b>0.56</b>	<b>0.58</b>

**Table 17 - Digital Opportunity Index (DOI) for selected countries, 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	<b>0.50</b>	<b>58</b>
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

<b>Concepts</b>	<b>Definitions</b>								
1. <b>ICT Sector</b>	<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)”.</p> <p>Since 2008 “Training in IT” is excluded from the ICT sector definition.</p>								
2. <b>ICT goods</b>	<p>Comprise telecommunications equipment, computer and related equipments, electronic components, audio and video equipments and other ICT goods.</p>								
3. <b>Digital Opportunity Index (DOI)</b>	<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;"><b>Category</b></th> <th style="text-align: left;"><b>Variables</b></th> </tr> </thead> <tbody> <tr> <td style="vertical-align: top;">Opportunity</td> <td> <ul style="list-style-type: none"> <li>Percentage of population covered by mobile cellular telephony</li> <li>Mobile cellular tariffs as a % of per capita income</li> <li>Internet access tariffs as a % of per capita income</li> </ul> </td> </tr> <tr> <td style="vertical-align: top;">Infrastructure</td> <td> <ul style="list-style-type: none"> <li>Proportion of households with a fixed line telephone</li> <li>Mobile cellular subscribers per 100 inhabitants</li> <li>Proportion of households with Internet access at home</li> <li>Mobile Internet subscribers per 100 inhabitants</li> <li>Proportion of households with a computer</li> </ul> </td> </tr> <tr> <td style="vertical-align: top;">Utilization</td> <td> <ul style="list-style-type: none"> <li>Internet users per 100 inhabitants</li> <li>Ratio of fixed broadband internet subscribers to total internet subscribers</li> <li>Ratio of mobile broadband internet subscribers to mobile internet subscribers</li> </ul> </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>	<b>Category</b>	<b>Variables</b>	Opportunity	<ul style="list-style-type: none"> <li>Percentage of population covered by mobile cellular telephony</li> <li>Mobile cellular tariffs as a % of per capita income</li> <li>Internet access tariffs as a % of per capita income</li> </ul>	Infrastructure	<ul style="list-style-type: none"> <li>Proportion of households with a fixed line telephone</li> <li>Mobile cellular subscribers per 100 inhabitants</li> <li>Proportion of households with Internet access at home</li> <li>Mobile Internet subscribers per 100 inhabitants</li> <li>Proportion of households with a computer</li> </ul>	Utilization	<ul style="list-style-type: none"> <li>Internet users per 100 inhabitants</li> <li>Ratio of fixed broadband internet subscribers to total internet subscribers</li> <li>Ratio of mobile broadband internet subscribers to mobile internet subscribers</li> </ul>
<b>Category</b>	<b>Variables</b>								
Opportunity	<ul style="list-style-type: none"> <li>Percentage of population covered by mobile cellular telephony</li> <li>Mobile cellular tariffs as a % of per capita income</li> <li>Internet access tariffs as a % of per capita income</li> </ul>								
Infrastructure	<ul style="list-style-type: none"> <li>Proportion of households with a fixed line telephone</li> <li>Mobile cellular subscribers per 100 inhabitants</li> <li>Proportion of households with Internet access at home</li> <li>Mobile Internet subscribers per 100 inhabitants</li> <li>Proportion of households with a computer</li> </ul>								
Utilization	<ul style="list-style-type: none"> <li>Internet users per 100 inhabitants</li> <li>Ratio of fixed broadband internet subscribers to total internet subscribers</li> <li>Ratio of mobile broadband internet subscribers to mobile internet subscribers</li> </ul>								
4. <b>Teledensity</b>	<p>Number of fixed telephone lines per 100 inhabitants</p>								
5. <b>Mobidensity</b>	<p>Number of mobile cellular phones per 100 inhabitants</p>								

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