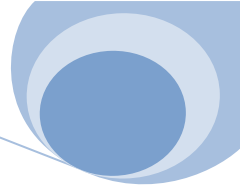


## 6. The Internet Market



## 6.1 Internet Definition

The Internet is a worldwide system of computer networks - a network linking together different networks - in which users at any one network point can - subject to permissions and privileges - connect to another network point or a number thereof. Originally conceived by the Advanced Research Projects Agency (ARPA) of the U.S. government and subsequently initially known as the ARPANET, today, the Internet is a public, cooperative, and self-sustaining facility accessible to hundreds of millions of people worldwide.

Physically, the Internet uses the extant electronic communications networks for data transmission. Nevertheless, the speed available to an end-user depends both on the technology that the end-user employs in connecting to the network which is then connected to other networks, possibly through yet other networks and also to the bandwidth assigned by the ISP.

The Internet uses a distinct set of protocols called Transmission Control Protocol/Internet Protocol (TCP/IP) to transfer data packets and control their transmission from one point to another. The addressing system on the Internet generates IP addresses, which are not easy to remember. Hence the Domain Name System (DNS) has been created to make it more user-friendly. This system provides the equivalent of a numeric IP address and further ensures that every site on the Internet has a unique address.

Given its constant state of flux, the Internet is very difficult, if at all possible, to define. For the ends of this review, however, the Internet will deal with the domestic aspect of the international network of networks being alluded to. It attempts to measure subscribers who access the Internet locally, by the more common bandwidth category used for classification purposes - this being broadband and narrowband - and to give an inkling of dial-up minutes consumed.

## 6.2 Internet Subscriptions

According to the NSO<sup>26</sup>, as at the end of December 2006, for which data is last available, the total number of Internet subscriptions, both broadband and narrowband, amounted to 95,240, up by 492 subscribers from September 2006 and by 6,469 subscribers from December 2005. This subscriber base translates into 23.6 subscriptions per 100 inhabitants, up from the 22.4 subscriptions per 100 inhabitants recorded over the previous ECMR period<sup>27</sup>. This is shown in chart 44.

According to MCA sources, by the end of December 2006, broadband subscribers amounted to 62,948<sup>28</sup>, or 66.1% of total Internet subscriptions<sup>29</sup> as reported by the NSO. This is shown in chart 45. The implicit number of narrowband subscriptions<sup>30</sup> as at the end of December 2006 stood at 31,229.

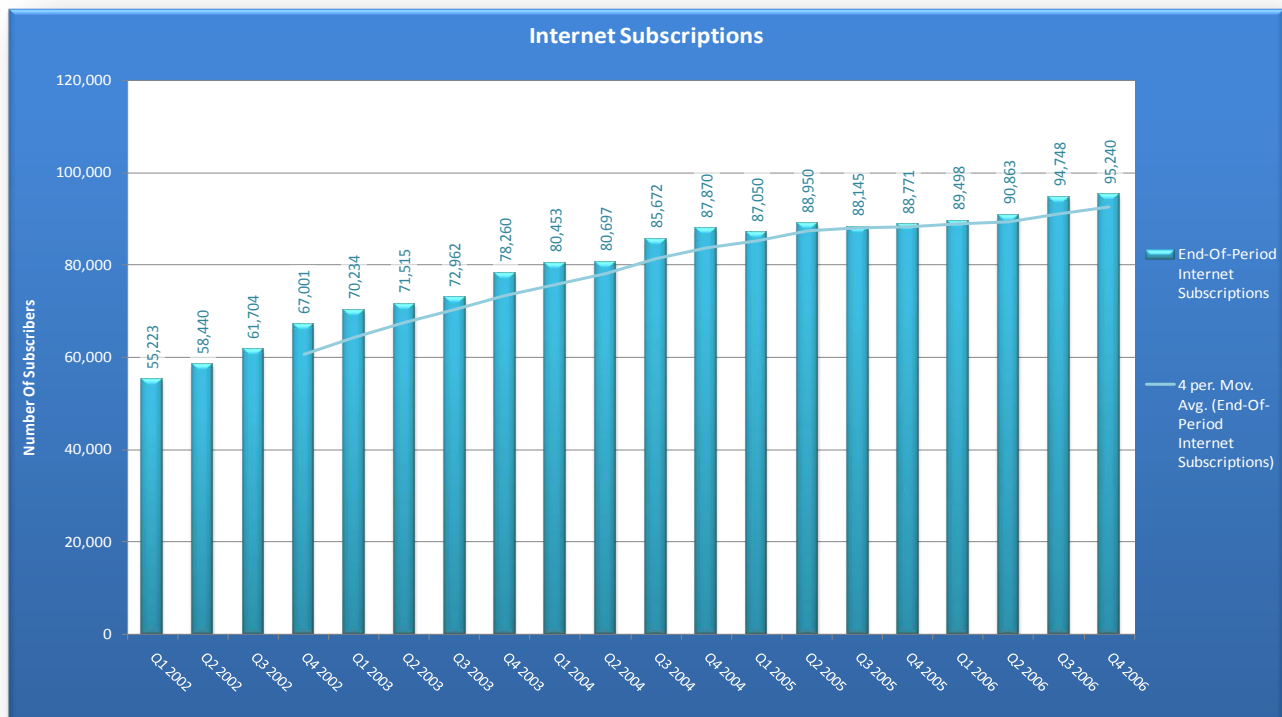


Chart 44. Quarterly End-Of-Period Internet Subscribers With Its 4-Period Moving Average Superimposed.  
Source: NSO - StatDB And Various Information Society News Releases

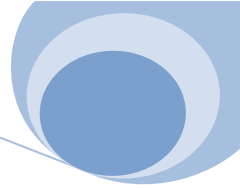
<sup>26</sup> The NSO StatDB is available on <http://www.nso.gov.mt/site/page.aspx?pageid=31> <accessed 2 Jul 2007> and the various Information Society news releases referred to are accessible on [http://www.nso.gov.mt/statdoc/document\\_view.aspx?id=1880](http://www.nso.gov.mt/statdoc/document_view.aspx?id=1880) <accessed 20 Jun 2007>.

<sup>27</sup> This figure will not coincide with the one published in the previous ECMR due to a revision in the data.

<sup>28</sup> This figure excludes some Business Connect services subscriptions, some of which are ADSL-based services terminating on ADSL. This exclusion is subjective and depends on the point-of-view taken. Broadband bandwidth was defined as one capable of 128kbps or more. Figures provided are provisional.

<sup>29</sup> The figures published here do not tally with those published on the previous ECMR because of the different sources of data being used. The figures published in the previous ECMR were NSO figures, while the figures being published have been extracted from MCA sources.

<sup>30</sup> These have been calculated by subtracting the broadband subscriptions as per the MCA database from the figures for Internet subscriptions reported by the NSO. Due to differences in methodologies, this is not a robust indicator and must be interpreted with caution. The series stops abruptly at December 2006 because NSO data was not available, as at the time of publication of this ECMR, for subsequent periods.



The quarterly end-of-period Internet subscribers by category are shown hereunder in chart 45. Broadband subscribers had, by the end of the review period, gone up by 5,016 subscribers (7.97%) over the previous quarter and by 10,889 subscribers (19.1%) over the previous ECMR period. Narrowband always-on connections, have also gone up by 1,275 subscribers over the previous quarter and by 5,338 subscribers over the previous ECMR period.

The implicit total number of narrowband connections (which should also include dial-up), on the other hand, seems to have been falling over time, with a registered fall of 5,381 subscribers (14.3%) between December 2006 and September of the same year.

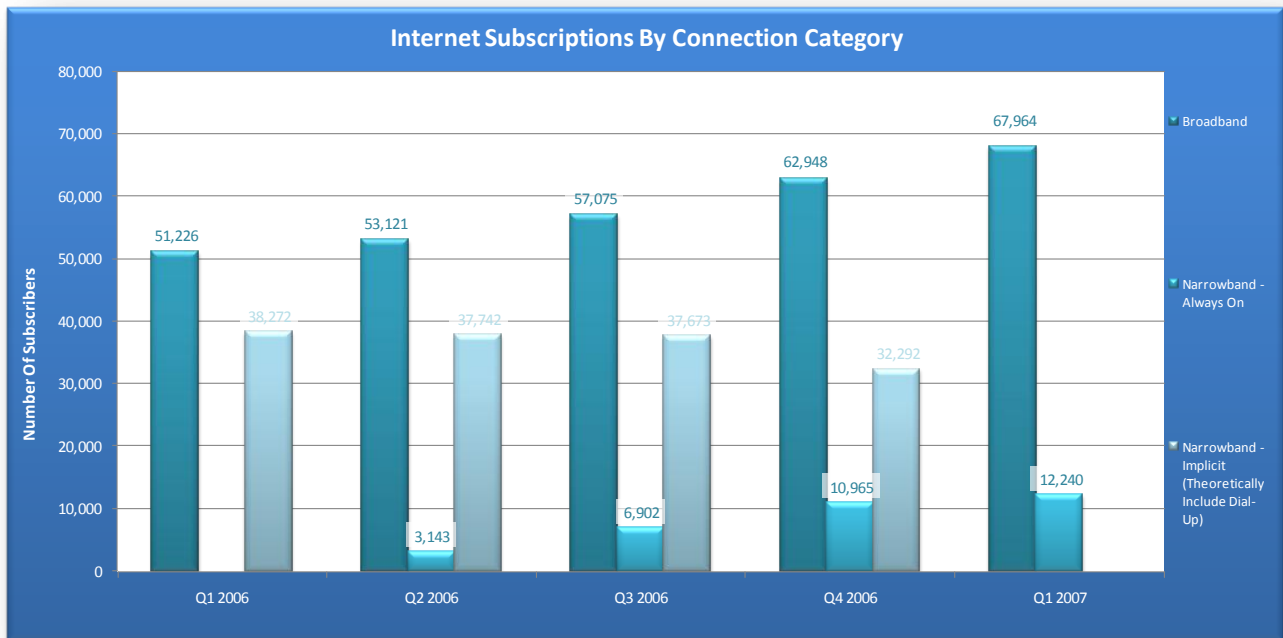
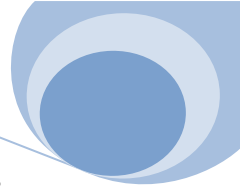


Chart 45. Quarterly End-Of-Period Internet Subscribers By Connection Category.



Digital Subscriber Line (DSL) connections have always been more popular than their cable counterparts in Malta. This is shown hereunder in chart 46. Notwithstanding this, the gap between the two has been diminishing over the current ECMR period as the cable Internet subscriber base has increased more than proportionately vis-à-vis DSL.

For the previous ECMR period, the DSL/cable market split ratio stood at 55%-to-45% DSL-to-cable subscriptions. As at the end of this ECMR period, the same ratio stood at 52.5%-to-47.5%.

The increasing popularity of always-on Internet is palpable, and this is all the more evident when seen together with the data provided in the next section of this review.

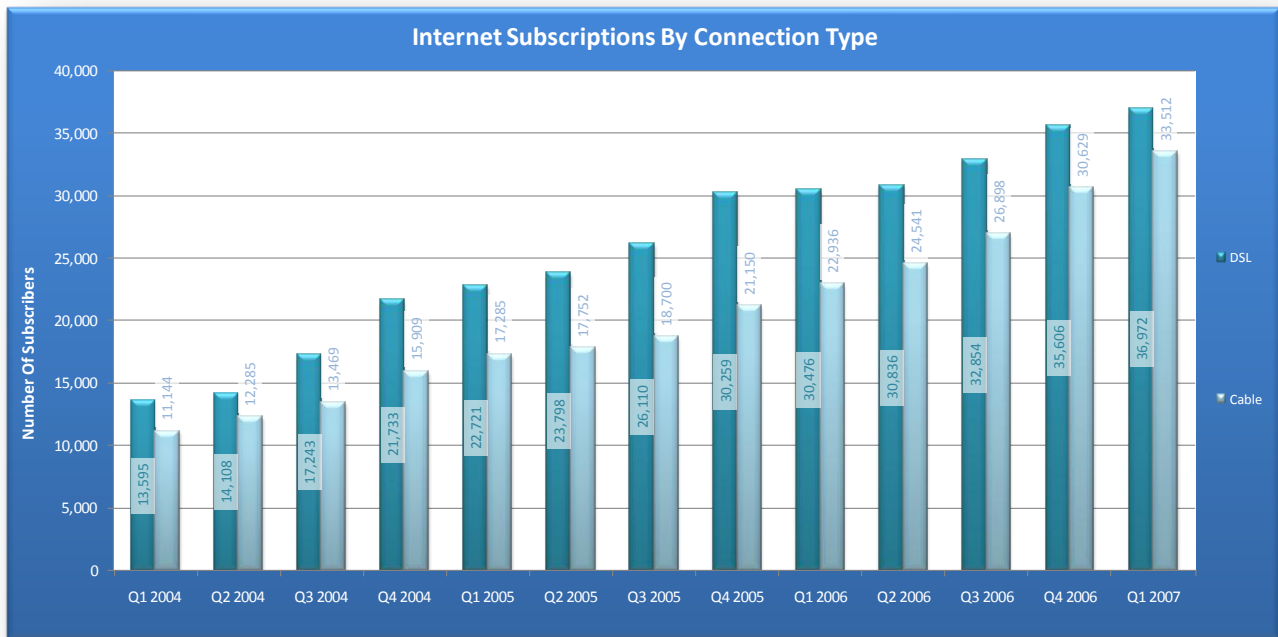


Chart 46. Quarterly End-Of-Period Internet Subscribers.

## 6.2 Internet Traffic - Dial-Up

Chart 47 shows the number of fixed line minutes used by subscribers to access the Internet. As illustrated, the downward movement in Internet minutes continued during the current review period, albeit with a mildly diminished impetus. The greater part of this drop and its diminished impetus are both attributable to residential dial-up Internet minutes. This is shown in chart 48 on the next page. Business dial-up Internet minutes have also registered a decline with the rate of decrease in business dial-up minutes also showing signs of a slow down, although this is not immediately evident due to the scale being employed in chart 48.

In comparison to its previous year counterpart, the period under review saw a fall of 19,102,330 minutes, making up for a hefty 57.3% - more than half - of total dial-up minutes. Compared to the previous ECMR period, the fall in Internet minutes amounts to 5,596,080, corresponding to a 28.2% decrease. The primary reason of this inexorable decline may be said to be the increased take-up of 'always-on' Internet which includes narrowband as well as broadband bandwidths. In relative terms, residential Internet minutes accounted for 87% of total Internet minutes.

Despite the drop in the number of registered calls to dial-up Internet numbers, the average connection duration has decreased only marginally. This suggests that, contrary to intuition, the migration from "dial-up" to "always-on" connections that has been going on so far was not *primarily* due to the economic expediency of migration to those who spend more time on the Internet, though this has certainly had some effect. Over the comparable period a year earlier, the average connection duration for dial-up connections has gone down by 12.6% from 112.7 minutes to 98.5 minutes.

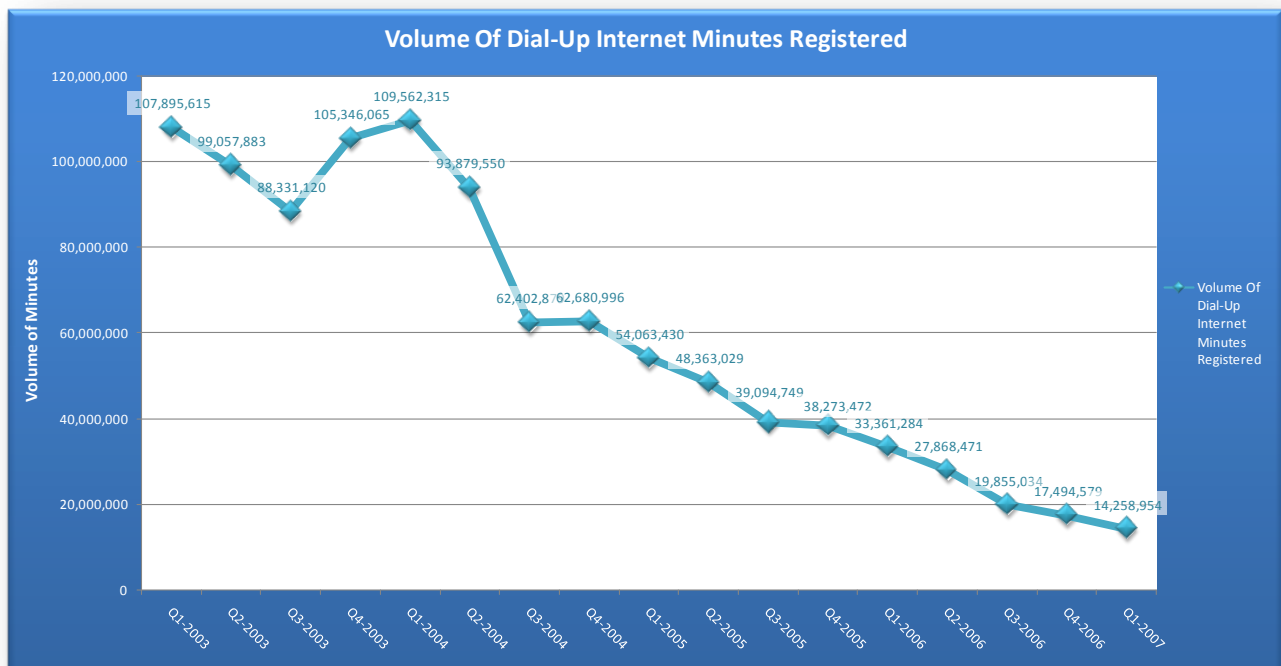


Chart 47. The Total Volume Of Internet Minutes Registered.

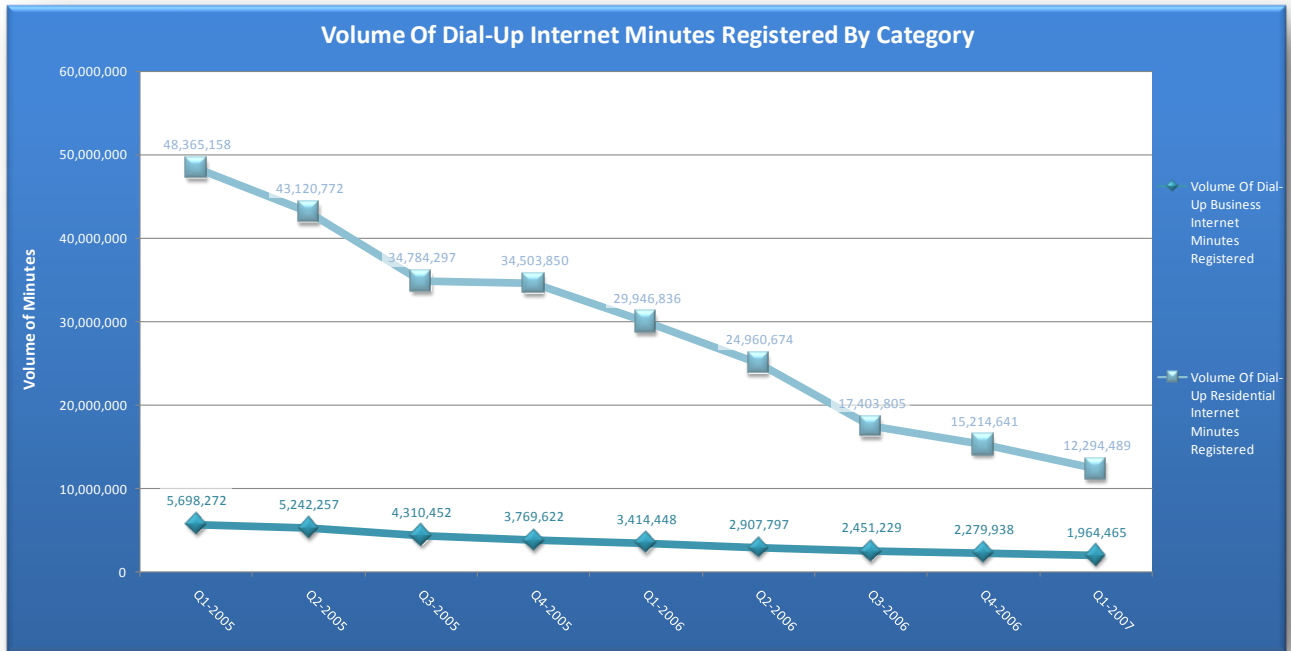
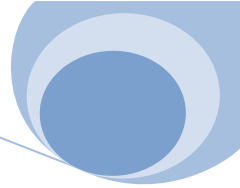


Chart 48. The Total Volume Of Internet Minutes Registered.