

Electronic Communications Market Review

April 2006 – September 2006

Malta Communications Authority, Malta, 2006

Published by the
Malta Communications Authority
Pinto Wharf
Valletta Waterfront
Valletta VLT 01
Malta

Tel: (+356) 21 336 840
Fax: (+356) 21 336 846
email: info@mca.org.mt
Web: www.mca.org.mt

For further information or feedback, please contact:

Bernard Mallia
Malta Communications Authority
Pinto Wharf
Valletta Waterfront
Valletta VLT 01
Malta
Tel: (+356) 21 336 840

All our publications are available online on the captioned url .

Executive Summary

This is the ninth publication of the Malta Communications Authority's (MCA) Electronic Communications Market Review. This report provides a general overview of the industry's performance for the six months ending 30 September 2006 and includes an analysis of the main trends and developments in the various sectors of the Maltese communications market.

As per the previous Electronic Communications Market Review, the most highly-used form of communication is still the fixed network, albeit activity thereon has continued on its downward trajectory during the period under review with a decrease in registered on-net minutes of 27.3 million (9.6%) over the comparable last year period. In total, PSTN-originating traffic fell by 28 million minutes (9.1%) relative to that registered in quarters 2 and 3 of 2005. During the same period, the subscriber base had fallen by 1.3% in relation to the same 6 months of the previous year. In quarter 3 of 2006, 17.6% of subscribers were business subscribers, with the remaining 82.4% being residential.

As at the end of the period under review the growth rate in the mobile telephony subscribers and minutes has continued unabated. The mobile subscriptions base grew by 6.1% or 19,872 over the comparable period of 2005, bringing the local mobile penetration rate to 86%. At the end of the period covered by this review 29,585 subscribers (9%) were on postpaid plans whereas the remaining 315,901 (91%) were on prepaid plans. Meanwhile, during the 6 months covered by this review, mobile-to-mobile traffic rose by 18.2 million (26.91%) relative to the same quarters in 2005.

The downward trend in mobile-originating traffic terminating on PSTN seems to have stabilized, whereas mobile-originating traffic passing through the international gateways exhibited a pronounced upward trend. *During* the current review period, registered ARPU went up by LM0.39 from LM9.64 in last year's comparable period to LM10.02. As at the *end* of the review period it stood at LM10.21. Mobile-originating voice traffic grew by 23.3% over the comparable period last year. In quarter 3 of 2006, voice traffic stood at an all-time high 49.6 million minutes.

During the current review period, SMS traffic had grown by 14 million units (4.7%) over the comparable period last year. This is, in all probability, due to the promotional offers and the price differential between text and voice prices in Malta. It has been confirmed, in this review, that only Danish, Polish and Czech SMS prices are lower, with only the former being significantly so.

MMS traffic fell by 96,989 units over the previous reporting period. This confirms that MMS has taken off only limitedly.

The total number of digital and analogue TV subscribers at the end of September 2006 stood at 108,204, translating into a yearly increase of 8,633 subscribers and spelling a subscription-rate-to-household ratio of 84.5%.

As at the end of the review period, Internet subscriptions amounted to 94,748, up by 6,553 from September 2005. This implies a ratio of subscriptions per 100 inhabitants of 23.5. Of these 56.8% were broadband subscribers, with the remaining 43.2% being narrowband subscribers.

Following the introduction of the 128 kbps bandwidth "always-on" Internet plan, dial-up minutes fell by 45.4% of total dial-up minutes over the span of a year.

The review period was also characterised by interconnection agreements between fixed networks and the setup of a carrier pre-selection operator. As per the MCA's glidepath for mobile interconnection rates, such rates have remained constant over this review period and are due for further downward revision in January 2007. During the current review period, there were no developments in the area of PSTN interconnection rates either. However, on the 18 of December 2006, after this review period had elapsed, the MCA issued a consultation document on the fixed interconnection pricing review for 2007. This document may be found on <http://www.mca.org.mt/infocentre/openarticle.asp?id=919&pref=1> .

A summary of the results of an E-Commerce survey henceforth to be undertaken at regular intervals is also available in this report.

1 THE FIXED LINE MARKET

1.1 Fixed Line Subscriptions

As at the end of September 2006 the number of fixed-line telephony subscribers stood at 202,331. This represents a rise in subscriptions of 0.47% in relation to the figure recorded in March 2006 and a rise of 0.2% relative to the same quarter last year. These figures hide two partially countervailing trends, a downward one where business subscribers are concerned and an upward one when it comes to residential subscribers.

As per the previous Electronic Communications Market Review (ECMR), the penetration of fixed line telephony still stands at 50 lines per 100 inhabitants.

Chart 1, which follows hereunder, shows the split between residential and business subscribers. In September 2006 17.6% of fixed line subscribers were classified as business lines with the remaining 82.4% being residential.

In the period under review, Maltacom was still a monopoly in the PSTN market, albeit a number of applications for PSTN service provision had been submitted to the MCA and were expected to commence their operations during the next ECMR period.

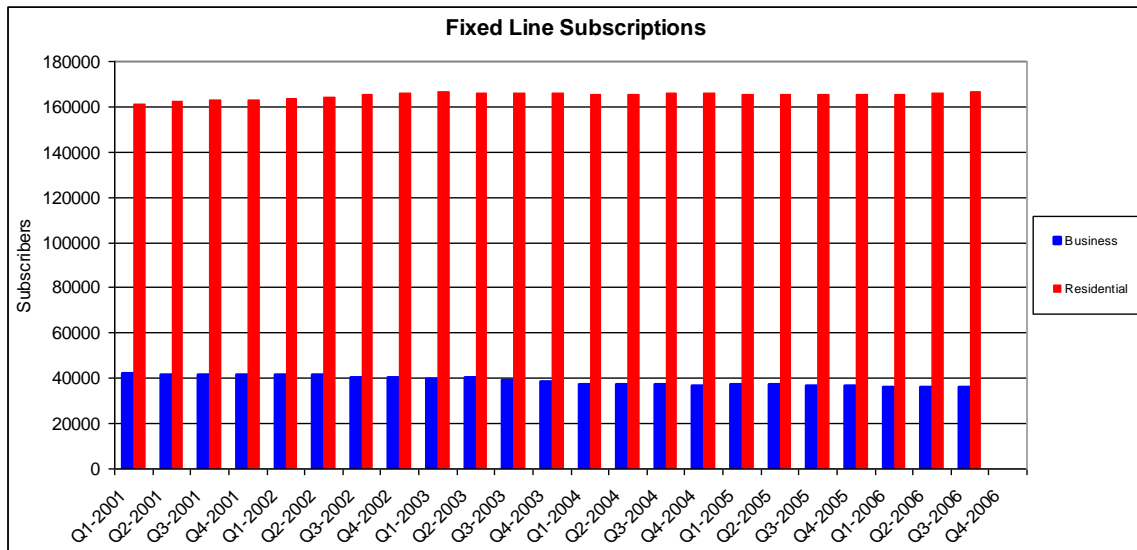


Chart 1: Fixed Line Subscriptions.

1.2 Fixed Line Telephony Traffic

1.2.1 Fixed line outgoing traffic terminating on the same network

Chart 2, below, depicts fixed line traffic minutes originating and terminating on Maltacom's own network. It is immediately evident that the downward trend in PSTN on-net minutes documented in previous ECMRs has been accentuated. Concomitantly mobile telephony traffic has been increasing so that it may be said that, at least in part, this is ascribable to fixed-to-mobile substitution. Other PSTN substitutes that are coming in vogue especially with the advent of broadband Internet, such as free-to-use Voice Over Internet Protocol (VOIP) telephony, might also be another factor accounting for the downturn in fixed telephony minutes, though the latter cannot be easily quantified on account of its elusiveness to measure. Moreover, mobile-originating traffic terminating on the Public Switched Telephone Network (PSTN) has also been on the wane.

Quantitatively, the drop in Maltacom's on-net minutes between this ECMR period and the comparable period last year amounted to 27,285,025 minutes and represented a chunky 9.6% of traffic.

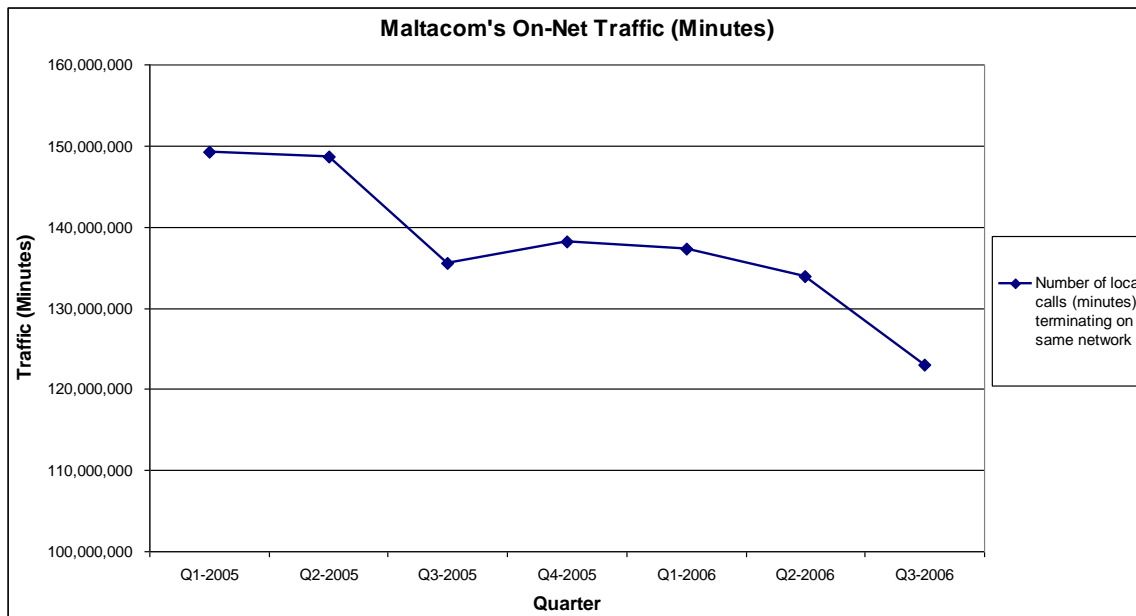


Chart 2: PSTN On-Net Traffic Volume In Minutes (Includes Both Business And Residential Line Minutes).

As Chart 3 on the next page shows, the market category for PSTN-Originating traffic terminating on mobiles might also be set to follow the same trajectory as its PSTN-Terminating counterpart, albeit the MCA is not in possession of a long enough time-series in order to be able to confidently assert that this is definitely the case¹.

Given the length of the available time series, what the MCA is able to aver is that for the period under review, if the data had to be deseasonalised, a very unequivocal – albeit mild – downward movement would emerge.

¹ This is so because, given the multivariate nature of the statistical model that needs to be constructed for such ends, the detraction in ‘degrees of freedom’ would be too large in relation to what is needed for a “size of statistical test” (i.e. 1 minus the probability of rejecting the null hypothesis in error, also known as a statistical type I error) deemed appropriate for forecasting.

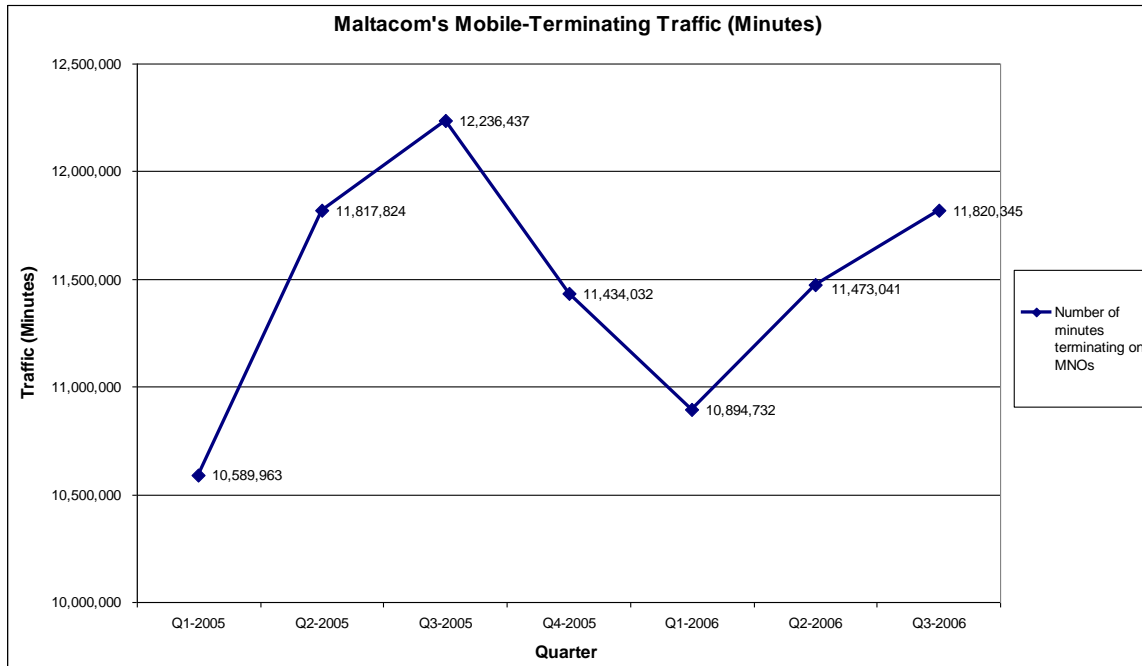


Chart 3: PSTN Off-Net Traffic Volume In Minutes.

2 THE MOBILE MARKET

2.1 Mobile Telephony Subscribers

As at September 2006, there were 345,486 Active-3² mobile subscribers in Malta. This represents an increase of 19,872 (or 6.1%) active-3 subscriptions compared to the last ECMR's end of period and 20,723 (or 6.4%) over September 2005. Effectively, this means that Malta had a mobile penetration rate of 86% at the end of the period under review³. The average penetration for the EU during the second quarter of 2006 stood at 100.4%⁴, with Chart 4 below highlighting the average penetration per country compared to the EU average for the first two quarters of 2006.

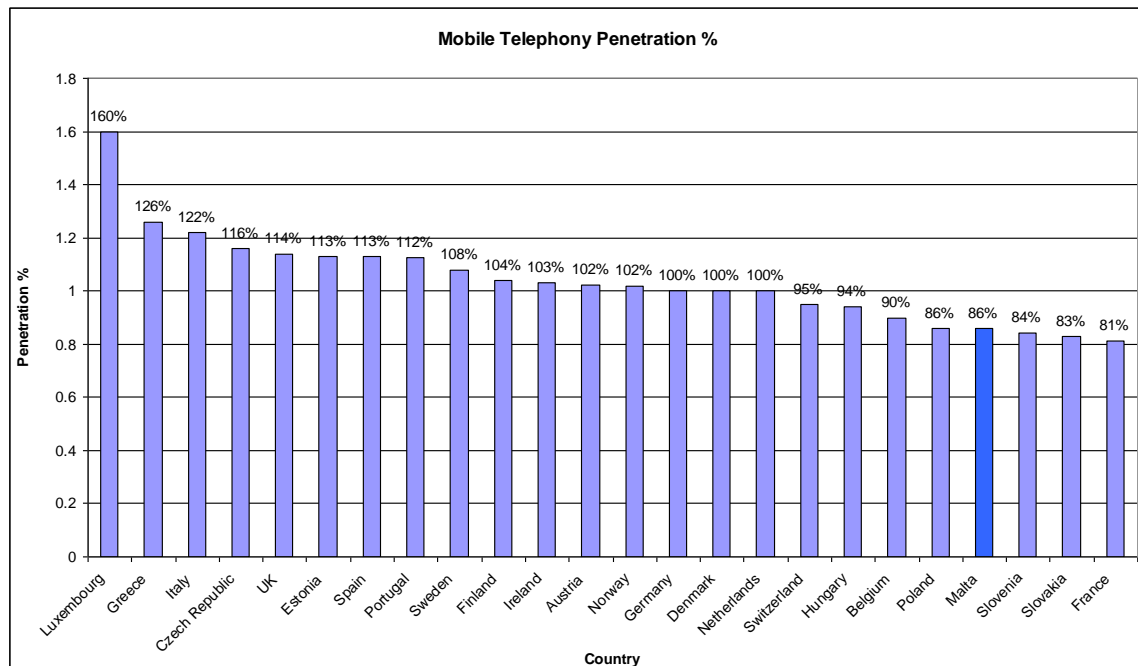


Chart 4: Mobile Telephony Penetration % Throughout Selected EU Countries.

Source: Tarifica Statistics and MCA database. Similar statistics for the previous two quarters are downloadable from http://www.icp.pt/streaming/2img_3q06.gif?categoryId=196523&contentId=423310&field= ATTACHED_FILE <accessed 18 Dec 2006>.

² The “Active-3” definition only counts in subscribers that have been active during the preceding 90-day period.

³ Caution is advisable in interpreting this statistic. This does not mean that 86% of the Maltese population has access to a mobile phone and is actively using it, but rather that the proportion of active lines in relation to the Maltese population is 86%. More explicitly, by way of illustration, this means that if all those who have a mobile phone own 2 mobile SIM cards, only 43% of the Maltese population would have access to mobile telephony but the proportion of mobile lines to the Maltese population would still be 86%. Though no presumption is made that everyone has more than one active mobile SIM, it is clear that *some* subscribers do own more than one SIM card. This is especially so with the advent of on-net tariffs. The population statistic used in the computation of this indicator has been obtained from the “Census of Population and Housing – Preliminary Report”, NSO (2006) p. 3. This statistic does not tally with the one presented in the EU Commission’s 11th Implementation Report since the said report makes use of data for a different time period.

⁴ Vide <http://www.icp.pt/template12.jsp?categoryId=217922#2> <accessed 18 Dec 2006>. This figure varies from the 96% reported in the EU Commission’s 11th Implementation Report due to the fact that the latter uses data for October 2005 or June of the same year where October data is unavailable.

Subscriber base growth, depicted in Chart 5, below, seems to have picked up again during the two quarters being reviewed. This trend stands in stark contrast with the trend observed during the preceding two quarters in which growth showed signs of stabilisation.

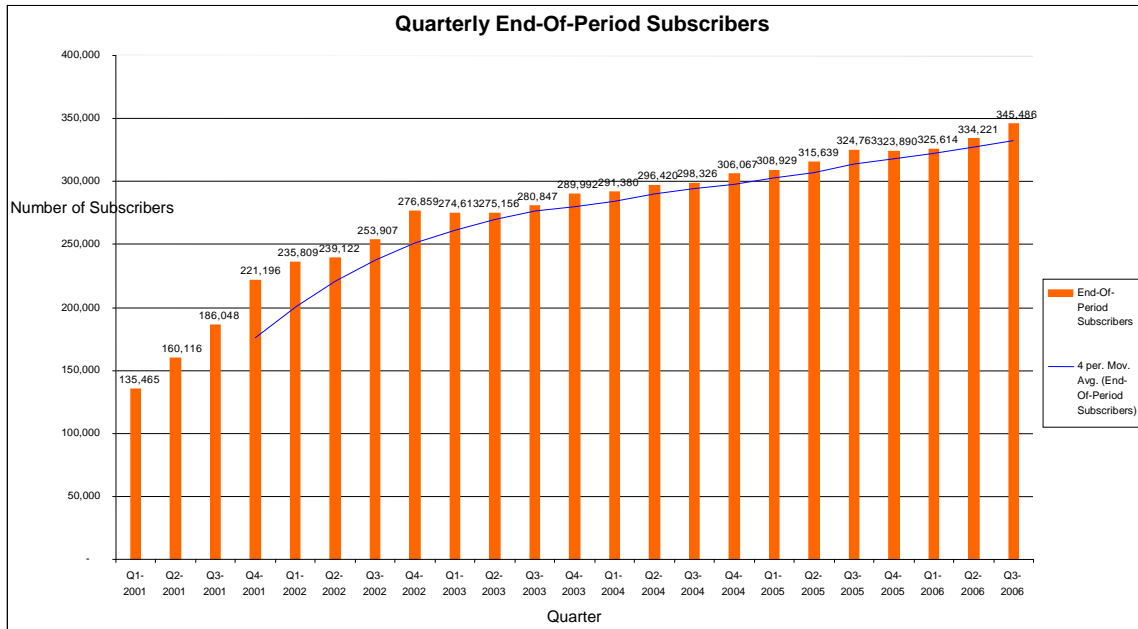


Chart 5: Quarterly End-Of-Period Subscribers And Its' 4-Quarter Moving-Average.

The 4-quarter moving average superimposed on the chart above shows that although subscriber base has been increasing at a decreasing rate for seven consecutive quarters since the second quarter of 2002, the rate of growth has thereafter exhibited a sustained cyclical pattern with average run durations of two quarters. The quarterly change in the 4-Quarter-Moving-Average is charted below.

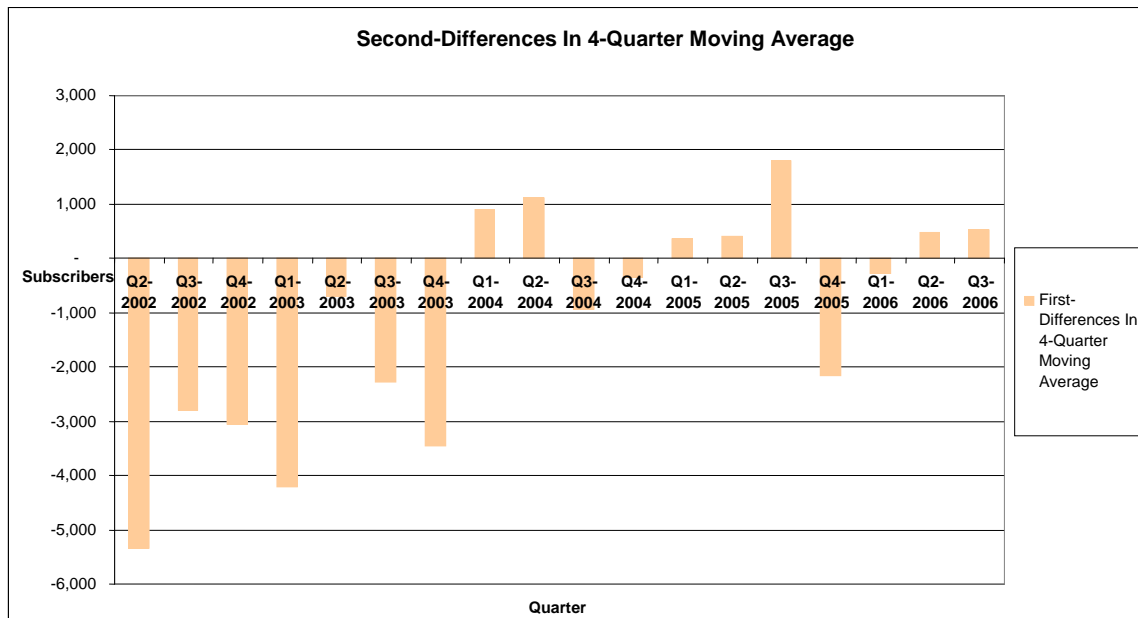


Chart 6: First-Differenced 4-Quarter Moving Average Of The End-Of-Period Subscribers Statistic.

With regards to the structural dichotomisation of subscribers between prepaid and contract, the situation in Malta is as depicted hereunder in Chart 7. 91% of the Maltese mobile subscriber base owns a prepaid card whereas the remaining 9% is made up of contract subscribers. This makes the structure of the Maltese mobile market markedly different from that of the average European Union (EU) country, at least insofar as the prepaid-postpaid dichotomy is concerned. In fact, as Chart 8 shows, 58% of mobile telephony subscribers in the EU are on prepaid plans and 42% are on postpaid plans (http://www.dri.co.jp/auto/report/bud/budweumobcom_05.htm).

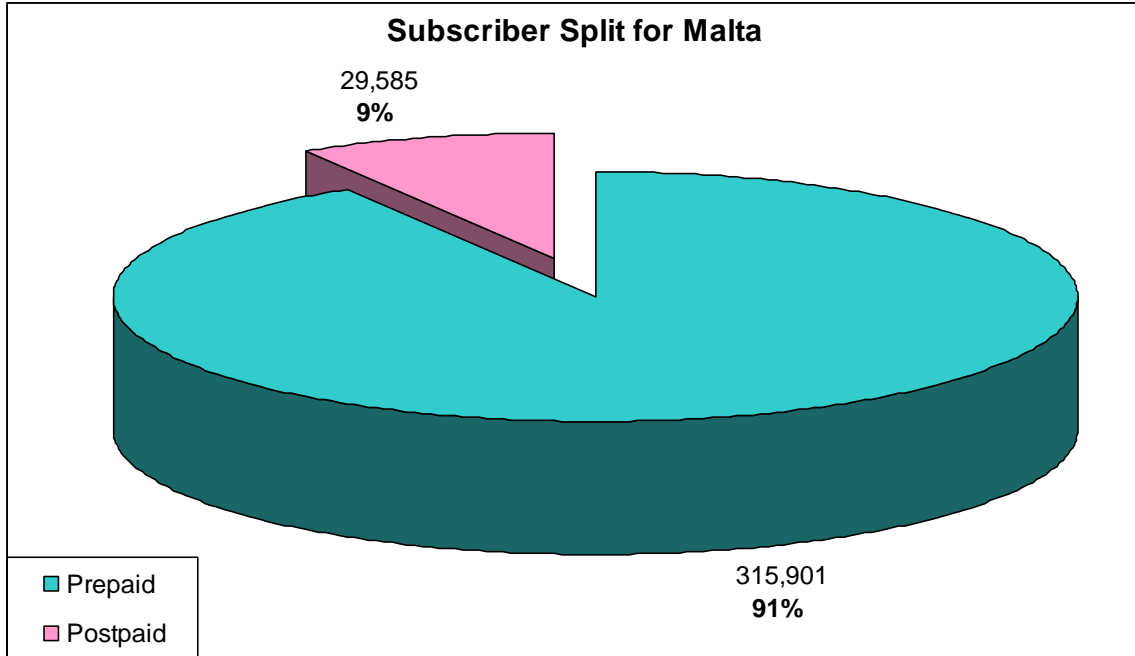


Chart 7: Prepaid-Postpaid Subscriber Base Split For The Maltese Islands.

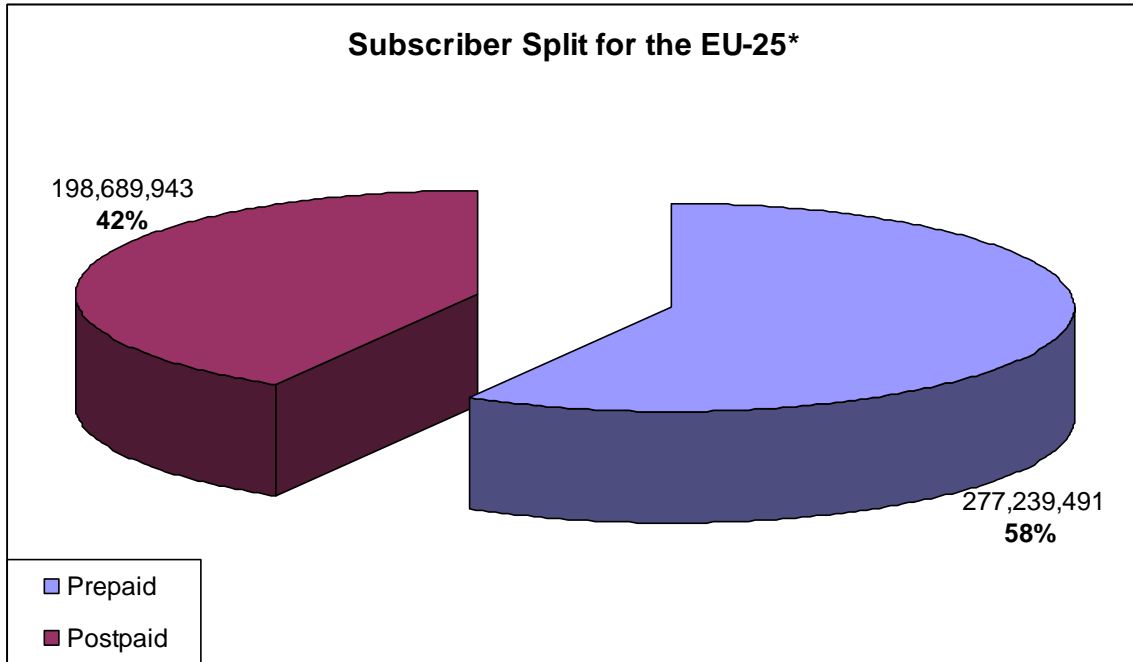


Chart 8: Prepaid-Postpaid Subscriber Base Split For EU-25* Countries.

Source: Tarifica Statistics.

* Malta and Cyprus have been excluded here since the former is the benchmark and since statistics were not available for the latter. Moreover, data for Luxembourg had not been submitted whereas some customer base splits for certain operators are Tarifica estimates and are therefore subject to change when actual data becomes available.

Chart 9 on the next page charts the prepaid-postpaid customer base dichotomy in various EU countries. From all the selected EU countries captioned below, postpaid subscriber base was highest in Finland and lowest in Malta. Since by the very nature of the prepaid-postpaid dichotomy, a subscriber is either on a prepaid or a postpaid plan, the reverse is true of prepaid subscriber bases across the selected EU countries featuring in the chart hereunder. This chart may be thought of as a continuum: the farther away one country is from another, the more dissimilar in terms of the subscriber base the particular country in question is.

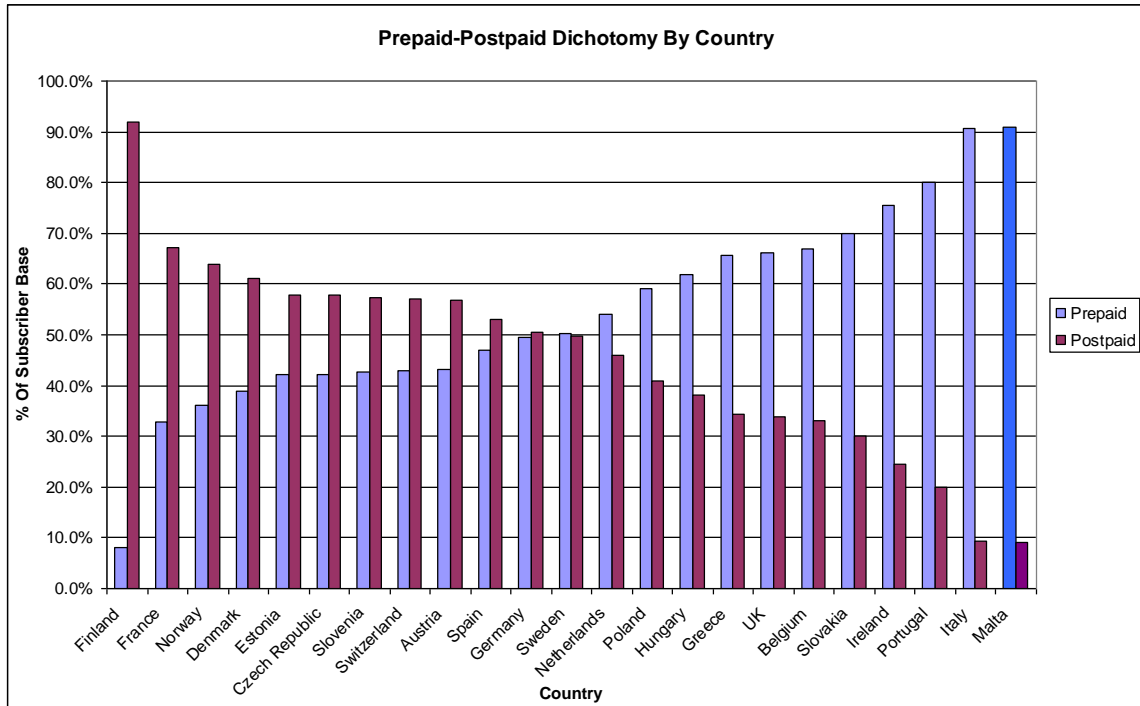


Chart 9: Prepaid-Postpaid Subscriber Base Dichotomy For Selected EU Countries.

2.2 Average Revenue Per User

Chart 10, on the next page, shows the quarterly (monthly-weighted) average revenue per user (ARPU) for the local mobile market. This indicator represents the average amount of revenue generated by a local mobile subscriber over a one-month period and may be thought of as the monthly expenditure on mobile services of a representative subscriber.

ARPU statistics include revenues generated from outbound and inbound traffic of whatever nature and roaming revenues for local subscribers, and exclude the revenues generated by foreign networks' subscribers visiting Malta.

As the chart below reveals, ARPU figures are fraught with seasonality which survives even the smoothing process inherent in quarterly aggregation. The summer period, in this respect, is always a good time for the local mobile network operators (MNOs), for all services offered, aggregated over both the local MNOs, register an increase in this period.

If we had to deseasonalise the ARPU data, say by using quarterly dummy variables or a Moving Average deseasonalisation mechanism, we would be able to observe a clear and somewhat sharp downward trend starting in quarter 2 of 2004 and ending in quarter 3 of 2005. Quarter 4 2005 represents the turning point and notwithstanding the fact that the trend therein is still downward, given the available data points (and hence the degrees of freedom available for computation) it is not statistically significantly different from 0. Thereafter ARPU picks up again and seems, as at the date of publication of this review to have been set on a positively-sloped trajectory. The reasons underlying this reversal might be – and probably are – manifold. General economic perceptions that permeate through every sector and create a self-reinforcing mechanism, the increased maturity of the mobile market, MNO offers intended to goad usage and increase revenue streams⁵ and an augmented usage of one's mobile phone while roaming might all be cited as such factors. Indeed, a list of potentially influential factors, here, would be so lengthy so as to merit a review of its own.

⁵ Such promotional offers usually affect the market both *while* the offer is on and also *after* the offer has come to an end. During an ongoing offer, although the revenue per unit of service usually declines, the revenue stream generated usually inclines. After the offer has taken place, familiarisation with and habituation to a service usually spurs an increased demand for the service(s) hitherto offered at a preferential rate. The latter, however, is not invariable as subscribers might get accustomed to paying the preferential rate for the service in question thereby eliciting resistive cut-backs when the normal rates are subsequently reverted to.

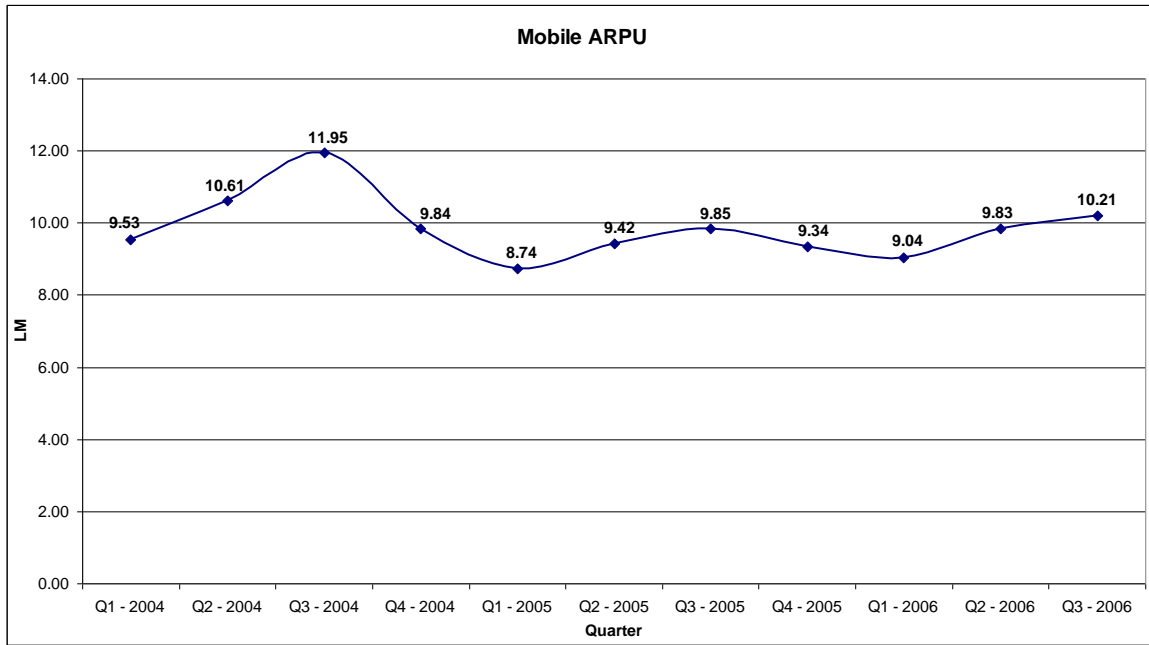


Chart 10: Periodic Movements In MNO-Reported ARPU.

2.3 Outgoing Mobile Traffic

Chart 11 on the next page depicts the total number of mobile minutes terminating on the fixed, mobile and foreign networks. The existence of seasonal fluctuations is indisputable. The unrelenting increase in mobile-originating-and-terminating minutes is also noteworthy. In fact during quarters 2 and 3 of 2006, mobile-to-mobile traffic increased by 26% and 28%, respectively when compared to the same quarters in 2005. These percentages represent a considerable 8,434,861 and 9,735,881 minutes respectively, with the upward trend being ascribable to the various offers being made to subscribers to utilise their mobile phones in off-peak periods (where charges are based on a per-call basis rather than on a per-minute basis) and on on-net calls. The said trend also underscores a continued preference for mobile-to-mobile calls, the inevitable habituation to the conveniences of mobile telephony and the added benefits emanating from the so-called "network economies".

Apropos of the seasonal element in mobile-originating minutes terminating on PSTN, quarter 1 has shown a tendency for being the lowest since the starting point of the time series at the MCA's disposal. This is undoubtedly affected by the number of days in this quarter, which includes February with 28 (or, in a leap year, 29) days, but is not totally ascribable to it. The latter can be easily proven by weighting the registered quarterly minutes by the number of days in the respective quarter⁶. Quarter 3, on the other hand, has persistently been the best. Notwithstanding that within the data charted hereunder the seasonality element is clear, the amplitude of fluctuations exhibits signs of consistent dampening. Although this is not clearly apparent because of the scale of the chart, the downward trend in mobile-originating minutes terminating on PSTN seems to have stabilised.

Lastly, when it comes to international minutes, the setting seems to be very similar to the one for PSTN-terminating mobile minutes discussed above, with quarter 1 being the worst in terms of minutes registered and quarter 3 being the best. Once again, the latter is partly, but not *in toto*, attributable to the number of days in February. In contradistinction to PSTN-terminating mobile minutes, however, mobile-originating traffic passing through the international gateways is exhibiting a very pronounced upward trend.

⁶ Possibly, though this is not provable and has to remain at the level of an introspective conjecture, following Christmas, where the level of social interactions rises necessitating an increase in the demand for the media that make this possible, there comes a period where satiation of social intercourse leads society's desired level of social activity in the opposite direction thus generating the pattern we observe in the data.

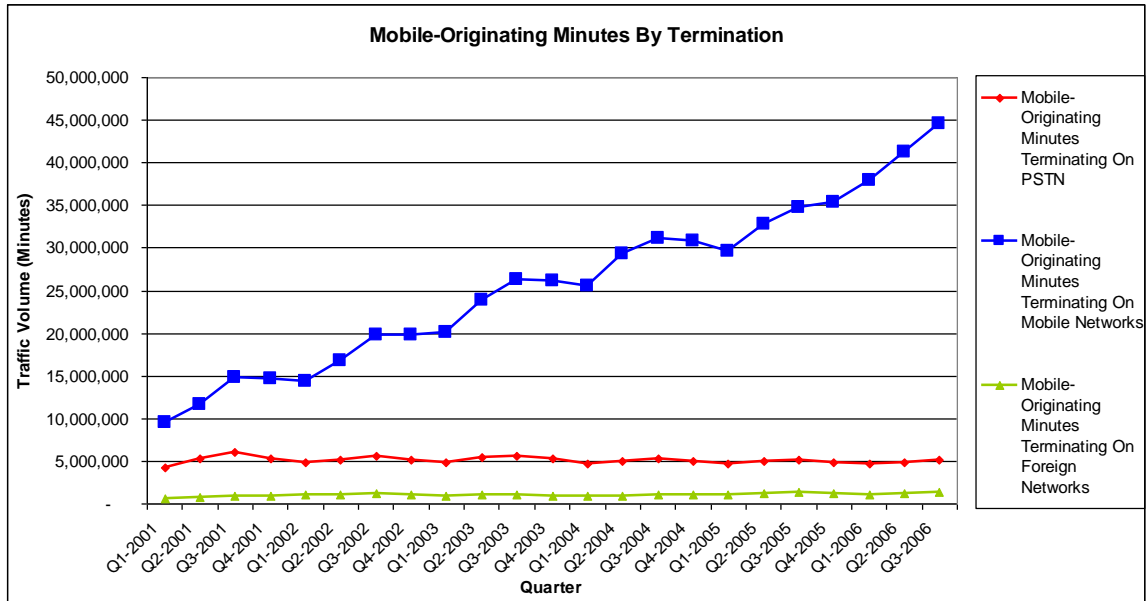


Chart 11: Mobile-Originating Minutes By Termination Category.

2.4 SMS Traffic⁷

Short Message Service (SMS) traffic volumes have continued on their upward trajectory and the rate of the increase is now as pronounced as it was back in 2004. As Chart 12, below, illustrates visually, SMS usage grew by 15,130,416 messages, or 7.3%, between this ECMR period and the one for quarters 2 and 3 of 2005.

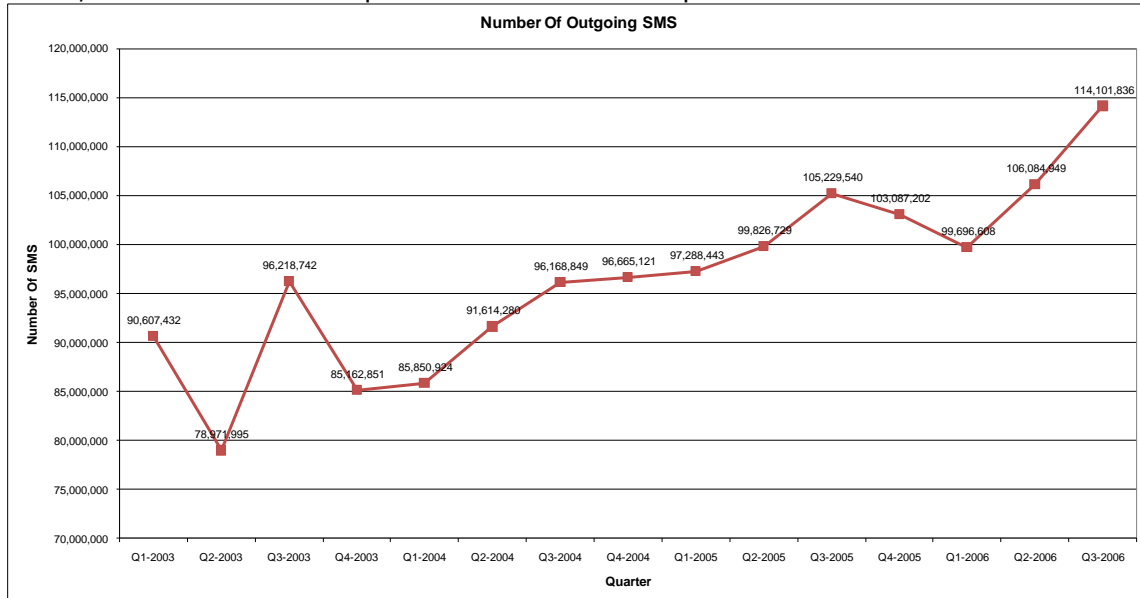


Chart 12: total Volume Of Outgoing SMS.

The increase in SMS traffic may be attributed to the increase in the number of mobile subscribers, which, as intimated in section 2.1 of this review, have gone up by 6.1% over the previous ECMR period alone. Undoubtedly, SMS usage is being fuelled by the high price differential between SMS and voice tariffs as well as the myriad promotional offers featuring texts in bulk. Withal, it has to be remembered that, insofar as the domestic market is concerned, there is strong evidence of a multiplier effect where texting is concerned. The logic behind the SMS multiplier is that a small initial-round increase in SMS traffic usually ends up generating much more SMS traffic than the initial-round volume⁸ as SMS addressees reply their incoming SMSs.

As Charts 13 and 14, hereafter, reveal, Maltese SMS tariffs are among the lowest in the whole of Europe, and this holds true for on-net as well as for off-net SMS prices. As a matter of fact, a domestic-terminating SMS in Malta costs less than half the average price of a domestic SMS in the EU countries featuring in the charts hereafter. While Polish and Czech domestic SMS cost less in absolute terms than domestic SMSs in Malta, it is only in Denmark that a domestic SMS costs significantly less.

⁷ SMS traffic figures have been revised following the original ECMR publication due to a revision of data by one of the operators.

⁸ Several non-domestic studies purporting a similar *modus operandi* exist. *Inter alia, vide* "SMS Interoperability: A Case for SMS Interoperability Now", VeriSign Communications Services, 2004 http://www.verisign.com/stellent/groups/public/documents/white_paper/001962.pdf <accessed 20 Dec 2006>.

"Handset and Network Value", RTT, June 2004 http://www.rttonline.com/HotTopics/HT_Jun04.htm <accessed 20 Dec 2006>.

"Multimedia Wireless Messaging Service in Singapore", 3G, 11th September 2002 <http://www.3g.co.uk/PR/Sept2002/4058.htm> <accessed 20 Dec 2006>.

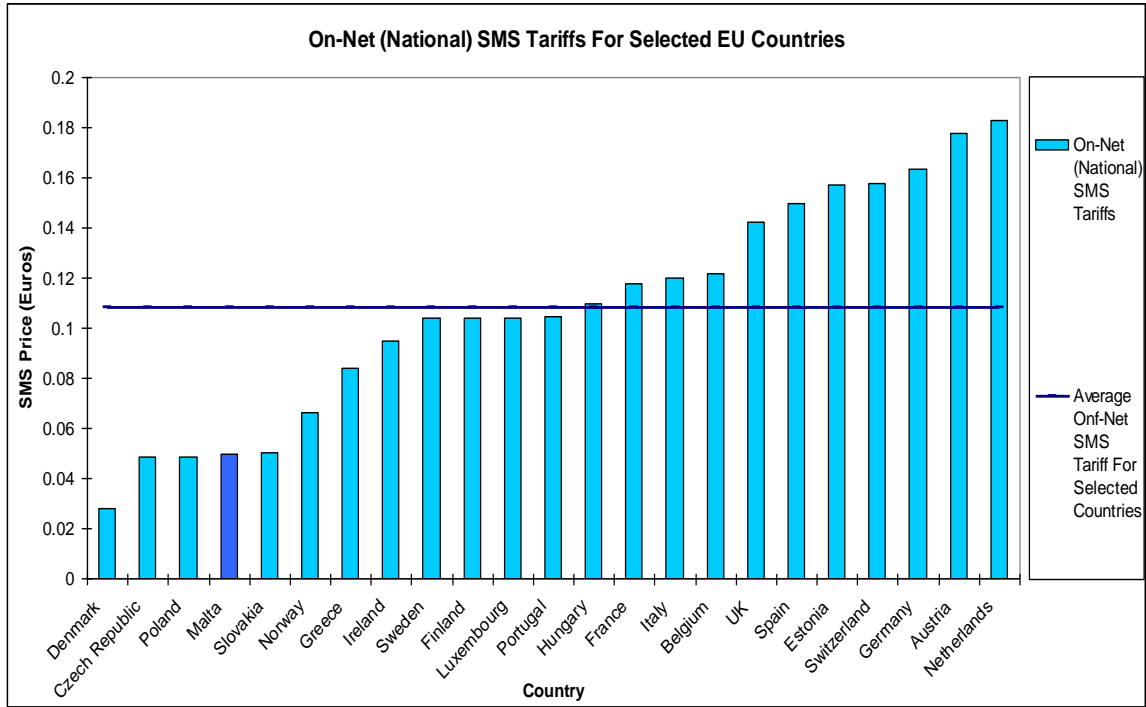


Chart 13: On-Net (National) SMS Tariffs For Selected EU Countries.
 Source: Tarifica Statistics.

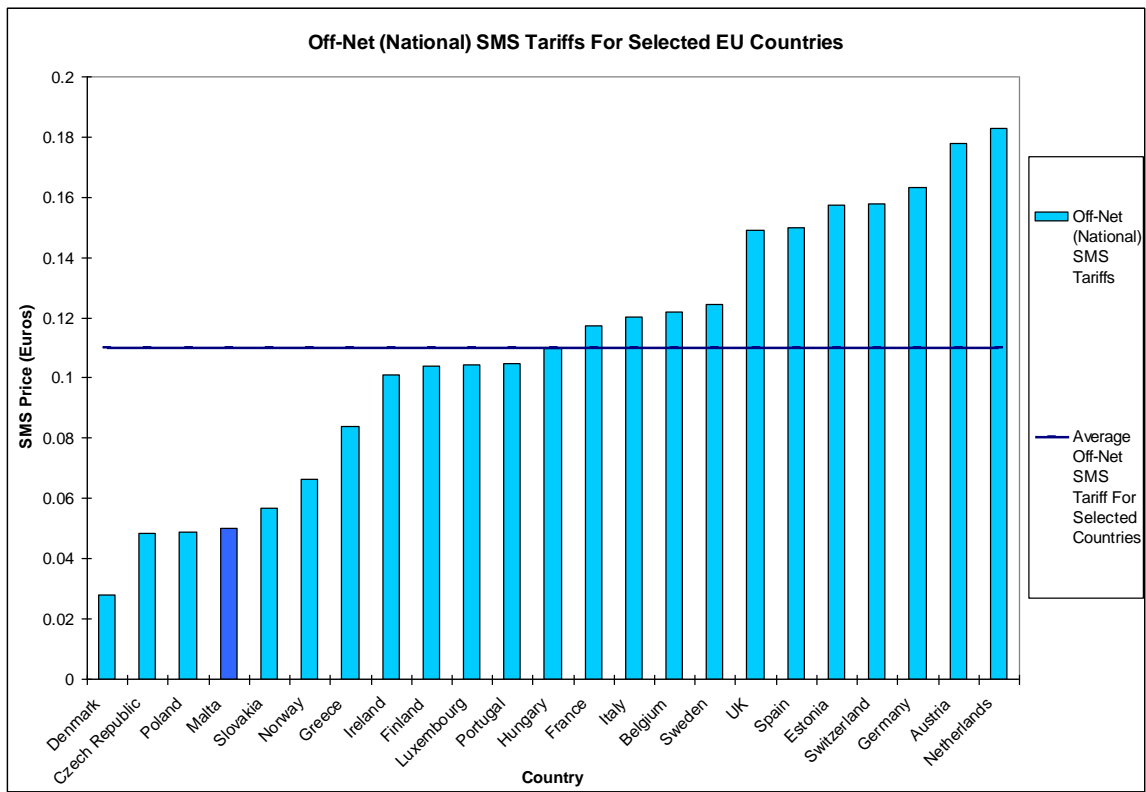


Chart 14: Off-Net (National) SMS Tariffs For Selected EU Countries.
 Source: Tarifica Statistics.

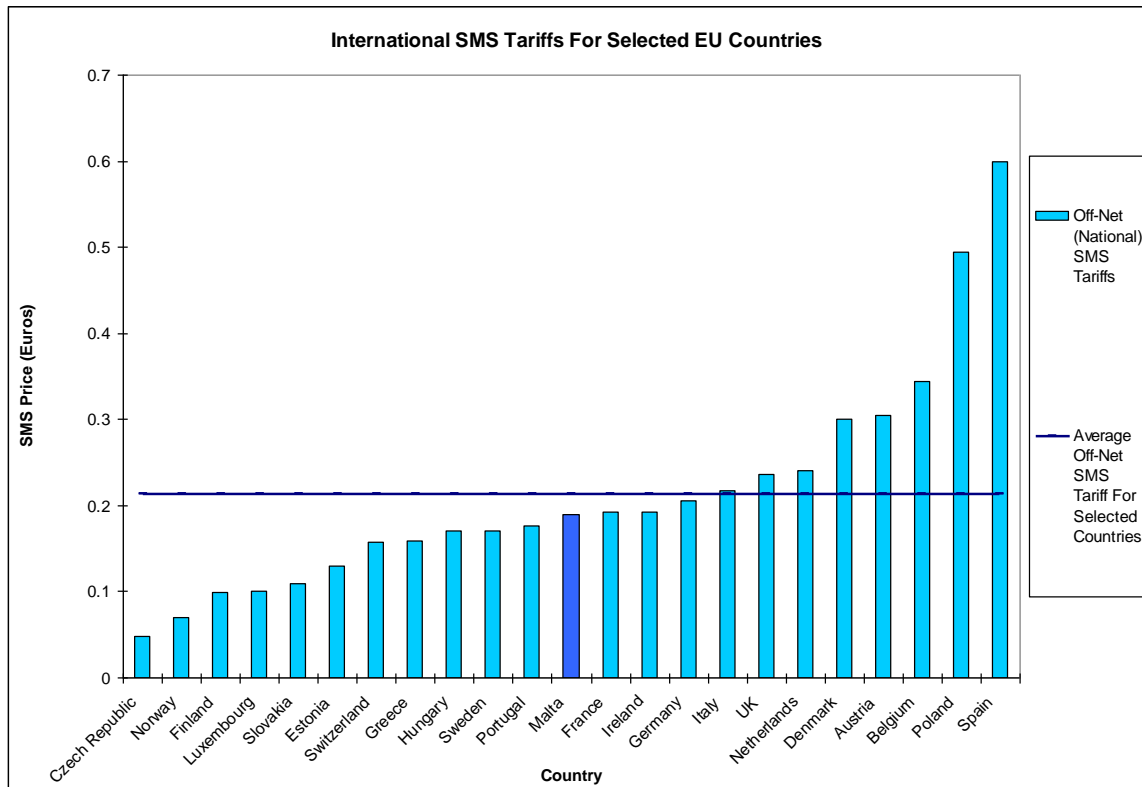


Chart 15: International SMS Tariffs For Selected EU Countries.
 Source: Tarifica Statistics.

Chart 15, lastly, shows that when it comes to foreign-terminating SMS prices, the median price is given by Malta’s SMS prices. Though in this context foreign-terminating SMS prices are still lower than the EU average, the average statistic is being biased by two observations with a high “leverage”⁹ and “Cook’s Distance”¹⁰ thus making them influential on the moments of the data. A boxplot¹¹ confirms that these two observations are indeed statistical outliers. If we had to truncate our data-set so as to exclude these two observations, Malta’s prices for foreign-terminating SMSs would go above the average line superimposed in Chart 14.

⁹ This statistic measures the influence of a data-point on the fit of computed data moments.

¹⁰ This is essentially a measure of how much the mean-deviations of all data points would change if a particular case were excluded from the calculation of the statistic. As in this case, a large Cook’s D indicates that excluding a data point from computation of the statistic changes the coefficients substantially.

¹¹ A boxplot, variously referred to as a box-whisker plot, *inter alia*, yields a plot of potential outliers.

2.5 Multi-Media Messaging

Multi-Media Messaging (MMS) refers to the transmission of messages containing text, graphics, photographic images, and audio and video clips between mobile devices.

MMS was introduced in Malta towards the end of 2002. The service was free of charge until March of 2004, which quarter does not feature in Chart 16 hereunder, but there was no MMS interoperability between local MNOs. In the last ECMR it was claimed that when considering the number of MMS enabled handsets that were in use then, MMS traffic was on the low side. In this ECMR we are in a position to add that despite the falling cost of MMS-enabled handsets and their uptake, MMS usage is still ebbing. Tariff complexities, cost considerations, and the perceived need to send an MMS could all contribute towards the construction of an explanation of why MMS has taken off only to a limited extent in Malta. Ignorance of one's mobile handset interface and the wider availability of substitutes (such as digital cameras with higher resolutions and better quality image capabilities, but which, admittedly, cannot be transferred as easily – but also will not cost as much) might also be hampering MMS traffic.

As Chart 16, below, shows, MMS traffic in quarter 2 of 2006 had fallen by 48,930 units over the previous quarter and it fell again by a further 19,189 units in quarter 3. MMS traffic volumes for the period being reviewed fell by 96,989 units for the current reporting period over the previous one and by 165,333 units over the comparable last-year period.

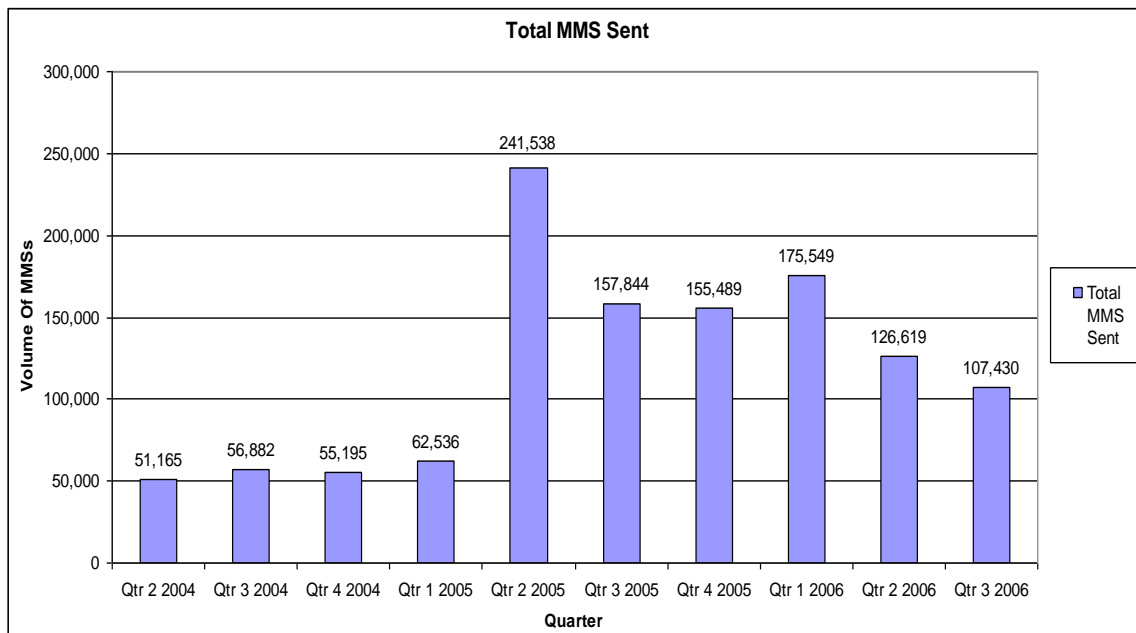


Chart 16: Quarterly MMS Origination Volumes.

3 VOICE TELEPHONY MARKET

3.1 Local Voice Telephony Traffic

The chart below shows the total volume of local voice minutes (both fixed and mobile). Quarter 2 of 2006 witnessed a slight increase of 550,436 domestic minutes over the previous quarter. Quarter 3 of the same year, on the other hand, saw a huge drop in total domestic telephony traffic of 6,966,560 minutes over the previous quarter. Though this is not immediately apparent from Chart 17, this probably reflects a seasonal element as well as a sustained downward trend in domestic telephony volumes fuelled by PSTN-originating traffic which has now been on the wane for a considerable period of time.

The above-mentioned decline has been coming from the business and residential segments alike, and is, of course, the cumulative effect of both.

Nevertheless, with over 280 million minutes of traffic in quarters 2 and 3 of this year, it still remains the most highly used form of communication in terms of absolute volume of minutes consumed. When the present review period is compared with the corresponding 2005 quarters, however, PSTN-originating traffic registered a decline of 28,045,900 minutes, which represent a drop tantamount to 9.1%. This reflects an evolving market structure with higher competition by PSTN telephony substitute services on the one hand (such as e-mails and freeware VOIP computer programmes) and a clear preference for going mobile on behalf of consumers on the other.

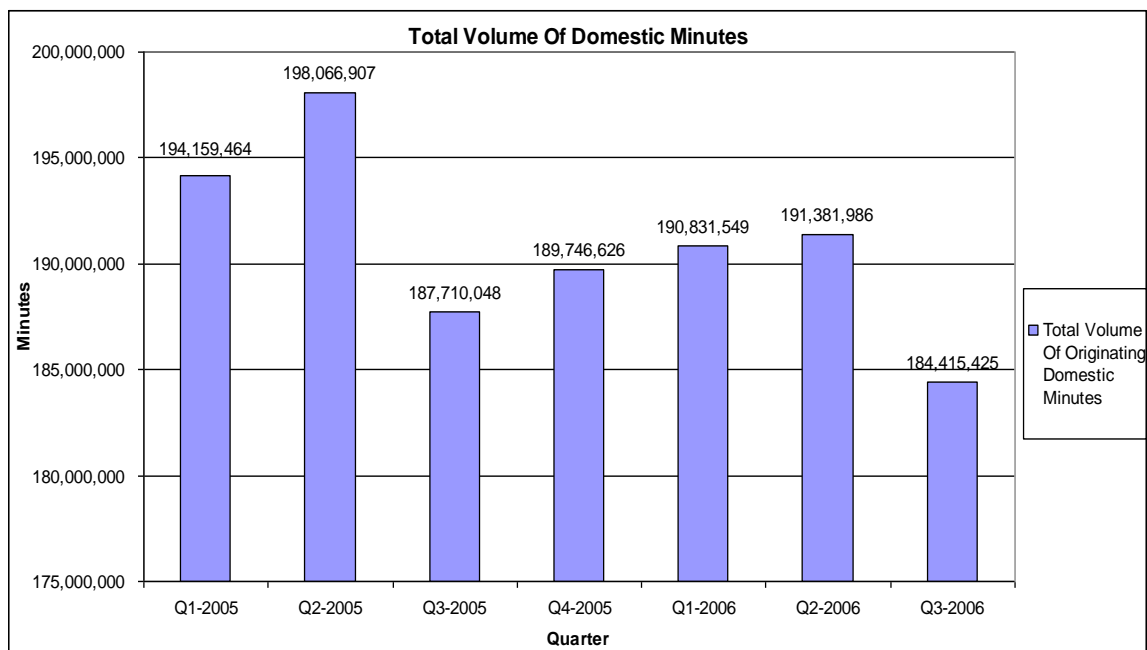


Chart 17: Total Volume Of Domestic Minutes (Fixed & Mobile).

Chart 18 on the next page shows that this is exactly the case. As a matter of fact, since the major part of the traffic volume from domestic networks is made up of PSTN-originating traffic, Charts 18 and 19 look very similar, with the difference being that the amplitude of the drop in the last quarter under review is not as pronounced in the former since it is partly being offset by rising mobile-originating traffic.

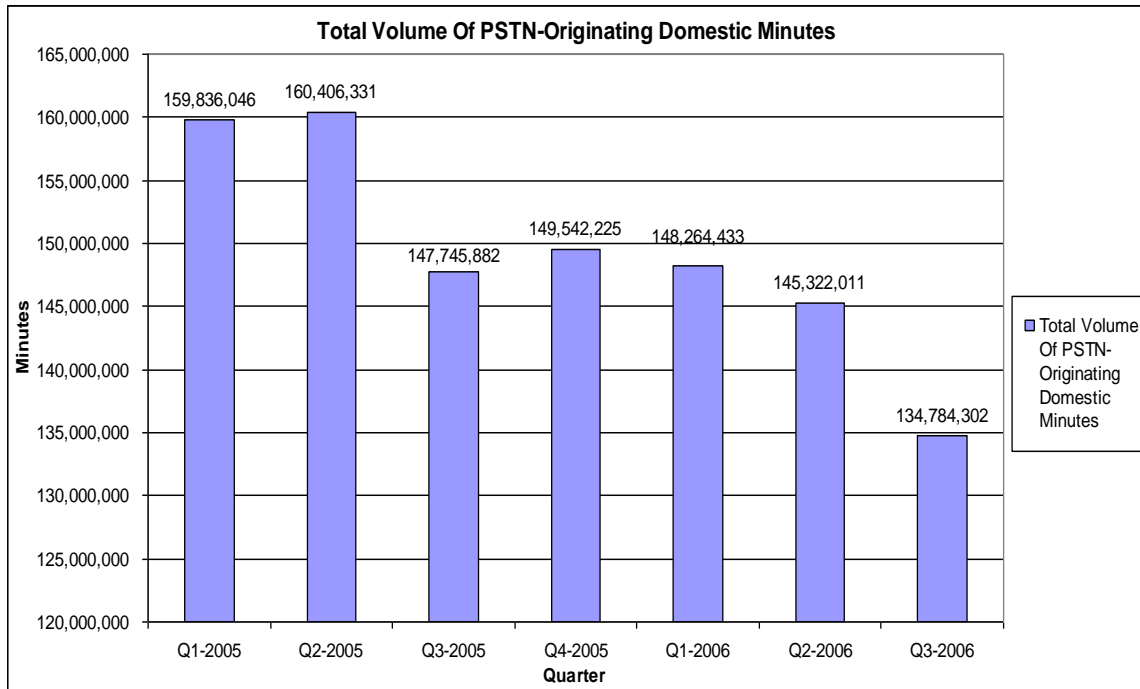


Chart 18: Total Volume Of PSTN-Originating Domestic Minutes (Fixed).

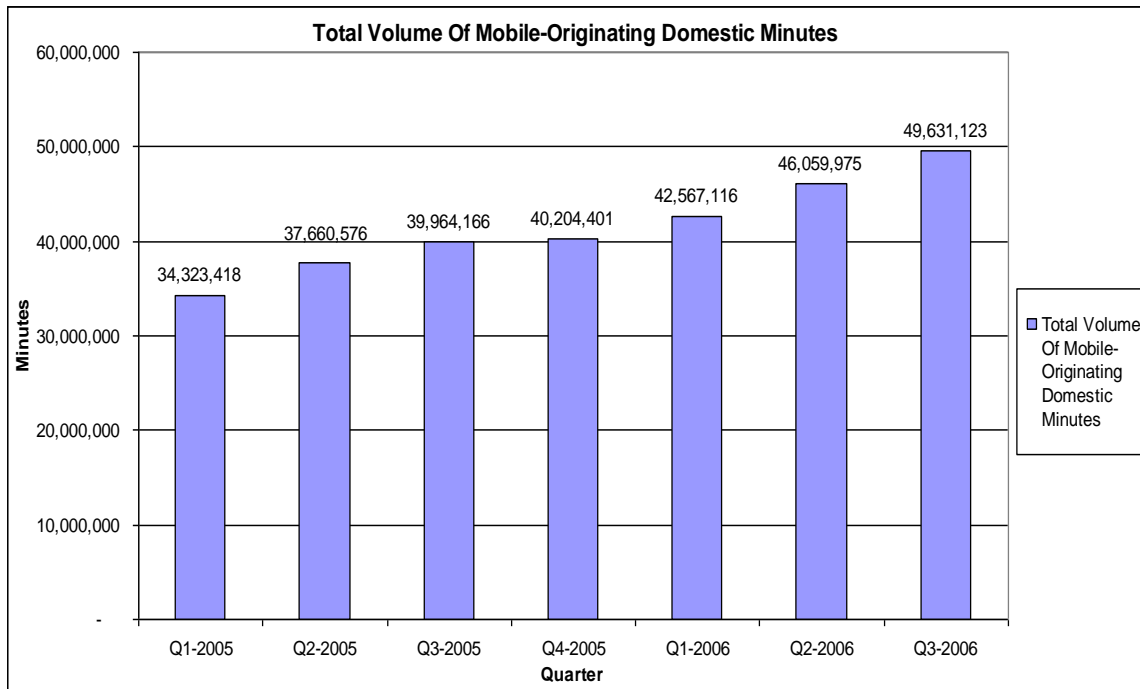


Chart 19: Total Volume Of Mobile-Originating Domestic Minutes.

During the same interlude, mobile-originating traffic grew to more than forty-nine and a half million minutes. This represents an increase of 18,066,355 minutes, or 23.3%, over the comparable quarter in 2005 and an increase of 12,919,581 minutes, tantamount to 15.6% over the previous ECMR period, which encompassed quarter 4 of 2005 and quarter 1 of 2006.

3.2 Voice over Internet Protocol (VoIP) And Payphones

The period being reviewed also bore testimony to the increased popularisation of the PSTN carrier-preselection VOIP service branded Ten21, originally launched in July 2005. By dialling the "1021" prefix prior to the country code and the telephone number, during the period being reviewed, subscribers could benefit from calls terminating on international networks costing as low as 1c5 per minute including VAT. The launching and popularisation of this service have to be seen in a context of increased competition which the MCA has been striving to foster since its inception. Although increased competition is not invariably conducive to an enhancement in the benefits to subscribers, in general it is, and the increasing volume of Ten21 traffic suggests that this particular service has indeed provided added customer value.

During the period being reviewed, Ten21 traffic accounted for a very substantial – and rising – chunk of total international traffic registered. Meanwhile, international traffic through the PSTN international gateway has been declining and has declined by 27,678 minutes, or 1.6%, in between the two quarters of the review period.

Foreign-terminating calls from payphones, lastly, do not seem to have been affected by the introduction of Ten21. The time-series for Payphone international minutes exhibits conspicuous seasonal patterns. When deseasonalised, the data shows a clear downward-trend. There seems to be no structural break in the data series since the introduction of Ten21 such that it would not be reasonable to ascribe such a trend to Ten21. It is far more likely that this decrease is explainable in terms of the increasing popularity of mobile roaming usage.

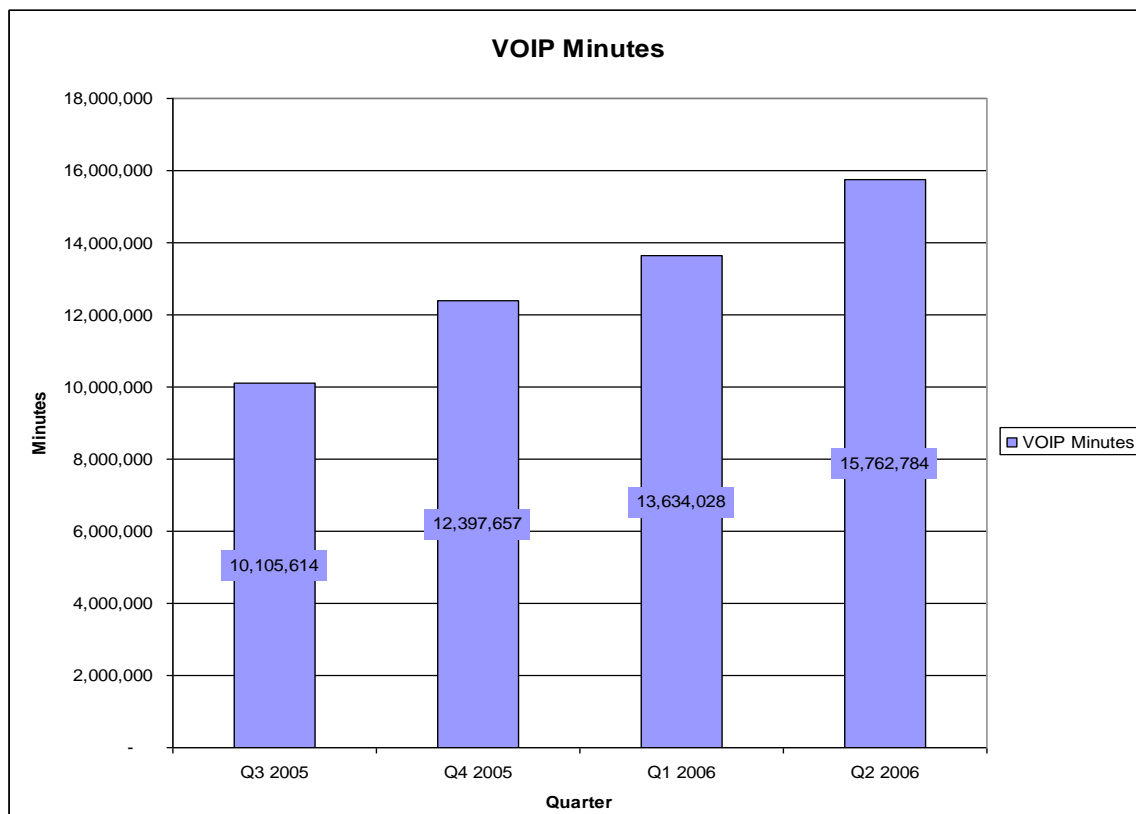


Chart 20: VOIP Minutes. Q2 2006 figure is still subject to change as some of its components are estimates rather than actual observations.

3.3 International Minutes

Chart 21, below, plots the traffic volume (in minutes) registered over the past seven quarters. It includes Ten21 traffic as well as that passing through the international PSTN gateway. Following the introduction of Ten21 in Quarter 3 of 2005, one can observe a sharp increase in the number of international minutes registered.

The lion's share (88.7%) of the volume of fixed-terminating international traffic terminates on Organisation for Economic Co-operation and Development (OECD) countries' networks. 66.6% of fixed-terminating international phone minutes terminate in one of the EU-25 countries. Of course, several EU-25 countries also form part of the OECD thus making any attempt at an inter-comparison between the two blocs spurious. During the last quarter of the period being reviewed, however, traffic towards EU countries has, in absolute terms, decreased marginally over the first quarter of review by 112,377 minutes, amounting to 2%, whereas traffic to OECD countries has gone on its ascending path, rising by 21,890 minutes, over the same period. The latter makes for a 0.3% increase. If a comparison had to be made between the present review period and the one before, nevertheless, EU-25-terminating traffic would still have gone up by 363,563 minutes or equivalently by 3.4%.

The picture for domestically-originated PSTN calls terminating on fixed international networks would have been very different if Ten21 traffic had to be excluded.

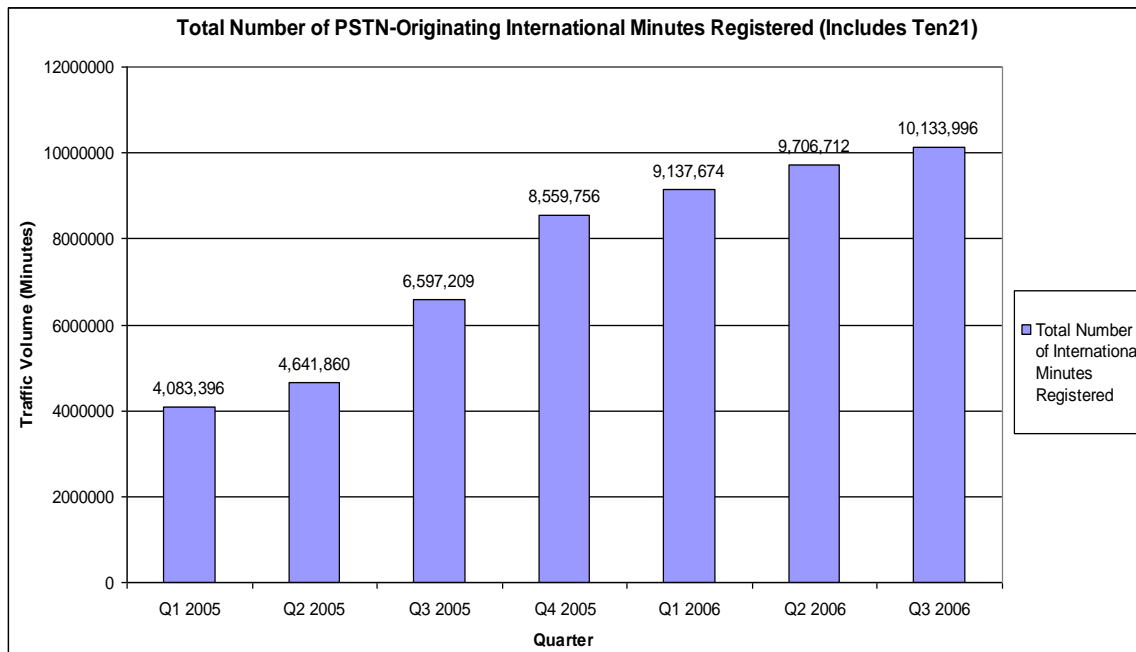


Chart 21: PSTN-Originating International Minutes Registered.

4 ANALOGUE/DIGITAL TELEVISION MARKET

4.1 Analogue/Digital

At the end of September 2006, there were 108,204 subscribers for analogue and digital television. Periodic movements in this subscriber base are shown in Chart 22 hereunder.

Since the introduction of digital terrestrial television (DTTV) in July 2005 and the concurrent entry of the new provider, the subscriber base for Digital and Analogue TV has increased by 8,633 to 108,204, with almost half this growth cipher being recorded over the two months being reviewed. This represents a subscription-rate-to-household ratio of 84.5%¹². At the end of the period under review, digital subscribers accounted for 16% of the total subscriber base, while the current penetration rate of analogue and digital television at the end of the review period stood at 26.8%¹³.

As Chart 22 clearly illustrates, insofar as the subscriber base is concerned, the digital and analogue TV markets are buoyant despite cut-throat competition from the wider availability of DVDs, satellites and the like. In spite of two consecutive quarters of negative growth at the dawn of 2005, subscriber base growth has kept flowing ever since.

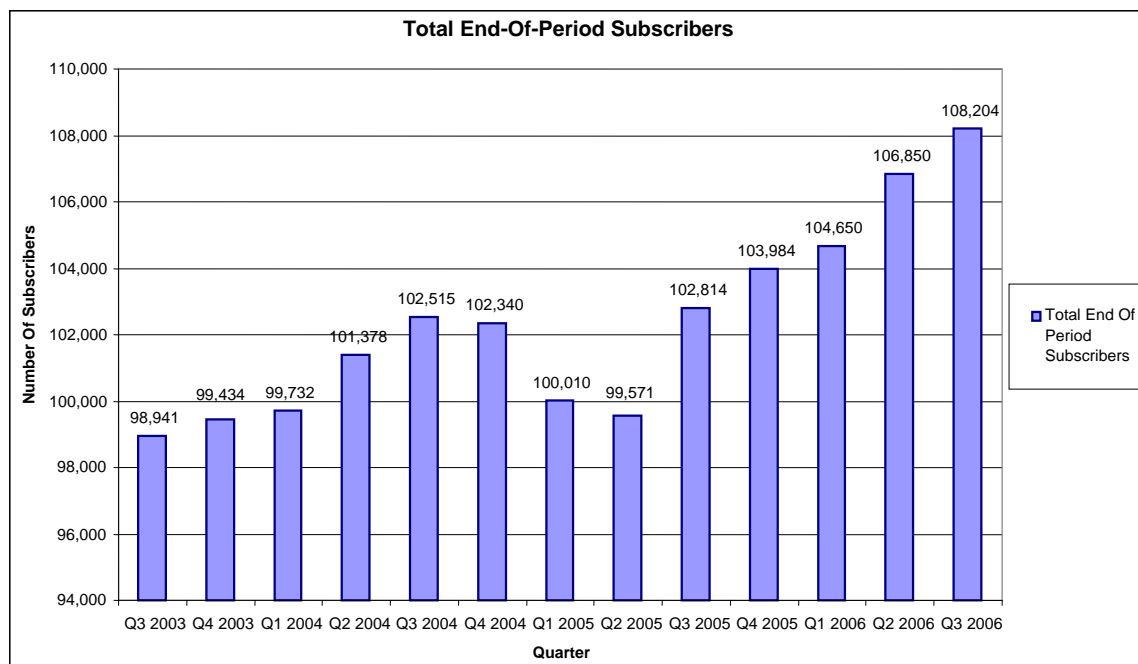


Chart 22: Total End-Of-Period Digital & Analogue TV Subscribers.

¹² This cipher was estimated using the latest available accurate mensuration of households given in the NSO's Household Budgetary Survey for the year 2000. The cipher quoted therein is that of 127,970 households. An updated figure for the number of households is due for publication in the forthcoming Household Budgetary Survey and will change this indicator according to the variation between the figure used and that to be published.

¹³ Unlike in the previous ECMR, the penetration rate here has been calculated per capita rather than per household. The population statistic used to establish the penetration rate has been obtained from the "Census of Population and Housing – Preliminary Report", NSO (2006) p. 3.

5 INTERNET

5.1 Internet Subscriptions

At the end of September 2006, the total number of internet subscriptions, both broadband and narrowband, amounted to 94,748, up by 5,250 subscribers from March 2006 and by 6,553 subscribers from September 2005. This subscriber base translates to 23.5 subscriptions per 100 inhabitants, up from 22 subscriptions per 100 inhabitants recorded over the previous ECMR period. During the period under review Broadband subscribers accounted for 58,236 subscribers (as shown in Chart 24), equivalent to 56.8% of total internet subscriptions, as opposed to 60% during the previous ECMR period. This movement is attributable to the introduction of the 128kbps bandwidth plan, which both as per the EU and the MCA definition falls under the narrowband category¹⁴. This may have partly been a move to clear up dial-up subscribers. Evidence in favour of this thesis is provided by chart 26 on page 28.

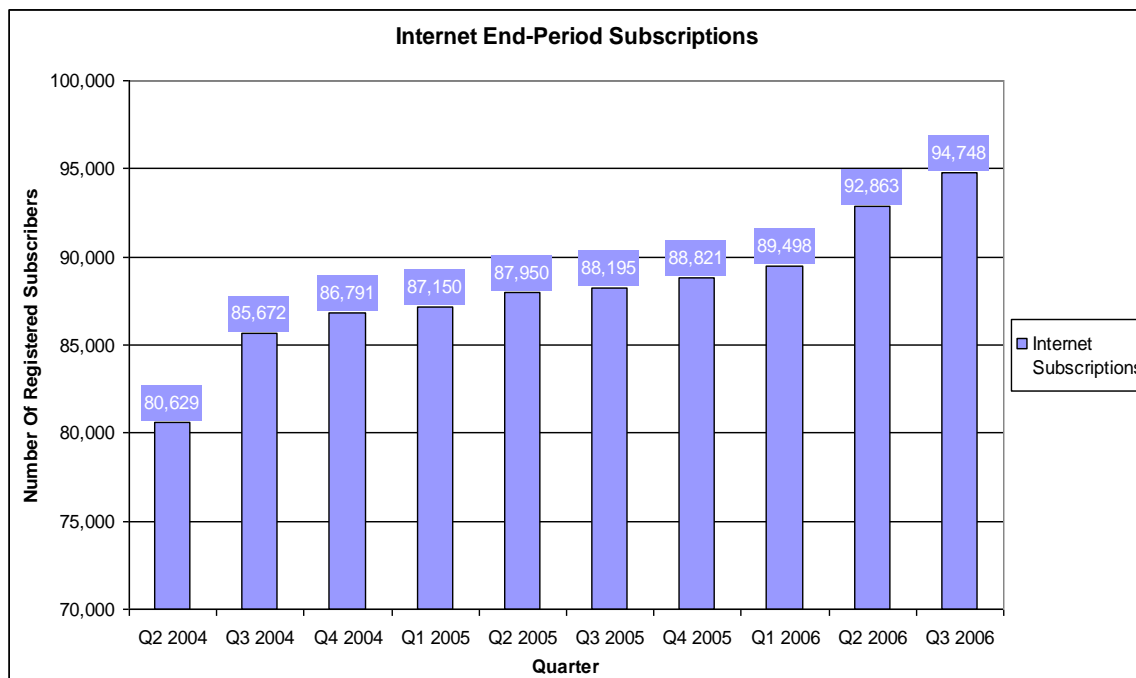


Chart 23: End Of Period Internet Subscriptions.

Source: Various NSO Press Releases

¹⁴ The EU uses a 144kbps bandwidth threshold for purposes of the narrow- and broad- band taxonomy.

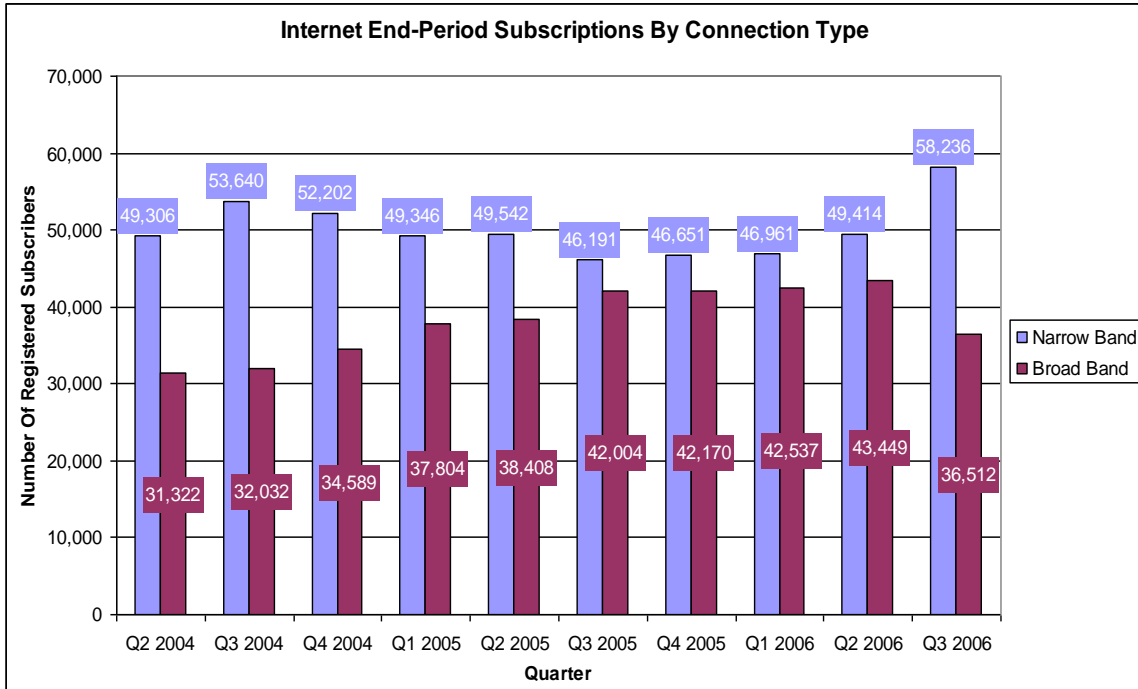


Chart 24: End-Of-Period Internet Subscriptions By Type Of Connection.
 Source: Various NSO Press Releases

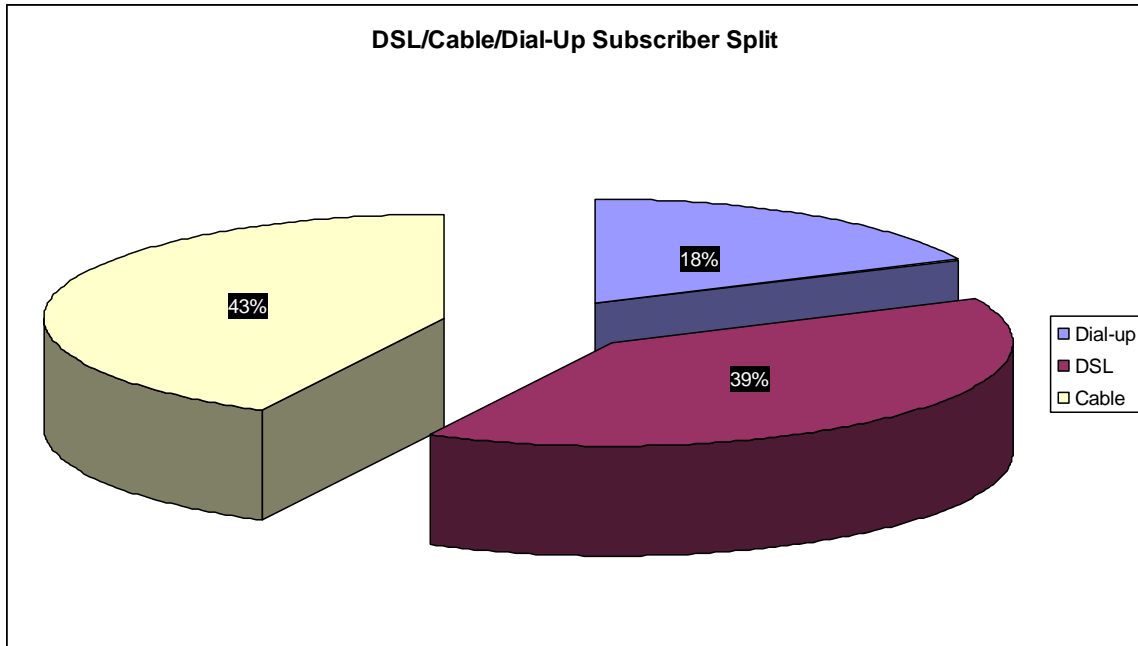


Chart 25: Quarter 3 2006 Internet Subscriptions By Type Of Connection.

5.2 Internet Traffic - Dial-Up

Chart 26 shows the number of fixed line minutes used by subscribers to access the Internet. As can be seen in the said chart, the downward movement in Internet minutes continued with an augmented impetus during Quarters 2 and 3 of 2006. This was mainly driven by plummeting residential dial-up Internet minutes, although business dial-up Internet minutes registered a decline as well. The former, which was initially nowhere as sharp as the latter, gathered momentum over the current ECMR period and as at the end of the reporting period, the rate of decline of residential dial-up minutes was appreciably steeper. In comparison to its previous year counterpart, the period under review saw a fall of 39,734,273 minutes, making up for a hefty 45.4% - nearly half - of total dial-up minutes. Compared to the previous ECMR period, the fall in Internet minutes amounts to 23,911,251, corresponding to a 33.4% decrease. The primary reasons of this inexorable decline may be said to be the increased take-up of 'always-on' Internet which now, as alluded to previously, includes narrowband as well as broadband bandwidths. In relative terms, despite the steeper decline in residential Internet minutes, the latter still accounted for 87.7% of total Internet minutes.

Since it is more economically expedient for those who spend more time on the Internet to switch to 'always-on' packages, in terms of dynamics, one would expect the initial migration from dial-up to 'always-on' to make up for the heftiest drop in Internet minutes recorded.

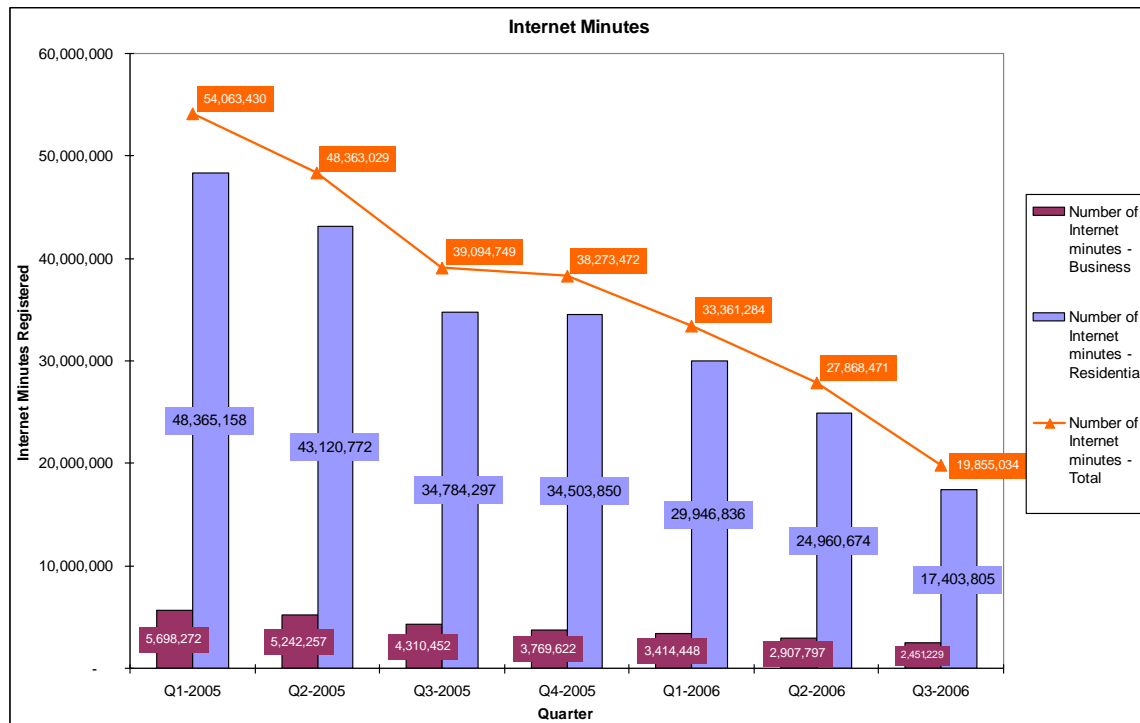


Chart 26: Internet Dial-Up Minutes.

5.3 Broadband Internet

Broadband connections have continued to grow for the first quarter being reviewed, as shown in Chart 24, but they have fallen substantially in the last quarter of the review period. As pointed out earlier on, this is in all probability due to the introduction of the 128 kbps bandwidth by both Internet service resellers, which by EU definitions would fall under the narrowband classification.

6. THE ELECTRONIC COMMUNICATIONS PRICE INDEX (ECPI) 2003 – 2005

Due to the introduction of new services within the communications market, the MCA has deemed it appropriate to update the basket of services used in the construction of the ECPI, as well as to refine the underlying methodology even further. This update was still being undertaken during the current review period and will be disclosed public once completed.

7. THE COMMUNICATIONS INDUSTRY IN THE MALTESE ECONOMY

As shown in Chart 27, over the four years to 2006 the value added produced by the firms within this industry has hovered around a relatively stable 3.3% of Gross Domestic Product (GDP). Over 2006 the communications industry's contribution towards Malta's GDP decreased marginally because of a combination of factors spanning a higher take-up of cheaper-priced intra-industry close substitutes, increased GDP growth for the Maltese Islands as a whole and also a fall in output prices attributable to increased competitive pressures¹⁵.

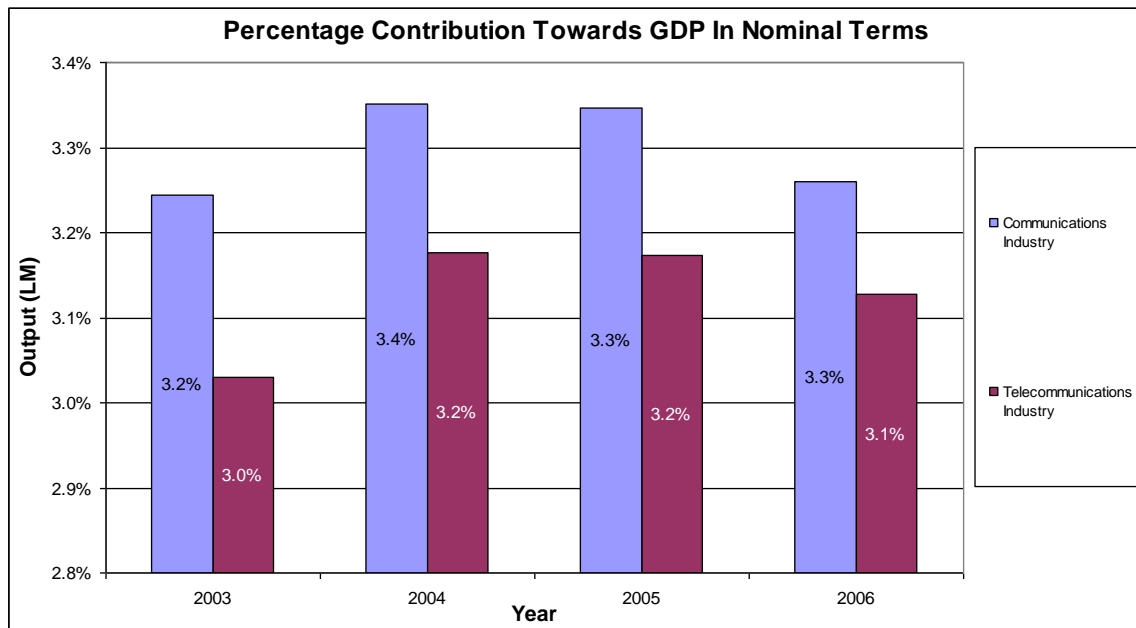


Chart 27: Percentage Contribution Towards GDP for the first 9 months of each year. All figures are provisional and therefore subject to change.

¹⁵ It is worth noting, here, that this is a pecuniary-based indicator. As such, it does not shed any light whatsoever as to whether the demand for communications services has changed and the direction of that change, if any. By way of illustration, a fall in prices assuming everything else equal – including usage – would result in a decline in this indicator.

The communications industry provides not only services to consumers but also intermediate services that are used as inputs by firms in the process of producing their outputs. In this milieu, the available statistics indicate that LM 93.871 million have been spent on communications services by the end of September 2006, LM87.913 million of which went to telecoms. This is shown hereafter in chart 28 and represents an increase of LM 3.919 million or 4.7% over the first nine months of the previous year. Available statistics show that for the first nine months of this year, 67.2% of nominal expenditure in the telecommunications sector was undertaken by private households and the remaining 32.8% by firms.

As shown in both Charts 28 and 29, nominal expenditure in telecommunications services has remained fairly stable since 2003, suggesting that this has come to play a central role in Maltese households' and business' consumption patterns.

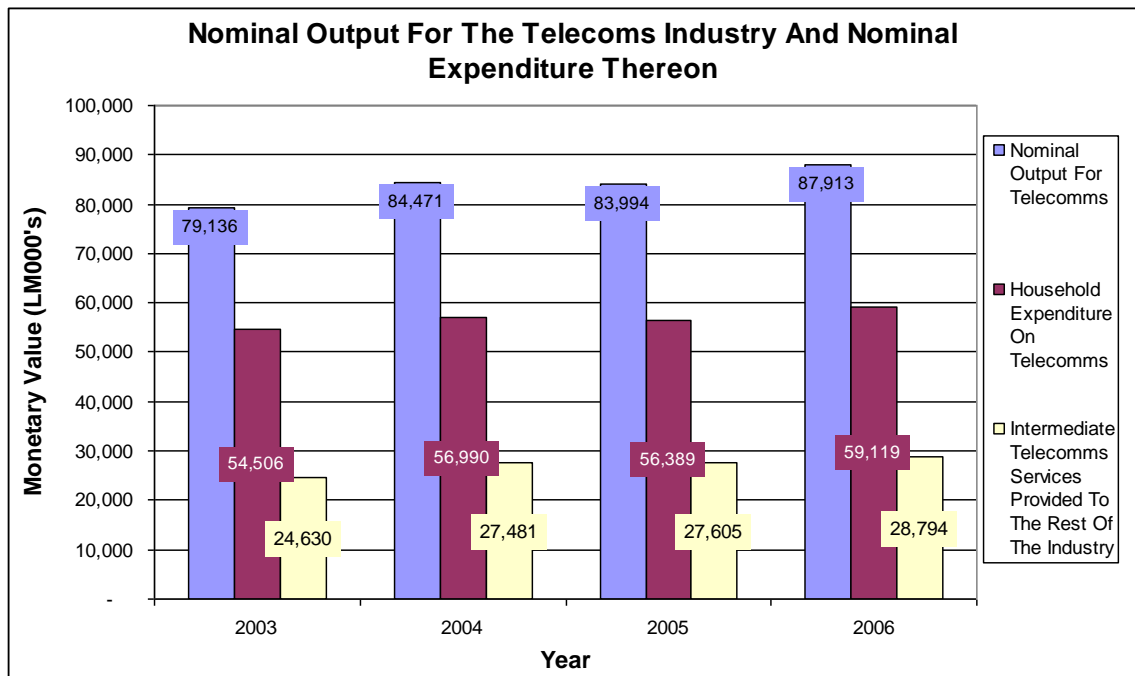


Chart 28: Nominal output for the telecommunications industry and nominal expenditure on telecoms for the first 9 months of each year. All figures are provisional and therefore subject to change.

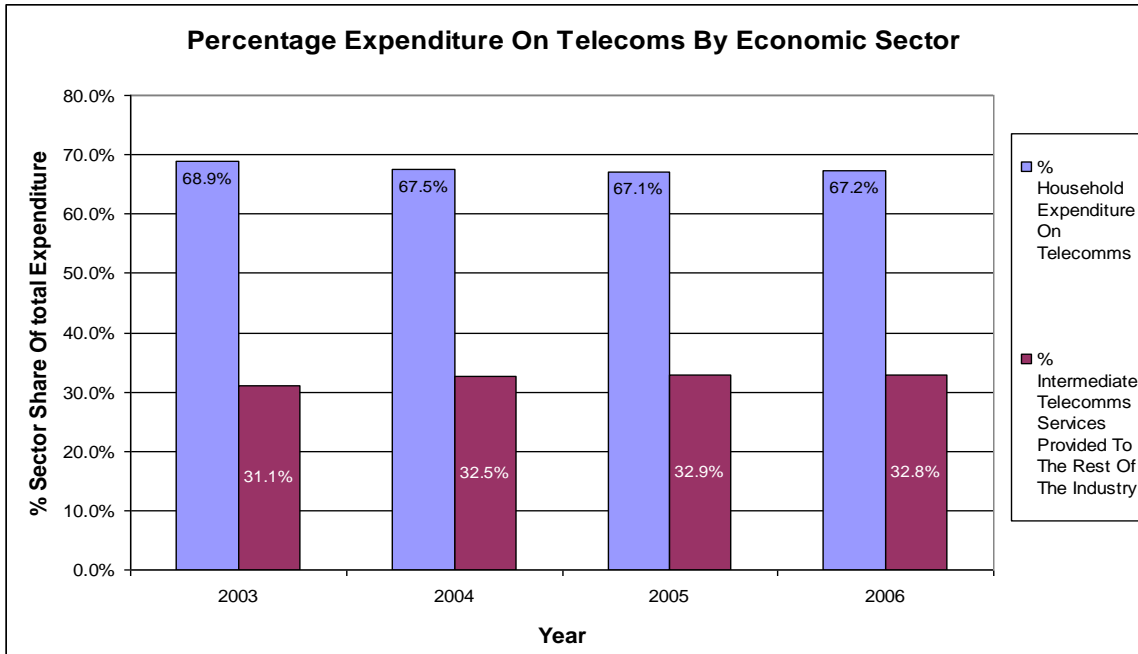


Chart 29: Percentage expenditure on telecommunication services for the first 9 months of each year by economic sector. All figures are provisional and therefore subject to change.

During the first three quarters of 2006 private households' expenditure on telecommunications services accounted for 6.1% of total household expenditure. As chart 30 shows, this rate has been fairly stable over time, implying that this sector has come to be at the core of the typical Maltese household and business consumption pattern. Furthermore, quality of service, with special reference to the postal sector, has registered an improvement, which translates into a better value for money from the consumption of such services to consumers.

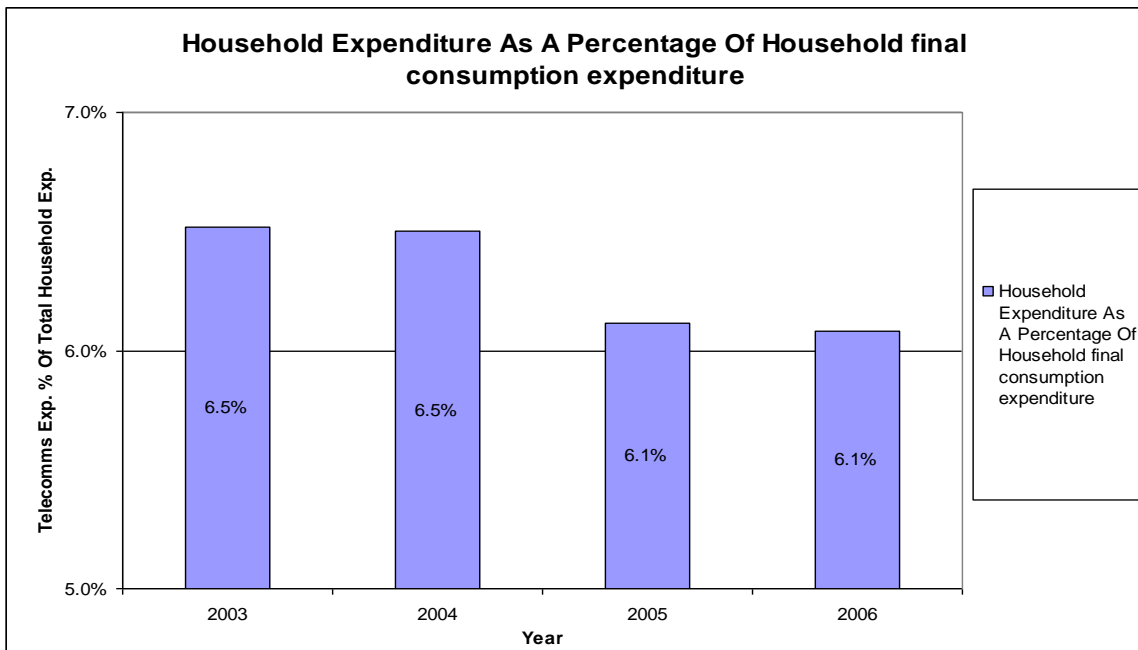


Chart 30: Household Expenditure As A Percentage Of Household final consumption expenditure for the first 9 months of each year by economic sector. All figures are provisional and therefore subject to change.

Full-Time Equivalent Employment in the communications services sector is estimated to stand at an all-time high cifer of 2,889 employees as at the end of September 2006. This is shown in chart 31.

The communications industry is driven by the electronic communications firms, which due to their capital intensity, can benefit from considerable labour productivity. Chart 32 compares a rough measure of labour productivity for the industry with that of the overall Maltese economy for the first nine months of each year reviewed therein. Labour productivity here is loosely defined as the ratio of real value added¹⁶ to the number of persons employed, expressed, in turn, in full-time equivalents¹⁷.

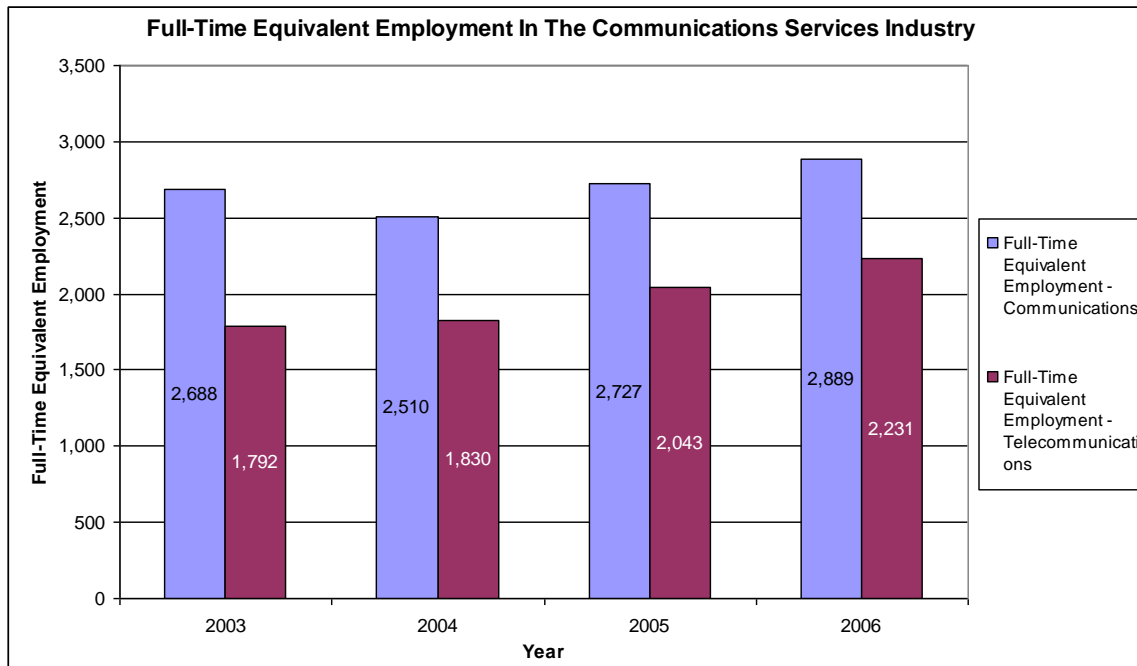


Chart 31: Full-time equivalent employment in the communications services sector for the first 9 months of each year. All figures are provisional and therefore subject to change.

¹⁶ Value added for the communications industry is deflated by the Transport and Communications sub-index of the RPI, while that for the general economy is deflated by the GDP deflator.

¹⁷ Full-time equivalence was obtained by assuming that a full-timer works roughly twice as much as a part-timer.

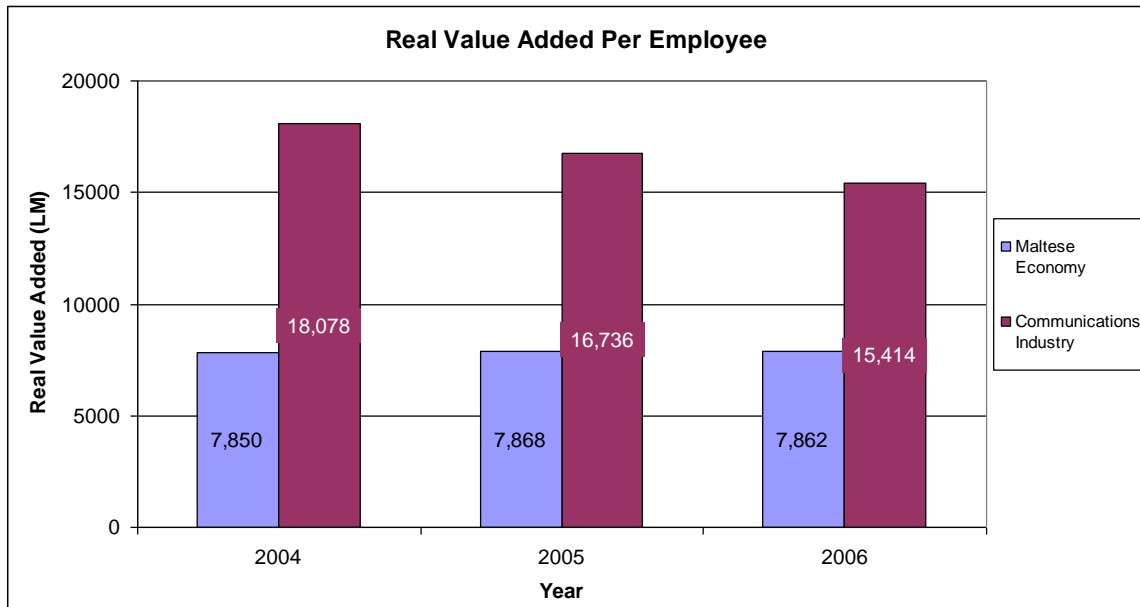


Chart 32: Real value added per employee for the overall Maltese economy and the communications industry for the first 9 months of each year. All figures are provisional and therefore subject to change.

As can be seen in Chart 32, the communications industry kept recording higher labour productivity rates when compared to those of the general economy. In fact, these figures suggest that on average, an employee in the communications industry produces almost double the output produced by its counterpart in the economy as a whole.

As shown also in chart 31, labour productivity in the communications industry declined gradually over the reviewed periods, while productivity in the economy kept stable. In fact, real value added per employee for the communications industry went down from Lm18,078 in the first nine months of 2004, to Lm15,413 for the corresponding period of 2006. This is mainly attributable to the fact that the rate of growth of real value added in the industry fell short of the growth rate in employment.

Moreover, during the first nine months of 2006, real value added dropped by 2%, thus contributing further to the drop in labour productivity. However, it is worth noting here, that the deflation factor (Transport & Communications sub-index of the RPI) used to convert the industry's value added in real terms is influenced by certain price movements which are totally unrelated to the communications industry, such as fuel and air travel prices. During 2006, these components of the deflation factor have increased considerably, causing the real value added of the industry to drop. For this reason, the MCA intends to refine this measure of productivity by substituting this deflator with its Electronic Communications Price Index, after the restructuring of the latter.

8 E-Commerce Market Review

8.1 Introduction

The MCA has carried out a research project relating to e-Commerce individual usage in the Maltese Islands. In August 2006, a consultancy firm was commissioned to carry out this research on behalf of the MCA.

This is the first in a series of surveys to be carried out in relation to e-Commerce use amongst Maltese residents.

The aim of this survey was to assess the extent to which the public at large is making use of e-commerce. The results will be published on a bi-annual basis and will be used as part of the regular consumer awareness campaigns that the MCA plans to undertake with regard to e-Commerce.

For the purposes of this assignment, e-commerce was given a wide definition and incorporated on-line shopping, use of government e-services, payment of fines and bills, and on-line banking transactions.

8.2 Methodology

The agreed tool for the carrying out of this study was the telephone survey. The survey was carried out amongst 1,500 respondents, the demographic characteristics of whom feature in Table 1, hereunder. Households were chosen at random from the telephone directory. It was decided that the study should involve at least 400 respondents who carried out e-commerce¹⁸ transactions.

Out of the 1,500 telephone interviews, the number of respondents who used the Internet for e-commerce amounted to 403 individuals.

8.3 Demographics

	Male	Female	Totals
18-29 years	177	166	343
30-39 years	121	122	243
40-49 years	141	142	283
50+ years	294	337	631
Totals	733	767	1,500

Table 1: Demographic Characteristics Of Respondents

¹⁸ The definition of e-commerce specified in introduction.

8.4 Summary of survey results

As charts 33 and 34 show, more than half (57%) of the 1,500 interviewees replied in the affirmative when asked whether they had access to the Internet. This proportion was much higher among the younger respondents and the A-B socio-economic category¹⁹ 29% of the respondents in the D-E category reported having Internet access.

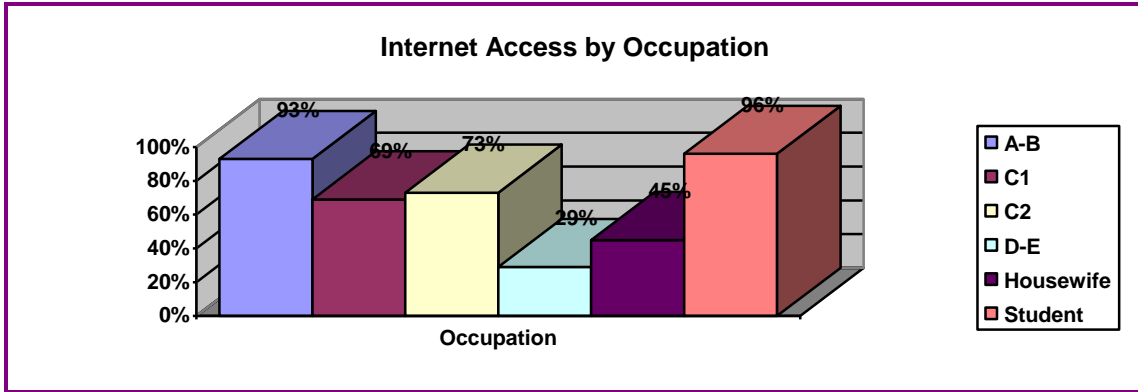


Chart 33: Internet Access By Occupation.

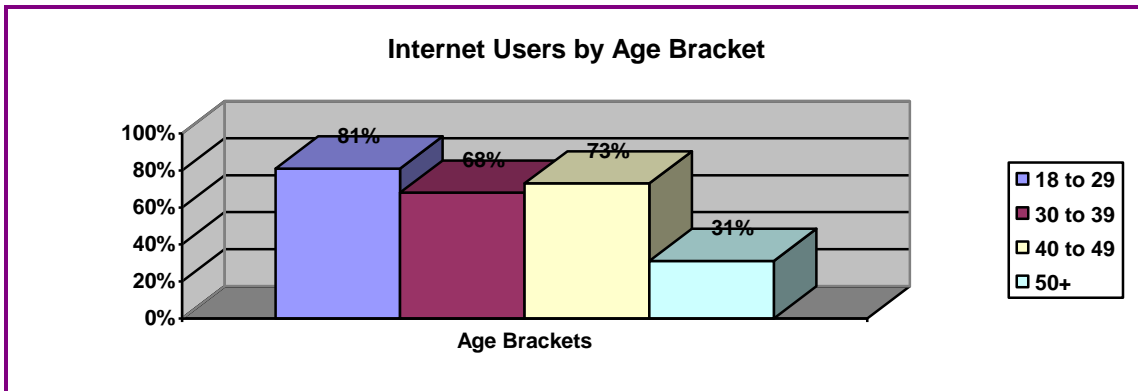


Chart 34: Internet Users By Age Bracket.

As shown in chart 35, the majority of respondents (80%) have Internet access only at home. The A-B category reported the highest proportion (29%), having Internet access both at home and at work.

¹⁹ This includes: large enterprise directors and top management; top level, established professionals; high-stature political figures and cabinet ministers; top-level state appointees and employees.

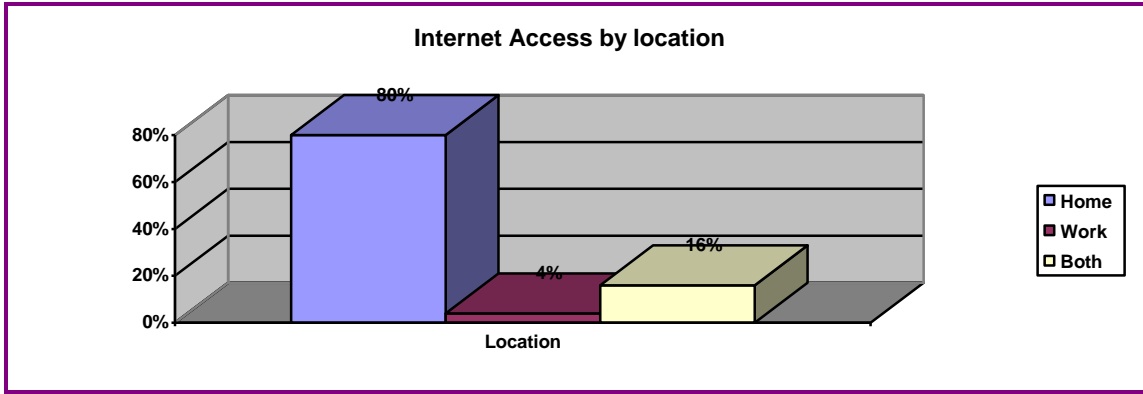


Chart 35: Internet Access By Location.

The main reasons given for not having Internet access were: not having a computer (especially amongst the D-E category); not needing the Internet; and not knowing how to use the Internet (especially amongst older respondents).

Almost half (48%) of the respondents who have Internet access reported using it for online shopping or Internet banking or e-government services. This means that 27% of all respondents interviewed used the Internet for one of these services. This is charted in Chart 35 hereunder.

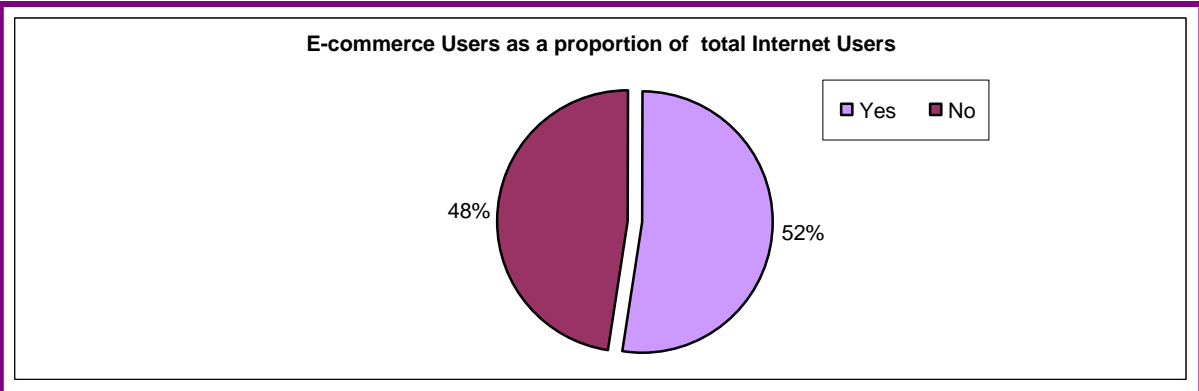


Chart 36: E-Commerce Users As A Percentage Of Total Internet Users.

The most popular e-commerce uses of the Internet were online banking (75% of those who use the Internet for e-commerce) and online shopping (74%). Only 45% of those who use the Internet for e-commerce used it for e-government services.

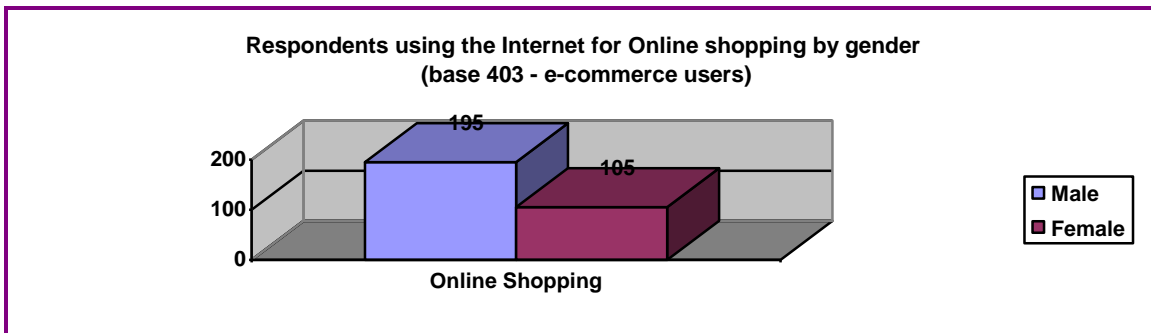


Chart 37: Respondents Who Have Used The Internet For Online Shopping Purposes.

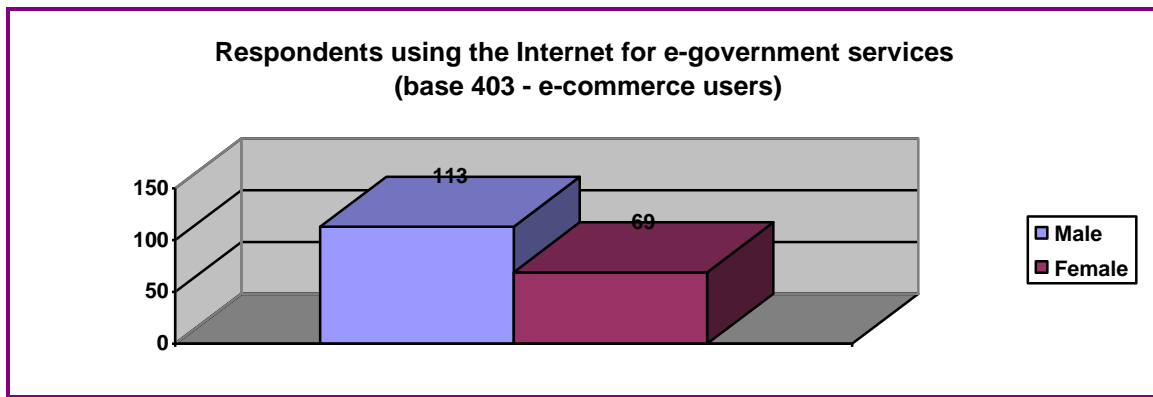


Chart 38: E-Government Services Users.

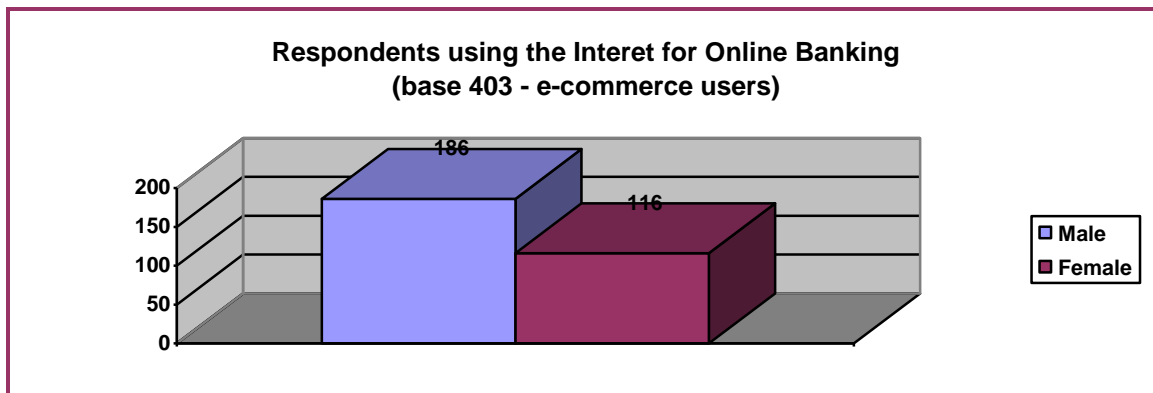


Chart 38: E-Commerce Users.

The main items bought online were books.

The main reasons given for buying online were better prices and convenience. Of those who have made an online purchase, 75% claimed to have done so only from foreign online shops; 9% from Maltese shops and the remaining 16% from both.

The main reasons given for not purchasing online from Maltese shops was that respondents preferred to visit outlets directly. Some respondents believed that Maltese outlets offering e-commerce were limited in number, were unaware of the existence of online shops that they needed, and/or believed that local online shops charged higher prices.

Out of all respondents who did buy online, 55% said that they did so in the last month, 23% in the last three months, 14% in the last six months, and 8% last bought online more than six months before. Of those respondents who last bought online during the last six months, 71% affirmed having purchased items between one to five times, 18% six to ten times, and 12% more than ten times.

Credit cards were by far the most popular method of payment when purchasing online. Almost all respondents (92% of those who buy online) said that their preferred method of payment was accepted by all sites.

The great majority (80%) of online shoppers claimed to have never experienced problems when carrying out online purchases.

The most frequently taken precautions were choosing secure sites and buying only from trusted companies.

When encountering problems while carrying out online purchases, most respondents would contact their bank or vendor directly.

The main reasons given for not purchasing online were that respondents never tried to carry out e-commerce transactions and that handling items before purchasing was preferred. Some respondents replied that they were simply not interested while others stated that they were afraid that their card details might be stolen. The main suggestions put forward by respondents to encourage them to purchase online were: more information, more security, better consumer protection and better prices.

The most popular e-government service was Public Registry-related (i.e. the issuance of certificates of marriage, birth etc). Other services mentioned included payment of water and electricity bills, submission of income tax declarations, education-related services, payment of fines and rent, passport applications and general information or research.

The main reasons given for not using e-government services were that respondents did not know about them or never felt the need to use them. A few replied to have simply forgotten about the availability of these services whereas others preferred to interact with people when using government services.

With regards to Internet banking, the most popular transactions include the transfer of funds between accounts, the payment of bills and the checking of account balances.

The full report is downloadable on

<http://www.mca.org.mt/infocentre/openarticle.asp?id=924&pref=21>

9 REGULATORY DEVELOPMENTS IN MALTA

The main developments during the period October 2005 to March 2006 are outlined below.

9.1 Consultative Documents

9.1.1 Wholesale Broadband Access Market (25.07.06)

<http://www.mca.org.mt/infocentre/openarticle.asp?id=869&pref=6>

The market review report presented the market definition and analysis of the wholesale broadband access market, and outlined the proposed remedies to be imposed on identified SMP operators.

9.2 Decision Notices

9.2.1 Statement of Proposed Decision regarding the Modification of BWA Rollout and Coverage Obligations (21.04.06)

<http://www.mca.org.mt/infocentre/openarticle.asp?id=806&pref=6>

This document established the revised timelines for the rollout of Broadband Wireless Access (BWA) networks.

9.2.2 Maltapost p.l.c. Tariff Adjustment Proposal - PROPOSED DECISION (24.05.06)

<http://www.mca.org.mt/infocentre/openarticle.asp?id=819&pref=18>

The MCA published a decision on the revision in the tariff structure for domestic mail, which was requested by Maltapost plc on 10 March 2006.

9.2.3 Report on Consultation and Decision Regarding the Modification of the Rollout & Coverage Obligations (25.05.06)

<http://www.mca.org.mt/infocentre/openarticle.asp?id=820&pref=6>

This Decision establishes the revised timelines for the rollout of Broadband Wireless Access (BWA) networks.

9.2.4 National Numbering Conventions - Decision (02.06.06)

<http://www.mca.org.mt/infocentre/openarticle.asp?id=829&pref=3>

Decision regarding domestic numbering conventions.

9.2.5 Development of the Numbering Plan - Decision (02.06.06)

<http://www.mca.org.mt/infocentre/openarticle.asp?id=828&pref=3>

Report on Numbering Plan Consultation and Decision.

9.2.6 Minimum Standards for Protecting the Integrity of Mail (12.06.06)

<http://www.mca.org.mt/infocentre/openarticle.asp?id=831&pref=18>

The decision contains the obligations that relate to mail integrity which aim at minimising the exposure of postal articles to the risk of loss, theft, damage and/or interference, as well as minimising the risk of offences as outlined in the Postal Services Act. This resulted after a Consultation process that was initiated in February 2006 on the subject.

9.2.7 Non-compliance to Regulation 26 of the Cable Systems (General) Regulations by Melita Cable plc. (14.06.06)

<http://www.mca.org.mt/infocentre/openarticle.asp?id=833&pref=10>

The regulation required a cable operator to apply for written consent before carrying advertising on any of its cablecast channels. An administrative fine of Lm10,000 and a daily fine of Lm200 was imposed on Melita as a result of this breach.

9.2.8 Decision regarding Sports Channel Advertising by Melita Cable plc. (27.06.06)

<http://www.mca.org.mt/infocentre/openarticle.asp?id=848&pref=10>

Melita failed to request the consent of the Minister to carry advertisements on its sports channel.

9.2.9 Proposed Statement of Decision on Win Back During and After the Porting Process (11.08.06)

<http://www.mca.org.mt/infocentre/openarticle.asp?id=872&pref=2>

This Proposed Statement of Decision examined the benefits and counter benefits of allowing 'win back' during and, or after the porting process.

9.2.10 Retail Leased Lines, Wholesale Terminating Segments & Wholesale Trunk Segments of Leased Lines (16.08.06)

<http://www.mca.org.mt/infocentre/openarticle.asp?id=873&pref=39>

This report summarised the responses elicited during the national consultation period, MCA's replies and the final decision by the Authority.

9.2.11 National telephone services provided at a fixed location - Report on Consultation and Decision (20.09.06)

<http://www.mca.org.mt/infocentre/openarticle.asp?id=882&pref=1>

This report summarised the responses elicited during the national consultation period, MCA's replies and the final decision adopted by the Authority.

9.2.12 Access to the public telephone network at a fixed - Report on Consultation and Decision (20.09.06)

<http://www.mca.org.mt/infocentre/openarticle.asp?id=881&pref=1>

This report summarised the responses elicited during the national consultation period, MCA's replies and the final decision adopted by the Authority.

9.2.13 MCA decision relating to failure by Maltacom to conclude interconnection agreement with Melita Cable (22.09.06)

<http://www.mca.org.mt/infocentre/openarticle.asp?id=883&pref=1>

The MCA considered that the allegation made by Maltacom was vague and unsubstantiated.

9.2.14 Decision following an own initiative investigation of a dispute between Maltacom and Telemail (26.09.06)

<http://www.mca.org.mt/infocentre/openarticle.asp?id=884&pref=1>

This dispute referred to the provision of carrier selection and pre-selection.

9.3 Licenses

9.3.1 Digi B Network Limited - Terrestrial Digital Audio Broadcasting (T-DAB) Licence Document (20.07.06)

<http://www.mca.org.mt/infocentre/openarticle.asp?id=866&pref=12>

This licence was granted by the MCA for the rights of use of radio frequency spectrum for the establishment and operation of a T-DAB network.

9.4 General Publications

9.4.1 Electronic Communications Market Review: October 2005 - March 2006 (24.07.06)

<http://www.mca.org.mt/infocentre/openarticle.asp?id=867&pref=1>

This report provided a general overview of the industry's performance during the six months ending 31 March 2006, including an analysis of the main trends and developments in the various sectors of the Maltese electronic communications market.

9.4.2 Wholesale call origination, termination & transit services provided over fixed networks (18.09.06)

<http://www.mca.org.mt/infocentre/openarticle.asp?id=880&pref=1>

This report summarised the responses elicited during the national consultation period, MCA's replies and final decision.

9.4.3 Annual Plan 2006 (12.04.06)

<http://www.mca.org.mt/infocentre/openarticle.asp?id=801&pref=15>

The document represented the MCA's Annual Plan for 2006. It sets out the overall approach to regulation, the business priorities and work programme for 2006, and how the MCA's effectiveness was measured and evaluated.

9.4.4 European Commission report on scope of universal service (12.04.06)

<http://www.mca.org.mt/infocentre/openarticle.asp?id=803&pref=5>

On 11 April 2006 the European Commission announced the publication of a report on the results of a public consultation on the review of the scope of universal service that ran between May and July 2005.

9.4.5 Quality of Postal Service: End-to-End Measurement - Local Ordinary Mail Service (11.05.06)

<http://www.mca.org.mt/infocentre/openarticle.asp?id=813&pref=18>

This report covered the period 1st October 2005 to 30th March 2006.

9.4.6 Study on radio interference regulatory models in the European Community (31.05.06)

<http://www.mca.org.mt/infocentre/openarticle.asp?id=824&pref=5>

Contract Notice 2006/S 95-101041.

9.4.7 Common Position on the approach to appropriate remedies in the ECNS regulatory framework (16.06.06)

<http://www.mca.org.mt/infocentre/openarticle.asp?id=840&pref=5>

Revised ERG Common Position. Final Version May 2006. ERG (06)33.

9.4.8 Revised ERG Common Position on Remedies: Explanatory Memorandum (16.06.06)

<http://www.mca.org.mt/infocentre/openarticle.asp?id=839&pref=5>

This is an Explanatory Memorandum to a document published by the ERG regarding remedies.

9.4.9 Annual Report and Financial Statements 2005 (18.07.06)

<http://www.mca.org.mt/infocentre/openarticle.asp?id=860&pref=15>

The report provided an interesting analysis of the developments and achievements in the electronic communications, postal services, eCommerce sectors as well as frequency spectrum management and consumer affairs.

9.4.10 Short Code Matrix (19.07.06)

<http://www.mca.org.mt/infocentre/openarticle.asp?id=863&pref=3>

The MCA decided to harmonise short codes with the minimum disruption to existing usage. The Short Code Matrix will be updated periodically.

9.4.11 National Numbering Plan (19.07.06)

<http://www.mca.org.mt/infocentre/openarticle.asp?id=862&pref=3>

This document provided a high level view of the national numbering plan. In order to ensure that there was a reasonable level of tariff transparency in numbers, tariff levels were also included in the plan.

9.4.12 National Numbering Plan Allocations (19.07.06)

<http://www.mca.org.mt/infocentre/openarticle.asp?id=682&pref=3>

Updated periodically, this table depicts basic Numbering allocation information on the various number ranges within the National Numbering Plan.

9.4.13 Draft Directive of 2006 (20.04.06)

<http://www.mca.org.mt/infocentre/openarticle.asp?id=804&pref=41>

Draft Directive of 2006 on the Procedure that related to the change of certain services provided by the Universal Services Provider under the Postal Services Act.

9.4.14 Directive 1 of 2006 on the procedure relating to the change of certain services provided by the USP (01.06.06)

<http://www.mca.org.mt/infocentre/openarticle.asp?id=827&pref=41>

This Directive established the procedure that the USP must follow when effecting changes in relation to the days and, or times of opening of any post office or changes to the days of delivery and, or of collection of postal article.

9.5 General Publications

9.5.1 European Regulators Respond To EC'S Proposed Regulation On International Roaming (11.05.06)

<http://www.mca.org.mt/infocentre/openarticle.asp?id=812&pref=5>

On 8 February 2006 the European Commission announced plans to impose a Regulation on the amount mobile network operators are allowed to charge customers using their phone whilst abroad.

9.5.2 General info on the Radio and Telecommunications Terminal Equipment (R&TTE) Directive (1999/5/EC) (05.05.06)

<http://www.mca.org.mt/infocentre/openarticle.asp?id=807&pref=14>

General guidelines on the procedures set out in the R&TTE Directive.

9.5.3 Radio Interface Specifications (27.06.06)

<http://www.mca.org.mt/infocentre/openarticle.asp?id=847&pref=14>

Radio interface specifications according to Article 4.1 of Directive 1999/5/EC.

9.5.4 Electromagnetic Fields: Mobile phone base stations - Information Leaflet (05.07.06)

<http://www.mca.org.mt/infocentre/openarticle.asp?id=859&pref=36>

An information leaflet launched during the MCA Forum on 'The Reality behind Electromagnetic Fields'.

9.5.5 Response by the OFC to market review on wholesale broadband access market (08.08.06)

<http://www.mca.org.mt/infocentre/openarticle.asp?id=871&pref=6>

This document contains the response to the consultation received from the Office of Fair Competition (OFC) regarding the results of the market review for the 'Wholesale broadband access market' published on the 25th July 2006.

9.5.6 Maltapost plc. Tariff Adjustment Proposal - May 2006 (12.09.06)

<http://www.mca.org.mt/infocentre/openarticle.asp?id=878&pref=18>

Report on Consultation and Decision - September 2006.