Wholesale call origination, call termination and transit services provided over fixed electronic communications networks

Identification and Analysis of Markets,
Determination of Market Power and Setting of Remedies.

Response to Consultation and Final Decision

18th September 2006

Contents

Executive Summary

The current regulatory framework for electronic communications networks and services which entered into force in Malta on the 14th September 2004 is designed to create harmonised regulation across Europe and is aimed at reducing entry barriers and fostering prospects for effective competition to the benefit of consumers. The basis for this framework are five EU Directives.

These Directives require National Regulatory Authorities (NRAs) to, amongst other things, carry out reviews of competition in communications markets to ensure that regulation remains appropriate in the light of changing market conditions. For a limited period, while those reviews are conducted and until the new Significant Market Power (SMP) conditions are imposed, parts of the regulatory regime which existed prior to the 14th September 2004 continue to be in force in line with Article 39 and 40 of the Electronic Communications (Regulation) Act.

This document sets out the Malta Communications Authority's (MCA's) decision in respect of the market reviews related to wholesale call origination, call termination and transit markets. A national consultation was carried out between the 14th October 2005 and the 31st December 2005.

As required by Regulation 6 of the Electronic Communications Networks and Services (General) Regulations, the MCA's proposals have been notified to the European Commission.

Summary of Conclusions

Identification of Markets

This review is split into three main parts. **Part A** deals with the wholesale call origination market on fixed networks as identified in the Commission Recommendation on Relevant Markets. The MCA has identified that this market includes all call origination services provided over all fixed networks which enable providers to supply retail fixed calls. More specifically, call origination incorporates conveyance from the network-end of the end-user's local loop through the switch directly connected to the end-user.

In **Part B** of this document, the MCA reviews the market for wholesale termination services provided over fixed networks. The MCA has defined wholesale termination services to include conveyance to the network-end of the end-user local loop through the switch directly connected to the end-user. The termination market is defined exactly as identified in the Commission recommendation. The MCA has identified two markets with respect to wholesale termination services: i) wholesale termination services provided over Maltacom plc's (hereinafter referred to as Maltacom) network; and ii) wholesale termination services provided over Melita Cable plc's (hereinafter referred to as Melita Cable) network.

Part C of this review deals with the provision of wholesale transit services in Malta. In its national consultation document the MCA proposed to define the market for transit services to comprise the conveyance of traffic through at least one tandem switch not acting as a primary switch and including conveyance through International Switching Centres. Following its analysis, the MCA had concluded that national and international transit services should not fall within the same market and therefore decided to define a market for wholesale national transit services provided over fixed networks, and another market for wholesale international transit provided over fixed networks.

However, following comments elicited through the national consultation process and additional market developments, the MCA carried out the three criteria test and concluded that wholesale national transit services do not pass the first and second criteria. However, the MCA identified that wholesale international transit services pass all the three criteria and are therefore subject to review for the purpose of ex ante regulation. As a result, the Authority has reconsidered its market definition to include only a market for wholesale international transit services in Malta.

The details of the definition of these markets and the approach taken by the MCA when identifying these markets, are contained in **Chapters 3, 5 and 8** respectively.

Assessment of Market Power

Based on the evidence presently available to the MCA, after having analysed the operation of these markets and taken due account of the Commission's 'Guidelines on market analysis and the assessment of SMP' (SMP Guidelines), the MCA concluded that Maltacom has SMP in the market for wholesale call origination on fixed networks. The main criteria used to identify SMP include market share, economies of scale and scope, vertical integration and lack of countervailing buyer power.

In the wholesale call termination market, the MCA concluded that all fixed network operators have SMP for termination services over their individual network. The MCA is designating Maltacom and Melita Cable as having SMP on their individual network for wholesale termination services. The MCA concludes that the lack of countervailing buying power and absolute market shares resulting from the 'calling-party-pays' principle, result in both operators having SMP.

In the analysis of the wholesale international transit market, the MCA concluded that due to the high market shares, economies of scale and scope and size of the undertaking, Maltacom should be designated as having SMP. The MCA concluded that the relatively 'new' presence of Vodafone Malta Ltd in the international transit market is not sufficient to be indicative of dominance and is not likely to be held as such during the timeframe of this review. Moreover, the MCA anticipates that during the timeframe of this review, Maltacom will not lose its market power.

Full details of the MCA's designations and reasoning are contained in **Chapters 4, 6 and 9** of this document.

Regulatory Implications

Given the position of dominance held by Maltacom in the wholesale call origination, termination and national and international transit markets, voice call termination – i.e. its ability to behave to an appreciable extent independently of competitors, customers and ultimately consumers – the MCA decided to impose on Maltacom the following obligations:

(a) Access to, and use of, specific network facilities;

(b) Non-discrimination;

(c) Transparency;

(d) Price control and Cost accounting; and

(e) Accounting Separation.

All these obligations are applicable to Maltacom in all the wholesale markets mentioned above.

The MCA has also identified Melita Cable as having SMP in the wholesale call termination market on their individual network. As a result, the MCA decided to impose the following obligations on Melita Cable:

1. Access to, and use of, specific network facilities;
2. Non-discrimination;
3. Transparency; and
4. Price control

Full details of these remedies, including their effect and the reasons for imposing these conditions, are contained in **Chapters 5, 7 and 10** of this document.

Chapter 1 - Introduction

A new European regulatory framework for electronic communications networks and services entered into force on the 25th July 2003. The framework is designed to create harmonised regulation across Europe and is aimed at reducing entry barriers and fostering prospects for effective competition to the benefit of consumers. The basis for the new regulatory framework are five Directives:

- Directive 2002/21/EC on a common regulatory framework for electronic communications networks and services ("the Framework Directive");

- Directive 2002/19/EC on access to, and interconnection of, electronic communications networks and associated facilities ("the Access Directive");

- Directive 2002/20/EC on the authorisation of electronic communications networks and services ("the Authorisation Directive");

- Directive 2002/22/EC on universal service and users' rights relating to electronic communications networks and services ("the Universal Service Directive"); and

- Directive 2002/58/EC concerning the processing of personal data and the protection of privacy in the electronic communications sector ("the Privacy Directive").

The Framework Directive provides the overall structure for the new regulatory regime and sets out fundamental rules and objectives across all the directives. Article 8 of the Framework Directive sets out three key policy objectives, which have been taken into account in the preparation of this consultation document, namely promotion of competition, development of the internal market and the promotion of the interests of the citizens of the European Union.

The Authorisation Directive establishes a new system whereby any person will be generally authorised to provide electronic communications services and/or networks without prior approval. The general authorisation replaces the former licensing regime. The Universal Service Directive defines a basic set of services that must be provided to end-users. The Access and Interconnection Directive sets out the terms on which providers may access each others' networks and services with a view to providing publicly available electronic communications services.

These four Directives were implemented in Malta on the 14th September 2004. This was achieved via the Electronic Communications (Regulation) Act, 2004 (hereinafter referred to as "ECRA") and the Electronic Communications Networks and Services (General) Regulations, 2004 (hereinafter referred to as ''ECNSR'').

The Directive on Privacy establishes users' rights with regard to the privacy of their communications was transposed into national legislation through the Processing of Personal Data (Electronic Communications Sector) Regulations of 2003 and the Electronic Communications (Personal Data and Protection of Privacy) Regulations of 2003.

The Directives require National Regulatory Authorities (NRAs) such as the MCA to carry out reviews of competition in communications markets to ensure that regulation remains appropriate in the light of changing market conditions.

Each market review has three parts:

- definition of the relevant market or markets;
- assessment of competition in each market, in particular whether any companies have SMP in a given market; and
- assessment of what are the appropriate regulatory obligations which should be imposed given the findings on SMP (NRAs are obliged to impose some form of regulation where there is SMP).

More detailed requirements and guidance concerning the conduct of market reviews are provided in the Directives, the ECRA, the ECNSR and in additional documents issued by the European Commission and the MCA. As required by the new regime, in conducting this review, the MCA has taken the utmost account of the two European Commission documents discussed below.

1.1 Market Review Methodology

The European Commission has identified in its Recommendation, a set of markets in which ex ante regulation may be warranted. The Recommendation seeks to promote harmonisation across the European Community by ensuring that the same product and service markets are subject to a market analysis in all Member States. However, NRAs are able to regulate markets that differ from those identified in the Recommendation where this is justified by national circumstances. Accordingly, NRAs are to define relevant markets appropriate to national circumstances, provided that the utmost account is taken of the product markets listed in the recommendation (Regulation 6 of the ECNSR).

The European Commission has also issued Guidelines on market analysis and the assessment of SMP ("SMP Guidelines"). The MCA has also published a document entitled 'Market Review Methodology' outlining the methodology to be used for assessing effective competition in the Maltese electronic communications sector[1]. The MCA is required to take these guidelines into utmost account when analysing a product or service market in order to assess whether the market under investigation is effectively competitive or otherwise (refer to Regulation 8 of the ECNSR).

As required in Regulation 6 of the ECNSR (Article 7 of the Framework Directive), the results of this market review and the proposed draft measures need to be notified to the European Commission and to other NRAs with a one-month consultation timeframe allowed for comments. If the Commission is of the opinion that the market definition, or proposals to designate an operator with SMP, or proposals to designate no operator with SMP, would create a barrier to the single market, or if the Commission has serious doubts as to its compatibility with Community law and issues a notice under Article 7(4) of the Framework Directive, the MCA is required by Regulation 6 of the ECNSR to delay adoption of these draft measures for a further period of 2 months while the Commission considers its position.

The MCA has collected market data from a variety of internal and external sources, including users and providers of electronic communications networks and services and from consumer surveys commissioned by the MCA, in order to carry out its respective market definition and market analysis procedures based on established economic and legal principles and taking the utmost account of the Relevant Markets Recommendation and the Guidelines.

[1] Link to MCA market review methodology: http://www.mca.org.mt/library/show.asp?id=513&lc=1

1.2 Consultation

As required by Article 10 of the ECRA, the MCA published the results of the market reviews and provided operators the opportunity to comment on the findings prior to adopting the final proposals.

Furthermore, Regulation 6 of the ECNSR establishes that, prior to adopting the draft measures proposed in the market review, the MCA is required to notify the Commission with the findings of the market reviews, the proposed remedies and the outcome of the national consultation process.

The MCA carried out a national consultation process from the 14th October 2005 till the 31st December 2005 during which it received three responses; namely from Maltacom , Melita Cable and Vodafone Malta Ltd. The main issues arising from the consultation process and the replies of the Authority are summarised hereunder.

On the 2nd May the MCA notified the draft Decision to the Commission. The Commission sent and published its 'Comments Letter' pursuant to Article 7(3) of Directive 2002/21/EC on cases MT/2006/0387-8-9 on 7th June 2006[2]. The MCA has taken the utmost regard of these comments in its final decision.

1.3 Liaison with Competition Authority

There is a requirement on the MCA under Regulation 10 of the ECNSR to carry out an analysis of a relevant market within the Electronic Communications sector. This analysis must be carried out in accordance, where appropriate, with an agreement with the National Competition Authorities (NCA) under Regulation 10 of the ECRA.

In line with the co-operation agreement signed on the 20th May 2005 between the MCA and the Office of Fair Competition (OFC)[3], the MCA presented the results of this review to the OFC. The OFC submitted its opinion letter on the 4th November 2005, a copy of which is attached to this document in **Appendix A.**

1.4 Scope of this Review

This review considers the markets for wholesale call origination, call termination and transit on fixed networks in Malta. The report is divided in three main sections dealing with each of these markets.

[2] Link to Comments Letter: http://www.mca.org.mt/library/show.asp?id=835&lc=1

[3] Link to Memorandum of Understanding between MCA and OFC:
http://www.mca.org.mt/library/show.asp?id=656&lc=1

1.5 Structure of the Document

The rest of the document is structured as follows:

Chapter 2 provides an overview of fixed networks in Malta and an initial delineation of market boundaries.

PART A - (Chapters 3,4,5) presents the MCA's conclusions on the definition of the markets for wholesale call origination on fixed networks in Malta. This section consists of a review of the market definition procedure and its scope, a detailed analysis of the market with the SMP designations and the regulatory measures imposed on the operator with SMP.

PART B - (Chapters 6,7,8) deals with the findings on the definition and analysis of the markets for wholesale call termination on individual fixed networks in Malta. This section consists of a review of the market definition procedure and its scope, a detailed analysis of the markets with the SMP designations and the regulatory measures on SMP operators.

PART C - (Chapters 9,10,11) illustrates the conclusions on the definition and analysis of the markets for wholesale transit services in Malta. This section consists of a review of the market definition procedure and its scope, a detailed analysis of the markets with the SMP designations and the regulatory measures to be imposed on the operator determined to have SMP.

Chapter 2 - Background to Fixed Telephone Networks in Malta

2.1 Introduction

As at December 2005, the total population of Malta stood at approximately 400,000. According to National Statistics Office figures, there are approximately 128,000 residential households and 31,000 non-residential units. The small geographic size of Malta (27km by 14km) is reflected in the relatively small-scale electronic communications services/networks available. Nonetheless, in the past decade, the electronic communications sector has experienced a positive growth both in terms of the number of operators and the variety of services offered. A perceptible amelioration in the quality of delivery of such services has also been recorded.

During 2005, the contribution of the electronic communications sector towards the Gross Domestic Product was just under 3 per cent, which shows a significant contribution to value added in the economy. Further details on the performance of the electronic communications sector in the Maltese economy and other relevant statistics can be found in the latest Electronic Communications Market Review published by the MCA[4].

In Malta, the incumbent fixed telephony services operator - Maltacom - operates a PSTN network. Over the past decade, the incumbent has developed its ubiquitous network from one predominantly focused on fixed-line telephone services including international gateways, to one which incorporates other types of electronic communications services including data communications (including Internet and VoIP), mobile telephony and wireless.

To date, Maltacom's infrastructure is made up of two International Switching Centres (ISC) and thirteen fully meshed switches at a lower level (see Diagram 1). While all the thirteen switches have access lines directly connected to them and therefore act as primary switches for their immediate areas, three of these switches are configured to function also as tandem switches for the conveyance of overflow traffic, Other Authorised Operators' (OAO) interconnection traffic and international traffic conveyance.

[4] http://www.mca.org.mt/library/

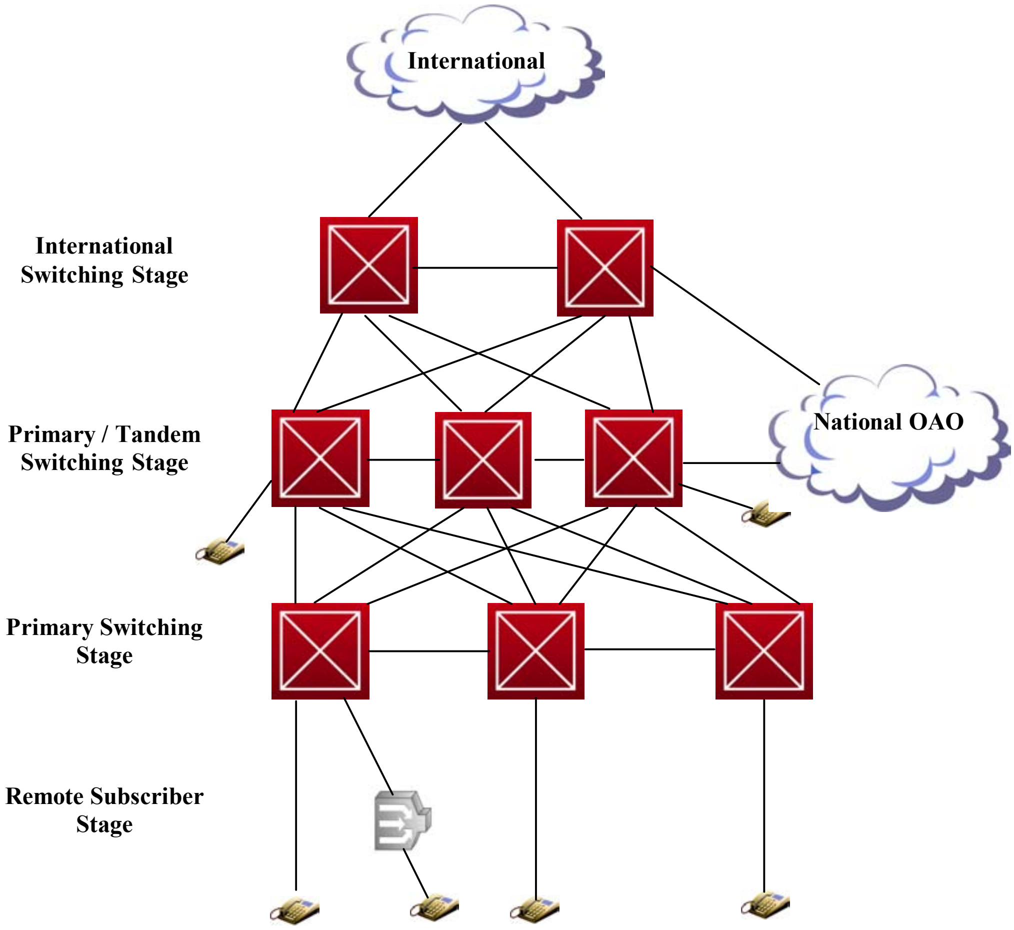

Diagram 1: Maltacom plc current fixed telephony network

This topology eliminates the need for OAOs to interconnect to each of the thirteen switches. Should the layout have not been such, OAOs would need to interconnect to all or the majority of switches to provide a quality service. This might not prove feasible given the 'limited' amount of landlines attached to each particular switch and the fact that OAOs need to make sure that they have the minimum amount of traffic to warrant the investment.

A call originating on another network is either carried from the interconnecting 'primary/tandem' switch directly to the end-user where the access line is connected directly to this switch, or conveyed to the switch to which the end-user number is associated. On-net calls are routed in a similar way. However, since all primary and 'primary/tandem' switches are connected, an on-net call to/from a particular access line may or may not include conveyance between 'primary/tandem' and primary switches.

While OAOs may interconnect to at least one of the three 'primary/tandem' switches mentioned above, they might also interconnect at a higher level to one or both ISCs to have their international calls conveyed as well.

Maltacom's network is expected to become less hierarchical with the upgrade of the present network as announced by the company. The soft-switch solution, which Maltacom is expected to adopt by the end of this year, will evolve their circuit-switched core network to a multi-service network capable of carrying voice, enhanced services and packet-based broadband traffic (see Diagram 2).

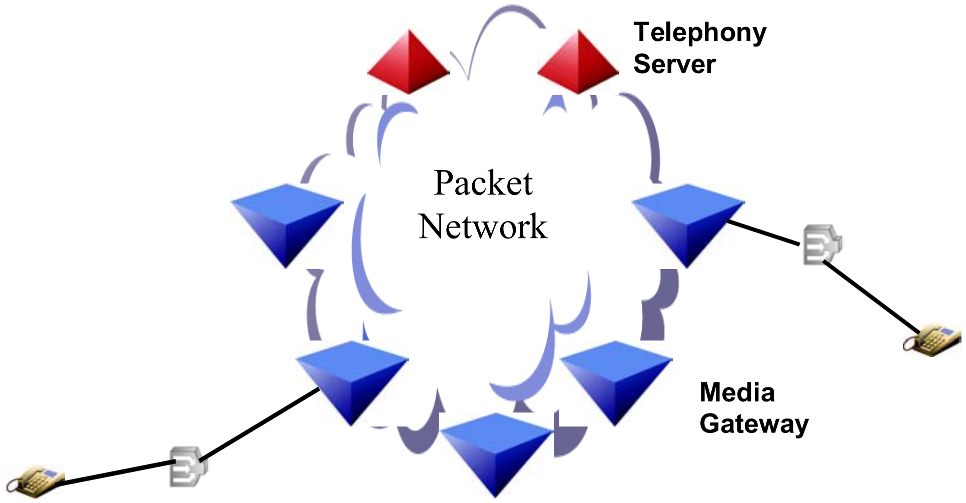

Diagram 2: Maltacom plc new network

Another infrastructure with almost ubiquitous coverage in Malta is the terrestrial network operated by Melita Cable. This is a typical hybrid fibre coaxial (HFC) cable network, the primary use of which is the delivery and provision of cable TV. Melita Cable undertook a network upgrade in the late 1990s in order to render their network bi-directional and thus be in a position to provide two-way communications. As a result of this, in 2000, Melita Cable started offering high speed Internet access across its HFC network via cable modem. Furthermore, as from July 2005 the cable operator introduced a packet-based voice service. Given that to date it has not concluded any interconnection agreements with other local operators, subscribers to this product are not able to make off-net calls but only on-net and international calls. The MCA is aware that the operator started negotiations with the main public voice operators to get the necessary interconnection.

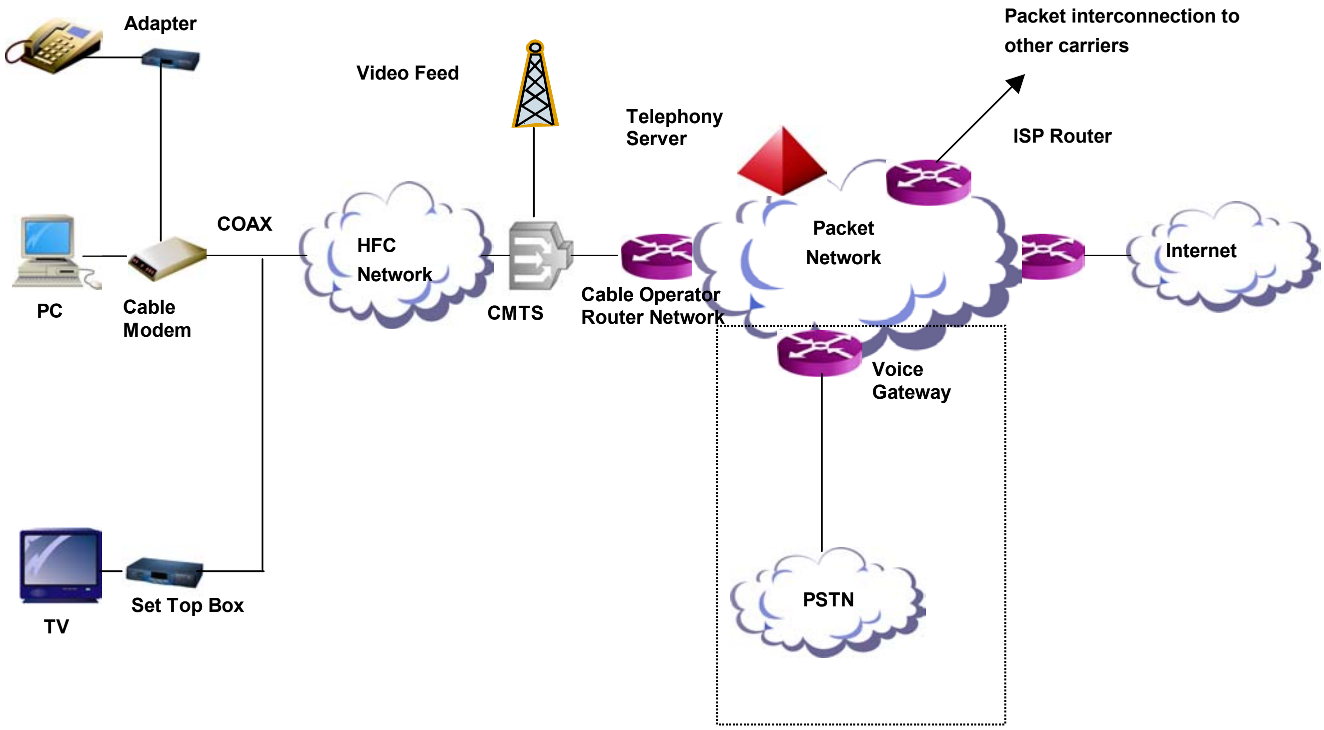

Diagram 3: Melita Cable network

2.2 Market Boundaries

In the national consultation document, the MCA proposed to functionally define the boundaries of the relevant markets for call origination, call termination and transit services primarily on a circuit-switched PSTN topology as follows:

Call origination services on the public telephone network provided at fixed locations provide call setup, switching and connection for the initial stage of the call. They incorporate conveyance from an end-user to the network-end of the end-user's local loop through to the primary node (e.g. primary switch/ media gateway) prior to the next stage in the call routing (either call termination or transit).

Call termination provides call completion and switching functionality at the terminating end of a call. It involves the conveyance of calls from the end of the previous stage in the call routing (either call origination or transit), through the primary node (e.g. primary switch/ media gateway) to the called end-user via the local loop.

Transit services comprise the conveyance of traffic through at least one switching node (e.g. tandem switch/ media gateway) not acting as a primary connection to the end-user for the conveyance of a particular call[5]. This would include the conveyance of on-net calls, calls between the network and OAOs, all international calls (self-supplied or otherwise) and all calls handed over to the network by an originating operator to a third operator for termination.

[5] includes conveyance through the International Switching Centres

The document stated that the market boundaries identified above would apply to Maltacom's current network (see Diagram 4 below) and may also be applied to Next Generation Networks (NGN) (see Diagram 5 below) including Maltacom's new network and Melita Cable's network.

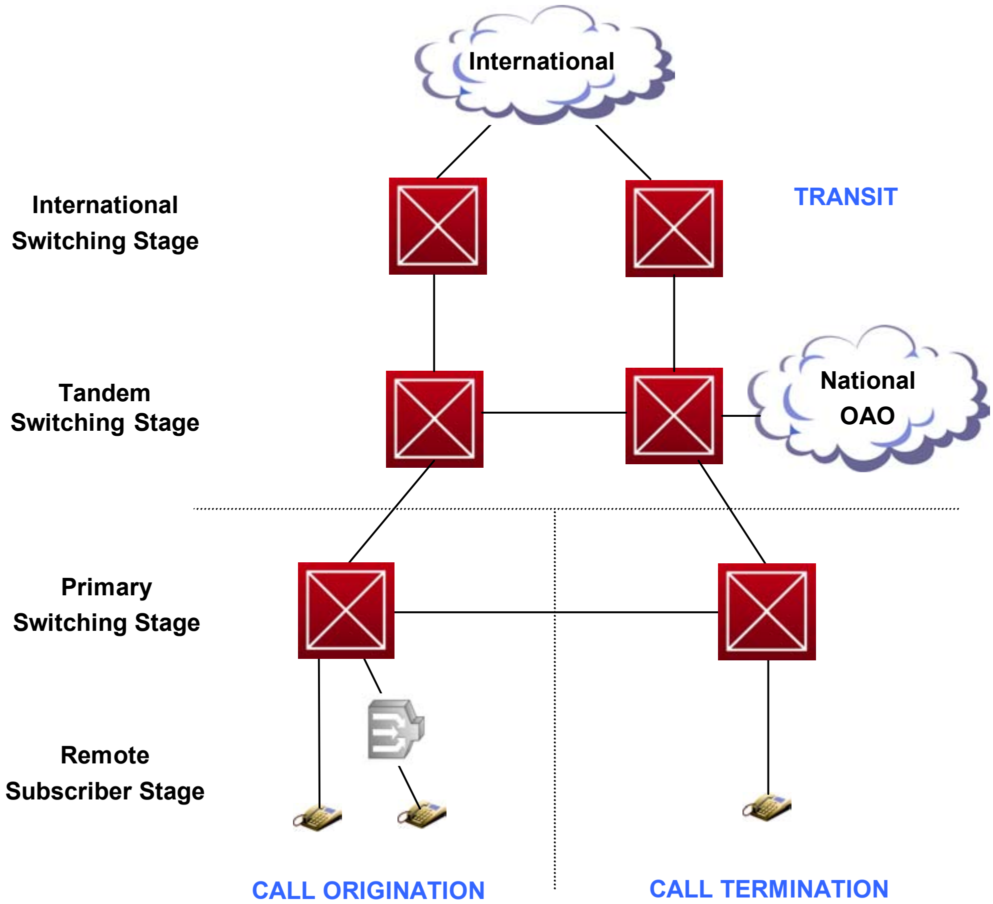

Diagram 4: POTS Market Boundaries

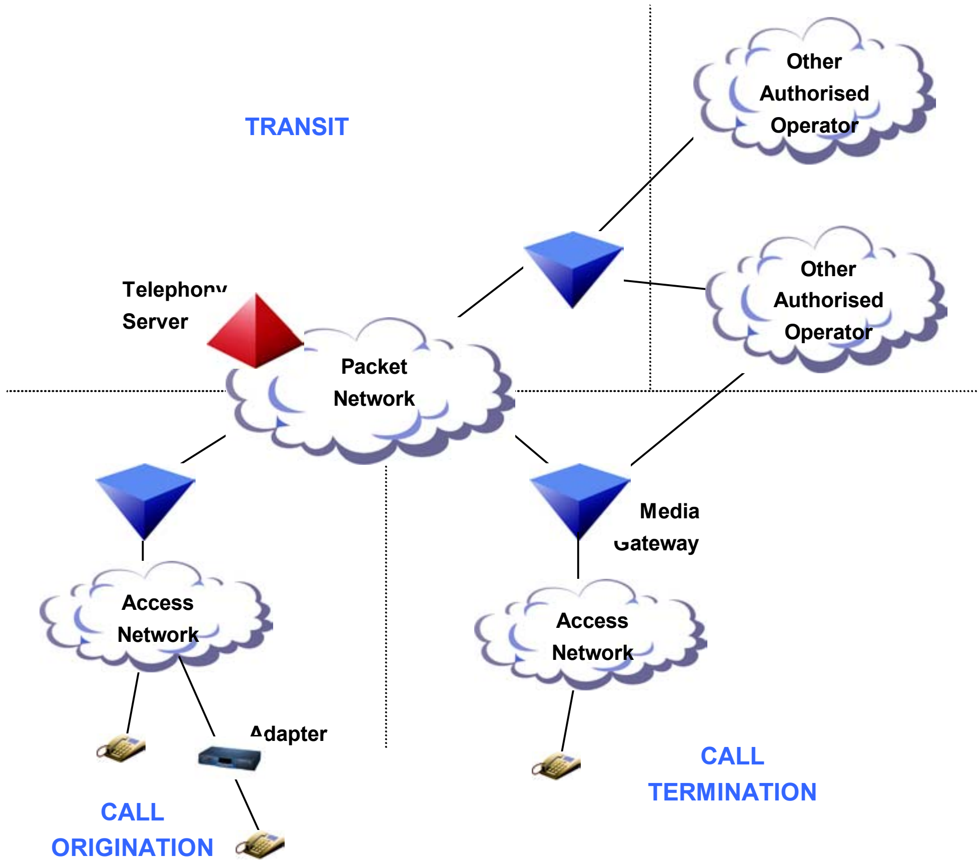

Diagram 5: Next Generation Network Market Boundaries

Given recent developments supported by Maltacom's submission to the effect that its project to deploy an NGN is underway and expected to be completed by the third quarter of 2006, the MCA has reconsidered these proposed boundaries. The completion of the NGN project by Maltacom will mean that by the end of this year, well within the timeframe of the market review, the underlying technology of all public fixed networks in Malta will rely on packet-based networks.

In view of this, the MCA feels that given the forward looking nature of the market reviews and the rapid deployment of next generation networks, it is no longer appropriate to define markets 8, 9 and 10 on the basis of circuit-switched PSTN technology. As explained earlier, the definition contained in the national consultation document was broadly based on the incumbent's current PSTN network, but could also be applied to NGNs.

Clearly, since NGNs rely on packet-based rather than circuit-switched solutions, NGNs are more streamlined in the way they convey calls. An operator like Maltacom is able to cover the national territory with four fully-meshed media gateways as opposed to the fifteen PSTN switches now in operation. The cable infrastructure is deployed in a similar setup. Contrary to circuit-switched technology, the concept of tandem switching does not apply to NGNs.

On the basis of this, the MCA has therefore decided to reassess the market boundaries originally stated in the national consultation document. The Authority is defining the boundaries of the relevant markets for call origination, call termination and transit services as follows:

Call origination services on the public telephone network provided at fixed locations include call set-up, switching and connection for the initial stage of the call. They incorporate conveyance from an end-user to the next stage in the call routing (either call termination or to the point of interconnection).

Call termination provides call completion and switching functionality at the terminating end of a call. It involves the conveyance of calls from the end of the previous stage (either call origination or to the point of interconnection), to the called end-user via the local loop.

Transit services comprise the pure conveyance of calls between two operators across a third transit operator. This incorporates both national and international calls. The market for international transit includes self-supply.

These market boundaries are depicted in the diagram below.

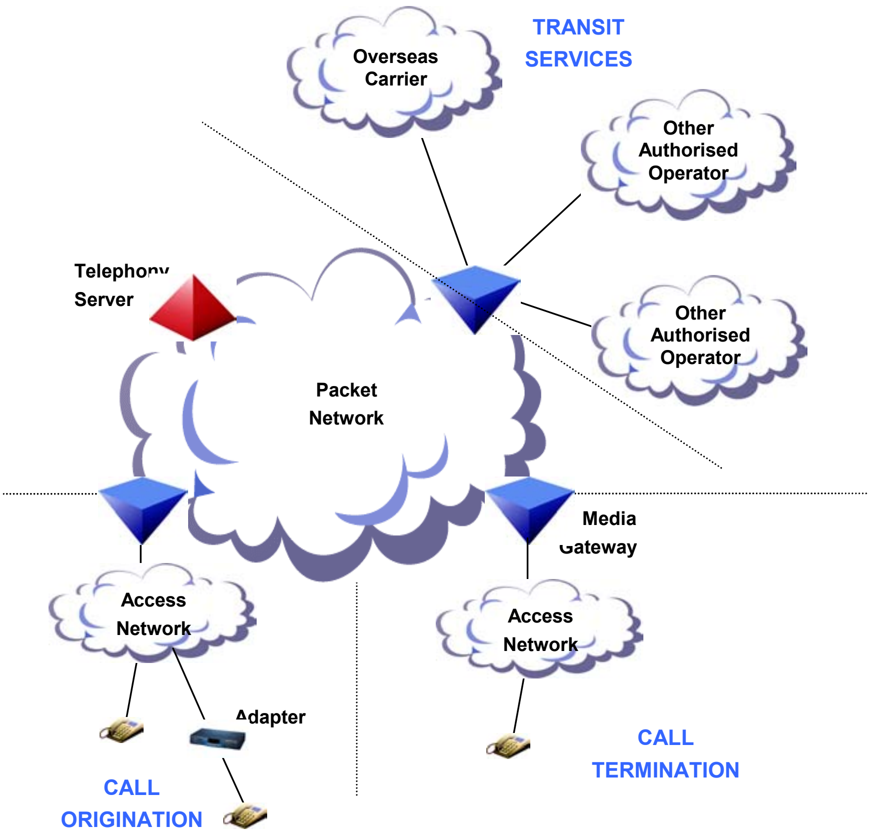

Diagram 6: NGN Market Boundaries

PART A – WHOLESALE CALL ORIGINATION

Chapter 3 - Market Definition: Call Origination

Regulation 10 of the ECNSR provides that before an SMP determination may be considered, the MCA must identify the markets in relation to which it is appropriate to consider such a determination and to analyse those markets. In identifying the relevant markets, the MCA is required to take utmost account of all applicable guidelines and recommendations issued by the European Commission.

Paragraph 3.1 of the Commission's Recommendation on relevant markets of 11th February 2003 states that *'because market analysis is forward-looking, markets are defined prospectively taking account of expected or foreseeable technological or economic developments over a reasonable horizon linked to the timing of the next market review'*. The market definition has been carried out on a forward looking basis and, where it is thought possible that market conditions may change significantly during the timeframe of this review, these changes are identified and discussed.

The Commission identified the wholesale call origination market as a relevant market for assessment by the NRAs. It includes the originating access that enables providers to supply retail calls on the public fixed telephone network.

The MCA has conducted an assessment of the market for wholesale call origination on fixed networks in order to validate its appropriateness in the Maltese context, and as preparatory work for the assessment of SMP in this market.

Where the market definition differs from the Commission's Recommendation the differences are identified and justification given in the light of the national circumstances which justify this departure, in the manner prescribed by the Commission's Recommendation.

In formulating its approach to market definition, the MCA has paid the utmost regard to the Commission's Recommendation and the Comments Letter pursuant to Article 7(3) of Directive 2002/21/EC sent by the Commission to the MCA on 1st June 2006.

3.1 Market Definition Process

The purpose of the market definition process is to identify the competitive constraints that electronic communications service providers face. There are two dimensions to the definition of a relevant market: the relevant products to be included in the same market and the geographic extent of the market. The MCA's approach to the market definition is in line with that identified in the MCA's market review methodology.

Recital (7) of the Recommendation clearly states that the starting point for market definition is a characterisation of the retail market over a given time horizon, taking into account the possibilities for demand and supply-side substitution. The wholesale market is then identified subsequently to this exercise being carried out in relation to the retail market. This approach is repeated in paragraph 3.1 of the main Recommendation and is exactly that adopted by the MCA in the following sections.

Call origination services on the public telephone network provided at fixed locations include call setup, switching and connection for the initial stage of the call. They incorporate conveyance from an end-user to the next stage in the call routing (either call termination or to the point of interconnection).

In Malta, the incumbent (Maltacom) is the main provider of fixed call origination services. At present, even though the operator offers call origination services in its Reference Interconnection Offer (RIO), no other operator has started using this service.

3.2 Retail Market

The Explanatory Memorandum to the Commission's Recommendation on relevant markets states that *'the relevant market is considered to comprise call origination for telephone calls and for the purpose of accessing dial-up internet service provision'.* Since the demand for wholesale call origination services is derived from the demand for retail services, the MCA takes the view that the scope of the wholesale market definition is conditioned by the extent to which operators require call origination services to be able to provide the relevant range of retail services. The MCA has first considered the relevant retail markets and then analysed those at the wholesale level.

The demand for call origination stems from:

- carrier selection (CS) and carrier pre-selection (CPS) related services; and
- the demand for call services by subscribers of access network operators.

The analysis of the retail markets in the document on *'National Telephone Services Provided At Fixed Location'*[6], led to the view that service providers offering telephone services tend to offer end-users an entire range of call types. These would generally include calls to geographic numbers, calls to non-geographic numbers, international calls, dial-up Internet calls and calls to mobile. The call origination services in this analysis are therefore being defined by reference to such retail telephone services.

In spite of this, unlike in the retail market where residential and business customers have different demand characteristics, wholesale call origination services provided to competing undertakings are the same regardless of whether they are being provided in relation to residential or business subscriber lines. This suggests that wholesale call origination for residential and business subscribers falls within the same market.

3.3 Wholesale Market

3.3.1 Wholesale Demand Side Substitutability

As indicated above, call origination can either be self-supplied by a network operator to its own retail arm or provided by such a network operator to third parties. These third parties can be CS/CPS operators, terminating providers of non-geographic services (for example freephone services provided by alternative operators), Internet Service Providers, etc.

Only the operator with control over the end-user connection can provide call origination services. Therefore, undertakings wanting to acquire call origination services from such an

[6] Link to document: www.mca.org.mt

operator are not able to substitute its service for that of another access network operator should the price of such services increase. An alternative operator wanting to provide CS/CPS services to the customers of operator X cannot resort to call origination services from operator Y as a feasible substitute to call origination services of operator X.

An increase in the price of wholesale call origination would be passed on to the retail level unless the retail service provider absorbs the price increase itself. Such an increase would affect both the retail arm of the network operator and third parties acquiring wholesale call origination, in the same way. This means that an operator raising its wholesale call origination charges would end up with either decreasing the profit margins of its retail arm or raise the prices of its own retail services. This may act as a constraint to price increase.

Moreover, the calling party has the ability to choose its originating operator[7] predominantly based on the level of pricing at the retail level. If the increase in retail costs to the calling party is significant, the subscriber will most likely switch the retail service provider. The ability to switch to another originating access network operator imposes a pricing constraint on the wholesale call origination price offered by an access network operator.

One direct alternative to the purchase of wholesale call origination is to establish network access to end-user locations by building a network. A new entrant may also decide to purchase or lease an established network connection to the end-user locations. This may be done by, for example, renting local loops or acquiring leased lines. The MCA believes that neither of these alternatives is a suitable substitute for call origination. Such services are not functionally equivalent to wholesale call origination in that they provide dedicated access to the end-user. This is also reflected in their cost. While in the case of wholesale call origination the service provider pays only for the switched capacity, the acquisition of leased lines and unbundled local loops requires a substantial financial commitment. The MCA therefore considers it unlikely that service providers would promptly switch between wholesale call origination services and leased lines or unbundled local loops, in response to a 5 to 10% increase in price.

3.3.2 Wholesale Supply Side Substitutability

In considering supply-side substitution, the key question to ask is whether a prospective supplier would enter the market in response to a small but significant increase in the price of wholesale call origination by a hypothetical monopolist.

As explained earlier, an ubiquitous bi-directional cable infrastructure, which currently covers more than 95 per cent of all households, has been operating since 1991. Together with the provision of television and broadband data services and following an upgrade to its existing infrastructure it recently started offering a packet-based voice call service. This service enables users to make on-net and international calls only for the time being. To date, the cable operator has not concluded any interconnection agreements with other network operators and therefore subscribers cannot make off-net local calls. Nevertheless, the MCA is aware that the operator started negotiations to interconnect with the main public voice operators in order to start providing off-net calls by the end of the year. It is therefore appropriate to consider call origination over the cable network to be in the same relevant market.

[7] The calling party can choose either the retail arm of the network operator, a CPS operator, or another network operator offering access and call services

Another potential and alternative type of access network is broadband wireless access (BWA) network. In October 2005, the MCA allocated frequency spectrum to three undertakings for the deployment of national BWA networks. The investment needed to roll out a nation wide BWA network is significant and a lengthy process. The MCA believes that operators using broadband wireless technology are unlikely to have an impact during the timeframe of this review. In any case, the MCA is going to monitor closely the development of BWA services in Malta and will consider revising the market review if the market structure changes considerably.

3.4 Relevant Geographic Market

A relevant geographical market comprises the area in which the undertakings concerned are involved in the supply and demand of products and/or services, in relation to which the conditions of competition are sufficiently homogeneous and which can be distinguished from neighbouring areas because the conditions of competition are appreciably different to those areas.

According to the EU Guidelines, in the electronic communications sector, the definition of the geographical scope of the relevant market is generally determined with reference to the area covered by a network, and to the existence of legal and other regulatory instruments.

Based on these definitions and the market conditions described earlier on the MCA takes the view that the relevant geographic market for the provision of wholesale call origination services is national in scope. This view is supported by the fact that all fixed networks operate at a national level and do not differentiate their services in terms of pricing and availability between different geographic regions.

3.5 Summary of responses to the National Consultation and MCA replies related to the Market Definition

Three respondents provided comments on the market definition of wholesale call origination. Two respondents agreed with the market definition set out in the national consultation document.

The other respondent stated that BWA networks should have been included in the defined markets. The undertaking disagreed with the conclusion of the national consultation that BWA networks are not expected to be sufficiently deployed such that they do not warrant inclusion in the market. It added that the call for applications stipulated that within the first year from allocation, each BWA network will need to cover at least 33% of the national territory – thus reflecting the ease of rolling out such networks over a small territory. It stated that such networks will probably start being rolled out in the most affluent or populated areas of the country.

The MCA has evaluated the above-mentioned submission in the context of the three BWA licences granted on the 21 October 2005[8]. Two of the three BWA licensees have agreed to cover at least 90% of the national territory within two years of the grant of the spectrum, whilst the other undertaking agreed to achieve at least 66% coverage of the territory within the same period. It is therefore expected that during the timeframe of this review, the roll-out of BWA networks would be at an advanced stage, thus allowing the potential for BWA

[8] It should be noted that the BWA spectrum licences where granted after the publication of the National Consultation

operators to start providing services over their networks. Even though the MCA does not have any definite information as to whether these operators will start providing telephony services during the timeframe of this review, it nonetheless is aware that such networks will have the capability to offer call origination services.

It is therefore appropriate to consider wholesale call origination over broadband wireless networks to be in the same relevant market.

In its national consultation document, the MCA's proposed definition of the relevant market referred to wholesale call origination "provided over PSTN or alternative fixed electronic communications networks". A respondent argued that the reference to PSTN is not technology neutral as it singles out the incumbent's network.

The MCA has taken into consideration this comment and has amended its definition in a way that the market is defined in a more technology neutral fashion.

3.6 Comments by the European Commission pursuant to Article 7(3) of the Framework Directive related to the Market Definition

In the draft measures notified to the European Commission, the MCA included Broadband Wireless Access in the relevant markets for wholesale call origination provided over fixed public telephone networks.

In its comments, the Commission argued that the MCA has not conducted a full substitution analysis before defining the relevant market. The Commission commented that the MCA's conclusion that it cannot be determined whether BWA operators will offer voice services and hence call termination services over their own individual networks during the lifetime of this review would seem to cast doubts as to whether call origination services will be provided over the timeframe of the review. The Commission however recognised that the inclusion of this technology in the relevant market does not affect the finding of SMP or the scope of regulation.

As described above, given the coverage obligations the BWA licensees have agreed to, such networks will deploy ubiquitous networks in a very short time within the timeframe of this review. The MCA is aware that BWA networks are capable of providing packet-based voice services similar in functionality and price to those provided by the fixed incumbent and the cable network. Hence, even though the MCA does not have any definite information as to whether these operators will start providing telephony services during the timeframe of this review, it nonetheless believes that in view of the forward-looking aspect of the Market Review, such possible entry is real and hence it is appropriate that call origination over BWA networks should be included in the market definition.

3.7 Conclusion on Market Definition

The MCA hereby defines call origination services as services on the public telephone network provided at a fixed location including call set-up, switching and connection for the initial stage of the call. It incorporates conveyance from an end-user to the next stage in the call routing (either call termination or to the point of interconnection).

Based on the analysis presented above, the MCA is hereby identifying the relevant market for wholesale call origination to include:

- wholesale call origination services provided to third parties; and

- self-supplied wholesale call origination services.

The relevant market includes wholesale call origination services provided over public fixed electronic communications networks including PSTN, cable and BWA networks.

Chapter 4 - Market Analysis: Call Origination

Having identified the relevant market, the MCA is required to analyse the market in order to assess whether any service provider/s have significant market power as defined in Regulation 8 of the ECNSR (Article 14 of the Framework Directive). This section presents this analysis.

4.1 Method to Assess Significant Market Power

Under the EU Communications Directives and Article 4(8) of the ECRA, SMP has been defined so that it is equivalent to the competition law concept of dominance. Article 14(2) of the Framework Directive states that:

"An undertaking shall be deemed to have significant market power if, either individually or jointly with others, it enjoys a position equivalent to dominance, that is to say a position of economic strength affording it the power to behave to an appreciable extent independently of competitors, customers and ultimately consumers."

Further, Article 14(3) of the Framework Directive states that:

"Where an undertaking has significant market power on a specific market, it may also be deemed to have significant market power on a closely related market, where the links between the two markets are such as to allow the market power held in one market to be leveraged into the other market, thereby strengthening the market power of the undertaking".

Therefore, in the relevant market, one or more undertakings may be designated as having SMP where that undertaking, or undertakings, enjoys a position of dominance. Also, an undertaking may be designated as having SMP where it could lever its market power from a closely related market into the relevant market, thereby strengthening its market power in the relevant market.

In assessing whether an undertaking has SMP, this review takes the utmost account of the Commission's SMP Guidelines as well as the MCA's equivalent guidelines, as referred to in Chapter 1 above.

4.2 Assessment of SMP against Relevant Criteria

This section considers whether single dominance is likely to exist in the identified relevant market. In the MCA's view the assessment is fully compliant with the Commission's Guidelines. The SMP assessment set out is based on the evidence available to the MCA.

Single dominance can be assessed using a large number of criteria as described in the Commission's and the MCA's guidelines on SMP assessment. This analysis in the first instance considers the following key criteria:

- Market share analysis;
- Barriers to entry;
- Countervailing buyer power;
- Vertical Integration;

- Potential competition.

4.2.1 Analysis of Market Shares

Although high market shares are not in themselves decisive as to whether an undertaking enjoys SMP in a market, the MCA is of the opinion that market shares higher than 50 per cent would necessitate the designation of SMP. Paragraph 75 of the Commission Guidelines states that, "*according to established case-law, very large market shares – in excess of 50% - are in themselves, save in exceptional circumstances, evidence of the existence of dominant position*."

As at June 2005 the fixed telephony incumbent Maltacom was the only provider of fixed access and calls in Malta and was therefore the only provider that was present at both retail and wholesale level. Given this situation, Maltacom had a 100 per cent market share when calculated in both volumes and revenues in the wholesale fixed call origination market. Furthermore, Maltacom has an enduring absolute market share in this market which further reinforces the presumed finding of dominance.

In the prevailing decision taken under the present regulatory regime, Maltacom has been designated as having a dominant market position in the public fixed telephony market which includes all fixed telephony services provided by the undertaking[9]. Amongst the obligations already imposed, Maltacom was obliged to provide third party access for the provision of CS and CPS services. However to date, no such operator is effectively operating as such.

During July 2005, the cable operator which operates a nation wide network, launched a packet-based voice service which, up to the date of publication of this review, allows its customers to make on-net calls and international calls only. To date, Melita Cable does not have any interconnection agreements with other local operators and therefore customers cannot make off-net calls. Given this limitation, this service is currently not fully substitutable with the traditional fixed telephone services provided by Maltacom.

Given the very early stage of development of this service, the MCA has very little information on the penetration and volumes of this cable voice service. However, the MCA is aware that as at September 2005, the number of subscribers of this cable voice service is approximately 2000. This figure is considered insignificant in contrast to the 202,714 subscribers connected to Maltacom's PSTN network as at June 2005. Given that the cable voice service has only been offered for a short period of time, it is very difficult to estimate the volumes of traffic passed over the network. Nevertheless, the MCA considers that the small number of subscribers currently using the cable voice service as well as the short time since the its launch, contribute to the limited volumes of traffic. The MCA is of the opinion that, until a significant number of customers are making use of the cable voice service, it is unlikely that Maltacom's presumed dominance in the wholesale call origination market would be negatively impacted.

As a result, the current market structure dictates that Maltacom has significant market power in the provision of wholesale call origination services at a fixed location. The finding of dominance is further supported by the fact that Maltacom has an enduring high market share in this market. The MCA expects that this situation is likely to persist during the timeframe of this review.

[9] http://www.mca.org.mt/library/show.asp?id=100&lc=1

4.2.2 Barriers to entry

Barriers to entry can take many forms such as significant sunk costs or economies of scale and scope resulting from the presence of a large undertaking in the market. The presence of entry barriers may create the necessary market conditions for an operator to exercise market power.

Economies of scale

For a significant number of years, Maltacom has been the only operator providing fixed access and telephone services in Malta. Given the ubiquity and the high density of its network, Maltacom enjoys economies of scale in providing fixed access and call services. The per unit cost incurred by this undertaking for providing these services are therefore likely to be much lower than those of a new entrant who would need to obtain a large share of the market if it is to effectively compete with the incumbent. In order to gain a large market share the new entrant will have to price below the incumbent's prices, which would make it very difficult for this operator to cover its costs.

Another area where economies of scale are likely to be achieved by Maltacom is in the supply of associated support services. As Maltacom provides a full range of services including access and calls, its per unit cost for providing associated services, like billing and maintenance costs would be much lower than the cost of a new entrant.

Economies of scope

Economies of scope exist where average costs for one product are lower as a result of it being produced jointly with another product by the same firm. Cost savings may be made where common processes are used in the provision of a group of services. When an operator is present in a large number of markets it can share common costs over a greater range of services.

Maltacom is present in a large number of electronic communications markets providing a full range of services over its ubiquitous network, such as leased lines, international connectivity, fixed calls and others. The ability to benefit from economies of scope may act as a barrier to entry for new competitors. For a new entrant to enjoy such economies of scope it would need to enter a large number of markets simultaneously, which would firstly increase the entry costs and secondly would make it more difficult to recoup such costs on exit.

The ability of Maltacom to benefit from such economies of scope are an indication that significant barriers to entry exist, and suggests that Maltacom will continue to enjoy SMP in the wholesale call origination market.

4.2.3 Vertical Integration

Vertical integration involves an undertaking operating in a given market, while also being present in a market that is at a higher or lower level in the chain of provision. Since vertically integrated operators are able to influence both upstream and downstream markets it would be more difficult for a new provider entering in one of these markets to compete effectively with the integrated operator.

Maltacom is an integrated provider and operates at a wholesale and retail level in all the electronic communications markets where it is present. The ability to lever market power from upstream to downstream markets may deter potential entry in these markets. An integrated provider can make it difficult for new entrants at a retail level to obtain the necessary inputs at a competitive price (i.e. cost based) and therefore create an entry barrier at retail level. Maltacom has to date leveraged its market power at the wholesale level into the retail market by charging excessive wholesale prices. This has lead to a situation where alternative operators could not enter the retail market profitably since wholesale rates were more expensive than the retail rates that Maltacom was charging its customers. The MCA believes that this situation is a clear reflection of the SMP that Maltacom enjoys at a wholesale level and this situation is likely to persist in the absence of appropriate regulation.

4.2.4 Countervailing Buyer Power

The existence of customers with a strong negotiating position, which could be exercised to produce a significant impact on competition, will tend to restrict the ability of providers to act independently of their customers. The extent of countervailing buyer power depends on the ability of large customers to switch to alternative providers or not to purchase the service or product from that particular provider within a short period of time.

As stated before, Maltacom is the only provider of a ubiquitous fixed telephone service in Malta and no alternative operator is currently purchasing wholesale call origination services from Maltacom. With the current market structure there is clearly lack of countervailing buyer power on Maltacom in setting wholesale call origination charges.

4.2.5 Potential Competition

Potential competition refers to the prospect of new undertakings entering the market within a short period of time and therefore possibly constraining incumbent firms. The threat of potential entry may prevent firms from raising prices above competitive levels, leading thereby to a situation in which no market power can be profitably exercised.

As stated earlier, in July 2005 the cable operator launched a cable voice service which enables its customers to make on-net calls and international calls. The MCA is of the opinion that when the cable operator starts to interconnect with other local operators, its voice service will compete with the traditional fixed telephone services offered by Maltacom. However, until the cable operator interconnects with other local operators, customers using the cable telephone service would not be in a position to have only one telephone line connection (i.e. cable or PSTN) since customers wanting to call a PSTN number would still need access to the Maltacom PSTN network and its fixed telephony services. The MCA is therefore of the opinion that until the cable operator interconnects with other local operators, the cable voice services would not be in a position to compete at par with the incumbent's fixed call services and therefore customers would not have a fully substitutable service. The MCA considers that this limitation will not allow the cable operator to successfully exert a significant competitive constraint on Maltacom in the provision of fixed telephony services for the time being.

Another potential development in the market will be the introduction of voice call services over BWA networks. On the 21st October 2005 the MCA allocated frequency spectrum to three undertakings for the deployment of a national BWA network. BWA network operators could potentially start providing voice services and offering wholesale call origination services over their network. However, the MCA considers that such a development would not have a material impact during the timeframe of this review since the rollout of a nationwide BWA network would be a lengthy and extensive process.

The MCA expects that the introduction of packet-based services is likely to increase the level of competition in the fixed calls market in the future. However, the MCA considers that this type of service is still emerging in Malta and it will not erode the significant market power held by Maltacom within the timeframe of this review. Nonetheless, the MCA will closely monitor the development of voice services in Malta and will consider revising its conclusions if the market structure changes considerably.

4.3 Summary of responses to the National Consultation and MCA replies related to the Market Analysis

Two respondents agreed with the MCA's conclusions in the market analysis for wholesale call origination and the proposed SMP designations. The other respondent commented on a number of issues regarding market shares, barriers to entry, vertical integration, countervailing buyer power and also potential competition, each of which is summarised below.

Market Shares

One respondent commented that the reason why there are no CS and CPS operators is because this is not an attractive option since all operators in the market have their own network infrastructure and therefore forgo the use of CS and CPS services.

The MCA does not concur with this view since the Authority believes it is up to the potential investors to decide which business model is more attractive for them. Contrary to what the respondent argued, the lack of take-up of CS and CPS services is dependent on a number of factors, including the high wholesale rates which until recently were being charged by the incumbent, and not only because there are other network operators owning their own infrastructures. Nevertheless, the role of the MCA is to ensure that all reasonable requests for access for the provision of CS and CPS services are met, and not to determine whether these investment options are attractive or not.

The respondent also commented on the fact that in the consultation document, the MCA stated that it had *"little information on the penetration and volumes of the cable service*". The respondent argued that the MCA should have sufficient powers to request all data necessary to analyse the market properly.

The MCA is cognisant of its powers at law and every quarter carries out a data collection exercise in order to obtain necessary data for its ongoing analysis. The comment made in the consultation document was not intended to suggest that the MCA does not have the appropriate information to carry out its analysis properly, but rather that the time series of this data is very limited since the cable voice service was only launched 3 months before the publication of the consultation document. The MCA has since then continued to update its data and is now in a position to update its information as at December 2005.

Minutes Originated	2005Q2	2005Q3	2005Q4
Maltacom	213,713,247	193,559,917	196,469,685
Melita Cable	-	466,835	1,423,527
Maltacom Share	100.0%	99.8%	99.3%
Melita Share	-	0.2%	0.7%

Subscribers	2005Q2	2005Q3	2005Q4
Maltacom	202,714	202,932	202,116
Melita Cable	-	2,332	3,731
Maltacom Share	100.0%	98.9%	98.2%
Melita Share	-	1.1%	1.8%

As clearly shown above, since the introduction of the cable voice service the cable operator has increased its subscribers to 3,731 whilst the subscribers of Maltacom decreased marginally by 600 to 202,116. In terms of minutes, during the last quarter of 2005, Melita Cable had originated nearly 2% of the total minutes originated over both networks. Although the cable voice service registered a positive increase in minutes Maltacom still holds a significant 98% market share.

One of the respondents argued that had the MCA provided a more complete set of data and adopted a more dynamic and forward-looking approach in its interpretation of figures, it would have concluded that Maltacom would not have an enduring high market share.

As clearly shown in the table above, both in terms of subscribers and volumes of minutes, Maltacom maintains a very high market share. Based on the data provided above, the MCA clearly maintains its position that it is likely that Maltacom would maintain a high market share during the timeframe of this review.

Barriers to Entry

One respondent argued that in its market analysis assessment the MCA completely ignores the fact that there is *"another network that enjoys ubiquity and economies of scale and scope"* and that with interconnection agreements in place, it will provide direct competitive pressure on Maltacom.

The MCA does not dispute the fact that Melita Cable has a ubiquitous network. Neither does it dispute that following the setting up of interconnection agreements with other public voice telephone networks, Melita Cable would be in a position to compete at par with Maltacom. However, assuming that interconnection agreements are achieved by the end of 2006, the MCA is doubtful as to how the cable operator could easily erode the market share of Maltacom over the next two years. Furthermore, the entry of Melita Cable in the market does not imply that the market is effectively competitive but rather, that the market could tend towards a competitive environment in the future.

The same respondent further states that in the MCA's market review entitled 'Access to the public telephone network at a fixed location', the Authority states that *"…ubiquity of both the PSTN and cable networks implies that costs associated with supply are not substantially different for business and residential customers"*. The respondent therefore concludes that the costs of Maltacom and Melita Cable for providing fixed telephony to their customers is not different.

The MCA does not concur with the interpretation arrived at by the respondent. That statement simply states that due to the almost 100% coverage of both the PSTN and cable networks, the cost of providing access services to a business customer would not be very different from supplying a residential customer. That statement in no way implies that the cost of Maltacom to supply its customers is the same as that incurred by Melita Cable. That statement was extracted from a section wherein the MCA was comparing the cost of supplying a business customer to that of supplying a residential customer, and not the cost of supplying services over the networks of Melita Cable and Maltacom. The comparison is between different customer classifications and not between different network platforms. The respondent's claim that the MCA is in any way stating that Maltacom and Melita Cable face the same cost and economies of scale is therefore incorrect.

A respondent suggested that the volumes generated over Maltacom's networks are not so high such that a new entrant would find it difficult to achieve similar economies of scale and scope. The respondent provides a simple comparison of the traffic generated over Maltacom's network to that of another 'small incumbent'; the Portuguese incumbent. The respondent concludes that the size of Malta limits the potential gains of economies of scale and scope compared to other countries.

The MCA does not in principle agree with these kind of comparisons. The respondent based his conclusion on just one statistic by mentioning the volumes of minutes passed over the Portuguese incumbent, Portugal Telecom, and by comparing them in absolute terms with those of Maltacom. The MCA would like to point out that the population of Portugal is approximately 10.5 million compared to the 400,000 of Malta and the geographic size of Portugal cannot possibly be compared with the size of Malta. As a result, the capital and operational cost associated with operating a network covering the territory of Portugal is significantly higher than that of Maltacom to cover the Maltese territory.

Arguably, taking the statistics provided by the respondent and working out the number of minutes per subscriber passed over the two respective networks, it transpires that on average, a Maltacom subscriber made 788 minutes in the first quarter of 2005 whilst a Portugal Telecom subscriber made 537 minutes during the same period[10]. This simple statistic clearly shows that a Maltese subscriber makes a significantly higher use of Maltacom's network than a fixed subscriber in Portugal. The MCA would like to point out that economies of scale are not only related to absolute size but also to network utilisation and efficiency in operations. Nevertheless, the MCA is wary of making such comparisons which might lead to inaccurate conclusions.

One respondent argued that due to technological developments new entrants, in particular BWA operators, will find it less difficult to compete with Maltacom by using cheaper IP technology and therefore any economies of scale and scope enjoyed by Maltacom would be easily achieved by new entrants.

The MCA is cognisant of the emergence of IP technology and the efficiency gains of providing services over NGN infrastructures. However, the MCA has strong reservations

[10] As at Q1 2005 Maltacom had 203,039 fixed line subscribers and 160 million minutes were generated over its network. Over the same period Portugal Telecom had 3,914,000 subscribers which generated 2.1 billion minutes. The figures for minutes were provided by the respondent whilst the number of subscribers were extracted from Maltacom's quarterly data submission and Portugal Telecom's website:

http://www.telecom.pt/InternetResource/PTSite/UK/Canais/Investidores/InformacaoFinanceira/IndicadoresChave/

about whether BWA entrants will be in a position to achieve economies of scale and scope so quickly such that they will be able to compete with Maltacom at an early stage of their launch. In fact, as the same respondent correctly states in its response, BWA networks will only be able to cover 33% by the end of this year and 90% by the end of 2007. This implies that people would not be able to substitute the service of Maltacom with the BWA providers prior 2007 since these would not be able to offer their clients a ubiquitous service. This would greatly limit the take-up of a hypothetical voice service provided by BWA providers.

The cable operator already has an IP network infrastructure and therefore it can reap the benefits of IP technology. However, unlike Maltacom, Melita Cable does not have an equivalent subscriber base for voice services which would enable it to enjoy economies of scale. The volume of minutes of the cable voice service over the last 6 months of 2005 registered a positive increase however the volumes are much lower than those of Maltacom. The fact that new entrants use IP technology does not mean that the new entrants automatically face the same economies of scale as the existing operator that has a high market share. Economies of scale are gained over time, subject to volumes and efficient utilisation of infrastructure.

Notwithstanding the above, the MCA positively notes that Maltacom is also upgrading its own network to an IP based infrastructure which would result in significant efficiency gains in the provision of services. The MCA therefore considers that Maltacom would be able to compete and reap the benefits of improved technology in the same manner as the new entrants. Maltacom would be in a position to counteract any aggressive competition by competitors which deploy an IP based network. With its already existing large customer base, Maltacom would still be at an advantage over its competitors since it can start exploiting economies of scale associated with IP technology from day one. The new entrants would need to build their customer base, a process which would take time and would not likely happen during the time frame of this review.

Leveraging

A respondent said that due to converging services, as well as the fact that all existing network operators are present in different markets, there is a high potential for operators to offer bundles of products and therefore leverage their market position form one market to another. The potential for offering triple play over different networks is high.

The MCA is fully aware of the potential that, in the near future, triple play would be provided over different fixed electronic communications networks. Bundles of products would be offered by operators in order to retain/attract customers and enable them to have a one-stop-shop solution for the purchasing of electronic communications services. Maltacom, as the fixed incumbent owning a fixed and mobile network and also having a DTTV licence, can strongly and effectively compete with any new entrant offering triple play products, given that Maltacom's current subscriber base is nearly 100%. Maltacom is also present in almost all markets for electronic communications services. Furthermore, Maltacom is the only provider currently in a position to offer quadruple-play since its is able to offer fixed and mobile telephony, broadband and also digital broadcasting services to its subscribers. The potential for new entrants to resort to leveraging tactics can effectively be replicated by Maltacom in order to retain its large customer base.

Vertical Integration

One respondent argued that Maltacom is not the only vertically integrated provider and that the cable operator is also a vertically integrated operator and therefore its is not the only operator that can derive benefits from its vertical integration.

The MCA is in agreement with the respondent that Maltacom is not the only vertically integrated provider in the market and that the cable operator can also gain benefits from its vertically integration. However, the fact that the cable operator is also vertically integrated and can therefore potentially engage in leveraging tactics does not necessarily imply that Maltacom cannot engage in such practices as well. Given its large subscribers base Maltacom is in a better position than the cable operator to gain advantage from such vertical integration.

The same respondent reiterated that there is low demand for wholesale origination service. The respondent further argued that the consultation document notes that in certain limited cases and under specific conditions, wholesale call origination prices would work out higher than Maltacom's retail rates. This imbalance is not in anyway Maltacom's responsibility but due to regulation of prices by the MCA.

The MCA is cognisant that currently there are no CS and CPS service providers, however the Authority is aware that there is at least one party interested in such services.

The MCA fails to understand the respondent's allegation that the low demand for CS and CPS services is the result of the regulatory intervention by the MCA. The Authority would like to point out that only lately, following the imposition of the CS/CPS decision, these services have started to be offered by Maltacom, and where never offered through self-initiative.

Secondly, the lack of take-up to date of such services is not the result of regulatory intervention but rather due to the high wholesale rates that Maltacom charges. The MCA strongly disagrees with the respondents assessment of the margin squeeze present in the fixed telephony markets. Contrary to what the respondent implies, the MCA has over the past years, adjusted Maltacom's wholesale and retail tariffs several times in order to eliminate the margin squeeze adopted by Maltacom which made any potential investment in CS and CPS unprofitable.

The MCA points out that the rebalancing of tariffs in order to remove any margin squeeze is not achieved solely by increasing retail prices, but by removing inefficiencies and through the setting of cost oriented wholesale rates. The MCA strongly believes that in the absence of regulatory intervention the availability of wholesale services over Maltacom's network would have been difficult to observe.

Potential Competition

One respondent argued that the cable operator will soon conclude interconnection agreements with all public voice telephony networks, therefore competitive pressures would soon be having an effect on Maltacom. This would limit the ability of Maltacom to increase prices independently from its customers since they would move to the alternative cable operator. Moreover, the respondent presumed that BWA will start offering voice telephony services during the timeframe of this review and would hence further increase the competitive pressures on Maltacom.

The MCA is aware of prospective interconnection agreements and is of the opinion that when these agreements are finalised, the cable operator would have a fully substitutable service to compete with Maltacom. As the respondent itself implies the competitive pressures would be mainly on price increases since Melita Cable is presumed to start competing aggressively on price to attract Maltacom customers to its network. However the impact of price constraints will be felt mostly at a retail level. This impact is being assessed in two separate market reviews related to retail fixed services.

At present, from a wholesale level, the competitive constraint on Maltacom from the cable operator and BWA operators is more limited. A services provider seeking wholesale call origination services would want to reach the largest number of customers and would therefore seek to be hosted by a network operator that has a large customer base. Currently Maltacom has 98% of subscribers connected to its network whilst the cable operator has only 2%. It is therefore clear that a prospective CS and CPS operator would find Maltacom much more attractive than Melita Cable since it would be able to reach the majority of subscribers. Consequently, a prospective CS or CPS operator would find it difficult to exert a credible constraint on Maltacom by considering to acquire wholesale origination services from the cable operator.

As the customer base of the cable operator increases, the competitive pressures at a wholesale level on Maltacom will increase. However, given Maltacom's high market share it would be very difficult for Melita Cable to erode such a share during the timeframe of this review. The MCA therefore concludes that until Melita Cable gains a high market share, wholesale customers would not be able to efficiently constrain Maltacom at a wholesale level.

Similarly to the situation for the cable operator, BWA network providers would not be able to constrain Maltacom unless they have a large customers base. The respondent argues the BWA operators will achieve a coverage of 33% by the end of the year and argues that this would have a material impact on competition. The MCA however considers the limited coverage of BWA networks as a very limiting factor for attracting consumers. Two of the BWA operators will only have a fully fledged network during the last quarter of 2007 which would be very near to the end of this review period. Therefore, during the timeframe of this review, the market share of BWA operators will be too low compared to that of Maltacom to be sufficient to constrain Maltacom.

4.4 Conclusion and SMP designation

Following the discussion presented above the MCA is of the opinion that Maltacom has significant market power in the wholesale call origination market and will continue to do so during the timeframe of this review.

This conclusion is supported by a number of factors including the very high market share in terms of both subscribers and volumes of minutes; Maltacom is a vertically integrated provider and has the ability to lever power from upstream to downstream markets; and the size of Maltacom which makes it very difficult for a new entrant to attract a large number of customers during the timeframe of this review in order to gain sufficient economies of scale and scope in order to compete effectively.

Chapter 5 - Regulatory Implications: Call Origination

In accordance with Regulation 10(4) of the ECNSR, where an operator is designated as having significant market power on a relevant market in accordance with Regulation 8 of the same ECNSR, the MCA is obliged to impose on such operator such appropriate specific regulatory obligations referred to in subregulation (2) of regulation 10 of the ECNSR or to maintain or amend such obligations where they already exist.

In accordance with the Framework Directive, Regulation 10(4) of the ECNSR obliges the MCA, where an operator is designated as having significant market power in a relevant market in accordance with Regulation 8 of the same ECNSR, to impose, or amend if already imposed, the appropriate of the following obligations:

- Transparency (Regulation 18)
- Non-discrimination (Regulation 19)
- Accounting Separation (Regulation 20)
- Access to, and use of, specific network facilities (Regulation 21)
- Price control and Cost Accounting (Regulation 22)

In addition to the above, Regulation 17(3) of the ECNSR empowers the MCA, in exceptional circumstances, to propose the imposition of additional access or interconnection obligations on an operator with SMP. In doing so, the MCA is required to obtain authorisation from the European Commission prior to imposing said obligations.

Any obligations imposed by the MCA upon an operator with SMP in accordance with the above must:

- be based on the nature of the problem identified;
- be proportionate and justified in the light of the objectives laid down in article 4 of the ECRA; and
- only be imposed following consultation in accordance with article 10 of the ECRA and regulation 6 of the ECNSR.[11]

This section aims at discussing the actual and potential competition problems that exist in the wholesale call origination market, and impose adequate remedies to address these problems.

5.1 Current Remedies

Under the previous regulatory framework, the MCA has already identified Maltacom as having a dominant position in the provision of fixed telephony services. Maltacom had been

[11] ECNSR, Regulation 17(4)

designated as having a dominant market position in May 2002[12]. Consequently the MCA has imposed on Maltacom the following remedies:

- Ensure that the access or service provided meets certain specified quality of service standards, and to keep records and furnish to the MCA details of compliance with those performance standards;
- Interconnect promptly, publish a Reference Interconnection Offer and ensure that charges for access/services are cost-oriented, transparent, unbundled and independent of the application to which they are put;
- Operate a cost accounting system which is suitable for implementation of the tariff requirements imposed on dominant operators and the calculation of charges for network elements used to provide interconnection; and
- Be subject to certain regulatory controls over retail tariffs as required by the Regulations.

5.2 Competition Problems in Fixed Markets

The MCA has identified a number of existing and potential SMP-related competition problems in the wholesale fixed markets under review. These are leveraging (vertical and horizontal), barriers to entry and price-related problems.

5.2.1 Leveraging

Leveraging may be exercised by operators having SMP in two forms:

Vertical leveraging is the practice of a dominant firm that denies proper access to an essential input that it provides with the intent of extending its power from one segment of the market (the bottleneck segment) to the other (the potentially competitive segment). Such practice may be both price-related and/or otherwise.

The MCA believes that there exists the potential for vertical leveraging in all the three wholesale markets under review.

Maltacom, as a vertically integrated operator which is dominant in an upstream market may, unless prohibited by effective regulatory intervention, engage in pricing that gives rise to a margin squeeze. Furthermore, since it is able to access economies of scale and scope that are not so readily available to potential undertakings competing at the downstream level, the said undertaking may bring extra pressure to bear on the margins available for competing downstream operators. Maltacom may also resort to other price leveraging strategies such as price discrimination, predatory pricing and cross-subsidisation.

Over and above such price leveraging strategies, unless prohibited by effective regulation, Maltacom may be enticed to indulge into other forms of non-price leveraging such as, discriminatory use or withholding of information, delaying tactics, quality discrimination and the imposition of undue requirements on , and with respect to, alternative service providers.

[12] http://www.mca.org.mt/library/show.asp?id=100&lc=1

Currently, the wholesale rates which Maltacom applies are regulated and this has mitigated the aforementioned competition problems to a certain extent. The MCA considers that further regulation at wholesale level is essential in order to mitigate price-related problems at both wholesale and retail level.

Horizontal leveraging involves the dominant undertaking using its position in one market to exert undue influence on other markets at the same level in the value chain. This form of leveraging can be exercised by Maltacom as it operates in a number of horizontal wholesale markets and can potentially leverage its power from one market to another.

5.2.2 Entry Deterrence, Exploitative Behaviour and Productive Inefficiencies

Besides the leveraging issues discussed above, the MCA believes that the single market dominance in the wholesale markets under review gives rise to a number of competition problems relating to entry deterrence, possible exploitative behaviour and productive inefficiencies.

With reference to the market analysis above, the MCA notes that currently Maltacom enjoys a very high market share in the said wholesale fixed markets. Given the ubiquity and the high density of its network, Maltacom enjoys economies of scale in the provision of wholesale services.

Exploitative behaviour could take the form of measures taken to increase switching costs, exclusive dealing and also predatory, excessive or discriminatory pricing. The MCA has intervened on a number of occasions to curtail as much as possible these competition problems. At present, it is mandatory over Maltacom to have cost-oriented, transparent and non-discriminatory charges for its wholesale service.

5.3 Specific problems in the Wholesale Call Origination Market

The main impediment to competition within the wholesale call origination market is that it is particularly difficult to replicate Maltacom’s network due to the large sunk costs associated with deploying such a network. As a consequence of this, an operator wishing to provide retail services to end-users of a fixed telephony access network, i.e. end-users of Maltacom, must either lease a direct connection from Maltacom via local loop unbundling or leased line and then self-supply call origination, or make use of indirect access via carrier pre-selection and/or carrier selection. In the latter instance, the operator wishing to provide services to Maltacom’s end-users needs to purchase the wholesale origination services from Maltacom to the point of interconnection with its own network. The MCA has already established that the lease of lines through either local loop unbundling or leased lines are not suitable substitutes to wholesale call origination.

According to the Explanatory Memorandum to the Commission’s Recommendation on relevant markets, the above situation gives rise to structural barriers since ‘*the state of the technology, and its associated cost structure, as well as the level of the demand, are such that they create asymmetric conditions between incumbents and new entrants impeding or preventing market entry of the latter*’. It is widely understood that, in such cases, effective competition is unlikely to emerge without proper regulatory intervention. In the absence of such intervention, problems such as excessive and predatory pricing, foreclosure of the development of competitive downstream retail markets by virtue of a price squeeze and discrimination, as well as cross-subsidisation, remain a threat to the benefits which effective competition may have on the end-user.

Since it is not envisaged that during the timeframe of this review, the market for wholesale call origination will become effectively competitive in order to bring the benefits of competition to the end-user and to reduce market failures associated with the foreclosure of retail markets, it is essential that competing operators can gain access to Maltacom's infrastructure. This implies that remedies should be imposed in order to provide alternative operators with essential wholesale inputs.

5.4 Selecting Remedies – Principles applied

Given the identified actual and potential competition problems arising from SMP in the markets under review, the MCA is obliged to impose obligations on undertakings identified by it as having significant power on those markets. Accordingly, the MCA is imposing those appropriate obligations that it believes will encourage efficient investment and innovation and further promote competition in the markets under review.

As discussed earlier, in selecting the remedies to impose on the designated SMP operator(s), the MCA considered the nature of the problem identified and, in accordance with the principle of proportionality, where necessary, is imposing those remedies which it considers to be the least burdensome, yet most effective. The MCA also took account of potential effects on any related markets. All this is reflected below.

Having said this, in view of the complexities of the competition problems discussed above, the MCA notes that it is unlikely that any single remedy can achieve the aim of ensuring effective competition. Hence, the need for a suite of remedies that complement, support and reinforce each other.

5.5 Regulatory Obligations

The MCA has identified Maltacom as having SMP in the wholesale call origination market. In order to curtail potential competition problems in this market, the MCA deems appropriate the imposition of remedies on the said undertaking.

The MCA is of the opinion that the remedies it is imposing are based on the nature of the competition problems it has identified in the relevant market and are proportionate and justified in light of the objectives set out in Article 4 of the Electronic Communications (Regulation) Act.

The MCA will however continue to monitor market developments and, where appropriate, may issue further directions refining these remedies.

5.5.1 Access

As described above, due to Maltacom's SMP status in the wholesale call origination market, the placing of an effective access obligation on Maltacom is deemed necessary. Without the imposition of such an obligation, negative and anti-competitive effects are bound to be experienced in the retail markets. The MCA considers that the denial of access to third parties by Maltacom or the provision of access on unreasonable terms and conditions having a similar effect would hinder the emergence of a sustainable competitive market at the retail level and would not be in the end-user's interest.

This situation calls for the imposition of access obligations under Regulation 21 of the ECNSR. This Regulation empowers the MCA to require Maltacom to abide by any of the obligations listed thereunder.

When imposing such access obligations, the MCA may also attach to such obligations conditions of fairness, reasonableness and timeliness as required under Regulation 21(3) of the ECNSR.

Notwithstanding this, in accordance with the principles of proportionality, when considering which of the access obligations, if any, to impose, the MCA in accordance with Regulation 21(4) is required to take into account of the following:

(a) the technical and economic viability of using or installing competing facilities, in the light of the rate of market development, taking into account the nature and type of interconnection and access involved;

(b) the feasibility of providing the access proposed, in relation to the capacity available;

(c) the initial investment by the facility owner, bearing in mind the risks involved in making the investment;

(d) the need to safeguard competition in the long term;

(e) where appropriate, any relevant intellectual property rights; and

(f) the provision of pan-European services.

In the light of the dominance enjoyed by Maltacom in the market under review, the MCA deems it appropriate that Maltacom is to abide by the obligations listed hereunder upon a reasonable request being made by an undertaking. By specifying that this access obligation is to be provided by Maltacom only upon a reasonable request being made by another undertaking, the law provides for the most proportionate means of applying the said obligation. In this way operators wishing to have access to Maltacom's wholesale call origination services could specify the particular access and, or interconnection arrangements that they require. Where successful negotiations between the two parties fail, the reasonableness or otherwise of the request will be subject to scrutiny by the MCA.

Primarily, Maltacom should retain its existing access obligations and not withdraw access to facilities already granted without prior authorisation in writing by the MCA. Moreover, Maltacom should negotiate in good faith with undertakings making new requests for such access.

Maltacom should also interconnect its network or network facilities with undertakings making reasonable requests.

In order to ensure that other operators will be able to offer new products, the MCA concludes that it is essential that Maltacom be obliged to provide access to its infrastructure also in terms of paragraphs (a) and (f) of the above-cited Regulation 21(2) of the ECNSR when such access is reasonably requested by other undertakings. Once again, in case of non-agreement between Maltacom and an undertaking requesting access, the MCA will intervene as arbiter in accordance with its powers at law.

The MCA further considers the availability of access to Maltacom's technical interfaces, protocols or other key technologies that are indispensable for the provision of the services by other undertakings necessary for the creation of a truly competitive environment. Hence, Maltacom shall be obliged to provide access in terms of paragraph (e) of Regulation 21(2) of the ECNSR.

Likewise, the provision by Maltacom of access to operational support systems or similar software systems necessary to ensure fair competition in the provision of services is deemed necessary by the MCA.

Finally, Maltacom is required to provide other undertakings with services needed to ensure interoperability of end-to-end services to users.

All the above access obligations must be provided by Maltacom on terms and conditions which are fair, reasonable and timely and which do not differ from those provided by Maltacom to its retail arm, with respect to both standards and timeliness. Moreover, access to the wholesale call origination services should be provided on an unbundled basis.

In all cases where access or interconnection is to be provided upon a reasonable request being made, and the reasonableness of such request is disputed, the MCA will itself determine whether the request is truly reasonable or otherwise.

The MCA, whilst ensuring that no obligations are imposed unduly on any undertaking, through its intervention aims at ensuring that no access is withheld or withdrawn unfairly.

The obligation of access, coupled with the obligation of transparency and in particular the publication of the RIO in accordance with what was stated above, should stultify the power of Maltacom, as an operator with SMP in the market, to exert on other operators competing with its downstream services at a retail level. This notwithstanding, accompanying obligations of price control and cost accounting are deemed necessary and in the interest of effective competition and the service provided to the end-user.

5.5.2 Transparency

Regulation 18 of the ECNSR authorises the MCA to impose transparency obligations on undertakings holding significant market power in relation to interconnection and, or access, by requiring such undertakings to make public specified information, such as accounting information, technical specifications, network characteristics, terms and conditions for supply and use, as well as prices.

Although possibly the least intrusive of remedies, the MCA believes that the imposition of the obligation of transparency would ensure that alternative operators have sufficient information on price and non-price terms and conditions together with clear processes, to which they would not otherwise have access.

The ECNSR[13] further state that, where an operator with SMP has obligations of non-discrimination, the MCA may require it to publish a reference offer which shall be sufficiently unbundled to ensure that undertakings are not required to pay for facilities which are not necessary for the services requested, giving a description of the relevant offerings broken down into components according to market needs, and the associated terms and conditions, including prices. In such instances, the Authority is able to impose changes to reference offers to give effect to the obligations imposed under the Act. The MCA may also specify the precise information to be made available, the level of detail required and the manner of publication.

[13] Regulation 18(2)

Currently Maltacom is meeting its obligation[14] to publish call origination pricing as part of its Reference Interconnection Offer (RIO)[15]. By virtue of the obligation of transparency which the MCA is imposing on Maltacom, the said undertaking will be obliged to continue publishing reference offers related to call origination. Such offers are to be sufficiently unbundled, include pricing, terms and conditions and service level agreements as directed by the MCA.

In order to better overcome the competition problems discussed above, Maltacom should continue to provide and publish appropriate manuals, order forms and processes for services. The publication of other information may be requested by the MCA from time to time. Furthermore, Maltacom should continue to provide itemised billing at the wholesale level.

The need to impose transparency obligations is felt in view of the need to ensure that Maltacom provides other operators with effective access to its wholesale inputs.

5.5.3 Non-discrimination

As explained above, where an SMP operator such as Maltacom is also a vertically integrated provider, there may be an incentive to provide wholesale services on terms and conditions that discriminate in favour of the firm's own retail activities. In particular, it is in the SMP operator's interest to charge competing providers higher prices for wholesale services than it charges its own retail activities. In doing so, the SMP operator increases the costs of competing providers, giving itself an unfair competitive advantage. Besides price-related competition problems, an SMP operator may also resort to non-price anti-competitive tactics such as the withholding of information, delaying tactics, undue requirements, low or discriminatory quality, strategic design of products, and discriminatory use of information - conditions which would disadvantage competing providers and, in turn, consumers.

The principal remedy offered for the competition problems resulting from vertical foreclosure is that of non-discrimination in the provision of access and, or interconnection. In accordance with Regulation 19 of the ECNSR, Maltacom, as the vertically integrated provider would be obliged to:

a) apply equivalent conditions in equivalent circumstances to other undertakings providing equivalent services, and

b) provide services and information to others under the same conditions and of the same quality as it provides for its own services, or those of its subsidiaries or partners.

The MCA has decided to impose the obligation of non-discrimination, as a remedy under Regulation 19. This will provide the same ability to alternative operators to obtain wholesale call origination at the same price and conditions which would apply to Maltacom's own retail arm. Hence this obligation is deemed an essential tool for the curtailment of foreclosure practices.

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[14] This was laid down in the MCA's 'Report on Consultation and Decision entitled 'Interconnection in the Maltese Telecommunications Sector' published in May 2003' http://www.mca.org.mt/library/show.asp?id=423&lc=1

[15] http://www.maltacom.com/interconnect/docs.aspx

The MCA deems it also important that information gained by Maltacom as a result of its provision of call origination services to another operator is not used by its downstream arms in any manner as to favour its own operations.

5.5.4 Price Control and Cost Accounting

In competitive markets, the price of services is driven down to competitive levels by the players forming the market. However, where competition does not provide pricing constraints, it is necessary to prevent excessive pricing by means of regulation. Without some intervention in pricing, dominant providers are likely to charge excessive prices in order to maximise both their profits and the costs of competing providers. Higher wholesale charges are likely to translate in terms of higher retail prices and alternative service providers being less able to compete in the retail market at the detriment of end-users.

As held above, the current market analysis indicates that the limited infrastructure competition in the wholesale call origination market may lead to Maltacom sustaining prices at an excessively high level, or applying a price squeeze, to the detriment of end-users.

Regulation 22 of the ECNSR authorises the imposition of obligations relating to cost recovery and price controls, including obligations for cost orientation of prices and obligations concerning cost accounting systems, for the provision of specific types of interconnection and, or access. Such intervention is in itself deemed instrumental in supporting competition in the retail market for the benefit of end-users, whilst at the same time supporting the obligations of non-discrimination and transparency at a wholesale level.

In applying obligations relating to cost recovery or pricing, the MCA is obliged to ensure that any cost recovery mechanism or pricing methodology that is mandated serves to promote efficiency and sustainable competition as well as maximise consumer benefits.[16]

a) Cost Orientation

When imposing cost orientation as a remedy for SMP, NRAs are required to take account of prices available in comparable competitive markets[17]. On the other hand, when considering the imposition of obligations of price control and cost accounting, they are to take into account the investment made by the operator and allow the operator a reasonable rate of return on adequate capital employed, taking into account the risks involved.

In view of the risk of excessive pricing being applied by Maltacom in the wholesale call origination market, the MCA is of the opinion that the pricing methodology that may promote competition most efficiently is that of cost orientation. Cost orientation is already mandated on Maltacom by virtue of its dominant position designation under the previous framework. By mandating that interconnection and access to wholesale call origination services provided by Maltacom are cost oriented, the MCA believes that it would be in a position to ensure fair and efficient access to Maltacom's network and services.

Therefore, in view of Maltacom's SMP status in the market under review, the MCA is imposing a cost orientation obligation on Maltacom. In accordance with this, the MCA will pay careful attention to those costs which are shared amongst a number of products, as well as ensure that only efficiently-incurred costs will feature in Maltacom's charges.

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[16] ECNSR, Reg. 22(2)

[17] ibid.

b) Cost Accounting Systems

The MCA believes that, in order to effectively promote competition and curb possible abuse of dominance in the wholesale call origination market, a cost accounting system will be necessary to support cost orientation. It is therefore imposing such obligation as a further remedy on Maltacom.

Such cost accounting system will provide the MCA with detailed information regarding Maltacom's service costs and ensure that fair, objective and transparent methodologies are followed by the operator in allocating costs to the regulated services. Information from such a system will be used by the MCA to complement the application of other regulatory measures, such as transparency and non-discrimination.

The MCA does not consider the imposition of a cost accounting obligation to constitute an unreasonable burden on Maltacom. Maltacom is currently obliged to support such a system by virtue of a decision[18] which has been in place for some time.

The 2002 decision established that operators having a Dominant Market Position should implement cost-based accounting systems based on a Fully Allocated Cost accounting methodology on a historic cost basis. At that time the MCA had taken the view that this methodology was the most practical approach in the short term. However, mindful of the deficiencies inherent in a historic cost-based system, particularly the issue that legacy costs and inefficiencies should not be shifted to other competing operators through incorporation in a RIO, the MCA stated in the same Decision that it would review the need to move to a current cost regime during 2005. It has thus issued a consultative document[19] that examines the various issues that are relevant to a transition from a historic cost base to a current cost base. Up till the publication of this document, the proposal is still under consultation.

5.5.5 Accounting Separation

In order to further strengthen the obligations of transparency and non-discrimination, the MCA considers it necessary to apply the complementary obligation of accounting separation on Maltacom.

Accounting separation is instrumental in ensuring that the undertaking with SMP is not price discriminating between its retail arm and its competitors when providing access and origination at a wholesale level. By evidencing the wholesale and internal transfer prices of the products and services of the undertaking with SMP, accounting separation ensures that the prices charged by the SMP operator are non-discriminatory.

The obligation of accounting separation is also important in the disclosure of possible market failures such as cross-subsidisation and the application of margin squeeze by an undertaking with SMP.

In view of the above and of the fact that the MCA is herein imposing the obligations of non-discrimination and transparency on Maltacom, the MCA decides that the imposition of an accounting separation obligation on Maltacom is appropriate. Currently, Maltacom is subject to the accounting separation obligation described in the MCA decision on Accounting

[18] Implementation of Cost-Based Accounting Systems for the Telecommunications Sector - Report on Consultation and Decision - July 2002.

[19] Current Cost Accounting Methodologies for the Electronic Communications Sector – July 2005

Separation[20]. This level of obligation shall be maintained until further consultation is deemed necessary.

5.6 Summary of responses and replies to issues related to Remedies

One respondent stated that while it is normally difficult to replicate a ubiquitous network given large sunk costs, it argued that the Maltese market presents specificities that make this a smaller problem than what one expects in the average EU Member State. The respondent mentioned the existence of Melita Cable's network, which it says lowers significantly any impediment to competition. In addition, it mentions the presumed advantage of BWA networks that will not require costly civil engineering work to construct a physical local loop network.

The same respondent acknowledged that there may be an argument for the imposition, limited in scope and duration, of wholesale remedies as a safeguard. The respondent adds that it sees limited scope for the access to wholesale call origination remedy to be durable, because there is already another operator with a ubiquitous network offering a wide scope of services and because this will be joined by three other networks in the near future.

In the national consultation document, the MCA proposed to impose an access obligation for wholesale call origination services under Regulation 21 of Legal Notice 412 of 2004. The MCA identified a number of requirements under the same Regulation. The same respondent argued that this Regulation has a very wide-ranging list of obligations and that the boundaries of this obligation are not established in the consultation document.

The MCA does not concur with the viewpoint that the boundaries of this obligation are not established. Given that the market under analysis is wholesale call origination, it stands to reason that the access obligations and requirements under consideration refer only to the market for wholesale call origination and therefore to requests for wholesale call origination services.

With regard to the obligation for non-discrimination, one respondent argued that any action by Maltacom to apply dissimilar wholesale conditions between its own retail arm and other operators would have very little impact on the market as there will be another four alternative providers that are capable of originating calls over their own network.

The MCA takes the stand that the number of operators in the market is irrelevant. The issue is whether an alternative operator, namely a CS or CPS, can acquire wholesale call origination services from another operator to reach Maltacom's subscribers. Given that Maltacom has the absolute majority of fixed line subscribers, a CS and CPS operator would logically seek wholesale origination services from Maltacom since this would enable it to reach the entire market. Although these alternative operators may acquire wholesale origination services from alternative network operators, this option would only enable them to reach a very limited number of subscribers. Therefore, any attempts from Maltacom to offer discriminatory conditions between its own retail provider and alternative operators would have a significant detrimental effect on the latter providers.

One respondent stated that in its view, the imposition on Maltacom of cost orientation, cost accounting systems and accounting separation is unnecessary and disproportionate. The

[20] 'Accounting Separation and Publication of Financial Information for Telecommunications Operators - Report on Consultation and Decision of October 2002' as amended - see http://www.mca.org.mt/library/show.asp?id=323&lc=1

imposition of such obligations on a small operator like Maltacom has to be weighed carefully. Maltacom already operates a cost accounting system that has cost the incumbent a large sum of money to set up and maintain.

The MCA does not agree with the assertion that Maltacom is a small operator. While it is true that the undertaking may be small compared to other European incumbents, Maltacom is a large player in the local market. The assessment of the wholesale call origination market is confined to the Maltese territory and as a result any comparisons in size should be made accordingly. The analysis of the market showed that Maltacom has 99% market share in the wholesale call origination market and this clearly shows the significant position that Maltacom enjoys in the market. As explained above, the continuation of the existing remedies of cost orientation, cost accounting systems and accounting separation are considered essential by the MCA.

5.7 Monitoring Market Developments

The MCA considers that it would be sensible to keep a close watch on market developments following this review. This would ensure that the obligations on the SMP operator identified earlier on, would be justified throughout the duration of this market review. If the MCA deems it necessary or appropriate a new market review would be undertaken at any time in response to significant changing market conditions.

This Decision shall be effective from the date of its publication and shall remain in force until further notice by the MCA.

PART B – WHOLESALE CALL TERMINATION

Chapter 6 - Market Definition: Call termination

Regulation 10 of the ECNSR provides that before an SMP determination may be considered, the MCA must identify the markets in relation to which it is appropriate to consider such a determination and to analyse those markets. In identifying the relevant markets, the MCA is required to take utmost account of all applicable guidelines and recommendations issued by the European Commission.

In its recommendation, the Commission identified three main wholesale markets for fixed networks. The Commission identified wholesale call termination as a relevant market for assessment by the NRAs. This includes the terminating and interconnection services required by providers to end a particular call on a public fixed telephone network.

The MCA has conducted an assessment of the market for wholesale call termination on fixed networks in order to validate its appropriateness in the Maltese context, and as preparatory work for the assessment of SMP in this market.

6.1 Market Definition Process

The purpose of the market definition process is to identify the competitive constraints that electronic communications service providers face. There are two dimensions to the definition of a relevant market: the relevant products to be included in the same market and the geographic extent of the market. The MCA's approach to market definition follows that identified in its market review methodology.

Recital (7) of the Recommendation clearly states that the starting point for market definition is a characterisation of the retail market over a given time horizon, taking into account the possibilities for demand and supply-side substitution. The wholesale market is then identified subsequently to this exercise being carried out in relation to the retail market. This approach is repeated in paragraph 3.1 of the main Recommendation and is exactly adopted by the MCA in the following sections.

Call termination provides call completion and switching functionality at the terminating end of a call. It involves the conveyance of calls from the end of the previous stage (either call origination or to the point of interconnection), to the called end-user via the local-loop.

There are evidently costs associated with the conveyance of calls between networks and the operator hosting the called party expects the originating operator to pay the network costs incurred to terminate the relevant call. This section considers the wholesale service required to terminate a call to a specific number on a particular fixed network.

6.2 Retail Market

Any call to a specific number will result in the call being delivered to the particular fixed telephone to which the dialled number is associated. As any telephone number is unique to a particular subscriber's fixed location, the calling party will generally know to where and to whom the call is being made although s/he might not know the identity of the network provider hosting the called party. It is unlikely that the calling party has any influence over the called party's choice of network.

Operators tend to offer their subscribers an entire range of retail call services as a cluster, which do not in practice include fixed call termination as a separate service. Subscribers require the ability to communicate with other retail users irrespective of the network to which they are connected. As a result, operators need to interconnect to each other's networks in order to allow calls to be seamlessly conveyed between them and terminated to the called subscriber line. It therefore follows that the need for wholesale termination is driven by retail call services.

Besides being acquired by call originating network operators and Carrier Selection / Pre-Selection operators seeking to terminate fixed calls to called parties, wholesale call termination may also be self-supplied by network operators conveying on-net calls.

6.2.1 Demand-side substitution at the retail level

Retail prices can only impose a competitive constraint on wholesale termination rates if the retail party paying for the service can bypass the terminating network. In terms of retail fixed-to-fixed calls, there are no effective substitutes for the caller who wishes to call a given party's fixed number. Calling someone other than the desired party is unlikely to be an adequate demand-side substitute.

A potential retail demand-side substitute to calling a party's fixed number would be calling the same party's mobile number. In its document entitled 'National Telephone Services Provided At Fixed Location', the MCA examined the probability of retail users switching to mobile services to replace fixed-to-fixed calls. In its analysis, the MCA concluded that the cost of making a fixed-to-mobile call is significantly more expensive than making a fixed-to-fixed call, which implies that from a demand-side substitution perspective there is little possibility that consumers would opt to substitute fixed-to-fixed calls by fixed-to-mobile calls. The same conclusion was arrived at when mobile-to-mobile calls were considered. Such high retail calls-to-mobile tariffs reflect the higher mobile termination costs charged by mobile networks.

The lack of demand-side substitution suggests that the provision of calls to individual numbers may constitute separate markets in which a hypothetical monopolist could profitably increase its retail price to specific numbers above the competitive level. However, retail call providers are unlikely to possess sufficient information regarding the elasticity of demand for calls to individual numbers to allow them to price discriminate profitably according to individual called numbers. The same argument is valid also at the wholesale termination level. This common pricing constraint allows the broadening of the market so as to include the termination of all calls on a particular fixed network.

6.2.2 Supply-side substitution at the retail level

Following the above, since there are no alternatives for making a fixed call to a particular number, it is clear that even if a competitive retail market exists, the retail market is not able to exert any competitive constraint on the wholesale terminating market of a terminating operator. As a result supply side substitution at the retail level is not possible following a 5 to 10 per cent increase in the price of wholesale termination rates. This is further substantiated in the following sections examining the wholesale level.

6.3 Wholesale Market

6.3.1 Wholesale demand side substitutability

The terminating network operator completes calls to the fixed points with which the called numbers are associated. As explained above, there are no alternatives for making a fixed-to-fixed call to a particular number and therefore, when purchasing wholesale call termination, an originating network provider will not find termination on a network, other than the one its retail customer wishes to call, to be an adequate substitute on the demand-side. A terminating operator raises its wholesale call termination charges to increase its revenues and also increases its competitors' costs.

Moreover, the 'calling party pays' payment flow used in end-to-end calling means that it is the calling party who bears the whole cost of a call. For every call made, the calling party pays the price of the retail call while the originating operator pays the associated wholesale call termination charge to the terminating operator. Such call termination cost is therefore reflected in the originating operator's retail price and it thus follows that an increase in the wholesale termination may lead to higher retail call prices.

Therefore, the lack of demand-side substitutes for terminating on a specific network together with the payment structure described above provide an incentive to the terminating operator to raise its call termination charges without competitive constraints. This suggests that termination on each individual network constitutes a separate relevant market.

6.3.1 Supply-side substitution at the wholesale level

In analysing supply-side substitution at wholesale level, the MCA has considered whether a hypothetical 5 to 10% increase in wholesale termination above the competitive price would attract new entrants in the call termination market in response.

As stated earlier, due to the calling party pays system a network operator can only provide termination services on its own network. Therefore, if a hypothetical monopolist increases the price of its termination services, an alternative network operator would not be able to start providing termination services on the hypothetical monopolist network. The alternative operator can only increase its termination price to match that of the hypothetical monopolist. Given the present level of technology, there is no possibility of any supply-side substitution following a hypothetical price increase.

6.4 Relevant Geographic Market

A relevant geographical market comprises the area in which the undertakings concerned are involved in the supply and demand of products and/or services, in relation to which the conditions of competition are sufficiently homogeneous and which can be distinguished from neighbouring areas because the conditions of competition are appreciably different to those areas.

According to the EU Guidelines, in the electronic communications sector, the definition of the geographical scope of the relevant market is generally determined with reference to the area covered by a network, and to the existence of legal and other regulatory instruments.

Based on these definitions and the market conditions described earlier on, the MCA takes the view that the relevant geographic market for the provision of wholesale call termination services by individual fixed network operators is national in scope.

This view is based primarily on the fact that, as each individual fixed network is considered to be a separate relevant product market for the provision of wholesale call termination services, the geographic scope reflects the extent of physical coverage that characterises each fixed network operator. Furthermore, each operator is licensed on a national basis and offers geographically uniform termination rates.

6.5 Summary of responses and replies to issues related to Market Definition

One respondent did not agree with the conclusions reached by the MCA in defining the relevant market under review stating that, at present, it is not active in the wholesale call termination market. The respondent added that currently the company is simply carrying internal transfer of calls on its own network and that there is no wholesale termination of calls on its network. The respondent stated that, for the sake of the argument, if internal transfer of calls amounted to wholesale call termination, it would imply that a number of local ISPs should be included in the analysis since these also carry out internal transfer of calls and provide a similar VoIP voice service.

The respondent argued that the undertaking is not present in the market for wholesale call termination and that it will not be present until such time as interconnection agreements are concluded with other operators. The respondent added that the only relevant issue at this stage is whether or not the operator is present in the market, and not whether it could potentially be so in the future.

The MCA does not concur with the assertion made by this respondent that, in terms of wholesale call termination, the service offered by local ISPs is similar to that which Melita Cable is providing.

The service offered by local ISPs referred to by the respondent can only be availed of if one is subscribed to an ADSL internet connection. Using a soft-phone application program installed on the PC or a SIP-phone, the subscriber is able to call other parties[21]. Such calls originate on the public internet via the ADSL internet connection. In the case of international calls, the call data is routed via the internet to some foreign operator/ISP which in turn terminates the call to the intended international number. With regards to local calls, given that ISPs are not interconnected to local operators, the call data is transferred from the subscriber's PC via the ADSL network to the ISP's infrastructure which is connected to a PABX. The VoIP call is finally conveyed to the intended number via a local call, over the incumbent's PSTN network, generated by the ISPs PABX. The user therefore ends up paying a 'premium'[22] tariff for the VoIP conveyance plus the fixed/mobile call originating on the incumbent's network. Given that ISPs do not own any access infrastructure, in no instance can the 'hybrid' VoIP call terminate on the ISP's infrastructure.

On the other hand, the voice service offered by the cable operator is different. On-net calls originate and terminate on the end-users' fixed access points of the cable network. International calls originate from an end-user's fixed access point on the cable operator's network to terminate abroad on the network associated with the dialled international number. Needless to say, in this document, the MCA is not reviewing call termination happening abroad - the MCA is only considering calls terminating in Malta. These could be either on-net self-supplied calls or calls originating outside the cable network which terminate on the cable network.

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[21] other subscribers to the same service, fixed, mobile and international numbers

[22] a rate higher than the tariff charged by the incumbent for the same type of call

Even though the service is marketed by the cable network's own ISP, call origination and call termination happen on the cable network and not on the ISP. The ISP is acting only as a retail arm. Therefore contrary to what the respondent is asserting, the MCA considers that the cable operator is providing both wholesale call origination and wholesale call termination over its network. Moreover, the MCA is aware that the cable operator started interconnection negotiations with other undertakings and that the company will soon accomplish these agreements. Therefore, the assumption that within the timeframe of this review, the cable operator will be providing wholesale call termination to other operators besides itself, is justified.

Another respondent stated that whereas, *prima facie,* the conclusion proposed by the MCA would appear to be correct, the respondent noted that the MCA should give particular attention to the Commission's Recommendation on relevant product and service markets stating that *"If all (or at least a substantial number of) fixed locations or subscribers in a given geographical area were connected to two or more networks, then alternative possibilities would exist for terminating calls to given locations."*. The respondent added that this would appear to apply to the particular situation in Malta, where both Maltacom and Melita Cable have networks featuring high national coverage as well as substantial penetration of households.

The MCA agrees that the two operators both own an infrastructure which covers a vast part of the country. However, it does not concur that a substantial number of fixed locations or subscribers are connected to both networks concurrently for the purpose of terminating calls. Figures available to the MCA also indicate that, given the low take up of the cable operator's voice service, this situation is likely to be sustained within the timeframe of this review.

One respondent stated that the definition of the market in the consultation document fails to consider the roll-out of 3 new BWA networks. The respondent recommends that in view of the requirement of the regulatory framework for the analysis to be carried out prospectively, wholesale termination on BWA networks should also constitute a separate market.

While it is true that 3 new BWA networks will be operating with at most 33% coverage by the end of 2006, the MCA cannot determine *a priori* whether BWA or other networks will offer voice services during the lifetime of this review and hence, call termination services over their own individual networks. If this happens, the MCA will need to redefine the market for any new entrants providing voice call termination services.

6.6 Conclusion on Market Definition

As defined above, call termination provides call completion and switching functionality at the terminating end of a call. It involves the conveyance of calls from the end of the previous stage (either call origination or to the point of interconnection), to the called end-user via the local-loop.

Based on the analysis presented above, the MCA is identifying two relevant markets for wholesale call termination services:

1. Wholesale call termination services provided by Maltacom over its network.
2. Wholesale call termination services provided by Melita Cable over its network.

Each relevant market includes call termination services provided by the individual network operators to third party operators and also self-supplied termination.

Chapter 7 - Market Analysis: Call Termination

Having identified the relevant market, the MCA is required to analyse the market in order to assess whether any services provider/s have significant market power as defined in Regulation 8 of the ECNSR (Article 14 of the Framework Directive). This section presents this analysis.

7.1 Assessment of SMP against Relevant Criteria

This section considers whether single dominance is likely to exist in the identified relevant market. In the MCA's view the assessment is fully compliant with the Commission's Guidelines. The SMP assessment set out is based on the evidence available to the MCA.

Single dominance can be assessed using a large number of criteria, as described in the Commission's and the MCA's guidelines on SMP assessment. In the MCA 's view, the most important ones are:

- Market share analysis
- Countervailing buyer power
- Potential competition

7.1.1 Analysis of market shares

As discussed in the market definition section, call termination for a particular call can only be made on the particular network to which the called number belongs. As a result, each individual network constitutes a separate market for termination services. This implies that when an operator requires terminating a call on a particular fixed network, it can do so only if it purchases termination from that operator. As a result all network operators providing termination services have an implicit 100 per cent share both in volumes and revenues for termination services over their own network.

In the absence of regulation, fixed network operators would have an incentive to set wholesale termination charges at above competitive levels, in order to maximise revenues and increase the cost of alternative operators for purchasing termination services. This would likely to be reflected in higher retail charges for end-users.

The fixed incumbent Maltacom is presently terminating all fixed calls to the PSTN network. Maltacom therefore has a 100 per cent market share for termination services over its PSTN network. The MCA believes that in the absence of regulation Maltacom would have an incentive to maintain high termination rates in order to limit competition in the market for fixed call services. This incentive is augmented further when considering the size of Maltacom as opposed to a new entrant. Since Maltacom owns all fixed access lines to the PSTN, a new entrant would find it very difficult to gather a large number of customers to its own network in order to reduce significantly the size of Maltacom and its market power.

The cable network operator Melita Cable has recently launched a packet-based voice service over its nation-wide cable network. Even though, to date this service is limited to on-net calls , Melita Cable is nonetheless present in the wholesale termination market as it is terminating its own traffic on its network. When the cable operator interconnects with other networks it will have to offer termination services to third party operators for termination over its network. The MCA is cognisant of the fact that the cable voice service is still in its infancy and therefore the volume of self-terminated minutes by Melita Cable over its network is currently minuscule compared to that of the fixed incumbent Maltacom. Nonetheless, Melita Cable has a 100 per cent market share for termination services over its cable network and therefore has significant market power.

The MCA concludes that all fixed network operators present in the market have a 100 per cent market share for termination services over their own network and therefore hold a position of significant market power.

7.1.2 Countervailing Buyer Power

Countervailing buyer power in the wholesale fixed termination market may arise where a large customer or group of customers impose a competitive constraint on the termination rate charged by an operator. This situation is possible if alternative operators have a feasible alternative to the termination offered by incumbents.

The MCA considers that in the absence of appropriate regulation the fixed telephony incumbent Maltacom will not face a competitive constraint from any other operator or group of customers in order to constrain wholesale termination rates. This understanding is based on three main factors a) technology barriers, b) the calling party pays system and c) the size of the undertaking.

With the present technology a customer wishing to contact a person on a fixed line can only do so by calling a particular fixed number associated with a particular fixed network. The originating operator has therefore to terminate the fixed call on the particular network to which the called number belongs. The originating operator cannot successfully terminate the call of his subscriber by terminating that call on a different network other than the one to which the number is registered. This technological barrier limits the countervailing buyer power of any operator when purchasing termination rates from other operators. In order to ensure a seamless communication service for its subscribers an operator has to purchase termination from other operators at the rate that these operators charge. Given the lack of countervailing buyer power any operator providing termination services can potentially abuse from its dominant position on its own network and charge termination rates above competitive levels.

Under the calling party pays system the calling party pays for the cost of the call and not the receiving party. However, the calling party does not have a choice as to where s/he wants to terminate the call since it is the called party which subscribes to a particular network of his choice. This arrangement leads to a situation where operators have an incentive to charge high termination rates since the cost incurred in buying termination on their network will be incurred by rival operators and not by their customers. Operators have an incentive to set termination rates above competitive levels since it increases revenue streams from wholesale services and at the same time increases the costs of rival operators.

Based on this reasoning and the size of Maltacom in the provision of fixed telephony services in Malta, the MCA concludes that in the absence of regulation Maltacom would be in a position to set termination rates at uncompetitive levels which would be detrimental for alternative operators and their customers. The MCA also considers that other operators would also be in a position to set high termination rates since Maltacom needs to buy termination services from these operators in order to ensure a seamless communication service for its customers. This gives alternative operators the ability to set termination rates above competitive levels which are likely to be reflected in higher retail tariffs for the customers of Maltacom.

7.1.3 Potential competition

Potential market entry in the wholesale termination market is expected from a number alternative network operators notably the cable network operator and potentially three BWA network operators. The cable operator is already providing termination services to itself for its telephone service. The cable network covers approximately 90 per cent of all households and therefore has a potential nation-wide coverage. This cable telephone service is currently an on-net service since the cable network is not interconnected with other networks. However the MCA is aware that in the near future the cable operator is seeking to interconnect with other operators in order to ensure a seamless communication service to its customers. This would require that the cable operator would offer termination services to other networks. Such a development is expected within the timeframe of this review and therefore the MCA considers that the potential provision of termination services to third parties by the cable operator will have an impact in the wholesale termination market.

A similar situation is likely to happen in the future when the deployment of BWA networks is completed. In the future three new network operators are likely to seek interconnection agreements with the existing fixed and cable operators. This however is not likely to happen within the next two years since the deployment of BWA networks is a lengthy process. This will therefore not have a material impact during the timeframe of this review.

The MCA has considered the extent to which entry in the market by the cable operator will influence the termination rates of the existing fixed incumbent Maltacom. As argued earlier, technical barriers and the calling party pays principle makes the terminating network dominant over its own network and therefore the number of players present in the market has very little constraining behaviour on the setting of termination rates. Further to this, Melita Cable currently has an insignificant market share when compared to Maltacom in terms of subscribers and volumes of minutes terminated on its network. The MCA therefore considers that given these barriers and the size of Maltacom, the cable operator would not be in a position to constrain Maltacom's termination rates effectively.

Similarly, because of the technological barriers, the calling-party pays principle and an obligation to interconnect Maltacom will not be in a position to constrain Melita Cable or any other operator from setting termination rates above the competitive level. All fixed network operators will have to rely on the termination of each other to be able to terminate all calls of their subscribers.

The MCA therefore concludes that in the absence of regulation, network operators may have an incentive to set termination rates above competitive levels which are then likely to be reflected in higher retail charges to consumers.

7.2 Summary of responses and replies to issues related to the Market Analysis

One respondent argued that the cable operator is not yet present in the market since it has not interconnected with other operators, and therefore it cannot be designated as SMP.

The MCA does not agree with the argument that Melita Cable is not in the market since it is not yet interconnected with any other operators. As argued earlier, the MCA considers that termination of self-generated minutes over its own network forms part of the market. Furthermore, Melita Cable is currently negotiating with major network operators to interconnect by the end of this year. This further implies that Melita Cable will be able to provide termination services to third party operators during the timeframe of this review. Since Melita Cable forms part of this market, the MCA proceeded with its analysis to determine whether the cable network operator holds SMP in the market defined.

One respondent disagreed with the MCA's proposed position that Melita Cable enjoyed significant market power in the market for wholesale call termination on its own network. In its view, the countervailing market power of Maltacom and the price restraining effect that this would have on Melita Cable were not taken into account by the MCA. The respondent referred, in this respect, to the judgement delivered by the Competition Appeal Tribunal of the UK in the names of Hutchinson 3G (UK) Limited v The Office of Communications of the 29th November 2005 (hereafter referred to as the Hutchinson 3G case). According to the respondent, this judgement dealt with a situation which was analogous to the one at hand. On this basis, according to the respondent, the MCA should have found that Melita Cable does not enjoy significant market power.

At the outset, the MCA clarifies that the decision designating Melita Cable as having significant market power on its own public telephone network is not one based exclusively on the consideration that Melita Cable enjoys a 100 per cent market share. On the contrary, the MCA expressly analysed other criteria which could similarly provide an indication as to whether Melita Cable enjoys the power to behave to an appreciable extent independently of its competitors, customers and consumers in the market in question. The decision states that market share is solely one of a number of factors that were taken into account.[23] Another of these factors taken into account is, in fact, countervailing buyer power.[24]

At the same time however the MCA in its decision acknowledges the implications of a 100 per cent market share. Although this, by itself, is not sufficient to determine significant market power, the existence of a 100 per cent market share undoubtedly raises a strong presumption of SMP. The Commission has itself stated that *"the 100% market share of network operators in the market for call termination on their individual public telephone network provided at a fixed location raises a strong presumption of SMP, save in exceptional circumstances which need to be clearly and unambiguously demonstrated by the NRA."*[25]

The MCA has proceeded to examine the respondent's claim that countervailing buyer power enjoyed by Maltacom may set-off the market power enjoyed by Melita Cable. Countervailing buyer power exists when a particular purchaser (or group of purchasers) of a good or service is sufficiently important to its supplier to influence the price charged for that good or service. In order to constrain the price effectively, the purchaser of termination services (in this case Maltacom) must be able to bring some pressure to bear on the supplier to prevent a price rise by exerting a credible threat, for example not to purchase or to self-provide.

The MCA has examined the extent of countervailing buyer power enjoyed by Maltacom vis-à-vis Melita Cable from a regulatory viewpoint. Article 5 of the Access Directive[26] which has been implemented *ad verbatim* in Maltese law[27] provides specifically that National

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[23] Refer to Section 07.1

[24] Refer to section 7.1.2 for a discussion on countervailing buyer power

[25] Commission Decision, Call termination on individual public telephone networks provided at a fixed location, 17 May 2005, Case DE/2005/0144, para.17

[26] Access Directive 2002/19/EC

[27] Subsidiary Legislation Part III Reg. 15.1(a)

Regulatory Authorities shall be able to impose, to the extent necessary to ensure end-to-end connectivity, obligations on undertakings that control access to-end users, including in justified cases the obligation to interconnect their networks where this is not already the case. In this light, Maltacom has an obligation to provide end-to-end connectivity. Maltacom therefore has no option but to enter into an interconnection agreement with Melita Cable. If it refuses to do so (or fails to do so for whatever reason) the MCA can intervene and require such interconnection. The fact that Maltacom cannot refuse to interconnect implies, as a direct consequence, that Maltacom does not have countervailing buyer power vis-à-vis Melita Cable.

7.3 Conclusion and SMP designation

The evidence presented above suggests that Maltacom and Melita Cable have significant market power over their individual networks for the provision of wholesale termination services.

This conclusion is supported by a number of factors including the 100 per cent market share held by each network operator in the provision of wholesale termination services over their respective networks. Moreover, the lack of potential competition and lack of countervailing buyer power in the markets due to technological barriers and the calling party pays system, limit the competitive constraints on all network operators.

Chapter 8 - Regulatory Implications: Call Termination

In accordance with Regulation 10(4) of the ECNSR, where an operator is designated as having significant market power on a relevant market in accordance with Regulation 8 of the same ECNSR, the MCA is obliged to impose on such operator such appropriate specific regulatory obligations referred to in subregulation (2) of regulation 10 of the ECNSR, or to maintain or amend such obligations where they already exist.

In accordance with the Framework Directive, Regulation 10(4) of the ECNSR obliges the MCA, where an operator is designated as having significant market power in a relevant market in accordance with Regulation 8 of the same ECNSR, to impose, or amend if already imposed, the appropriate obligations.

This section aims at discussing the actual and potential competition problems that exist in the wholesale call termination market, and imposing adequate remedies to address these problems.

8.1 Current Remedies

Under the previous regulatory framework the MCA has already identified Maltacom as having a dominant position in the provision of fixed telephony services. Maltacom had been designated as having a dominant market position in May 2002[28]. Consequently the MCA has imposed the following remedies on Maltacom:

- Ensure that the access or service provided meets certain specified quality of service standards, and to keep records and furnish the MCA with details of compliance with those performance standards;
- Interconnect promptly, publish a RIO and ensure that charges for access/services are cost-oriented, transparent, unbundled and independent of the application to which they are put;
- Operate a cost accounting system which is suitable for implementation of the tariff requirements imposed on dominant operators and the calculation of charges for network elements used to provide interconnection; and
- Be subject to certain regulatory controls over retail tariffs as required by the Regulations.

8.2 Competition Problems in Fixed Markets

The MCA has identified a number of existing and potential SMP-related competition problems in the wholesale fixed markets under review. These are leveraging (vertical and horizontal), barriers to entry and price related problems and other competition problems

[28] http://www.mca.org.mt/library/show.asp?id=100&lc=1

specific to call termination. These problems have already been discussed in detail in section 04.2 above.

8.2.1 Specific problems in the Wholesale Call Termination Market

As explained in the market analysis section above, every undertaking providing fixed termination to end-users is deemed to have SMP over its own network. This in itself provides a further competition problem in comparison with the markets for fixed origination and transit. This is due to the fact that all operators in the market may have an incentive to exercise their market power in a way that will hinder competition by other operators competing with their retail arm. This may be done by, for example, setting excessive prices for terminating calls onto their network. Two or more of such operators may also potentially tacitly collude and this would also result in high prices for termination.

Having said this however, the market reality suggests that Maltacom would be in a more likely position to abuse of its market power. This is due to the fact that, as a result of its ubiquitous provision of termination services and its former monopolist position, both at a wholesale and retail level, Maltacom still enjoys the greater portion of termination of fixed calls. The MCA is of the opinion that it is improbable that this situation would change within the period of this review. Moreover, whereas Maltacom may be incentivised to hinder competition at retail level by rendering termination of calls from competitors' subscribers to its own subscribers difficult, the inverse will not apply equally well. In fact, if a new entrant were to charge excessive prices for wholesale call termination services on its network, its end-users are bound to experience less calls being made to them. Even further, if such alternative operators were to refuse to provide wholesale call termination services on its network, no off-net calls will be made to its end-users. In both situations end-users would have little reason to be attracted to, or remain with, such alternative operator.

This imbalance in the ability to exert market power may also be reflected in other non-price abuses, such as the discriminatory use, or withholding of, information, delaying tactics and the application of undue requirements in interconnection.

In this light, and in accordance with the principle of proportionality, the MCA believes that it is necessary to impose a suite of remedies on all undertakings in the market. However, the level of the remedies imposed will not be uniform for all undertakings but will vary according to the individual undertakings' ability to exert market power, as described above, and the nature of the competition problems identified.

8.3 Selecting Remedies – Principles applied

Given the identified actual and potential competition problems arising from SMP in the markets under review, the MCA is obliged to impose obligations on undertakings identified by it as having significant power on those markets. Accordingly, the MCA is imposing those appropriate obligations that it believes will encourage efficient investment and innovation and further promote competition in the markets under review.

In selecting the remedies to impose on the designated SMP operator(s), the MCA considers the nature of the problem identified and, in accordance with the principle of proportionality, where necessary, imposes those remedies which it considers to be the least burdensome, yet effective. The MCA also took account of potential effects on any related markets. All this is reflected below.

Having said this, in view of the complexities of the competition problems discussed above, the MCA notes that it is unlikely that any single remedy can achieve the aim of ensuring effective competition; hence, the need for a suite of remedies that complement, support and reinforce each other.

8.4 Regulatory Obligations

The MCA believes that, as a result of the individual SMP position held by Maltacom and Melita Cable in the wholesale call termination market over their respective networks, the imposition of remedies is required.

The MCA is of the opinion that the remedies it is imposing are based on the nature of the competition problems it has identified in the relevant market, and are proportionate and justified in light of the objectives set out in Article 4 of the Electronic Communications (Regulation) Act.

The MCA will however, continue to monitor market developments and where appropriate may issue further directions refining these remedies.

8.4.1 Access

In view of their ability to exert market power, the MCA believes that it is reasonable and adequate to require both Maltacom and Melita Cable to meet reasonable requests for access to, and use of, such wholesale access products, features or additional associated facilities forming part of the market for wholesale call termination services.

In view of the above, the MCA is of the opinion that the imposition of the following specific requirements on Maltacom and Melita Cable are necessary.

Primarily these operators should interconnect their network or network facilities with undertakings making reasonable requests. The operators should also negotiate in good faith with undertakings making new requests for termination services.

Operators should also retain any existing obligations relating to access to termination services and not withdraw such access facilities without prior authorisation in writing by the MCA.

In order to ensure that other operators are able to offer new products, the MCA considers it essential that both operators be obliged to give third parties access to specified network elements in terms of paragraphs a) and f) of Regulation 21(2) of the ECNSR when this is reasonably requested by other undertakings. In case of non-agreement between the operator and an undertaking requesting access, the MCA will intervene as arbiter in accordance with its powers at law.

The MCA further considers the grant to open access to the operators’ technical interfaces, protocols or other key technologies that are indispensable for these services by other undertakings necessary for the creation of a truly competitive environment.

Likewise, the provision of access to operational support systems or similar software systems necessary to ensure fair competition in the provision of wholesale termination services is deemed necessary by the MCA.

Finally, Maltacom is required to provide other undertakings with services needed to ensure interoperability of end-to-end services to users.

All the above access obligations must be provided on terms and conditions which are fair, reasonable and timely and which do not differ from those provided to the retail arm, both with respect to standard and timeliness.

In all cases where access or interconnection is to be provided upon a reasonable request being made, the MCA will itself determine whether the request is truly reasonable or otherwise.

The MCA intervention is aimed at ensuring that no access is withdrawn unfairly and at the same time that no obligations are unduly imposed on any undertaking.

8.4.2 Transparency

The obligation of transparency emanates from Regulation 18 of the ECNSR. This provision authorises the MCA to impose transparency obligations on undertakings holding significant market power in relation to interconnection and, or access (including wholesale call termination), by requiring such undertakings to make public specified information, such as accounting information, technical specifications, network characteristics, terms and conditions for supply and use, as well as prices.

In view of the fact that Melita Cable is a new entrant in the provision of voice services and has a limited subscriber base, the MCA is of the opinion that requiring such operator to render public its termination rates and proposed changes to such rates in advance of the change taking place is proportional, sufficient but essential to remedy the potential abuse of their market power. Nevertheless, the MCA will monitor closely the application of this remedy and will consider revising it, if and when it deems necessary.

Whereas the MCA considers it necessary to impose the same obligation on Maltacom, it believes that the undertaking's size in terms of subscriber base and the fact that Maltacom has been present and regulated in the said market for a number of years necessitates further safeguards of transparency. Hence, it is suggested that Maltacom should continue to publish a sufficiently unbundled reference offer for termination services in accordance with Regulation 18(2) of the ECNSR[29]. In this regard, the reference offer should be sufficiently unbundled so as to ensure that alternative operators are not required to pay for facilities which are not necessary for the services requested, giving a description of the relevant offerings broken down into components according to market needs and the associated terms and conditions including services level agreements and prices as directed by the MCA. Maltacom should also continue to provide and publish appropriate manuals, order forms and processes for services.

The implementation of these obligations may also require the publication of other information from time to time. The MCA retains the right to impose changes to reference offers to give effect to the obligations imposed under the Act.

Apart from the obligations relating to the RIO, the MCA is of the opinion that Maltacom should continue to provide itemised billing at a wholesale level.

[29] refer to current RIO: http://www.maltacom.com/interconnect/docs.aspx

The MCA believes that the imposition of the above transparency obligations should help to curtail a possible abuse of market power by both Maltacom and Melita Cable in the wholesale termination market. However, the MCA is also aware that, without further obligations in place to complement this obligation of transparency, the effectiveness of said obligation will be greatly impaired.

8.4.3 Non-discrimination

The obligation of non-discrimination is another effective remedy with which to counter the possibility of abuse of market power by undertakings with SMP. This obligation extends to both price and non-price related competition problems which very often give rise to vertical foreclosure in the provision of access and, or interconnection.

The said remedy targets in particular the competition problem of vertical foreclosure. It has been stated that in the wholesale termination market, both Maltacom and Melita Cable are deemed to have SMP. In view of this problem and of the fact that the benefit of the said remedy surpasses the level of burden it places upon the operators which implement it, the MCA is imposing such obligation on both operators.

This implies that when providing call termination services to other operators, Maltacom and Melita Cable shall apply equivalent terms, conditions and charges in equivalent circumstances to other undertakings providing equivalent services, and provide services and information to others under the same terms and conditions, at the same price, and of the same quality as they provide for their own services, or those of their subsidiaries or partners.

The MCA also deems it important that information gained by operators as a result of its provision of call termination services is not used by downstream retail providers in any manner as to favour their own operations.

8.4.4 Price control, Cost Accounting and Accounting Separation

In order to counteract the incentive of SMP operators to charge excessive termination rates and so as to further strengthen the obligations of non-discrimination and transparency, the MCA considers it is necessary to apply a price control remedy. In determining the level of remedies to impose, the MCA believes that it would be appropriate to take into account the requirement for proportionality and the positions of the operators in this market. Where possible, the least burdensome and effective set of remedies is to be selected. The form of price control should, if possible, be relatively light and should ensure that rates are fair and reasonable.

A. Melita Cable

Although Melita Cable enjoys a ubiquitous network, the MCA is aware that Melita Cable has only recently started providing voice services to end-users. The imposition of detailed cost-orientation and cost-accounting obligations would, at this point in time, be too onerous in view of its small customer base for its voice services.

For this reason, the MCA is of the view that the objective of ensuring that termination rates is fair and reasonable and may be achieved by requiring that any rates for wholesale termination shall be pegged, at a maximum, to Maltacom's termination prices. Since detailed cost-orientation and cost-accounting obligations are already imposed on Maltacom, the MCA expects that, for the time being, the capping of Melita Cable's termination rates at a level equal to Maltacom's regulated rates will guarantee that such termination rates will be likewise fair and reasonable. Although the obligation of accounting separation will not be imposed at this time, nonetheless, Melita Cable will still need to ensure that such rates are non-discriminatory and do not create a margin-squeeze to the detriment of end-users.

The MCA is of the opinion that within these parameters, Melita Cable should in the first instance, be able to negotiate on a commercial basis the termination rate it shall offer to electronic communications providers requesting termination services. In circumstances where commercial negotiation on the termination rate to be offered within the caps imposed fails, the MCA reserves the right to intervene in accordance with its powers at law.

At the current time the MCA considers that it is not proportionate to impose detailed cost-orientation and cost-accounting obligations on Melita Cable. This notwithstanding, the MCA will monitor developments in the market and keep this decision under review. If the MCA determines that despite its charging of similar or lower rates to Maltacom for wholesale termination services, Melita Cable engages in excessive pricing practices which distort competition, the MCA reserves the right to impose cost orientation and, or accounting separation and, or cost accounting obligations on Melita Cable.

The MCA also reserves the right to demand any information or data from Melita Cable to ensure that the latter is not adopting pricing strategies that are disruptive to the market. In the case where the MCA amends the specified obligations, the MCA shall notify the EU Commission in accordance with Regulation 6 of ECNSR (Article 7 of the Framework Directive).

The MCA therefore concludes that a price control obligation will be imposed on Melita Cable which, in the first instance, will take the form of an obligation that Melita Cable's wholesale termination rates shall be equal to, or less than, Maltacom's termination rates. If at any point, Maltacom's rates are changed, whether or not as a result of regulatory intervention, Melita's cap on termination rates shall be set accordingly. If this form of price control proves to be insufficient in ensuring fair and reasonable pricing, the MCA shall consider more onerous obligations in the form of cost orientation, cost accounting and accounting separation.

B. Maltacom

As was held above with respect to the call origination market, without some intervention in pricing, Maltacom is likely to charge excessive prices in order to maximise both its profits and the costs of competing providers. Higher wholesale charges are likely to translate in terms of higher retail prices of competing undertakings and such undertakings being less able to compete in the retail market, and this to the detriment of end-users.

In light of the above, the MCA deems it necessary and adequate to impose the following obligations on Maltacom:

B.1 Cost Orientation

In view of the risk of excessive pricing being applied by Maltacom in the wholesale termination market, the MCA is of the opinion that the pricing methodology that may promote competition most efficiently is that of cost orientation. Cost orientation is already mandated on Maltacom by virtue of its dominant position designation under the previous framework. By mandating that interconnection and access to wholesale call termination services provided by Maltacom are cost oriented, the MCA believes that it would be in a position to ensure fair and efficient access to Maltacom's network and services.

Therefore, in view of Maltacom's SMP status in the market under review, the MCA concludes that Maltacom's current cost orientation obligation is to be maintained. In accordance with this, the MCA will pay careful attention to those costs which are shared amongst a number of products and ensure that costs charged will reflect the costs of an efficient operation.

B.2 Cost Accounting Systems

The MCA believes that, in order to effectively promote competition and curb possible abuse of dominance in the wholesale call termination market, a cost accounting system is necessary to support cost orientation. It is therefore imposing such obligation as a further remedy on Maltacom.

Such cost accounting system will provide the MCA with detailed information regarding Maltacom's service costs and ensure that fair, objective and transparent methodologies are followed by the operator in allocating costs to the regulated services. Information from such system will be used by the MCA to complement the application of other regulatory measures, such as transparency and non-discrimination.

The MCA does not consider the imposition of a cost accounting obligation to constitute an unreasonable burden on Maltacom, given that such obligation is already imposed on the operator. Maltacom is currently obliged to support such a system by virtue of a decision[30] which has been in place for some time.

The 2002 decision established that operators having a Dominant Market Position should implement a Fully Allocated Cost accounting system using a historic cost base. At that time, the MCA had taken the view that this methodology was the most practical approach in the short term. However, mindful of the deficiencies inherent in a historic cost-based system, particularly the issue that legacy costs and inefficiencies should not be shifted to other competing operators through incorporation in a Reference Interconnection Offer, in the same Decision, the MCA stated that it would review the need to move to a current cost regime during 2005. It has thus issued a consultative document[31] that examines the various issues that are relevant to a transition from a historic cost base to a current cost base. Further guidance on the way forward on this issue will be published in the near future.

Although these obligations are deemed adequate, the MCA will nevertheless continue to monitor developments in the call termination market on an ongoing basis.

B.3 Accounting Separation

Accounting separation is instrumental in ensuring that the undertaking with SMP is not price-discriminating between its retail arm and its competitors when providing access and interconnection at a wholesale level. By evidencing the wholesale and internal transfer prices

[30] Implementation of Cost Based Accounting Systems for the Telecommunications Sector - Report on Consultation and Decision - July 2002.

[31] Current Cost Accounting Methodologies for the Electronic Communications Sector – July 2005

of the products and services of the undertaking with SMP, accounting separation ensures that the prices charged by the SMP operator are non-discriminatory.

The obligation of accounting separation is important in the disclosure of possible market failures such as cross-subsidisation and the application of margin squeeze by an undertaking with SMP.

In view of the above and of the fact that the MCA is herein imposing the obligations of non-discrimination and transparency on Maltacom, the MCA has decided that the imposition of a accounting separation obligation on Maltacom is appropriate. Currently Maltacom is subject to the accounting separation obligation described in the MCA decision on Accounting Separation[32]. This level of obligation shall be maintained until further consultation is deemed necessary.

8.5 Summary of responses and replies to issues related to Remedies

One respondent argued that the MCA is incorrect to propose remedies on Melita Cable since the undertaking is not providing any termination services and therefore is not part of the market and has no SMP.

The MCA has already provided its position regarding these issues in the market definition and market analysis section. The MCA believes that termination services provided by Melita Cable internally are part of the market. Moreover, the MCA is aware that the cable operator started interconnection negotiations with other undertakings and that the company will soon accomplish these agreements. As explained earlier, the assumption that within the timeframe of this review the cable operator will be providing wholesale call termination to other operators besides itself is therefore justified. Furthermore, given that Melita Cable has been found to have SMP in the market for termination services, the MCA is also justified in imposing regulatory obligations in correspondence with the identified potential competition problems.

Another respondent argued that since every operator has been found as equally dominant on its own network, the MCA should impose equal and identical remedies on all operators.

The MCA disagrees with this argument, in that the MCA needs to be guided by the principle of proportionality when imposing remedies. All operators have been found to be dominant on their respective networks however there is a clear difference in the market position of different network operators. Factors such as the size of the undertaking in the specific market, subscriber base, position vis-à-vis other competitors and the time of entry in the market, all determine the extent of the remedies to be imposed. The finding of SMP does not automatically imply that a given set of remedies is imposed indifferently on all operators.

8.6 Comments by the European Commission pursuant to Article 7(3) of the Framework Directive related to the Market Definition

In the draft measures notified to the European Commission, the MCA stated that it intends to implement a price control obligation on Maltacom on the basis of cost orientation through a

[32] Accounting Separation and Publication of Financial Information for Telecommunications Operators - Report on Consultation and Decision of October 2002, as amended http://www.mca.org.mt/library/show.asp?id=323&lc=1

cost accounting system. Currently, Maltacom is obliged to support such a cost accounting system using a fully allocated historic cost accounting methodology. The document notified to the Commission states that the MCA is considering a move to a current cost regime, given that this would lead to a reduction in charges.

In its comments, the Commission argued that Maltacom's interconnection charges for call termination are, according to the 11th Implementation Report, among the highest in the EU and invited the MCA to revise its price control obligations as soon as possible in order to accelerate interconnection tariff reduction. As an intermediate solution, the Commission proposed that the MCA could temporarily base its price control obligations on international benchmarking until a new price control model is implemented.

The MCA wants to point out that, given that the 11th Implementation Report reports data as at 1 October 2005, the reduction in interconnection rates of 1 January 2006 is not shown in the charts depicting interconnection charges. The report however states in a footnote that 'On 28 November 2005 the Malta Communications Authority published a proposed statement of decision whereby it was proposing to reduce the average call termination rate of the fixed incumbent by 33% as from 1 January 2006'.

These new rates, which became effective in January 2006, are based on the results obtained from a bottom-up cost model specifically developed by the MCA. The bottom-up cost model was developed on the basis of a modified scorched-node approach which replicated an efficiently designed Next Generation Network. The underlying operating costs were adjusted to reflect that of an efficiently operated network, whilst the capital base was calculated using current costs. Following an extensive consultation process with Maltacom, the MCA published the above-mentioned decision notice to determine wholesale call termination and call origination rates. In this decision notice, the MCA expressed its intention to refine the bottom-up cost model and to keep interconnection rates under review. Such refinement could lead to further reductions in Maltacom's interconnection charges.

The MCA is nonetheless taking note of the Commission's comments regarding the possibility of resorting to temporary implementation of international benchmarked tariffs.

8.7 Summary of Obligations

Given the position of dominance held by Maltacom in the wholesale voice call market, the MCA decided to impose on Maltacom the following obligations:

1. Access to, and use of, specific network facilities;
2. Non-discrimination;
3. Transparency;
4. Cost orientation, cost accounting and accounting separation.

The MCA has also identified Melita Cable as having SMP in the wholesale call termination market on their individual network. As a result, the MCA is imposing the following obligations on Melita Cable:

1. Access to, and use of, specific network facilities;
2. Non-discrimination;

3. Transparency; and
4. Price control.

8.8 Monitoring Market Developments

The MCA considers that it would be sensible to keep a reasonably close watch on market developments following this review. This would ensure that the obligations of the SMP operator identified earlier on, would be justified throughout the duration of this market review. If the MCA deems necessary or appropriate, a new market review would be undertaken at any time in response to changing market conditions.

This Decision shall be effective from the date of its publication and shall remain in force until further notice by the MCA.

PART C – WHOLESALE TRANSIT SERVICES

Chapter 9 - Market Definition: Transit Services

Regulation 10 of the ECNSR provides that before an SMP determination may be considered, the MCA must identify the markets in relation to which it is appropriate to consider such a determination and to analyse those markets. In identifying the relevant markets, the MCA is required to take utmost account of all applicable guidelines and recommendations issued by the European Commission.

In its recommendation the Commission identified three main wholesale markets for fixed networks. The Commission identified the wholesale transit services market as a relevant market for assessment by the NRAs. The Explanatory Memorandum to the Commission's Recommendation on relevant markets states that *'transit services refer to the (long distance) conveyance of switched calls on the public telephone network'* and that *'transit services … comprise both conveyance between tandem switches on a given network, between tandem switches on different networks and including pure conveyance across a third network.'*

The MCA has conducted an assessment of the market for wholesale transit services in order to validate its appropriateness in the Maltese context, and as preparatory work for the assessment of SMP in this market.

9.1 Wholesale Transit Market

In its national consultation paper, the MCA proposed to define transit services as comprising the conveyance of traffic through at least one switching node (e.g. tandem switch / media gateway) not acting as a primary connection to the end-user for the conveyance of a particular call[33]. This would include the conveyance of on-net calls, calls between the network and OAOs, all international calls (self-supplied or otherwise) and all calls handed over to the network by an originating operator to a third operator for termination. Possibly due to the small size of the islands (316 sq km), to the knowledge of the Authority, national transit services for the transit of traffic between operators with Maltacom acting as a third party transit provider have never been requested.[34] In fact, three of the four existing telephone service providers, that is, Maltacom, Mobisle Communications Ltd and Vodafone Malta Ltd are directly interconnected with each other. The cable operator, Melita Cable, is not yet interconnected to any one of these operators however it is currently negotiating interconnection agreements.

On the other hand, international transit services have been offered by the incumbent since the early 1990s when the first mobile infrastructure was set up. Lately, one of the mobile operators invested in an underwater optical fibre cable to Italy and started conveying its own international traffic.

[33] includes conveyance through the International Switching Centres

[34] This has been confirmed by Maltacom in its submission to the National Consultation.

In defining the wholesale transit services market, the Authority has considered the following factors:

1. The building of alternative fixed access networks as a substitute to wholesale transit services;
2. Wholesale leased lines as a substitute to wholesale transit services;
3. Direct physical interconnection as a substitute to wholesale transit services;
4. Whether wholesale transit provided over mobile networks is part of the market; and
5. Whether national transit and international transit are in the same market.

9.1.1 Whether building an alternative fixed access network can substitute Wholesale Transit Services

A new entrant may opt to build it's own infrastructure including the local loop to end-users in order to avoid purchasing wholesale transit services. This requires the construction of a ubiquitous fixed network. By doing so, its subscribers would be able to make calls to other subscribers on the same network.

Since there are no alternatives for conveying and terminating a particular fixed call to a specific location/number, the new entrant needs to replicate the extensive fixed access network of the incumbent and eventually attract enough subscribers to his own number ranges or through number porting. The operator would then need to use this network for self-provision of transit services.

The MCA considers that given the present limited demand for national transit services and the level of investment that would be needed to achieve the same extensive coverage as that of the incumbent, the construction of such network is highly unlikely within the timeframe of this review.

9.1.2 Whether wholesale leased lines can substitute Wholesale Transit Services

The MCA has considered whether wholesale leased lines are a feasible substitute to wholesale transit services.

A wholesale leased line is a communications link between two points provided by a fixed network operator at fixed locations. Such a connection provides dedicated capacity between those two points. On the other hand, transit services are provided over a connection which is able to convey information that can be routed and carried to anywhere on the public switched telephone network. Transit services provide switching, routing and carriage for switched calls originating and terminating on the public telephone network. As a result leased lines are functionally different from transit services since a leased line is only limited to provide two-way conveyance between two points whereas transit services can convey information to more than one fixed point and to different OAOs.

A new entrant opting to acquire wholesale leased lines from a fixed network operator needs to establish such a connection with every telephone service operator it requires to convey traffic with. The new entrant needs to ensure that it has the minimum volume of traffic on each particular point-to-point route to warrant such an investment.

The MCA therefore deems wholesale leased lines and wholesale transit services to be functionally different services and constitute separate markets. The MCA has analysed and notified retail and wholesale leased lines in a separate review.

9.1.3 Whether Wholesale Transit Services can be substituted by direct physical interconnection

The MCA has also considered whether wholesale transit services and direct physical interconnection fall within the same relevant market.

Similar to leased lines, direct interconnection provides a dedicated direct link between two network operators. This time however since the physical connection is achieved by actually laying fibre-optic cable in the ground end-to-end, such a connection is permanent. A decision to switch to direct physical interconnection requires substantial commitment as well as a significant amount of investment, planning and time. The operator needs to ensure that it has the minimum volume of traffic to justify such commitment.

Since the MCA cannot compare the prices of the services being analysed, it cannot judge whether an increase in transit cost would prompt an operator to switch to use direct interconnection. However, as in the case of wholesale leased lines, a new entrant opting to directly interconnect needs to establish such a connection with every telephone service operator it requires to convey traffic to. The high level of investment required coupled with high entry barriers makes it unlikely that service providers would promptly shift to direct interconnection if wholesale transit services were to increase by a 5 to 10 per cent hypothetical price increase. Besides, the MCA is also doubtful as to whether the newly created capacity would be offered on a systematic basis as transit services to third parties.

The MCA therefore believes that direct physical interconnection is not in the same market as fixed wholesale switched transit services.

9.1.4 Whether Wholesale Transit Services provided over mobile and fixed networks fall in the same relevant market

In its analysis, the MCA has also considered whether switched transit services provided over mobile networks to third parties are in the same market as switched transit services over fixed networks.

At present there are five network operators that are or are about to get interconnected directly between themselves foregoing the need to make use of national transit services.

The two mobile operators have not, up till now, offered national transit services to third parties. Although these operators might be able to offer transit services, the MCA is doubtful whether these operators have the sufficient capacity on their network to offer transit services systematically. The MCA believes that within the lifetime of this review, mobile operators will not offer national transit services to third parties on a systematic basis given an increase in price for transit services by a hypothetical monopolist.

The MCA therefore considers that for the duration of this review national transit services provided over mobile networks will not be part of the market for transit services.

As stated earlier, Malta is primarily connected to Italy through two fibre cables owned by Maltacom and Vodafone respectively. As at July 2004 all three public telephone operators where conveying all their international traffic over Maltacom's international gateway. However, as from July 2004 Vodafone started operating an international getaway and started to convey its own international traffic over this infrastructure. Since the deployment of the new international gateway, a new entrant in the market would have a choice between conveying its international traffic over Maltacom or Vodafone's network. The MCA is informed that Vodafone has recently developed a public offer for wholesale international transit services, however at the time of publication of this review no requests have been made to the company. The MCA considers that the international transit services provided by the mobile operator are similar to those offered by the fixed incumbent and therefore possibly pose a competitive constraint on Maltacom. The MCA is of the opinion that Vodafone has sufficient spare capacity over its international gateway to provide transit services to third parties. Moreover, this wholesale service is readily available to anyone interested in acquiring such services.

The MCA therefore concludes that international transit services provided by mobile and fixed networks are sufficiently similar to be considered as adequate substitutes and should therefore fall within the same relevant market.

9.1.5 Whether International Transit Services and National Transit Services fall within the same market

The MCA also considered whether international transit services constitute a separate service market from the relevant market for wholesale national transit services. Functionally, international transit services entail the routing of a call to/from an international termination/origination point.

From a demand-side perspective, international transit services are acquired by national and foreign providers of international retail call services. International transit services and national transit services are functionally different and a retail call service provider seeking to convey an international call would not be able to do so by acquiring national transit services as a substitute. Such service provider needs the call to be terminated to the end-user with which the called international number is associated. There are no alternatives for making an international call to a particular number.

From a supply-side substitution perspective, the investment needed to enter the market and start providing either the national transit services or the international transit is a significant one and it would take a considerable amount of time to plan and deploy such a network.

The MCA believes that during the timeframe of this review, a supplier of national transit services would not be able to enter the market for the supply of international transit services in response to a small but significant price increase. This applies also to a supplier of international transit services seeking to enter the market for the supply of national transit services.

The MCA therefore concludes that national transit services and international transit services are not substitutes.

9.2 Relevant Geographic Market

A relevant geographical market comprises the area in which the undertakings concerned are involved in the supply and demand of products and/or services, in relation to which the conditions of competition are sufficiently homogeneous and which can be distinguished from neighbouring areas because the conditions of competition are appreciably different to those areas.

According to the EU Guidelines, in the electronic communications sector, the definition of the geographical scope of the relevant market is generally determined with reference to the area covered by a network, and to the existence of legal and other regulatory instruments.

Based on these definitions and the market conditions described earlier on the MCA takes the view that the relevant geographic market for the provision of wholesale transit services is national in scope.

9.3 Summary of responses and replies to issues related to the Market Definition

One respondent argued that given the small geographic area of the Maltese Islands, (27 km by 14.5 km) the concept of long distance conveyance of calls does not exist. The small size of the country therefore limits significantly the scope of transit services in Malta.

In their submission Maltacom confirmed that there were no requests to date for national transit services with Maltacom acting as a third party transit provider. It added that Malta represents a unique situation in that the limited number of operators that can be economically sustained in such a small country, coupled with the small number of interconnection points needed, make it feasible for each network operator to interconnect directly with the others. The respondent therefore argued that it is incorrect to conclude that direct interconnection requires substantial commitment as well as a significant amount of investment, planning and time and that if this were so, the network operators currently in the market would have requested transit services. The same respondent also argued that it is possible that mobile operators offer national transit services over their networks.

As argued earlier, the MCA is of the view that the different functional characteristics between transit services and these alternative services indicate that both direct physical interconnection and interconnection through wholesale leased lines are not in the same relevant market of wholesale transit services.

Maltacom further questioned whether given the above possible alternatives for transit services and given that all fixed networks in Malta will operate a NGN in the near future, the market for transit services *“will actually continue to exist in the coming months”*.

In its national consultation document the MCA proposed its market boundaries broadly based on the incumbent’s current PSTN network, but which could in principle also apply to NGNs. As explained at the beginning of this document, the fixed telephony incumbent (Maltacom) will complete its upgrade of its PSTN network to an NGN later this year while the new BWA network operators are also opting for similar technology. Moreover, the cable network operator has been operating a ubiquitous NGN network for some time.

Clearly, since these new networks rely on packet-based rather than circuit-switched solutions, NGNs are more streamlined in the way they convey calls. An operator like Maltacom is able to cover the national territory with four fully-meshed gateways as compared to the fifteen PSTN switches currently in operation. The cable infrastructure is currently operating a somewhat similar solution. Contrary to circuit-switched technology, the concept of tandem switching does not apply to NGNs. The topology of these new infrastructures supplemented by the lack of long-distance in Malta therefore shape differently the traditional transit market structure existing abroad.

Given these technological developments, and the fact that there is no demand for third party transit services in Malta, the MCA is hereby carrying out the three-criteria test to determine whether the market for wholesale transit services as defined in the Commission’s Recommendation will continue to be a relevant market for Malta in the near future.

9.3.1 Barriers to entry

The Recommendation on Relevant markets states that two types of entry barriers need to be analysed: structural and legal or statutory barriers.

The small geographic size of Malta coupled with the small number of ubiquitous networks makes it feasible for Maltese network operators to make use of alternative services - such as wholesale leased lines and direct physical interconnection - to ensure the conveyance of calls to third party networks. More specifically, the fixed incumbent Maltacom and the cable operator Melita Cable have already or are in the process to interconnect between them and other operators using direct physical interconnection. The fact that these two operators have their own already-laid underground cables makes it feasible for them to deploy such a fixed and long-term solution. Through this setup both operators forgo the use of any kind of transit services to convey their national traffic.

The two mobile operators Vodafone and Go Mobile have opted to interconnect amongst themselves through wholesale leased lines and with Maltacom through direct physical interconnection. The use of wholesale leased lines offers greater independence, more control and flexibility to the mobile operators when conveying national traffic. The cable operator is also currently negotiating interconnection with the two mobile operators and is expected to opt for direct physical interconnection and/or wholesale leased lines acquired from Maltacom.

The new BWA infrastructures which will be deployed over the next two to three years are also highly expected to forgo the use of transit services, if and when they start providing voice services. Two of the BWA frequency spectrum licences have been assigned to Vodafone and Go Mobile, which are already interconnection amongst themselves using wholesale leased lines and with Maltacom using direct physical interconnect. The third BWA operator is also expected to opt for wholesale leased lines.

The MCA believes that the small size of the country and the limited number of operators presents a unique situation where operators find it feasible to deploy alternative solutions to forgo the use of transit services over third party operators. Furthermore, all networks in Malta are/will deploy a NGN which enables operators to convey traffic over their network in an efficient way eliminating the need for tandem switching. All of the above therefore limit the extent to which network operators require national transit services in Malta. The ease with which network operators are by-passing the use of national transit services is clear.

After taking into consideration the developments in the market and the comments of the respondents the MCA considers that there are no high barriers for conveying national calls between operators.

Currently Malta is connected to mainland Italy with two submarine fibre optic cables owned by Maltacom and Vodafone respectively. These two links are vital for all the electronic communications services industry since they represent the main connection point with international providers for international calls, IP bandwidth, international leased lines and other services. There are other forms of interconnection with mainland such as microwave links and satellite however these are mainly used as back-up infrastructures.

Deploying such an infrastructure requires a significant investment and long-term commitment. Such an investment poses a clear financial and structural barrier to entry and this is clearly evidenced with the limited number of international links available. All service providers were up till last year dependent on Maltacom’s international link for transiting of international calls and internet services. Last year Vodafone launched a public offer for service providers interested in acquiring services over its international link.

The MCA has assessed the potential for other operators to deploy such an international infrastructure and is of the opinion that such an investment would not be possible in the short-term or during the time-frame of this review. The MCA is therefore of the opinion that the international transit of calls is heavily dependent on the existing infrastructures and there are significant barriers to entry in the provision of international transit of calls.

The analysis above therefore leads to the conclusion that there are low barriers to entry for the provision of national transit services in Malta but there are high barriers to entry for the provision of international transit services.

9.3.2 Development of competition

As stated earlier there is currently no demand for wholesale national transit services in Malta and this situation is not expected to change in the near future. All network operators are interconnected amongst themselves and therefore will not require national transit services. This shows that given the particular circumstances in Malta, direct physical interconnection and the use of wholesale leased lines for interconnection purposes are a feasible alternative to national transit services.

Currently there are no CS or CPS service providers operating in the market. However, the MCA is cognisant that one prospective CS operator is currently into negotiations with major operators to obtain interconnection to other operators. This would enable him to convey its own traffic independently forgoing the use of third party transit services. Nevertheless, should this CS operator require national transit services all network operators would be in a position to provide such services subject to available capacity. Given that by the end of this year there will be four ubiquitous networks interconnected between themselves, a service provider could hypothetically transit its national calls over any network operator.

With respect to the transit of international calls, the limited number of infrastructures capable to offer such services limits competition. The lack of alternative solutions pose a problem for the fostering of a competitive market during the timeframe of this review.

The MCA therefore considers that at a national level the provision of transit services is effectively constrained by the deployment of alternative solutions which offer greater flexibility to operators over transit services. These advantages justify any additional cost, if any, required by operators to deploy these solutions over acquiring readily available transit services. These competitive constraints are likely to increase in the near future with the interconnection of the cable operator with other networks and the deployment of three new BWA networks.

On the other hand, the MCA concludes that the provision of international transit services is still subject to high barriers to entry that limit the prospects of effective competition.

9.3.3 Efficiency of competition law

The Commission states that should ex-post competition law be sufficient to regulate any inefficiencies in the market, ex-ante regulation should not be imposed.

In the previous sections the MCA concluded that the provision of national transit services where characterised by low barriers to entry and subject to competitive constraints. As a result, the MCA believes that there is no scope for imposing ex-ante regulation on the provision of national transit services. The MCA is of the opinion that given the current lack of demand and number of alternative solutions that operators can avail themselves to forgo the use of transit services there is limited scope for market failure. In the case such a situation arises, competition law would suffice to resort back competition.

The market conditions for the provision of international transit services is however different from that of national transit services. The geographic position of Malta makes it particularly expensive to deploy international gateways. This is reflected in the small number of international facilities available in Malta. The MCA believes that the provision of international transit services are still not subject to sufficient competitive constraints. The Authority is therefore of the opinion that ex-post regulation alone would not ensure that such vital services are offered at competitive conditions.

9.4 Conclusion on Market Definition

From the analysis carried out above and given the technology developments in the Maltese market, the MCA concludes that the wholesale transit market proposed in the Recommendation on relevant markets has to be split into two markets; one for national transit and another for international transit. This is due to different demand and supply-side characteristics and different competitive conditions that these markets present.

The deployment of NGNs imply that the concept of internal transit in the national transit market as described in the national consultation paper will not exist anymore. Third party transit services have never been requested in Malta since a number of alternative solutions are being successfully deployed. This situation is likely to persist during the timeframe of this review.

The provision of international transit services are governed by different market conditions since the deployment of such infrastructures incurs significant costs and long term commitments. The limited number of infrastructures that are capable to provide such services imply that the market is still not competitive and need to be reviewed for the purpose of ex ante regulation.

The MCA is therefore defining the market for wholesale international transit services for the purpose of ex-ante regulation. At this stage the MCA safely concludes that national transit services are subject to sufficient competitive pressures such that ex-ante regulation is not required. Nevertheless, the MCA will monitor closely this market and reserves the right to take any appropriate action should market conditions change significantly.

Chapter 10 - Market Analysis: Transit Services

Having identified the relevant market, the MCA is required to analyse the market in order to assess whether any services provider/s have significant market power as defined in Regulation 8 of the ECNSR (Article 14 of the Framework Directive). This analysis is presented in this section.

In the national consultation document the MCA had defined a national transit market and found that Maltacom had a 100% market share. This statistic was based solely on the internal transit of calls by Maltacom, which was originally defined as any conveyance of calls over at least one tandem switch not acting as a primary switch. Such internal transit costs charged by Maltacom are currently incorporated in the origination and termination charges. Third party transit services have never been requested by any operator.

Following the carrying out of the three criteria test above, the MCA has not defined a national transit market since it found that this market presents signs of effective competition.

The MCA has defined an international transit market since this market still presents significant barriers to entry and limited competition. The following section presents an analysis of the market conditions of the said market.

10.1 Assessment of SMP against Relevant Criteria

This section considers whether single dominance is likely to exist in the identified relevant market. In the MCA's view the assessment is fully compliant with the Commission's Guidelines. The SMP assessment set out is based on the evidence available to the MCA.

Single dominance can be assessed using a large number of criteria, as described in the Commission's and the MCA's guidelines on SMP assessment. In the MCA 's view, the most important ones are:

- Market share analysis
- Countervailing buyer power
- Barriers to entry
- Size of the undertaking

10.1.1 Analysis of market shares

The analysis presented in the market definition chapter identified a market for the provision of wholesale international transit services.

There are currently two operators that are providing wholesale international transit services; Maltacom and Vodafone. Up till July 2004 Maltacom was the only provider of international transit services since it was the only operator that had an international gateway. Consequently, Maltacom had a 100 per cent market share in the provision of international transit services.

As from July 2004, Vodafone started to operate the second international gateway and started to transit its own international minutes over its infrastructure. Moreover, the MCA is informed that Vodafone has recently launched an offer to third parties for acquiring international transit services. However, as at the date of publication of this review, the MCA is not aware that any third party operator is using this service from Vodafone.

From data available to the MCA, the estimated market shares are as follows:

	2004Q2	2004Q3	2004Q4	2005Q1	2005Q2
Vodafone	0%	28%	34%	31%	36%
Maltacom	100%	72%	66%	69%	64%

The trend in the market shares seems to be relatively stable and indicates that although in the last quarter of 2004 Vodafone has started to transit its own international traffic over its network, Maltacom still transits on average of 66 per cent of international traffic over its international gateway. This indicates that although the second international gateway has introduced an element of competition in the market, Maltacom has maintained a position of dominance.

The MCA therefore concludes that Maltacom has a market share much higher than 50 per cent and has significant market power in the provision of wholesale international transit market.

10.1.2 Countervailing Buyer Power

Countervailing buyer power in the provision of wholesale international transit services market may arise where a large customer or group of customers impose a competitive constraint on the transit rates charged by an operator. This situation is possible if alternative operators have a feasible alternative to the termination offered by incumbents.

Maltacom's retail activities make it the largest purchaser of transit services in the international transit services market and therefore Maltacom is the only provider that could potentially exert countervailing buyer power in the purchase of transit services. However, the MCA is of the opinion that it is unlikely that Maltacom would use its market power to constrain its own prices.

The entry of the second operator on the international transit market could potentially give alternative operators the ability to exert some level of countervailing buyer power on Maltacom. The MCA notes this possibility, however given the economies of scale and scope gained by Maltacom and the present limited demand for transit services, the MCA concludes that this possibility is not sufficient to constraint Maltacom for the time being. The MCA notes that the second largest purchaser of international transit minutes from Maltacom is Go Mobile which is the mobile subsidiary of the Maltacom Group. The MCA is again doubtful as to whether a subsidiary company would effectively constrain Maltacom's prices.

The MCA considers that, during the timeframe of this review, there can be little countervailing buyer power in the provision of international transit services.

10.1.3 Ease of market entry

Due to the geographical position of Malta, international connectivity requires a huge capital investment. As at July 2004, the fixed incumbent, Maltacom, was the only operator that had the infrastructure to offer international transit services. However, as from July 2004, Vodafone started operating the second international gateway. Nevertheless, the MCA considers that the high investment involved in deploying the necessary infrastructure to ensure international connectivity is a significant barrier to entry for any other new entrant during the timeframe of this review. Issues related to barriers to entry have already been explored in more detail in the market definition section above.

The MCA therefore safely concludes that the wholesale international transit market is subject to high barriers to entry and it would therefore be very difficult for new entrants to replicate the existing infrastructures.

10.1.4 Economies of scale and scope

For operators to exploit economies of scale, they must be able to achieve a high utilisation of their interconnect links, which is only possible with large volumes of traffic. Given that Maltacom owns nearly all fixed access lines in Malta, it is in a position to enjoy the benefits of economies of scale. An alternative operator would not have such a large volume of traffic and would therefore be unable to gain economies of scale.

Due to the significant sunk costs involved in building an international infrastructure, alternative operators would find it very difficult to match Maltacom's dominant position. In order to compete with Maltacom on price they would need to have sufficient scale to bring their overall costs below those of Maltacom. The MCA considers that alternative operators would not be in a position to ensure such a wide coverage and a sufficient traffic volume to effectively compete with Maltacom in the provision of wholesale international transit services. Moreover, Maltacom provides a large number of services over its network and is therefore able to exploit economies of scope in the provision of its services. This further limits the possibility of alternative operators to effectively compete with the incumbent.

10.1.5 Overall size of the undertaking

Maltacom's network is ubiquitous, providing a whole array of fixed services. Large customers can acquire a full package of services from Maltacom and this would enable it to compete effectively in order to maintain its customers in the case of competition. At retail level Maltacom enjoys a position of dominance in the provision of retail fixed calls and owns nearly all fixed access lines.

Moreover, Maltacom is a vertically and horizontally integrated provider that is able to leverage its dominance from the origination market into the wholesale international transit services market.

The size and ubiquity of Maltacom is an important factor in ensuring that during the timeframe of this review it will continue to maintain its significant market power in the provision of wholesale international transit services.

10.2 Conclusion and SMP designation

The evidence presented above clearly suggests that Maltacom has significant market power in the wholesale international transit services market.

This conclusion is supported by a number of factors including the high market share in the provision of international transit services. Maltacom is a vertically integrated provider and has the ability to lever power from the call origination market into the transit services market. The size of Maltacom makes its very difficult for a new entrant to attract a large number of customers and traffic in order to gain sufficient economies of scale and scope and hence, compete effectively with the incumbent. Moreover, the market for the provision of international transit services is subject to high entry barriers.

Chapter 11 - Regulatory Implications: Transit Services

In accordance with Regulation 10(4) of the ECNSR, where an operator is designated as having significant market power on a relevant market in accordance with Regulation 8 of the same ECNSR the MCA is obliged to impose on such operator such appropriate specific regulatory obligations referred to in subregulation (2) of regulation 10 of the ECNSR, or to maintain or amend such obligations where they already exist.

In accordance with the Framework Directive, Regulation 10(4) of the ECNSR obliges the MCA, where an operator is designated as having significant market power in a relevant market in accordance with Regulation 8 of the same ECNSR, to impose, or amend if already imposed, the appropriate obligations.

This section aims at discussing the actual and potential competition problems that exist in the wholesale national and international transit services markets and impose adequate remedies to address these problems.

11.1 Current Remedies

Under the previous regulatory framework the MCA has already identified Maltacom as having a dominant position in the provision of fixed telephony services. Maltacom had been designated as having a dominant market position in May 2002[35]. Consequently the MCA has imposed on Maltacom the following remedies:

- Ensure that the access or service provided meets certain specified quality of service standards, and to keep records and furnish the MCA with details of compliance with those performance standards;
- Interconnect promptly, publish a Reference Interconnection Offer and ensure that charges for access/services are cost-oriented, transparent, unbundled and independent of the application to which they are put;
- Operate a cost accounting system which is suitable for implementation of the tariff requirements imposed on dominant operators and the calculation of charges for network elements used to provide interconnection; and
- Be subject to certain regulatory controls over retail tariffs as required by the Regulations.

11.2 Competition Problems in Fixed Markets

The MCA has identified a number of existing and potential SMP-related competition problems in the wholesale fixed markets under review. These are leveraging (vertical and horizontal), barriers to entry and price related problems. These problems have been discussed under section 04.2 above.

[35] http://www.mca.org.mt/library/show.asp?id=100&lc=1

11.3 Selecting Remedies – Principles Applied

Given the identified actual and potential competition problems arising from SMP in the markets under review, the MCA is obliged to impose obligations on undertakings identified by it as having significant power on those markets. Accordingly, the MCA is imposing those appropriate obligations that it believes will encourage efficient investment and innovation and further promote competition in the markets under review.

In selecting the remedies to impose on the designated SMP operator(s), the MCA considered the nature of the problem identified and, in accordance with the principle of proportionality, where necessary, imposes those remedies which it considers to be the least burdensome, yet effective. The MCA also took account of potential effects on any related markets. All this is reflected below.

Having said this, in view of the complexities of the competition problems discussed above, the MCA notes that it is unlikely that any single remedy can achieve the aim of ensuring effective competition. Hence, the need for a suite of remediesthat complement, support and reinforce each other.

11.4 Regulatory Obligations

The market definition above has identified a market for International Transit Services with Maltacom being found to have significant market power. The MCA is of the opinion that there is the need to curtail possible abuses, both price-related and otherwise, of Maltacom's market power, by means of *ex ante* obligations. It believes that the remedies it is imposing are based on the nature of the competition problems it has identified in the relevant market and are proportionate and justified in light of the objectives set out in Article 4 of the Electronic Communications (Regulation) Act.

The MCA will however continue to monitor market developments and where appropriate, may issue further directions refining these remedies.

11.4.1 Access

As a result of Maltacom's SMP in the wholesale international transit market, it is justifiable to conclude that Maltacom would have an incentive to foreclose the market unless it is prohibited from doing so by *ex ante* regulatory intervention. In view of this, the placing of an effective access obligation on Maltacom is considered necessary. Without such an obligation, negative and anti-competitive effects are bound to be experienced in the retail markets. The MCA considers that the denial of access to third parties by Maltacom, or the provision of access on unreasonable terms and conditions having a similar effect, would hinder the emergence of a sustainable competitive market at the retail level to the detriment of end-users.

In view of the need to curb possible abuses of power by Maltacom in the transit market, the MCA deems it justifiable and adequate to impose the following obligations on Maltacom.

Primarily Maltacom should interconnect its network or network facilities with undertakings making reasonable requests. Maltacom should also negotiate in good faith with undertakings making new requests for access to transit services.

Moreover, Maltacom should retain its existing access obligations and not withdraw access to transit facilities already granted without prior authorisation in writing by the MCA.

In order to ensure that other undertakings will be able to offer new products, the MCA concludes that it is essential that Maltacom be obliged to give third parties access to specified network elements and, or facilities, in terms of paragraphs a) and f) of Regulation 21(2) of the ECNSR when this is reasonably requested by other undertakings. In case of non-agreement between Maltacom and an undertaking requesting access, the MCA will determine the matter in accordance with its powers at law.

The MCA further considers the grant of open access to Maltacom's technical interfaces, protocols or other key technologies that are indispensable for these services by other undertakings necessary for the creation of a truly competitive environment.

Likewise, the provision by Maltacom of access to operational support systems or similar software systems necessary to ensure fair competition in the provision of services is deemed necessary by the MCA.

Finally, Maltacom is required to provide other undertakings with services needed to ensure interoperability of end-to-end services to users.

All the above access obligations must be provided by Maltacom on terms and conditions which are fair, reasonable and timely and which do not differ from those provided by Maltacom to its retail arm, both with respect to standard and timeliness. Moreover, access to the wholesale transit services should be provided unbundled.

In all cases where access or interconnection is to be provided upon a reasonable request being made, the MCA will itself determine whether the request is truly reasonable or otherwise.

The MCA, whilst ensuring that no obligations are imposed unduly on Maltacom, through its intervention aims at ensuring that no access to transit services is withheld or withdrawn unfairly.

The obligation of access, coupled with the obligation of transparency and in particular the publication of a Reference Offer in accordance with what was stated above, should stultify the power exerted by Maltacom, as an undertaking with SMP in the market, on other undertakings competing with its downstream services at a retail level. This notwithstanding, accompanying obligations of price control and cost accounting are deemed necessary and in the interest of effective competition and the service produced to the end-user.

11.4.2 Transparency

Maltacom is currently obliged to publish its international transit rates in its RIO. The MCA has concluded that such transit rates charged by Maltacom are to continue to feature in the RIO. Maltacom is thus obliged to continue publishing a reference offer for international transit services. This shall be sufficiently unbundled so as to ensure that undertakings are not required to pay for other facilities which are not necessary for the provision of transit services. The transit offer shall include pricing, terms and conditions and service level agreements as directed by the MCA. The publication of other information may be requested by the MCA from time to time. Furthermore, the MCA is of the opinion that Maltacom should continue to provide itemised billing relating to wholesale international transit services.

In view of Maltacom's significant market power in the wholesale international transit market, the MCA also concludes that Maltacom is obliged to continue to feature such services in the appropriate manuals, order forms and processes.

Although effective, the MCA reiterates its belief that, if applied in isolation, the remedy of transparency would have little, if any, effect on the promotion and enhancement of effective competition in the wholesale transit market.

11.4.3 Non-discrimination

As was explained above, where an SMP operator such as Maltacom, is also a vertically integrated provider, it may have an incentive to provide wholesale services on terms and conditions that discriminate in favour of its own retail activities. The obligation of non-discrimination tackles both price and non-price related competition problems.

By virtue of this obligation, in accordance with Regulation 19 of the ECNSR, Maltacom, as the vertically integrated provider, should be obliged to:

a) apply equivalent conditions in equivalent circumstances to other undertakings providing equivalent services; and

b) provide services and information to others under the same conditions and of the same quality as it provides for its own services, or those of its subsidiaries or partners.

The MCA has decided to impose the obligation of non-discrimination, as a remedy under Regulation 19. This will provide the same ability to alternative undertakings to obtain transit at the same price and conditions which would apply to Maltacom's own retail arm. Hence this obligation is deemed an essential tool for the curtailment of foreclosure practices.

The MCA also deems it important that information gained by Maltacom as a result of their provision of transit services to another undertaking is not used by its downstream arm in any manner.

Hence, by virtue of this obligation alternative undertakings would be given the opportunity to obtain transit services from Maltacom at the same price and conditions which would apply to Maltacom's own retail arm. Moreover, Maltacom would be inhibited from abusing of any information it would have gained from such alternative undertakings as a result of its SMP position.

11.4.4 Price Control and Cost Accounting

As held above, where competition does not provide pricing constraints, it is necessary to prevent excessive pricing by means of regulation. Without some intervention in pricing, dominant providers are likely to charge excessive prices, in order to maximise both their profits and the costs of competing providers. Higher wholesale charges are likely to translate in terms of higher retail prices and alternative undertakings being less able to compete in the retail market to the detriment of end-users.

The current market analysis indicates that the limited infrastructure competition in the wholesale international transit market may lead to Maltacom (as the operator with SMP) sustaining prices at an excessively high level, or applying a price squeeze, to the detriment of end-users.

Regulation 22 of the ECNSR authorises the imposition on an undertaking with SMP of obligations relating to cost recovery and price controls, including obligations for cost orientation and obligations concerning cost accounting systems, for the provision of specific types of interconnection and, or access.

Such intervention is in itself deemed instrumental in supporting competition in the retail market to the benefit of end-users, whilst at the same time supporting the obligations of non-discrimination and transparency at a wholesale level.

In applying obligations relating to cost recovery or pricing, the MCA is obliged to ensure that any cost recovery mechanism or pricing methodology that is mandated serves to promote efficiency and sustainable competition as well as maximise consumer benefits.[36]

a) Cost Orientation

In view of the risk of excessive pricing being applied by Maltacom in the wholesale international transit market, the MCA is of the opinion that the pricing methodology that may promote competition most efficiently is cost orientation. By mandating that the wholesale international call transit services provided by Maltacom be cost oriented, the MCA believes that it would be in a position to ensure fair and efficient access to Maltacom's network and services.

Therefore, in view of Maltacom's SMP status in the market under review, the MCA concludes that Maltacom's present cost orientation obligation is to be maintained. In accordance with this, the MCA will pay careful attention to those costs which may be shared amongst a number of products, as well as ensure that only efficiently-incurred costs will feature in Maltacom's transit charges.

b) Cost Accounting Systems

The MCA believes that, in order to effectively promote competition and curb possible abuse of dominance in the wholesale transit market, a cost accounting system is necessary to support cost orientation. It is therefore imposing such obligation as a further remedy on Maltacom.

Such cost accounting system will provide the MCA with detailed information regarding Maltacom's service costs and ensure that fair, objective and transparent methodologies are followed by the undertakings in allocating costs to the regulated services. Information from such system will be used by the MCA to complement the application of other regulatory measures such as transparency and non-discrimination.

The MCA does not consider the imposition of a cost accounting obligation to constitute an unreasonable burden on Maltacom. Maltacom is currently obliged to support such a system by virtue of a decision[37] which has been in place for some time. The 2002 decision established that operators having a Dominant Market Position should implement cost-based accounting systems using a Fully Allocated Cost accounting methodology using a historic

[36] ECNSR, Reg. 22(2)

[37] Implementation of Cost Based Accounting Systems for the Telecommunications Sector - Report on Consultation and Decision - July 2002.

cost base. At that time the MCA had taken the view that this methodology was the most practical approach in the short term. However, mindful of the deficiencies inherent in a historic cost-based system, particularly the issue that legacy costs and inefficiencies should not be shifted to other competing operators through incorporation in a Reference Interconnection Offer, in the same Decision, the MCA stated that it would review the need to move to a current cost regime during 2005. It has thus issued a consultative document[38] that examines the various issues that are relevant to a transition from a historic cost base to a current cost base. Up till the publication of this document the proposal is still under consultation.

11.4.5 Accounting Separation

Accounting separation is instrumental in ensuring that the undertaking with SMP is not price-discriminating between its retail arm and its competitors when providing access and interconnection at a wholesale level. By evidencing the wholesale and internal transfer prices of the products and services of the undertaking with SMP, accounting separation ensures that the prices charged by the SMP operator are non-discriminatory.

The obligation of accounting separation is also important in the disclosure of possible market failures such as cross-subsidisation and the application of margin squeeze by an undertaking with SMP.

In view of the above and of the fact that the MCA is imposing the obligations of non-discrimination and transparency on Maltacom, the MCA decides that the imposition of an accounting separation obligation on the same Maltacom is appropriate. Currently, Maltacom is subject to the accounting separation obligation described in the MCA decision on Accounting Separation[39.] This level of obligation shall be maintained until further consultation is deemed necessary.

[38] Current Cost Accounting Methodologies for the Electronic Communications Sector – July 2005

[39] Accounting Separation and Publication of Financial Information for Telecommunications Operators - Report on Consultation and Decision of October 2002, as amended by http://www.mca.org.mt/library/show.asp?id=323&lc=1

11.5 Summary of obligations

Given the position of dominance held by Maltacom in the wholesale international transit market, the MCA is imposing on Maltacom the following obligations:

1. Access to, and use of, specific network facilities;
2. Transparency;
3. Non-discrimination;
4. Cost orientation
5. Cost accounting systems; and
6. Accounting Separation

11.6 Monitoring Market Developments

The MCA considers that it would be sensible to keep a reasonably close watch on market developments following this review. This would ensure that the obligations of the SMP operator identified earlier on, would be justified throughout the duration of this market review. If the MCA deems it necessary or appropriate a new market review would be undertaken at any time in response to changing market conditions.

This Decision shall be effective from the date of its publication and shall remain in force until further notice by the MCA.

Appendix A

4 November 2005

Chairman
Malta Communications Authority (MCA)

Attn Mr Victor Zammit

Dear Mr Zammit

The Office for Fair Competition (OFC) have been asked below to provide its opinion with respect to the outcome of the MCA's review and market analysis of the following retail and wholesale markets:

1 Retail markets

Market 1 - Access to the public telephone network at a fixed location for residential customers
Market 2 - Access to the public telephone network at a fixed location for non-residential customers
Market 3 - Publicly available local and/or national telephone services provided at a fixed location for residential customers
Market 5 - Publicly available local and/or national telephone services provided at a fixed location for non-residential customers

2 Wholesale markets

Market 8 - Call origination on the public telephone network provided at a fixed location
Market 9 - Call termination on individual public telephone networks provided at a fixed location
Market 10 - Transit services in the fixed public telephone network.

The Office takes the view that the exercise undertaken by MCA to define the above proposed markets applied principles based on best practice for defining relevant markets in competition analysis. The Office believes it is reasonable to accept MCA's findings that the proposed retail and wholesale markets exist in Malta, at least for the period under review. Nonetheless, MCA should monitor market developments in this regard.

We would note that these OFC views and opinion have been made in the context of the specific provisions of the SMP guidelines relating to the relationship between markets defined for the purposes of ex-ante regulation vis-à-vis competition law enforcement. The OFC reserves the right to re-examine any or all of the issues underlying these MCA recommendations in the light of facts and evidence that may arise in specific future cases before it.

Yours sincerely

Martin Spiteri
f/Director General
Consumer and Competition Division