

**Wholesale voice call termination on individual mobile networks**

---

Identification and Analysis of Markets, Determination of  
Market Power and Setting of SMP Conditions

18<sup>th</sup> March 2008

---

## Contents

---

	<b>Page</b>
<b>Contents</b> .....	<b>1</b>
<b>Executive Summary</b> .....	<b>1</b>
<b>Chapter 01 – Introduction</b> .....	<b>3</b>
1.1 The EU Regulatory Framework for Electronic Communications .....	3
1.2 Market Review Methodology .....	4
1.3 Consultation.....	5
1.4 Liaison with Competition Authority .....	5
1.5 Scope of this review.....	5
1.6 Structure of the Document.....	6
<b>Chapter 02 - Market Definition</b> .....	<b>7</b>
2.0 Outline .....	7
2.1 Background to the Chapter.....	7
2.2 The Mobile Telephony Sector in Malta.....	7
2.3 The Market Definition Procedure applied by the MCA.....	8
2.4 Demand Side Substitution at the Retail Level .....	8
2.5 Demand side substitution at the wholesale level .....	13
2.6 Supply Side Substitution at the Wholesale Level .....	13
2.7 Further details to market definition .....	14
2.9 Preliminary Delineation of Mobile Termination Markets.....	15
<b>Chapter 03 - Market Analysis</b> .....	<b>17</b>
3.0 Outline .....	17
3.1 Background to market analysis.....	17
3.2 Assessment of Market Dominance.....	17
3.3 Preliminary conclusion on SMP designation.....	21

<b>Chapter 04 – Regulatory Implications .....</b>	<b>22</b>
4.0 Outline .....	22
4.1 Background .....	22
4.2 Selecting Regulatory Obligations & Remedies .....	22
4.3 Current Regulatory Obligations .....	22
4.4 Factors Distorting Competition.....	23
4.5 The MCA’s Regulatory Approach .....	24
 <b>Chapter 05 – Submission of Comments.....</b>	 <b>29</b>

## Executive Summary

---

This document discusses the second round market review carried out for mobile voice call termination in accordance to the EU regulatory framework of electronic communications networks and services<sup>1</sup>. This market review follows a similar exercise carried out by the MCA in December 2005.

### Background

The EU Commission refers to wholesale voice call termination on individual mobile networks as a candidate market susceptible for ex ante regulation. Wholesale mobile voice call termination (MCT) is a necessary service for a network operator to terminate calls on other or across networks. These services are indeed necessary for mobile network operators to connect a caller with the intended mobile recipient of a call on a different network.

The MCA's first round market review for mobile termination concluded that there was no good substitute for termination services on mobile networks. The decision specified that the relevant product market consists of mobile call termination as supplied by a particular MNO and that each MNO has a monopoly in the market for mobile termination on its own network. In this regard, two separate markets were identified:

- ❑ Wholesale voice call termination provided by Vodafone Malta Ltd.
- ❑ Wholesale voice call termination provided by MobIsle Communications Ltd.

The MCA found sufficient evidence to designate Vodafone and Go Mobile with SMP in their respective market. Both operators were then subject to regulated mobile termination rates (MTRs) in the form of a glide path. Reductions in MTRs applied as from 2005 through to 2008. This glide-path obligation for MTRs was determined in conjunction with other regulatory obligations, namely the provision of access, non-discrimination, transparency, and accounting separation.

### Second Round Market Review

The present document starts again by specifying the relevant product markets (Chapter 2), followed by an analysis to determine the presence of market power and any existent or potential competition problems, and finally prescribes any required regulatory intervention.

This review also assesses the competitive constraints on the price-setting behaviour of mobile voice call providers. Demand side substitution, supply side substitution, and potential competition are considered. None of these factors is however found to sufficiently constrain MTRs at the wholesale level within the timeframe of this review.

Chapter 3 then presents an analysis of market power. This review confirms that each mobile operator has a market share of 100 per cent in terminating voice calls on its respective network. The MCA also notes that countervailing buyer power is not sufficient to restrict SMP and to constrain MTRs to a competitive level. Therefore, the MCA proposes to designate Vodafone and Go Mobile as having SMP in their respective termination markets.

Chapter 4 outlines the main competition problems identified in this market and proposes a set of remedies that would counter the SMP held by Vodafone and Go Mobile. The MCA is

---

<sup>1</sup> The EU regulatory framework was transposed into Maltese legislation on 14<sup>th</sup> September 2004.

proposing to impose an access obligation together with the transparency and non-discrimination obligations. The MCA is also proposing to impose a price control obligation on both operators in the form of a pegging mechanism supported by the cost accounting and accounting separation obligations.

### **Consultation**

Interested parties are invited to forward their comments on the proposals of this document by not later than Tuesday, 15<sup>th</sup> of April 2008. Submission arrangements are further explained in Chapter 05.

As required by Article 4 of the Electronic Communications Regulations, the MCAs' proposals will be notified to the European Commission and to other NRAs after taking into account comments elicited during the national consultation exercise.

## Chapter 01 – Introduction

---

### 1.1 The EU Regulatory Framework for Electronic Communications

The EU Regulatory Framework for Electronic Communications (also referred to as the eCommunications framework<sup>2</sup>) sets the ground rules for regulation and aims to ensure legislative stability and harmonisation of the regulatory approach across EU Member States.

The eCommunications Framework comprises of five directives as follows:

- ❑ 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 reading across all the new directives. Article 8 of the Framework Directive sets out three key policy objectives 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.

The above-mentioned directives were transposed into national legislation when the Maltese Parliament enacted the Electronic Communications (Regulation) Act, 2004 (hereinafter referred to “ECRA”) and the Electronic Communications Networks and Services (General) Regulations, 2004 (hereinafter referred to “ECNSR”). The fifth Directive on Privacy establishing users' rights with regard to the privacy of their communications was transposed on 10<sup>th</sup> January 2003 (Legal Notice 16 of 2003 under the Data Protection Act).

---

<sup>2</sup> Transposed into Maltese legislation on 14th September 2004.

The Directives oblige National Regulatory Authorities (NRAs) such as the MCA to carry out reviews of competition in electronic communications markets to ensure appropriate and proportionate regulation in the light of ongoing changes in market conditions.

Each market review is subdivided into three phases:

- ❑ The definition of the relevant market or markets;
- ❑ An assessment of competition in each market, in particular whether any companies have Significant Market Power (SMP) in the relevant market; and
- ❑ An assessment of remedies to be imposed on undertakings identified as having 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, and the ECNSR together with other documents issued by the European Commission and the MCA.

## 1.2 Market Review Methodology

The EU Recommendation on relevant product and service markets within the electronic communications sector provides a common approach for NRAs in the identification of telecoms markets for which regulatory intervention is warranted. The Recommendation originally came into force in July 2003 (Rec. 2003/311/EC). After being in force for more than four years, the Recommendation has been up for review and eventually revised. The revised Recommendation was then published in November 2007.

This process brought about some very important developments. Of significant relevance was the proposal to reduce to 8<sup>3</sup> from 18 the number of markets for which the EU Commission recommends regulatory intervention.

Beyond these markets regulators could still intervene. However, NRAs need to present a strong and convincing case with the EU Commission to justify their intervention in markets that have been excluded from the Recommendation.

At the same time, the principles behind the framework and the ground rules for how telecommunications are regulated across the EU have not changed. The revised Recommendation remains set to promote further harmonisation across the European Community by ensuring that the same product and service markets are subject to a market analysis in all Member States.

From a local view point, the MCA's document entitled 'Market Review Methodology' elaborates on the criteria used in assessing competition in Maltese electronic communications markets<sup>4</sup>. In this respect, the Recommendation, the EU Commission guidelines on market analysis ("Market Analysis Guidelines"), and the guidelines on the assessment of SMP (the "SMP Guidelines") assume much relevance to the analysis of a product or service market under investigation (see Regulation 8 of the ECNSR).

Regulation 6 of the ECNSR stipulates that the results of market reviews carried out by the MCA and the proposed remedies shall be notified to the European Commission and to other

---

<sup>3</sup> The revised Recommendation refers to voice call termination on individual mobile networks as Market 8.

<sup>4</sup> Link to MCA market review methodology:  
<http://www.mca.org.mt/infocentre/openarticle.asp?id=513&pref=1>

NRAs. If the Commission is of the opinion that the market definition or proposals of whether to designate or not an 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 market reviews are also supported by market data, which is collected from various internal and external sources, including users and providers of electronic communications networks and services and from regular consumer surveys.

### **1.3 Consultation**

As required by Article 10 of the ECRA, the MCA is to publish the results of market reviews and to provide 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.

In line with our national consultation process, the consultation period shall run from the 18<sup>th</sup> of March to the 15<sup>th</sup> of April 2008. The MCA welcomes written comments on any of the issues raised in this review. Further details on the public consultation are provided in **Chapter 05**.

### **1.4 Liaison with Competition Authority**

Regulation 10 of the ECNSR requires the MCA to carry out an analysis of a relevant market within the electronic communications sector. This regulation also stipulates that this analysis is undertaken, where appropriate, on agreement with the National Competition Authorities (NCA).

In line with the cooperation agreement signed on the 20<sup>th</sup> May 2005 between the MCA and the Office of Fair Competition (OFC)<sup>5</sup>, the MCA has initiated a two week consultation process with the OFC. The official position of the OFC in writing is expected in the coming days, which will then be made available to the general public.

### **1.5 Scope of this review**

As indicated in the previous sections, this review considers the markets for wholesale voice call termination on individual mobile networks in Malta (hereafter also referred to as 'mobile termination markets', MTMs), which include termination services over mobile networks.

---

<sup>5</sup> Link to Memorandum of Understanding between MCA and OFC:  
<http://www.mca.org.mt/infocentre/openarticle.asp?id=656&pref=9>



## 1.6 Structure of the Document

The document comprises four more chapters as follows:

**Chapter 02** defines the markets for wholesale voice call termination on individual mobile networks in Malta. It also examines demand-side and supply-side substitution both at a retail and wholesale level;

**Chapter 03** conducts an analysis of the relevant markets for mobile termination and identifies the operators having significant market power on these markets;

**Chapter 04** sets out MCA's reasoning on formulating regulation to promote competition in the market for termination on mobile networks; and

**Chapter 05** explains the procedure for submitting comments to this consultation document.

## Chapter 02 - Market Definition

---

### 2.0 Outline

This chapter defines the markets for wholesale voice call termination on individual mobile networks in Malta. It delineates the boundaries of these markets – a combination of the product and geographic dimensions - and analyses the prospects of competition at this level.

Following a brief reference to the latest developments in the mobile telephony sector in Malta, this chapter sets out the market definition procedure. It also investigates the conditions in which MNOs operate, through a detailed analysis of demand-side and supply-side substitution both at the retail and the wholesale level.

### 2.1 Background to the Chapter

Regulation 10 of the ECNSR stipulates that prior to the assessment of SMP, an appropriate market definition is to be determined. This approach must tailor for national circumstances whilst taking utmost account of all applicable guidelines and the Recommendation issued by the European Commission.

There are various dimensions related to the market definition procedure. Paragraph 2.1 of the Commission's Recommendation on relevant markets states that *'As the market analysis carried out by the NRAs have to be forward-looking, markets are defined prospectively. Their definitions take account of expected or foreseeable technological or economic developments over a reasonable horizon linked to the timing of the next market review'*. In this regard, the MCA carries out its market analysis 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.

Paragraph 4 of the same Recommendation adds that retail markets shall be examined in a way which is independent of the infrastructure being used, as well as in accordance with the principles of Competition Law. Again this approach is at the heart of the MCA's analysis. The MCA's approach is based on a Competition Law assessment of markets and an assessment of the extent to which switching among services by consumers constrains prices, irrespective of the infrastructure used by the providers of those services.

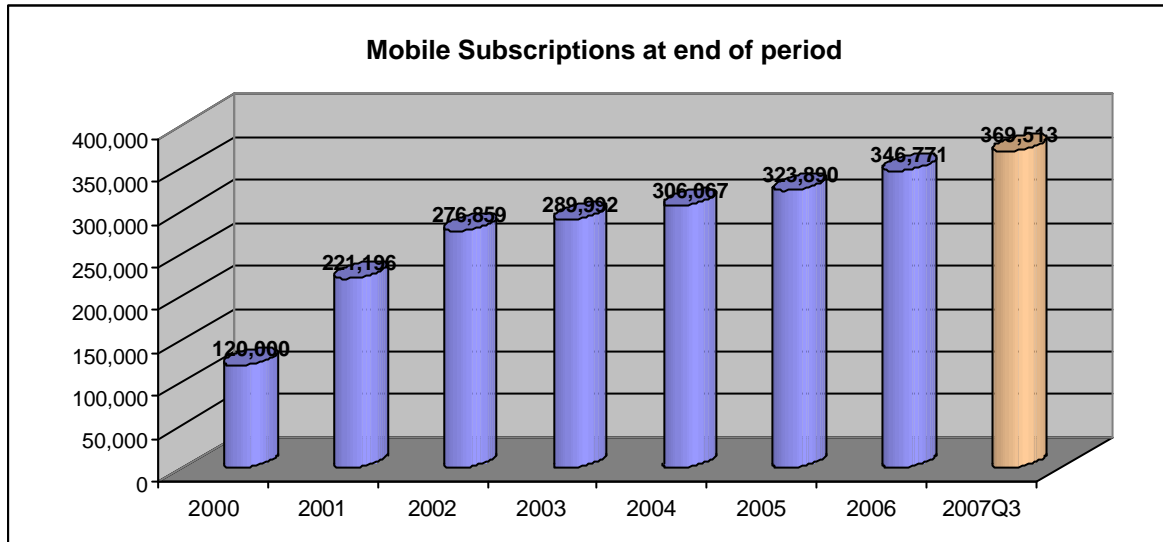
The purpose of the market definition procedure is to identify in a systematic way the competitive constraints that MNOs encounter, thereby also facilitating the subsequent market analysis procedure.

### 2.2 The Mobile Telephony Sector in Malta

For nearly two decades, the mobile telephony sector in Malta has been characterised by two competing operators, namely Vodafone Malta Ltd. and MobIsle Communications Ltd., operating under the brand name of Vodafone and Go Mobile respectively. Go Mobile launched their services in December 2000 whilst Vodafone started its operations way back in 1990.

In 2007, the third mobile licence has been awarded, this time to M/C Venture Partners, which subsequently announced that it was taking a stake in Melita Cable plc. This new market entity is expected to start rolling out its mobile services throughout 2008.

By the end of the third quarter of 2007, mobile penetration stood at around 89 per cent of the population, reaching 363,585 subscribers. Market shares were split at 52 per cent for Vodafone and 48 per cent for Go Mobile.



Throughout the years, new mobile telephony services have been rolled out, such as 3G mobile services, whilst a new trend in bundling has been observed.

These new services, together with other developments such as the introduction of number portability, have contributed to enhance competition in a market restricted by a small number of operators.

### 2.3 The Market Definition Procedure applied by the MCA

The MCA's forward-looking approach to market definition is set out according to the EU Commission's Recommendation and Guidelines. In accordance to Recital (7) of the Recommendation, this procedure starts from a characterisation of the retail market over a given time horizon, taking into account the possibilities for demand and supply-side substitution. Substitutability on the demand and supply sides will be assessed by first 'looking' at the retail level followed by a similar exercise at a wholesale level.

### 2.4 Demand Side Substitution at the Retail Level

Demand-side substitution represents the most immediate and effective disciplinary force constraining the suppliers of a product or service. In theory, if suppliers increase the price of their goods and services customers could then choose to switch to alternatives, thereby constraining prices back to their 'original' levels.

The relevance of this argument for mobile call termination depends on the degree to which demand side substitution constrains MNOs in pricing this service. Indeed, pressure on MTRs could arise if customers of mobile telephony services value the price of incoming calls so much that it determines their choice of network to make their off-net mobile-to-mobile calls.

This case is however not representative of normal customer behaviour, given that mobile call termination is governed by the 'Calling Party Pays' (CPP) principle. This principle underlines that the originator of the call (the calling party) pays for the whole cost of the call - including termination charges - whilst the recipient of the call incurs no charge for answering an incoming call. Therefore, MNOs have no incentive to maintain low MTRs given that subscribers are not price sensitive to these rates, and most probably not even aware of this cost component in retail tariffs for mobile calls.

An increase in the price of mobile termination could also determine the means of communication employed to reach mobile subscribers. Callers who are price sensitive to mobile termination charges could react to an increase in MTRs by switching to alternatives (substitutes) through which they could adequately terminate the calls on a mobile network to which the called party subscribes.

The following sub sections will further evaluate demand side substitution at the retail level and its effects on wholesale mobile voice call termination both from a 'calling party' perspective and a 'called party' perspective.

#### **2.4.1 Calling Party Behaviour – Price Awareness**

In the latest qualitative survey<sup>6</sup> commissioned by the MCA, the majority of consumers say that they have enough information regarding the average prices of mobile calls being charged by their network provider. This means that if MNOs change their retail tariffs subscribers would notice such a change and act accordingly. This however does not suggest that consumers are aware of the underlying components of the price of a call, such as mobile termination charges. The end-user would only see a global retail tariff including the mobile termination rate and other costs. Consequently, the end-user cannot detect any changes in termination charges and cannot exert pressure on the setting of MTRs.

Under the CPP arrangement end users are insensitive to the pricing of termination on mobile networks. Number portability has made it more difficult for customers to identify the network to which the called party is subscribed and the termination charges that apply.

Overall, the MCA believes that the behaviour of the calling party cannot adequately influence the ability of MNOs to set high MTRs.

#### **2.4.2. Calling Party Behaviour – The Use of Alternative Services**

Assuming that consumers have enough knowledge of MTRs and are sensitive to changes in these rates, a small but non-transitory increase in MTRs could then motivate these consumers to switch to the use of alternatives.

In this regard, various demand side alternatives to voice call termination on mobile networks could be considered.

As a start, one could mention options such as the use of multiple internal SIM cards in the same handset or an automatic mechanism to re-route calls. However, such devices and mechanisms are not yet commonly available to the general public.

The following sections will assess other alternatives to determine whether these could have a significant impact on the setting of mobile termination charges and ultimately constrain MTRs.

#### **2.4.2A Calls to a fixed number**

---

<sup>6</sup> Electronic Communications Market Review Sep–Mar 2007:  
<http://www.mca.org.mt/infocentre/openarticle.asp?id=1093&pref=13>

Calling parties can use fixed telephony as a possible alternative to mobile telephony. Indeed, presupposing that end users know on which network a call is terminated and the costs related to the call, calling parties can circumvent high MTRs when calling on a mobile phone by calling to a fixed number rather than to a mobile number. This is because calls to a fixed number usually involve cheaper (if any) termination charges.

However, this consideration ignores the fundamental principle that mobile numbers are intrinsically by nature 'mobile' and not set at fixed locations as a fixed line number. Therefore an end user calling someone on a mobile number might not have a 'real' choice to call that person on a fixed line number. This means that calls to a fixed number cannot be considered as a suitable alternative for calls to a mobile number.

#### **2.4.2B Mobile-to-mobile (MTM) calls as a substitute to fixed-to-mobile (FTM) calls**

A calling party incurs the same termination charges for FTM calls and MTM calls. This is because a call terminated on a mobile network will use the same network elements (and therefore incur the same cost) regardless of the origination network being it fixed or mobile.

In this sense, in terms of termination rates, an end user calling a mobile number would be indifferent to whether the call is originated from a fixed or a mobile network. The MCA therefore believes that substitution from MTM to FTM calls does not impact wholesale MTRs.

#### **2.4.2C On-net MTM calls as a substitute to off-net MTM calls and FTM calls**

According to the CPP principle, an end user is more concerned on the cost of making a call rather than on what others have to pay in order to terminate a call on the network to which the called party is subscribed. This means that if a mobile operator increases the charges for terminating calls on its network, an end user would have to face higher costs when making off-net mobile calls or calls through a fixed network.

In this regard, where an end user calling a mobile number is aware of the network terminating its call and the respective termination charges, an increase in these charges for off-net MTM calls and FTM calls would incentivise the said customer to choose on-net MTM calls by switching to the mobile network to which the called party is subscribed.

However, end users cannot exactly identify the network they are calling. In these circumstances, their call decisions and subscription preferences are not determined by costs for termination. Therefore, substitution from off-net MTM calls and FTM calls to on-net MTM calls is very unlikely, particularly when on-net and off-net mobile voice call termination charges are the same.

The MCA also notes that only a small share of customers have multiple mobile subscriptions, whilst the option of having to change SIM cards to make a call on different networks from the same mobile handset remains impractical. The more networks are in operation the more SIM cards would need to be changed every time a call has to be made to another network.

Finally, the MCA recognizes that local MNOs do not differentiate between on-net and off-net MTM voice call termination charges. In this sense, end users have no incentive to substitute on-net to off-net MTM calls on the basis of MTRs.

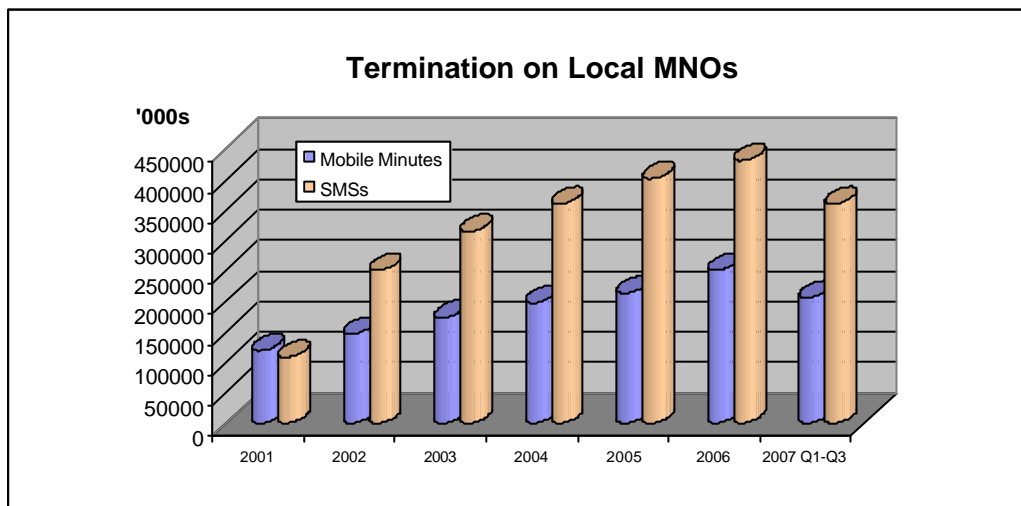
#### **2.4.2D SMS as alternative to any type of call**

Consumers may in some instances consider an SMS as a substitute for mobile voice calls, especially for shorter calls not requiring real time delivery. In fact, the latest mobile perception survey carried out on behalf of the MCA indicates that over 30 per cent of respondents *always* consider SMS to be a good substitute for mobile voice calls. Another 29 per cent *very often* consider SMS to be a good substitute.

At the same time, when asked to rate the price of mobile voice calls, over 60 per cent of respondents replied that it is still *expensive*. This means that with respect to the price differential between mobile voice calls and SMS, SMS is usually perceived to be a good and cheaper alternative as well.

Nonetheless, the MCA holds the view that SMS is not an adequate substitute to mobile voice calls for a number of reasons, namely:

1. the conveyance of a limited number of characters per message (160 alphanumeric characters); and
2. the transfer of SMS between networks on a 'store and forward basis' explaining the transfer delays in SMS.



Further to the above, the MCA observes that over the last few years both SMS usage and mobile voice call traffic (minutes) increased. No trend was in fact identified in favour of SMSs at the expense of call minutes terminated on mobile networks, even when retail SMS rates declined. Instead, both mobile minutes and SMS usage registered growth suggesting that, in general, end-users do not substitute voice calls with SMSs.

The MCA therefore reiterates that SMSs and voice calls qualify as complimentary services rather than substitutes and that SMS usage is not an adequate instrument to constrain MTRs in the absence of regulation.

#### 2.4.2E Call back Solutions

The MCA holds the view that, in general, call-back services cannot sufficiently constrain MTRs. This is further compounded by the fact that retail voice call charges are very similar or identical when calling on-net or off-net.

Furthermore, the MCA believes that, in the absence of regulation, the level of price sensitivity on the part of the calling party is insufficient to impact MTRs.

### **2.4.2F Voice Over Internet Protocol Calls (VOIP)**

The provision of VOIP calls could, in theory, represent an alternative way to conventional voice call methods of reaching a mobile subscriber. However, by simply switching from conventional voice calls to VOIP calls, end users do not automatically constrain MNOs behaviour with respect to the setting of MTRs. It is indeed the charging arrangement for VOIP calls that carries most weight in determining whether competitive pressures on termination charges set in.

As a matter of fact, it is possible for commercial operators to offer VOIP calls on the basis of different charging arrangements. For example, some VOIP providers may choose not to charge for calls to other subscribers to the service. Others may opt to charge for a long distance call to a number outside a particular calling area, similar to existing, traditional wire line telephone service. Other providers may even allow a caller to call anywhere at a flat rate for a fixed number of minutes or require the called parties to pay for VOIP calls.

It therefore remains inconclusive for the MCA in what specific manner pricing arrangements for VOIP calls could influence MTRs charged by local MNOs.

### **2.4.3 Called Party Behaviour**

The MCA notes that, given the CPP arrangement, the called party is relatively insensitive to the pricing and costs of termination on mobile networks. In reality, customers care most about the prices they have to pay to subscribe and to place calls with a mobile operator rather than what others had to pay in order to contact them. In this sense, the behaviour of the called party is not expected to limit a provider's ability to charge others high prices for its services, such as for mobile termination services.

If, on the other hand, a called party cares about what others have to pay to contact him/her, a small but significant non-transitory increase in mobile termination charges could induce the called party to arrange and have calls terminated via other forms of communication and/or another mobile network. A case in point is the existence of closed user groups referred to below.

#### **2.4.3A Closed User Groups**

Closed user groups are specifically tailored to keep traffic within the community of family and friends or a business network. Such schemes are targeted to maintain voice calls on a particular network by offering cheaper call rates than the normal rates to numbers pertaining to a group of people.

In Malta, network wide Closed User Groups tariff schemes have been commercially launched. Nonetheless, the MCA does not have sufficient evidence to confirm that mobile users are selecting their service providers based on Closed User Group tariff structures. The MCA also notes that closed user groups are not widespread enough to put sufficient downward pressure on call termination charges.

#### **2.4.3B GSM Gateways**

GSM gateways have been successfully deployed on the local market to cater for specific customer segments. This facility allows MNOs to limit churn and enables much call traffic originated through a traditional fixed line to a mobile number to be converted to 'on-net' mobile-to-mobile calls. This is achieved by programming a PABX to automatically route calls dialled to mobile numbers to the GSM gateway which then sets-up an 'on-net' MTM call to complete the call. However, this solution can only be implemented in fixed locations and is generally deployed by business customers rather than individual users. Therefore,



the MCA is of the view that this option does not have a sufficient constraining effect on mobile voice call termination charges.

End-users could possibly constrain MTRs if they are able to receive their incoming calls on networks other than the one to which they are subscribed by using and switching different SIM cards on the same telephone handset. However this practice is time-consuming and laborious. Therefore, the MCA believes that this alternative is not a practicable solution to sufficiently constrain mobile voice call termination rates.

#### **2.4.3C Bundles**

Bundle offers are becoming quite common with local network operators and end-users. Indeed, various 'multiple-play' offers have been issued on the market with voice, internet and TV services bundled together in different packages. In this respect, end-user preferences are then determined by convenience, quality and overall price of the bundle.

At present, bundles launched onto the Maltese market do not include mobile services, although their introduction might just be a matter of time. In this sense, the MCA has no market evidence to suggest whether or not bundles that include mobile services could effectively constrain MTRs on the local scene.

Nonetheless, a number of factors could still be considered. For example, if mobile services form part of a bundle, it would be highly unlikely that end-user preferences are skewed in 'favour' or 'against' the respective bundle because of considerations related to MTRs.

Due to the CPP arrangement, the party receiving the call is insensitive to the price of the incoming call and is therefore not concerned about the exact prices and costs of mobile termination when subscribing to a particular network or choosing a particular bundle. This means that an MNO offering a bundle with mobile services would still have the option of raising mobile voice call termination rates whilst reducing prices for the remaining bundle elements. The MCA is therefore of the opinion that MNOs would not be constrained in raising MTRs through the introduction of new bundle offers.

Overall, the MCA considers that, with the present level of technology, the CPP arrangement, and lack of a sufficient competitive constraint from FTM, MTM, and off-net calls, MNOs have an incentive and are able to set MTRs beyond competitive levels.

### **2.5 Demand side substitution at the wholesale level**

Demand for wholesale call termination is inextricably linked to retail demand for calls. This means that if a subscriber wishes to reach another subscriber either on the same or on another network, the network provider from which the call originates has no choice other than to purchase termination (services) from the network provider to which the called party is subscribed. There are indeed no viable substitutes for termination of calls on the network to which the called party is subscribed.

The MCA holds the view that currently there are no demand side substitutes for wholesale voice call termination which could sufficiently constrain MTRs.

### **2.6 Supply Side Substitution at the Wholesale Level**

If in the short term a product market exhibits a small but permanent increase in the price of a relevant product, firms may alter their plans and start supplying that product. This must happen fast enough in order to prevent the price rise of the product from being profitable for the firm that implemented it.



In this sense, a small but significant increase in the price of MTRs could lead firms to consider providing mobile termination services in competition to those provided by existent MNOs.

However, the MCA holds the view that no provider could readily substitute call termination on a network other than the network to which the called party is subscribed. Calls to a particular user can 'only' be terminated on the network chosen by the called party. The MCA concludes that, in the current circumstances, supply-side substitution for mobile termination services is not possible.

## **2.7 Further details to market definition**

The following sections shall briefly describe three particular issues that further distinguish mobile telephony markets. These include third generation networks, mobile virtual network operators, and the geographic scope of the market.

### **2.8.1 Third Generation Mobile Networks (3G networks)**

Malta's first 3G licences were awarded in August 2005 to Vodafone (Malta) Ltd and Mobisle Communications Ltd, after a call for applications was issued for entities interested to obtain right of use of this spectrum band. Vodafone Malta launched its 3G services in August 2006 and in December of the same year launched 3.5G services. Go Mobile launched its 3.5G network services in early 2007. The third 3G licence was issued to 3G Communications Ltd in August 2007.

2G and 3G mobile handsets support similar basic services such as voice call services and SMSs over their respective networks. In this regard, an end-user with a 2G handset could make mobile voice calls to an end-user with a 3G handset and vice-versa. This also means that the choice of equipment over which a mobile voice call is terminated does not differentiate the product.

In practice, a mobile user is not aware of whether a call would be terminated over 2G or 3G equipment. As a result, the end user pays the same tariff for originating a voice call terminated over a 2G or 3G network.

The MCA holds the view that, based on the principle of technology neutrality, voice call termination on a 3G network is no different to voice call termination on a 2G network.

In addition, the MCA notes that the current voice call traffic patterns and user profiles have not changed significantly following the introduction of 3G networks, although it envisages further growth in voice call traffic patterns within the timeframe of this review. On the other hand, market outcomes with respect to data services and additional 3G mobile services remain uncertain.

The MCA concludes that from a technology and functional point of view, voice calls terminating over 2G and 3G networks will not be different and that both 2G and 3G voice call termination shall therefore be included in the same market.

Furthermore, the incentive for MNOs to set high MTRs for 2G networks still applies for 3G networks since both technologies operate under the CPP arrangement. Indeed, termination services over a 3G network can only be provided by the operator owning the network. Similarly, customers calling a particular number on a 3G network cannot terminate that particular call over a different network, other than the network to which the called party subscribes.

### 2.8.2 Mobile Virtual Network Operators (MVNOs)

MVNOs are virtual operators which can provide mobile voice and data services but do not own a licensed spectrum. MVNOs can be classified in various ways. One could differentiate between MVNOs owning a mobile switching centre against those lacking this infrastructure or even between MVNOs adhering to different business models.

For example, MVNOs could enter into business agreements with providers owning network infrastructure and a licensed spectrum - usually MNOs - in order to sell mobile services under a brand name different from that of the respective MNO. Indeed, these MVNOs (sometimes also referred to as 'service re-sellers') buy minutes of use from the licensed MNO and then resell minutes of usage to their customers.

There are also other types of MVNOs which can provide additional services other than re-selling voice call minutes. These are usually referred to as 'enhanced service providers' which, as a general rule, do not own a mobile switching centre.

From the viewpoint of mobile termination, both 'service re-sellers' and 'enhanced service providers' are however constrained to use the same MTRs being charged by the MNOs selling network capacity.

On the other side of the spectrum, one also finds MVNOs owning a mobile switching centre, referred to as 'full' MVNOs. These MVNOs have enough technical facilities to design their own service packages and tariffs, such that they are able to differentiate their products from that of existing MNOs. 'Full' MVNOs could then set their own charges for mobile voice call termination.

However, 'full' MVNOs do not constrain MTRs charged by MNOs because these entities still operate under the CPP arrangement. The MCA also believes that a 'full' MVNO would still fall within the remit of this market definition given that it can set up its own network from which to provide call origination and termination services to its subscribers.

### 2.8.3 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.

On the basis of this definition, the MCA takes the view that the relevant geographic market for the provision of mobile voice call termination services by individual MNOs is national in scope.

Each MNO is considered to be a separate relevant product market for the provision of mobile voice call termination services. The geographic scope of the market then reflects the extent of physical coverage that characterises each MNO. The MCA finally notes that each MNO is licensed on a national basis and offers geographically uniform MTRs.

## 2.9 Preliminary Delineation of Mobile Termination Markets

In respect of the analysis presented above, and in accordance with competition law principles, the MCA identifies wholesale voice call termination on individual mobile networks as relevant for the purposes of ex ante regulation. On this basis, the MCA identifies two wholesale mobile termination markets in Malta:

1. Wholesale voice call termination provided by Vodafone Malta Ltd.

2. Wholesale voice call termination provided by Mobile Communications Ltd

**Q1. Do you agree with the above preliminary conclusions regarding the market definition exercise?**

## Chapter 03 - Market Analysis

---

### 3.0 Outline

The Chapter considers a number of appropriate criteria for the assessment of SMP, namely market shares, barriers to entry and potential competition, countervailing buyer power, and pricing structure.

### 3.1 Background to market analysis

According to the ECRA, SMP is defined as follows:

*"A position equivalent to dominance enjoyed by an undertaking either individually or jointly with others 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."*

This follows the definition under Article 14(2) of the Framework Directive and the definition that the Court of Justice case law ascribes to the concept of dominant position in Art. 82 of the Treaty.

Article 8(4) of the ECRA introduces the concept of leveraging of market power and 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".*

In a 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.

### 3.2 Assessment of Market Dominance

Chapter 2 underlines that in mobile termination markets each individual operator holds a 100 per cent market share of the given market and is therefore likely to be designated with SMP. Although the MCA does not rebut the link between market shares and a finding of dominance, it believes that the existence of market dominance must be assessed against various criteria and not just on the basis of market shares.

The SMP guidelines provide a long list of criteria for assessing market dominance. However, the MCA is of the opinion that, in light of market evidence and the principle of proportionality, this exercise must carefully take into account a select number of criteria, namely:

- ❑ market shares

- ❑ entry deterrence
- ❑ countervailing buyer power
- ❑ pricing structure

### 3.2.1 Market shares

An important criterion in the assessment of single dominance is market share. However, as any other criterion being considered, it is not conclusive on its own especially when it comes to decide 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. This is in line to the EU Commission Guidelines. Paragraph 75 of these guidelines states that, *“according to established case-law, very large market shares – in excess of 50 per cent - are in themselves, save in exceptional circumstances, evidence of the existence of dominant position.”*

The area covered by each MNO is considered to constitute a separate wholesale termination market given that termination on a particular network cannot be substituted by termination on another network. This implies that termination of voice calls over a particular network will have to be terminated on the network of the respective mobile operator.

Hence, every MNO has a 100 per cent market share in terminating calls on its network, in terms of both volumes and revenues of mobile termination minutes.

### 3.2.2 Entry deterrence

The MCA recognises that an SMP operator has a strong incentive to foreclose markets and to behave in such a way that makes market entry inefficient and difficult at the very least.

Termination of voice calls is governed by the CPP arrangement which eliminates any opportunity for supply side substitutability. It is in fact not possible for existent market players and new market entrants, including 3G operators, to terminate a call other than on the network to which the called party is subscribed.

Given the current level of technological developments and the forward looking nature of this document, this market condition is set to prevail within the timeframe of this market review.

### 3.2.3 Countervailing buyer power (CBP)

Countervailing buyer power assumes particular relevance when assessing SMP in wholesale voice call termination on mobile networks, considering that each MNO holds SMP over calls terminated on its own individual network. The presence of effective CBP would tend to restrict the ability of suppliers to exercise market power and to act independently of their customers.

Indeed, when customers served in a given market have a certain weight to exert pressure on a supplier of a good or service, they stand to gain a sufficiently strong bargaining power to effectively stop an attempt by the supplier to increase prices. The extent of countervailing buyer power depends on whether customers could in the first place choose to discontinue purchasing the service or product from that particular supplier or even switch to alternatives.

The MCA maintains that its view that since the CPP principle is in force, the called parties does not sufficiently care about the costs that other parties incur when calling them. This means that consumers does not have sufficient countervailing buyer power to impact on MTRs set by their mobile service providers.

Another important step in the assessment of the CPB criterion is to evaluate the possibility for providers purchasing network services to exert pressure on other providers selling these services. In this respect, one needs to look at the share of mobile termination minutes being purchased by fixed or mobile network operators. These shares are depicted in the table below.

Termination on Mobile Networks (%)	2004	2005	2006	2007 (Q1-Q3)
Fixed to Mobile	25.61	23.18	19.79	18.00
Mobile to Mobile (off-net)	23.99	26.04	25.30	25.16
Mobile to Mobile (on-net)	35.37	37.14	43.02	46.21
International to Mobile	15.03	13.64	11.88	10.64

### 3.2.3A Fixed-to-Mobile

Fixed network operators (FNOs) are important buyers of mobile call termination services (MCT). In this sense, local FNOs such as GO and Melita Cable could have a relatively strong weight as purchasers of MCT services to put enough pressure on a provider and constrain its ability to set high termination charges.

A hypothetical way of how FNOs could exercise CBP is to threaten not to interconnect unless the price of mobile termination services is considered acceptable or reasonable. However, it is very difficult for this scenario to materialise given that all operators require interconnection with each other to permit call traffic between their customers and those subscribed to other networks. This ensures that all operators are interdependent on each other to provide access to each others' networks and services with a view to provide a fully comprehensive communications services.

Furthermore, GO is also designated with a universal service obligation in accordance with Article 30 of the ECNSR. GO is therefore obliged to terminate all calls in order to ensure end-to-end connectivity. As a result, any countervailing buyer power that GO might have through its large market share in the fixed calls market is not sufficient to constrain MTRs.

The MCA therefore believes that fixed-to-mobile countervailing buyer power is not sufficient to ensure competitive MTRs.

### 3.2.3B Mobile-to-Mobile (off-net)

Mobile operators themselves purchase termination services from each other. The share of off-net termination minutes has remained relatively stable during the past three years at around 25%.

In Malta we have only two MNOs namely Vodafone and Go Mobile. Given that these two operators have a fairly equal number of subscribers, neither of them has sufficient countervailing buyer power to influence the mobile termination rate of the other.

If for example Vodafone (or GO) had to increase its termination rate, the retail price of calling a Vodafone number would increase for a Go Mobile customer. Given that customers are mainly concerned with the cost of making an outgoing call and not of receiving a call, Vodafone customers would not particularly mind such a price increase.

This price increase would therefore be detrimental for customers of the competing operator. On its part Go Mobile would then have an incentive to react and in so doing increase its termination rate, knowing beforehand that this would not affect its own customers. In the end, this strategy results in customers paying higher retail charges to make off-net mobile-to-mobile calls.

In the light of the CPP principle, MNOs do not face any constraints from their customers if they increase MTRs. The lack of retail pressures on termination rates would therefore not induce a wholesale provider to offer low MTRs, given that a hypothetical price increase would only be translated into higher charges for the customers of competing networks.

### **3.2.3C Mobile-to-Mobile (on-net)**

As of 2006 both MNOs have launched lower retail tariffs for on-net MTM calls. As depicted in the table above the share of on-net terminated minutes (on-net traffic) has thereafter seen a steady increase.

Although MNOs still incur some costs in terminating a voice call over their own network, it is logically more beneficial for them to maintain or even increase traffic volumes on their network. By offering lower tariffs for on-net calls they are also enticing more users to their network, since calling a friend or relative on the same network would be cheaper.

Given that MNOs offer lower on-net call tariffs, these operators could also decide to push down MTRs so as to lower on-net MTM rates even further. Nevertheless, the MCA believes that operators tend to compensate lower revenue streams from on-net calls with higher revenues from off-net calls. This in itself is an incentive for MNOs to keep high MTRs not to lower termination charges so as to keep the cost of off-net calls more expensive.

The MCA therefore concludes that MNOs tend to offer lower retail call rates for on-net MTM calls. However this in itself does not guarantee that MTRs will be set at a competitive level.

### **3.2.3D International-to-Mobile**

MNOs also terminate international calls on their network. However, the share of international minutes terminated on mobile networks has been declining over the past 3 years and now only accounts for the smallest share of total call minutes terminated on mobile networks.

Overall, the MCA concludes that there is no one particular factor that would induce local operators to reduce their charges with respect to mobile termination. It is also worthwhile to point out that there is no wholesale operator or group of operators that can effectively constrain MTRs to a level commensurate with a competitive outcome.

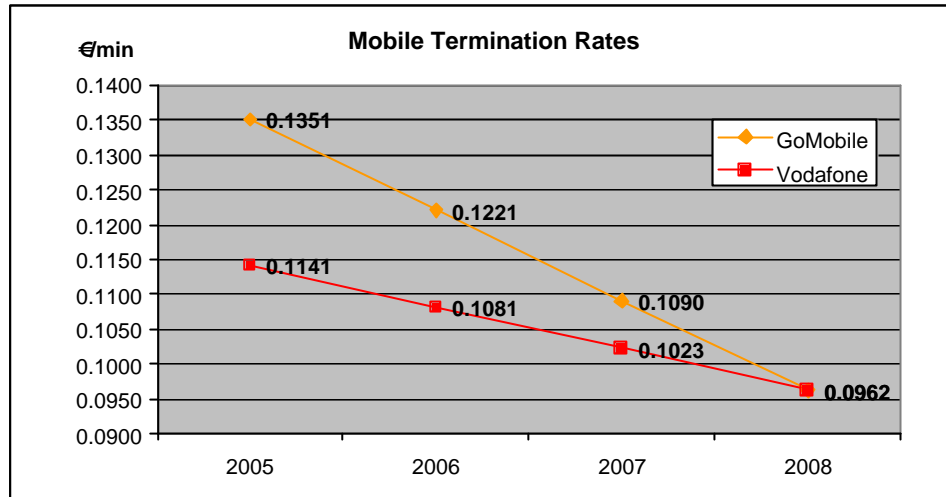
### **3.2.4 Pricing structure**

Prices provide useful information on the degree of competition in the market. If high prices are set irrespective of costs, profits are expected to be persistently and significantly above the competitive level. However, this rationale does not hold in markets where competition prevails.

In mobile termination markets, MNOs do not face competition from other operators. This allows MNOs to exercise market power and to set high MTRs. Regulatory intervention

would therefore be necessary to ensure that termination charges are set close to the competitive level as much as possible.

The MCA's regulatory intervention in the price setting behaviour of mobile termination rates has, for the last few years, taken the form of a glide path<sup>7</sup>. MTRs were adjusted to reach symmetry as of January 2008.



The MCA believes that factors such as countervailing bargaining power or self-interest did not contribute to the decline in MTRs. Indeed, without the glide-path obligation, termination rates would have probably remained well above the existing rates.

The MCA believes that, in the absence of regulatory intervention, MNOs would have no incentive to reduce MTRs and to lower interconnection rates.

### 3.3 Preliminary conclusion on SMP designation

The MCA concludes that Vodafone Malta Ltd. and MoblSle Communications Ltd. enjoy significant market power over calls terminated on their own network. This conclusion is based on the following:

- ❑ MNOs hold a 100 per cent market share on termination over their network;
- ❑ lack of sufficient countervailing buyer power with respect to voice call termination;
- ❑ absolute barriers to entry for potential competitors;
- ❑ the calling party pays (CPP) principle predominates.

**Q2. Do you agree with the above preliminary conclusions regarding market analysis and proposed SMP designations?**

<sup>7</sup> Decisions on termination rates: <http://www.mca.org.mt/infocentre/openarticle.asp?id=748&pref=2>



## Chapter 04 – Regulatory Implications

---

### 4.0 Outline

This chapter assesses the regulatory implications of the findings emanating from this market analysis exercise. It specifically describes the general nature of the proposed regulation designed to promote the development of competition in the market.

### 4.1 Background

In accordance with Regulation 10(4) of the ECNSR, where an operator is designated as having SMP 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 sub regulation (2) of Regulation 10 of the ECNSR or to maintain or amend such obligations where they already exist.

Moreover, Regulation 37 of the ECNSR requires the MCA, after having designated an operator as having SMP on a relevant retail market, to impose on such operator such obligations as it considers appropriate to achieve those objectives set out in Article 4 of the Electronic Communications Regulation Act, where the MCA determines, as a result of a market analysis carried out in accordance with Regulation 10 of the said regulations, that the given retail market, as identified in accordance with Regulation 9 of the same regulations, is not effectively competitive and concludes that obligations imposed under Part III or Regulation 39 of the said regulations would not result in the achievement of the objectives set out in Article 4 of the Electronic Communications Regulation Act.

### 4.2 Selecting Regulatory Obligations & Remedies

In accordance with regulation 37(2) of the ECNSR, the MCA is obliged to ensure that any obligations imposed under sub regulation (1) of the same Regulation 37 shall be based on the nature of the problem identified and be proportionate and justified in the light of the objectives laid down in Article 4 of the ECRA.

The MCA has established that the relevant markets for voice call termination services on individual mobile networks are not effectively competitive. In this respect, this review finds that market forces are insufficient to impact MTRs in the absence of regulation, whilst acknowledging that regulatory intervention is necessary to enhance competition.

In selecting regulatory obligations, the MCA bases its decisions on the principle of proportionality, whilst employing the most necessary and the least burdensome remedy or set of remedies.

### 4.3 Current Regulatory Obligations

In its first round of market analyses for wholesale voice call termination on mobile networks, the MCA identified four main factors that could distort competition. These are tacit collusion, excessive pricing, price discrimination, and denial to interconnect.

Based on the nature of these competition problems, the MCA decided to impose a set of remedies on MNOs, which it considered as proportionate and justified in light of the objectives set out in Article 4 of the Electronic Communications (Regulation) Act. These remedies oblige Vodafone and Go Mobile:

- ❑ to meet reasonable requests for access to/and use of their specific network facilities;
- ❑ not to show undue preference or undue discrimination in the provision of interconnection services;
- ❑ to ensure transparency in accounting information, technical specifications, network characteristics, terms and conditions for supply and use, and prices;
- ❑ to maintain a cost accounting system to allow for the calculation of costs related to the provision of specific types of interconnection and, or access;
- ❑ to follow a 3 year glide-path to reduce termination rates to a symmetric level; and
- ❑ to implement accounting separation to facilitate the verification of compliance.

#### **4.4 Factors Distorting Competition**

On the basis of this latest analysis of the market in question the MCA has found sufficient evidence to conclude that Vodafone and Go Mobile continue to enjoy SMP for termination services over their own individual network. The MCA also concludes that there is virtually no competition and no immediate prospect of competition in the market for wholesale voice call termination on mobile networks.

The MCA is also of the opinion that the underlying causes of SMP in the identified MTMs could result from three potential competition problems, namely excessive pricing, price discrimination, and interconnection at unreasonable terms. More detail on these is presented below.

##### **4.4.1 Excessive Pricing**

The MCA holds the view that MNOs have an interest in charging excessive MTRs because this increases the inflow of revenues from interconnection with other fixed or mobile network operators.

Excessive pricing for mobile termination services would make FTM calls and off-net mobile calls more expensive, thus leading to an increase in prices for these types of calls. Given the CPP principle end-users would not have any option but to incur higher costs for making mobile calls.

Excessive pricing would also open up an opportunity for a particular MNO to discriminate in favour of on-net calls. It could also be detrimental to market expansion in the mobile retail market.

##### **4.4.3 Price Discrimination**

An operator could charge 'itself' or its subsidiary a lower termination than it charges to other fixed or mobile operators. Through these price discriminatory practices an operator could indeed foreclose the retail market from its competitors.

For example, an operator could set high termination charges on other operators so as to cross subsidise very low on-net MTM calls. In this sense, other operators would find it more difficult to compete in the retail market given that these are faced by much higher costs for off-net MTM calls.

New entrants or networks with a small number of subscribers would find themselves at a greater disadvantage, especially when the on-net termination rate differs significantly from the off-net one.

#### **4.4.4 Interconnection at Unreasonable Terms**

Although it is common practice for network operators to negotiate interconnection agreements, the approach to such agreements could vary significantly from one case to another to such an extent that it could even result in a potential competition problem.

In a market where operators are competing for customers of the same service, some operators might find it to their advantage to delay, refuse, or even impede interconnection. This could happen in various ways such as by charging high interconnection rates to foreclose markets from existent or potential competitors for the same pool of retail customers.

Network operators have every incentive to maximise profits and would therefore be keen to maintain high interconnection charges, whilst also foreclosing new market entry.

### **4.5 The MCA's Regulatory Approach**

After having identified potential competition problems with respect to the wholesale market for mobile voice call termination, the MCA is required to impose obligations on MNOs to ensure that these problems do not materialise.

The MCA holds the view that any regulatory proposal shall be based on the nature of the competition problems it has identified in the relevant market, and that each proposal is proportionate and justified in light of the objectives set out in Article 4 of the Electronic Communications (Regulation) Act.

The MCA also intends to keep a reasonably close watch on market developments to ensure that regulatory obligations on operators remain relevant within the two year timeframe of this market review. If the MCA deems necessary, a new market review would be undertaken at any time in response to changes in market conditions.

The following sections will now take a forward-looking view, and discuss those obligations which the MCA believes must be imposed on local MNOs (each designated with SMP) to ensure that competitive practices prevail in the market and that customers reap the benefits of competition.

#### **4.5.1 Access Obligation**

The MCA has the function, under Regulation 15 of the ECNSR, to ensure that electronic communications services provide end-to-end connectivity through the appropriate granting of access to, or interconnection with, other networks, without prejudice to an SMP designation. It is therefore authorised to impose obligations on undertakings that control access to end-users in order to ensure end-to-end connectivity where this is not already the case.

The access obligation ensures that SMP operators provide access to their infrastructure for the purpose of providing voice call termination and interoperability of network services (through interconnection). The obligation to provide access already exists and has been enforced on Vodafone and Go Mobile through the 2005 market review decision. The access obligation requires both operators to publish a cost oriented reference interconnection offer (RIO), which is also subject to the transparency and non-discriminatory obligations.

In this review the MCA confirms that both Vodafone and Go Mobile have SMP on the market for voice call termination on their individual mobile network, and is therefore of the opinion that the access obligation shall be maintained, in accordance with Regulation 21 of the ECNSR.

MNOs are required to have interconnection agreements for the termination of voice calls on their respective networks and to have similar interconnection agreements with all other operators. MNOs shall therefore negotiate in good faith with undertakings making new requests for interconnection services.

MNOs shall provide network access for the provision of voice call termination services to every public electronic communications network providers who make such a reasonable request (Regulation 21(2) of the ECNSR).

The reasonableness or otherwise of the request shall be evaluated on the basis of Regulation 21(4) of the ECNSR and the decision to provide interconnection or otherwise will be subject to scrutiny by the MCA in accordance with its powers at law where commercial negotiations between the two parties fail.

In the latter case, the MCA will be the final arbiter in deciding whether the request is truly reasonable or otherwise. Moreover, the MCA intervention is aimed at ensuring that no interconnection services are withdrawn unfairly and at the same time that no obligations are imposed unduly on existent operators.

Interconnection services shall be provided together with any services, facilities or arrangements which are necessary for the provision of such services. The said MNOs shall also ensure that all reasonable requests for interconnection services are expedited in a fair, reasonable, and timely manner as required under Regulation 21(3) of the ECNSR.

#### **4.5.2 Non-Discriminatory Obligation**

This obligation is to ensure that MNOs do not provide wholesale services on terms and conditions that discriminate in favour of a particular undertaking. More specifically, the imposition of this obligation is intended to avoid a situation whereby an SMP operator would have the ability to exploit its market power in order to discriminate when providing termination services to itself and those supplied to other fixed or mobile operators.

The obligation in question is not limited to a particular form of non-discrimination or a particular behaviour but incorporates all forms of discrimination as set out in Regulation 19 of the ECNSR. Indeed, besides tackling price-related discriminatory behaviour, the obligation also targets non-price parameters such as withholding of information, delaying tactics, undue requirements, low or discriminatory quality, strategic design of products, and discriminatory use of information.

The MCA holds the view that the non-discrimination obligation shall be maintained on Vodafone and Go mobile. This is to ensure that SMP operators do not exercise any discriminatory behaviour in relation to interconnection within the timeframe of this review.

#### **4.5.3 Transparency Obligation**

The imposition of the transparency obligation on MNOs is to ensure that the access and non-discrimination obligations are observed. The transparency obligation would require MNOs to deliver services of equivalent quality to all operators and that alternative operators have sufficient information and clear processes to which they would not otherwise have access. This would assist their entry into the market and directly targets the nature of such problems.

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

Moreover, given that both SMP operators have an obligation of non-discrimination, the Authority is obliging the said operators to publish a reference interconnection offer (RIO). The RIO 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 would impose changes to RIOs to give effect to the obligations imposed under the Act. The Authority also reserves the right to specify the precise information to be made available, the level of detail required, and the manner of publication. However, for the time being, the MCA is not proposing to increase the requirements relative to the publication of information with respect to the existing reference offer. This notwithstanding, the MCA maintains the right to establish or alter the extent of the obligation to publish information in the reference offer at a later stage.

Consequently, the MCA proposes to maintain the transparency obligation on both MNOs. This obligation also requires operators to make public information regarding call termination rates, network and technical specifications, terms and conditions for supply and use, and accounting information as required by the MCA.

The MCA believes that the imposition of the transparency obligation helps in giving the market confidence that services are not provided on a discriminatory basis and helps avoid any possible disputes and accelerate negotiations between existing and potential operators.

#### **4.5.3 Accounting Separation**

The MCA believes that effective monitoring of the transparency and non-discrimination obligations relies on the existence of accounting separation. In this regard, accounting separation facilitates the verification of compliance for services that the MNOs provide to other operators.

Separated accounts help disclose possible market failures and provide evidence in relevant markets of the presence, or absence, of discrimination. Accounting separation supports the imposition of transparency as it makes visible the wholesale prices and internal transfer prices of the operators' products and services. It also allows the MCA to check compliance with obligations of non-discrimination and to address price competition problems.

Accounting separation also provides support to the price control obligation so as to ensure that wholesale prices are set in a transparent and non-discriminatory manner.

The accounting separation obligation is already mandated on Vodafone and Go Mobile since 2005 and the MCA is proposing to maintain this obligation. The MCA has already issued guidelines in 2002 on how this obligation shall be implemented.<sup>8</sup> This notwithstanding, the MCA reserves the right to amend the current obligation in accordance with its powers at law, in particular Regulation 20 of the ECNSR, and the principles of reasonableness and proportionality.

#### **4.5.4 Price Control & Cost Accounting**

Regulation 22 of the Electronic Communications Networks and Services (General) Regulations authorises the imposition of obligations relating to cost recovery and price

---

<sup>8</sup> "Accounting Separation and Publication of Financial Information for Telecommunications Operators - Report on Consultation and Decision", MCA, October 2002  
<http://www.mca.org.au/infocentre/openarticle.asp?id=323&pref=1>

control, including obligations for cost orientation of prices and obligations concerning cost accounting systems, for the provision of specific types of interconnection and, or access.

The MCA considers the imposition of price control and cost accounting obligations as essential tools to ensure efficient MTRs, because otherwise MNOs have no incentive to lower termination through self initiative.

The said obligations have already been mandated on Vodafone and Go Mobile since 2005. Given the nature of competition problems identified above, the MCA is now proposing to maintain these obligations on both MNOs.

As explained earlier on, the price control obligation introduced in 2005 took the form of a 3 year glide-path with MTRs declining on a yearly basis and reaching a symmetric level by January 2008.

#### **4.5.4A Price Control**

The MCA has assessed a number of options for the implementation of the price control obligation. In principle the MCA is of the opinion that a cost oriented MTR should be based on a cost model designed on the specifications of an efficient mobile operator.

The MCA however notes that, in the present circumstances, this option cannot be implemented for a number of reasons. First, this model requires extensive technical and financial information. Furthermore, given that the deployment of 3G networks in Malta is a recent event, audited financial and technical data on 3G network operations are not yet available. Usage statistics are also scarce since the majority of end-users do not make use of 3G services.

Second, existing MNOs are utilising the 2.5G and 3G networks in parallel, which may distort the efficient costs allocated to MTRs which are currently based on a top-down FAC model. Given these considerations the MCA is of the opinion that for the time being and for the purpose of the two year timeframe of this review, the use of the current cost models maintained by existing MNOs is not a feasible option . This timeframe should also give the MCA the required time to explore the possibility of building its own cost model which will in turn be based on the guidelines and best practice recommended by ERG.

Another option which has been considered was the extension of the glide-path for a further two years, given the MCA's success in reducing local MTRs for the past three years through this method. However, the MCA notes that the continuation of the glide-path method would require a 'target' rate to be achieved in two years time. The target rate would have to be established and based on the cost oriented rate of an efficient MNO. Given the temporary unavailability of such a cost model, the MCA cannot select the glide-path option without a target-rate at its disposal.

The final option which was considered by the MCA was the pegging of the local MTR with international benchmarks. The MCA evaluated a number of potential benchmarks including an index of the EU27 countries , a distilled EU27 index excluding 'outliers', an index of EU countries having a cost model, and finally a EU27 index of the lowest termination rate applicable in each EU country.

Following a detailed analysis of all indices, the MCA believes that the best choice would be the index of the EU 27 countries without any further adjustments or refinements.

The MCA believes that, in the current circumstances, the best option for the implementation of the price control obligation shall take the form of a pegging mechanism linked to an EU 27 index.



The MCA is also proposing to set the MTR for both Vodafone and Go Mobile for the years 2009 and 2010, based on the average yearly percentage change in the EU 27 average MTR. The EU 27 average rate is to be determined from official data (backdated by one year) published by the EU Commission on a yearly basis.

Furthermore, the MCA is also proposing to set a maximum and minimum cap of +/-10% variation in the local termination rate to limit any significant unexpected shocks in the average EU27 MTR. This implies that if the EU average MTR were to increase or decrease in excess of the 10% margin, Vodafone and Go Mobile would only be requested to adjust their termination rate by 10% over the existing local termination rate. This would ensure stability in the termination rates being charged locally.

Within this ambit the MCA is proposing to issue the first adjusted MTR in December 2008, to be applied as from 1<sup>st</sup> January 2009, and a new adjusted rate in December 2009, to be applied as from 1<sup>st</sup> January 2010. During 2010 the MCA will then carry out a fresh review of mobile termination markets.

This proposed methodology is to be adopted without prejudice to developments that may occur during the two year timeframe of this review, such as the development of a cost model by the MCA.

#### **4.5.4B Cost accounting**

As stated above, the MCA maintains that a cost model would be the best option to determine MTRs. The MCA therefore believes that a cost accounting obligation is to be maintained on both Vodafone and Go Mobile in order to monitor, on an ongoing basis, costs incurred by operators as opposed to the termination charges being applied.

The cost accounting data represents valuable information on the allocation of costs onto different services. This can also prove valuable in the eventuality of the development of a new cost model, even if this were to be based on a bottom-up methodology as, in practice, cost accounting models are hybrid systems which still make use of top-down data.

The MCA therefore proposes that the cost accounting obligation is to be mandated on Vodafone and Go Mobile for the timeframe of this review. The methodology to be employed by both MNOs for the cost accounting obligation shall follow the MCA decision on this obligation which has been in place since 2002<sup>9</sup>.

### **Q3. Do you agree on the proposed set of remedies to be imposed on identified SMP operators?**

---

<sup>9</sup> Implementation of Cost Based Accounting Systems for the Telecommunications Sector - Report on Consultation and Decision - July 2002 -

<http://www.mca.org.mt/infocentre/openarticle.asp?id=59&pref=1>

Guidance on Accounting Methodologies for Regulatory Accounting Purposes, March 2003 -

<http://www.mca.org.mt/infocentre/openarticle.asp?id=245&pref=1>

Implementation of Cost Based Accounting Systems and Accounting Separation, Mobile Communications, April 2004. - <http://www.mca.org.mt/infocentre/openarticle.asp?id=583&pref=2>

## Chapter 05 – Submission of Comments

---

The MCA welcomes written comments and representations to this report during the national consultation period. These should preferably follow the relevant question numbers listed in the document. The consultation will run from the 18<sup>th</sup> of March 2008 to the 15<sup>th</sup> of April 2008.

The MCA appreciates that respondents may provide confidential information in their comments. This information is to be included in a separate annex to their response.

After due consideration of the comments and representations received, the MCA will review this analysis and publish a report summarising the responses to the consultation.

For the sake of openness and transparency the MCA will publish the names of all respondents to this consultation. To this end, all representations will be published, except where respondents indicate that a response, or part of it, is confidential.<sup>10</sup> The MCA will take steps to protect the confidentiality of all such material from the moment that it is received at MCA's offices. Respondents should however avoid applying confidential markings wherever possible.

All responses must be submitted to the MCA by no later than 04.00pm of the 15<sup>th</sup> of April 2008. Late submissions will not be taken into account.

Extensions to the consultation deadline will only be permitted in exceptional circumstances and where the Authority deems fit. The MCA reserves the right to grant or refuse any such request at its discretion. Requests for extensions are to be made in writing within the first ten (10) working days of the consultation period.

All submissions should be made in writing and sent by email to [pvella@mca.org.mt](mailto:pvella@mca.org.mt). Hard copies may also be posted or faxed to the address below.

Chief Policy and Planning  
Malta Communications Authority  
Valletta Waterfront, Pinto Wharf,  
Valletta FRN 1913  
Malta  
Europe  
tel: +356 21 336840  
fax: +356 21 336846

---

<sup>10</sup> In accordance with the MCA's confidentiality guidelines and procedures - <http://www.mca.org.mt/infocentre/openarticle.asp?id=544&pref=1>