

DECISION DOCUMENT

MCA ANALYSIS OF THE WHOLESALE MARKET FOR THE PROVISION OF DEDICATED CAPACITY IN MALTA

MCA Reference: MCA-D/kc/22-4799

Publication Date: 23rd December 2022

 (+356) 2133 6840  info@mca.org.mt  www.mca.org.mt/


 Valletta Waterfront, Pinto Wharf, Floriana FRN1913, Malta

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1 Executive Summary

1.1 Scope

The Malta Communications Authority (MCA) is hereby publishing its decision concerning the definition and competitive assessment of the wholesale market concerning the provision of dedicated capacity in Malta.

This market is listed as Market 2 in the Annex to the Commission Recommendation of 18th December 2020 on relevant product and service markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive (EU) 2018/1972 of the European Parliament and of the Council of 11th December 2018 establishing the European Electronic Communications Code (hereafter referred to as the 2020 Recommendation)¹.

Also taking due account of national circumstances, the MCA considers that the wholesale market for the provision of dedicated capacity corresponds to Market 4 (wholesale high quality access provided at fixed location) listed in the 2014 Recommendation².

This decision follows a consultation exercise carried out with stakeholders between the 30th of September and the 1st of November 2022. Five stakeholders submitted their feedback to the consultation exercise, listed hereunder:

- The Office for Competition (hereafter referred to as the 'OC'; submission provided in the Annex to this document)
- GO plc. (hereafter referred to as 'GO')
- Melita Ltd. (hereafter referred to as 'Melita')
- Epic Communications Limited (hereafter referred to as 'Epic')
- Vanilla Telecoms Ltd.

The MCA took into account the submissions made to this consultation and notified the relevant draft measure to the European Commission, to the body of European Regulators for Electronic Communications (BEREC), and to the national regulatory authorities in other Member States at the same time. The European Commission registered the notified draft measure as 'Case MT/2022/2420: Wholesale dedicated capacity in Malta'. Under Article 32(3) of the Code,

¹ It is of note that the 2020 Recommendation replaces the 2014 Recommendation and is the fourth revision since 2003. Link to 2020 Recommendation and Annex: <https://digital-strategy.ec.europa.eu/en/news/commission-updated-recommendation-relevant-markets>

² The MCA analyzed Market 4 in 2016, with a Decision entitled 'High-quality access and connectivity services provided at a fixed location in Malta' published in January 2017. Link to MCA 2017 Decision: https://www.mca.org.mt/sites/default/files/mca_decision_market_2-14_24%2001%202016.pdf#overlay-context=consultations-decisions/high-quality-access-and-connectivity-services-provided-fixed-location-0

NRAs, the Body of European Regulators for Electronic Communications (BEREC) and the Commission may make comments on notified draft measures to the NRA concerned. The MCA received a letter from the EU Commission on the 16th of December, stating that it *'has examined the notification and the additional information provided by the MCA and has no comments'* and that *'Under Article 32(9) of the Code, the MCA may adopt the draft measure and, where it does so, shall communicate it to the Commission'*. The MCA is publishing the EU Commission's letter alongside this Decision publication.

1.2 Commitment to market analyses

The MCA carries out reviews of electronic communications markets in accordance with Article 9 of the Electronic Communications (Regulation) Act. The market review exercise entails the definition of the relevant market(s), appropriate to national circumstances, and an ex-ante market power (or dominance) assessment that is carried out in accordance with the principles of competition law. In assessing the adequacy of competition, the MCA would ensure that regulation remains appropriate in the light of changing market conditions.

1.3 Context to the current analysis

Several commercial entities (for example, banks or large corporate customers including hospitals and schools) and public sector organisations require data connectivity with service characteristics that go beyond what is typically offered with a standard internet connection. The main characteristics that are sought by these entities are listed hereunder:

- high and symmetrical upload and download speeds;
- dedicated connectivity and capacity, also in view of multi-site demand;
- redundancy and high quality of service metrics (including low latency, jitter and packet loss).
- high-quality of service in all circumstances, guaranteed by SLAs, uninterrupted customer support, short repair times and service desks available 24/7.

It is also common for customers of these products to purchase complex and bespoke bundles of services combining dedicated connectivity with hardware and applications. Given these considerations, the MCA describes these kind of products under the term *'dedicated capacity'*. It is also relevant to underline that the cost of dedicated connectivity products is typically significantly higher than the cost of the standard internet products earmarking the mass market.

Back in 2017, the MCA determined that the provision of wholesale dedicated capacity services in Malta was characterised by three network operators, namely GO, Melita and Epic, which at the time utilised these wholesale services to establish a retail market presence and thus to offer dedicated connectivity services to business users and public entities. A reseller was also active at the retail level, namely Space Hellas, with this service provider purchasing the

relevant wholesale services from the afore-mentioned operators in the merchant market for resale to retail clients.

Notwithstanding the presence of multiple operators at the retail level, the MCA considered that the market was still largely dominated by the operator GO and the competition assessment effectively determined that this operator had SMP in the relevant wholesale market. The MCA is now revisiting its 2017 position by carrying out a new assessment, taking into account new market developments. The MCA's main findings and decisions concerning the market definition, assessment of SMP and regulatory approach are outlined hereunder.

1.4 Market definition

In order to define the relevant wholesale market for the provision of dedicated capacity in Malta, the MCA complied with the principles of competition law as further specified in the Commission Notice on Market Definition and the “Significant Market Power” Guidelines (hereafter referred to as the ‘SMP Guidelines’)³. The exercise was carried out in a forward-looking perspective.

The MCA defines a wholesale market for the provision of dedicated capacity in Malta after having identified the relevant retail market. The market definition exercise takes into account demand-side and supply-side substitutability of products (using SSNIP Test methodology).

- The MCA identifies five economic operators that are active in the provision of dedicated capacity services in Malta. Three network operators - GO, Melita and Epic – are active at the wholesale provision of dedicated capacity services. These three operators are also active at the retail level alongside two value-added resellers, namely Space Hellas and BMIT. The presence of value-added resellers is based on commercial resale agreements with all network operators.
- All network operators provide dedicated capacity to business users via their own retail arms. Melita and GO, have nationwide network coverage. A third operator, namely Epic, is gradually deploying an FTTH network, whilst also owning the necessary infrastructure to provide dedicated capacity services to businesses when required.
- The relevant wholesale market includes the provision of dedicated capacity over the following product interfaces:

³ Officially referred to as Commission Notice on the definition of relevant market for the purpose of Community competition law, OJ C 372, 9.12.1997, p. 5-13, “Commission Notice on Market Definition”. Link: <https://digital-strategy.ec.europa.eu/en/news/revision-guidelines-significant-market-power-commission-publishes-drafts-revised-guidelines-and>

- ➔ Ethernet;
- ➔ Wavelength-division multiplex (WDM); and
- ➔ Business-to-Business (B2B).

GO, Melita and Epic are supplying Ethernet products and B2B products. GO is also supplying WDM-based solutions, whilst Melita is also in a position to offer these solutions given that it already did so in the past.

- Traditional interface (TI) products are no longer included in the focal product market. Products based on this technology are not deemed to pose a direct constraint to other wholesale dedicated capacity products based on Ethernet and WDM and B2B interfaces. This is because just a few legacy TI connections remain active and TI leased lines are no longer commercially on offer.
- Based on the substitutability analysis, wholesale mass-market connectivity does not form part of the wholesale market for dedicated capacity. The main factors leading to this conclusion are (i) the different product functionalities of dedicated capacity products; (ii) intended use; and (iii) prices.
- The MCA considers that the conditions of competition are sufficiently homogeneous in the provision of dedicated capacity across the national territory and hence the defined wholesale market is deemed national in scope.
- The MCA also considers this definition as appropriate to national circumstances, having taken into account, inter alia, the degree of infrastructure and service-based competition in accordance with the principles of competition law.
- For more details on the market definition exercise see Chapter 4 to this document.

1.5 No SMP designation

The wholesale market concerning the provision of dedicated capacity in Malta is deemed to be effectively competitive and does not necessitate ex ante regulatory intervention. The main reasons behind this conclusion are the following:

- Three network operators are competing at wholesale level, self-supplying their own retail arms and also participating actively at the merchant market, by selling to value-added service providers (or resellers) that in turn resell dedicated capacity at the retail level. Barriers to entry have progressively become less relevant, as competitors to GO (or alternative operators) consolidated their market presence since 2017.
- Whilst it is not easy and always viable to duplicate the necessary infrastructure to supply dedicated capacity products and services, alternative operators managed to accommodate new retail and wholesale demand for the services under consideration. All

network operators and service providers are active in commercial centres and business districts.

- The market under review is characterised by infrastructure-based competition (to different extents for the different operators) and service-based competition, which is based on wholesale products supplied by network operators. There are commercial resale agreements in place between network operators and value-added resellers. These agreements have been in place for several years and are deemed sustainable. It is considered that these value-added resellers enhance competitive dynamics at the related retail dedicated capacity market.

1.6 Withdrawal of current regulatory remedies

Given the findings on competition dynamics in the market under investigation, the MCA considers that ex ante regulatory intervention is no longer required. The MCA will therefore withdraw the regulatory remedies that currently apply on GO, by way of the SMP designation imposed on this operator as outlined in the MCA Decision concerning high-quality access and connectivity published in 2017.

In order to have a smooth transition from a regulated market to a non-regulated market, the MCA shall withdraw the existing obligations that are currently mandated on GO in the market under review (access, non-discrimination, transparency, price control, cost accounting and accounting separation) within 90 calendar days following the publication of the final decision. The MCA believes that this notice period is justified and sufficient to allow for all stakeholders to make necessary arrangements for the new regulatory approach to the wholesale dedicated capacity market.

The afore-mentioned withdrawal shall also be implemented without prejudice to any other general obligations at law or remedies emanating from other market analysis decisions.

For more details on the SMP assessment and regulatory approach see Chapters 5 and 6 to this document respectively.

2 Regulatory background

The MCA is responsible for the regulation of the Maltese electronic communications sector and the supervision of compliance with the sector's regulations. This section provides a general insight of the main legislative tools and regulatory principles upheld by the MCA to carry out these tasks (see sub-section 2.1 below).

This section also focuses on the current regulatory remedies that apply on the designated SMP operator (namely GO) in the wholesale market for the provision of dedicated capacity in Malta (formerly the high quality access market). These remedies have come into force by way of an MCA Decision entitled '*High-quality access and connectivity services provided at a fixed location in Malta*' that was published on the 24th of January 2017 (see sub-section 2.2 below).

2.1 The European Electronic Communications Code

The European Electronic Communications Code (hereafter the 'EECC') underpins the regulation of the electronic communications sector in Malta. The new Directive 2018/1972 of 11 December 2018 establishing the EECC entered into force on 20 December 2018⁴. Malta transposed the EECC into national legislation in September 2021 after national consultation⁵.

The overarching objective of the Code is to promote investment through sustainable competition, encourage efficient and effective use of radio spectrum, maintain the security of networks and services, and provide a higher level of consumer protection.

The Code effectively sets the regulatory framework for market reviews, such as the obligation to carry out periodic reviews of certain electronic communications markets. In this context, the MCA seeks to satisfy various economic and legal tests throughout the execution of its market analysis function and adopts a standard three-stage approach for its market analyses. In fact, the current market review exercise is carried out in three sequential stages, starting from the definition of the relevant market, the competitive assessment of the defined markets and the proposed regulatory approach, which depends on whether or not an SMP designation is made. More details in this respect are provided in below.

⁴ Link to EU Directive 2018/1972: <http://data.consilium.europa.eu/doc/document/PE-52-2018-INIT/en/pdf>

⁵ See https://meae.gov.mt/en/Public_Consultations/MEIB/Documents/Electronic%20Communications%20Framework%20Review%20-%20Consultation%20Document.pdf

2.1.1 Transposition into national legislation

The Code was transposed into national legislation in September 2021, with Malta adopting the provisions of the EECC through various laws and regulations⁶:

- The Malta Communications Authority Act (Chapter 418)
- The Electronic Communications (Regulation) Act (Chapter 399)
- The Utilities and Services (Regulation of Certain Works) Act (Chapter 81)
- The Electronic Communications Networks and Services (General) Regulations (referred hereafter as the 'ECNSR'; SL 399.48)
- The Single European Emergency Call Service ('112' number) and The European Harmonised Services of Social Value ('116' numbering range) Regulations (S.L. 399.43).

2.1.2 The ECC and market review process

The EECC is transposed in Maltese legislation and requires the MCA to carry out periodic reviews of electronic communications markets. The procedural aspects relating to market analysis and significant market power are reflected in subsidiary legislation under Cap. 399.

The market review process is carried out in three stages, with each stage elaborated by the ECNSR regulations as described below:

- Regulation 54 of the ECNSR stipulates that the MCA tailors its market definition (Stage 1 for the purposes of the current analysis) on national circumstances, taking utmost account of all applicable guidelines and in accordance with the procedure referred to in article 4A of the Malta Communications Authority Act and regulation 21.
- Regulation 51(2) of the ECNSR focuses on the SMP assessment (Stage 2 for the purposes of the current analysis) and 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, namely a position of economic strength affording it the power to behave to an appreciable extent independently of competitors, customers and ultimately consumers'*.
- Regulation 51(3) of the ECNSR states that NRAs *'shall take into the utmost account the guidelines on market analysis and the assessment of significant market power published by the European Commission pursuant to regulation 52'*.
- Regulation 51(4) of the ECNSR states that *'where an undertaking has significant market power on a specific market, the Authority may also designate that undertaking as having*

⁶ Link to all relevant legislation: <https://www.mca.org.mt/regulatory/legislation>

significant market power on a closely related market, where the links between the two markets allow the market power held on the specific market to be leveraged into the closely related market, there by strengthening the market power of the undertaking. In such instances the Authority may consider remedies aiming to prevent the application of such leverage in the closely related market pursuant to regulations 56, 57, 58 and 61’.

- Regulation 54(8) of the ECNSR focuses on the implementation of ex ante remedies (Stage 3 for the purposes of the current analysis) and underlines that *‘where the Authority determines that, in a relevant market the imposition of regulatory obligations in accordance with sub-regulations (1) to (5) is justified, it shall identify any undertakings which individually or jointly have a significant market power on that relevant market in accordance with regulation 51. In doing so the Authority shall impose on such undertakings appropriate specific regulatory obligations in accordance with regulation 55 or maintain or amend such obligations where they already exist if it considers that the outcome for end-users would not be effectively competitive in the absence of those obligations’.*
- Where regulatory obligations already exist in the market(s) under investigation, a new finding of SMP would lead the MCA to maintain or amend the existing regulatory conditions accordingly. If, on the other hand, the finding of SMP cannot be ascertained, the MCA would have to withdraw such regulation, in accordance with regulation 54(6) of the ECNSR, subject to an appropriate period of notice given to all parties affected by such withdrawal.
- Regulation 54(7) also foresees the possibility of regulatory obligations being withdrawn from an already regulated market and states that *‘The Authority shall ensure that parties affected by a withdrawal of obligations done in accordance with this regulation, receive an appropriate notice period, defined by balancing the need to ensure a sustainable transition for the beneficiaries of those obligations and end-users, end-user choice, and that regulation does not continue for longer than necessary: Provided that when setting such a notice period, the Authority may determine specific conditions and notice periods in relation to existing access agreements’.*
- Regulation 54(1) of the ECNSR also states that the MCA carries out its market reviews and in doing so may seek the advice of the competent authority responsible for completion (‘National Competition Authority’ or ‘the NCA’).

2.2 Previous market analysis and regulatory decision

The MCA concluded the last market review for high quality connectivity services in 2016 and published the related decision in January 2017⁷. The main conclusions are outlined hereunder:

2.2.1 Market definition

The MCA identified a retail market and a wholesale market for the provision of high-quality access and connectivity services in Malta.

On the basis of a substitutability assessment and in line with the EU Commission's Recommendation, the MCA concluded that the relevant product markets include the following products:

- Analogue leased lines;
- Semi-digital leased lines;
- Synchronous Digital Hierarchy (SDH) leased lines;
- Ethernet leased lines; and
- Wavelength-division multiplex (WDM) -based solutions

The MCA considered that all authorised operators providing retail and wholesale high-quality access and connectivity services over the above-mentioned products in Malta were doing so without actually differentiating - in terms of pricing and availability - on the basis of geographic location. The relevant geographic market was therefore determined to be national in scope.

2.2.2 SMP assessment

The MCA identified a retail market and a wholesale market for the provision of high-quality access and connectivity services in Malta.

The MCA determined that the identified wholesale market was not competitive and designated GO with SMP in this market. This conclusion was based on the following findings:

- GO enjoys a high and stable market share that is not readily available to competitors.
- GO may abuse of its position as a vertically integrated and a horizontally integrated service provider by leveraging power from upstream to downstream high-quality connectivity markets, particularly in the provision of TI leased line products.
- The wholesale provision of high-quality access and connectivity services over national leased lines in Malta is subject to the existence of barriers to entry, in part explained by

⁷ Link to MCA 2017 Decision: https://www.mca.org.mt/sites/default/files/mca_decision_market_2-14_24%2001%202016.pdf#overlay-context=consultations-decisions/high-quality-access-and-connectivity-services-provided-fixed-location-0

GO's ubiquitous wholesale offering, including TI-based products, the small size of the customer base and the apparent lack of switching at wholesale level. The MCA considered these factors as inhibiting alternative operators from attracting a sufficient number of customers and thus from posing a sufficiently strong direct constraint on GO.

2.2.3 Remedies

In 2017, the MCA mandated a number of ex ante regulatory obligations on GO in the relevant wholesale market, as per below:

- an obligation to provide access to/and use of specific network facilities;
- a transparency obligation;
- an obligation of non-discrimination;
- price control & cost accounting;
- accounting separation.

The MCA deregulated the relevant retail market, removing GO's SMP designation and withdrawing the light touch regulatory remedies of transparency and non-discrimination obligations that were imposed on this operator by way of an earlier MCA decision published in 2012⁸.

2.3 Consultation and notification

Market reviews are subject to national public consultation in accordance with article 4A of the Malta Communications Authority Act. The consultation exercise relevant to this Decision was undertaken between the 30th of September and the 1st of November 2022.

The MCA also consulted with the MCCA on its SMP-based market reviews. This is in line with the cooperation agreement signed on 20th May 2005 between the MCA and the Office of Fair Competition, succeeded by the MCCA, which calls for a two-week consultation exercise between the two Authorities on ex ante market reviews carried out by the MCA. The MCCA, through the Office of Competition, submitted its official response on the 1st of November⁹. The MCA took into account all consultation submissions before reaching its final conclusions.

The MCA also notified the EU Commission with the draft measure for the market under investigation, with the Commission registering the notification under Case MT/2022/2420. The Commission sent a request for information to the MCA on 24 November 2022, with the MCA submitting a reply on 29 November 2022. The Commission's position on this particular

⁸ Link to the MCA's 2012 Decision: <https://www.mca.org.mt/consultations-decisions/mca-decision-definition-assessment-competition-and-regulation-leased-line>

⁹ The submission of the Office of Competition is available in Annex to this notification document.

notification was stated in a letter dated 16 December 2022. This letter is being published alongside this Decision.

3 EU Policy and Market Background

The current analysis seeks to determine whether one or more operators exhibit SMP in the wholesale market for the provision of dedicated capacity in Malta. An SMP designation would effectively signal market power, tantamount to an ability of an undertaking to operate without constraint from competitors in the relevant market. Ex ante remedies would only be imposed / maintained in a scenario where SMP is determined.

The purpose of this chapter is to highlight the main EU documents that serve as a reference to the MCA's conceptual framework for carrying out the current analysis (see sub-sections 3.1 and 3.2). This chapter also looks at market developments since the last review carried out in 2016/2017, outlining in the process on (i) the current network structures supporting the provision of dedicated capacity products; (ii) the main types of dedicated capacity products that are currently on offer and their take-up; (iii) other business connectivity products; and (iii) trends in take-up.

3.1 The 2020 recommendation on relevant markets

The Commission Recommendation on relevant product and service markets within the electronic communications sector susceptible to ex ante regulation (hereafter referred to as the 'Recommendation') lists two markets in which ex ante regulation might be warranted. These are listed below:

- **Market 1:** Wholesale local access provided at a fixed location
- **Market 2:** Wholesale dedicated capacity

The latest version of the Recommendation was published in December 2020¹⁰, following earlier versions published in 2003, 2007 and 2014.

¹⁰ Link to Commission Recommendation of 18.12.2020 on relevant product and service markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive (EU) 018/1972 of the European Parliament and of the Council of 11 December 2018 establishing the European Electronic Communications Code: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32020H2245>

3.1.1 Focus of the current analysis

The focus of the current analysis is Market 2 of the Recommendation, which concerns the provision of 'Wholesale dedicated capacity'. The accompanying Staff Working Document accompanying the Recommendation¹¹ make several statements that are relevant to the market in question, as listed hereunder:

- Specifically on the functionalities of dedicated capacity products and services, the Staff Working Document outlines that *'The distinguishing product characteristics of leased lines are their ability to provide dedicated and uncontended connections and symmetrical speeds. Moreover, certain advanced quality characteristics are relevant at the wholesale level, such as (i) guaranteed availability and high quality of service in all circumstances (including SLAs, uninterrupted customer support, short repair times and redundancy), (ii) high-quality network management resulting in upload speeds appropriate for business use and in very low contention and (iii) the possibility to access the network at points which have been defined according to the geographic density and distribution of business rather than mass-market users'*.
- The Staff Working Document adds that *'the dedicated capacity market should comprise the terminating segments of leased lines providing dedicated capacity. The terminating segment can be defined as the portion of the Point-to-Point line service between the end-user site and the closest exchange. The precise definition of the market should however be determined by the characteristics of the service delivered rather than by technological details'*.
- Further to the above, the Staff Working document adds that *'Ethernet (layer 2) is likely to be the prevailing interface for terminating segments of leased lines. As demand for higher bandwidth increases, there is likely to be increasing take-up of WDM leased lines, because leased lines of 1 Gbit/s or more can be more efficiently connected to the underlying OTN.'*
- The Staff Working Document further elaborates that *'significant performance gaps remain between mass-market shared capacity connections and dedicated Point-to-Point connections and therefore the specific need for dedicated capacity could, in particular in certain geographic areas, become a competitive bottleneck'*.
- On the development of competition at EU level in the market under investigation, the Recommendation states that *'The deployment of alternative infrastructures providing a dedicated fibre connectivity for business has increased significantly in particular in more densely populated areas, commercial centres and business districts. However, there may be areas in which, even though the deployment of an alternative infrastructure for mass-market connectivity may be economically viable, it may be less economically viable to*

¹¹ Explanatory Note to the Commission Recommendation: <https://ec.europa.eu/newsroom/dae/redirection/document/72442>

duplicate networks providing isolated dedicated connections due to the size of the addressable market’.

3.1.2 Taking into account national circumstances

The MCA underlines that the Recommendation seeks to promote harmonisation across the European Union by ensuring that the same product and service markets are subject to a market analysis in all Member States. However, NRAs are still able to regulate markets that differ from those identified in the EU Recommendation, where this is justified by national circumstances.

This means that whilst the MCA takes utmost account of the Recommendation on Relevant Product and Service Markets, it remains committed to define relevant markets appropriate to national circumstances.

3.2 The SMP guidelines

The European Commission issues guidelines on market definition and the assessment of significant market power. The first set of SMP guidelines was published in 2002 under the EU regulatory framework for electronic communications networks and services. In 2017, the European Commission initiated a review of these guidelines, in view of the adoption of the Code. The new SMP guidelines on in the telecoms sector were officially published on 26th April 2018¹², alongside an Explanatory Note¹³.

The MCA takes into account these guidelines when carrying out the market analysis to determine whether an undertaking has SMP in accordance with the procedure referred to in regulation 54(2) of the ECNSR. An undertaking shall be deemed to have SMP if, either individually or jointly with others, it enjoys a position equivalent to dominance, namely a position of economic strength affording it the power to behave to an appreciable extent independently of competitors, customers and ultimately consumers.(3) The Authority shall, when assessing whether two or more undertakings are in a joint dominant position in a market, act in accordance with European Union law, and shall take into the utmost account the

¹² Communication from the Commission - Guidelines on market analysis and the assessment of significant market power (SMP) under the EU regulatory framework for electronic communications networks and services: [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52018XC0507\(01\)&from=EN](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52018XC0507(01)&from=EN)

¹³ Staff Working Document - Guidelines on market analysis and the assessment of SMP under the EU regulatory framework for electronic communications networks and services: <https://digital-strategy.ec.europa.eu/en/library/staff-working-document-guidelines-market-analysis-and-assessment-smp-under-eu-regulatory-framework>

guidelines on market analysis and the assessment of significant market power published by the European Commission pursuant to regulation 52 of the ECNSR.

More specifically on each stage of the market analysis, the SMP Guidelines specify the following:

- The market definition of the relevant retail and wholesale markets is based on the assessment of demand and supply-side substitution and the application of the so-called '*hypothetical monopolist*' or '*SSNIP test*'.
- NRAs need to take into account several criteria to determine whether or not an undertaking can behave to an appreciable extent independently of its competitors, customers and consumers. These criteria include market shares, barriers to entry / expansion, control of infrastructure not easily duplicated, economies of scale / scope, vertical integration and potential competition amongst others.
- A proposal for regulatory intervention would be made in case SMP is determined. If no SMP is determined in relevant markets that are regulated at the time of assessment, existing regulation would have to be withdrawn.

3.3 Market context and developments

This analysis focuses on dedicated capacity products that are currently offered in Malta. There are three operators in Malta supplying dedicated capacity services, namely GO, Melita and Epic. All three operators are active at retail level (via self-supply), selling these services to businesses, and supplying wholesale dedicated capacity to value-added providers that are also active as resellers at retail level. The scope of this section is to provide insight on the networks supporting the provision of dedicated capacity in Malta and to outline the main trends and developments for this market segment since 2017.

3.3.1 Networks supporting dedicated capacity services

The provision of dedicated capacity is based on the supply of connectivity routes between the customer and the network nodes of the operator providing the service¹⁴. The network nodes are located in exchanges and switching centres owned by the operators. In this regard, the MCA considers that network infrastructures in Malta exhibit the same connectivity route concept, irrespective of the underlying technology supporting the network infrastructure, with the access / aggregation point, core network and Internet access being common elements.

¹⁴ Effectively, each end-user site is connected to one of the network's access aggregation nodes, which is in turn connected to at least one core node, either directly or indirectly, via a backhaul aggregating node using a backhaul connection.

When it comes to backhauling and core network design, GO and Melita are considered to exhibit equivalent arrangements, with both operators having nationwide deployment. Meanwhile, Epic has in 2020 started rolling out its own access network infrastructure based on fibre technology. Epic's access network infrastructure is concentrated in two localities in Malta, namely Mosta and Attard, although this operator extended its connectivity routes, via the access aggregation nodes, further across the national territory, to specific customer sites (including business districts and commercial centres) and providing points of connection to the other networks. It is relevant to underline that all three network operators in Malta are interconnected on a national scale, between designated nodes (located at points of handover and / or via a dedicated point-to-point connection).

The availability of physical infrastructure is a key factor determining the roll-out of access networks in Malta. It is relevant to underline that GO is the only operator in Malta having ubiquitous physical infrastructure, with this infrastructure solely deployed for the purpose of providing telecom services¹⁵. Melita also owns physical infrastructure but to a much lesser extent than GO, with this operator in fact relying to a significant extent on access to GO's physical infrastructure (such as ducts) to build nationwide reach¹⁶. Epic also owns physical infrastructure, with an extent comparable to that of Melita. Nonetheless, this operator does not have access to GO's physical infrastructure, as no agreement between these two operators is currently in place. Epic did however lay fibre targeting specific areas in Malta, particularly business districts and locations, to reach several dedicated capacity retail clients.

3.3.2 Connectivity based on dedicated capacity products

A dedicated capacity connection typically comprises a link that goes all the way between the access aggregation node at the exchange and the customer site. These connections are based on products that exhibit a number of features that are not available to end-users of mass-market broadband connectivity, targeting in particular retail customers such as banks, large corporate entities (including those with a multi-site nature) and public institutions. The products provided to this segment of clients require specific product characteristic and functionalities, as per below:

- dedicated and uncontended connections;
- high and symmetric bandwidths;
- high quality of service metrics (including low latency, jitter and packet loss);
- guaranteed availability and high quality of service in all circumstances (including SLAs, uninterrupted customer support, short repair times and redundancy); and

¹⁵ The MCA carried out an ad hoc survey on the matter in 2021 and relevant information was provided directly by operators.

¹⁶ Melita's access to GO's physical infrastructure is based on a legacy agreement that came into force in 1992.

- high-quality network management resulting in upload speeds appropriate for business use and in very low contention.

Given the above, the term dedicated capacity is used throughout this document to describe products and services that feature the above-mentioned characteristics.

Already in 2016, the MCA outlined the product characteristics of dedicated capacity products, with fibre-based Ethernet and WDM products featuring as the most commonly used for dedicated capacity purposes. These products remain in use today, alongside traditional leased lines that are no longer offered commercially to new clients but used by a few legacy customers. Ethernet-based solutions, WDM products and Traditional Interface Leased Lines are described hereunder:

- Traditional interface leased lines

Traditional interface leased lines use legacy technology to provide analogue and digital services. Some years back, GO's traditional interface leased line portfolio included analogue, semi-digital and Synchronous Digital Hierarchy (SDH) connections. Since 2017, GO discontinued offering analogue and semi-digital leased lines and has gradually phased out digital SDH connections. The latter are no longer commercially available and GO reported 9 retail SDH connections by the end of March 2022.

It is expected that traditional interface leased line connections will be switched off within the timeframe of this review. Ultimately this means that traditional interface leased lines are practically redundant and no longer meet market requirements. Therefore, the MCA does not consider these products as relevant from a substitutability standpoint for the purposes of the current assessment.

- Ethernet based solutions

Ethernet-based products are today mainstream for high-quality business connectivity purposes. These products are used by a significant share of retail clients for dedicated capacity.

Ethernet-based connectivity is typically delivered over fibre and is scalable on a range of bandwidths up to 10Gbit/s. This scalability characteristic provides flexibility to the business user in meeting specific dedicated capacity requirements. It also enables business users to reduce the complexity and the overheads involved in the configuration of networks according to service demand.

There are currently three operators supplying Ethernet-based connectivity services in Malta, namely GO, Melita and Epic and two value-added resellers, namely Space Hellas and BMIT. The latter providers purchase wholesale in the merchant market from the three operators mentioned earlier and thereafter resell dedicated capacity to retail business clients in a package alongside other services.

There are two main trends that are specific to Ethernet-based connectivity:

- ➔ Take-up is in long-term decline as some users dropped out of this market segment entirely. In fact, the number of business clients with dedicated connectivity was down by 26.3% since March 2017, from 434 to 320. This change is a result of several business users opting for the standard broadband connection on higher bandwidths via VHC networks. This has been particularly the case for business customers seeking connectivity below 100Mbps, whereby these switched to standard broadband supplemented by VPNs.

Another possibility for the drop in Ethernet-based dedicated capacity connections is the availability of Business-to-Business (hereafter referred to as ‘B2B’) connectivity products based on enhanced symmetrical broadband and 1:1 contention. This kind of connectivity will be described further down, with one operator already confirming with the MCA that it is supplying these products¹⁷.

- ➔ The MCA observes a shift to Ethernet-based connectivity based on higher symmetric bandwidths. In fact, whilst the overall number of Ethernet-based connections declined, the share of clients on connections with bandwidths of 100Mbit/s or more was up from 12.2% at the end of March 2017 to 27.5% at the end of March 2022.

Ethernet based connections	Less than 30Mbit/s	30Mbit/s but less than 100Mbit/s	100Mbit/s or more
As at end March 2022	176	56	88
As at end March 2017	306	70	58

Table 1: Number of Ethernet based retail connections

- Wavelength division multiplex (WDM)-based solutions

A total 18 business users were reported on WDM-based connectivity by the end of March 2022, with GO accounting for all these users. Their number is up from 7 as at the end of March 2017. It is relevant to underline that Melita is also in a position to supply such connectivity, as it reported one WDM connectivity client in 2017, which is however no longer on its books.

¹⁷ Epic has confirmed that it is offering these products. GO and Melita are in the process of supplying such data.

It is considered that WDM allows more efficient use of fibre technology, supporting multiple wavelengths (from 16 for a simple system and potentially up to 320) over one or two fibres, with one circuit per wavelength. The bandwidth for each wavelength is typically 10 Gbit/s.

This type of connectivity may be deemed a cost-effective¹⁸ solution in instances where the customer requires a number of services over the same fibre connection. For instance, WDM connectivity can be used to carry a leased circuit together with other services across technologies. Once the first circuit is installed, additional circuits can be added quickly without the need to add more fibres. This is possible because the end-user owns the active equipment (or network links) installed at the two ends of its connection. The high bandwidths and scalability of WDM leased lines make them particularly suited for high capacity routes, for example, between core nodes, to data centres. Furthermore, WDM leased lines are also covered by SLAs.

3.3.3 Other business connectivity products

Business users could avail of different types of products used to provide business connectivity. The previous sub-section outlined those products that the MCA has in 2017 determined as being part of the focal product market. In this regard, the MCA observes that only a few businesses are subscribed to dedicated capacity connectivity, featuring specific characteristics such as high and symmetrical guaranteed data rates and low latency, redundancy and high service levels. The MCA however underlines that a much larger number of business users are subscribed to other business connectivity products, including standard 'mass-market' broadband, VPNs, dedicated microwave links and Business-to-Business (hereafter referred to as 'B2B')¹⁹. The characteristics of these products and their take-up (where relevant data is available) are outlined hereunder:

- Standard 'mass-market' broadband

GO, Melita and Epic are in a position to supply standard internet connectivity with speeds typically going up to 1000Mbps, 1200Mbps and in certain localities up to 2000Mbps. The bandwidth capacity utilised for the provision of standard fixed broadband is shared between clients and cannot therefore effectively satisfy the same contention ratio supported by dedicated capacity products, which is 1:1. The latter feature is a particularly

¹⁸ WDM can be seen as a more expensive interface, however its cost is not determined by the bandwidth of the service itself, but rather by the configuration (or complexity) of the network required and / or implemented by end-users. After a speed/complexity threshold level, the end-user might find a WDM-based connection to be a cost-effective alternative. In effect, the relative cost of WDM equipment would diminish with the complexity of the network and the more bandwidth required by the end-user.

¹⁹ The MCA notes that no operator currently sells dark fibre connectivity (i.e. a passive optical fibre connection between two sites without active electronics) on a commercial basis, for either access or backhaul.

important consideration for business users seeking connectivity with no contention, alongside very high bandwidths.

Further to the above, standard internet products do not encompass the strict SLAs associated with dedicated capacity products.

It is also relevant to underline that a number of business users are subscribed to fixed broadband supplied via fixed wireless technology, which also exhibits certain service limitations, due to limited bandwidth and the potential disruption that could arise as a result of line-of-sight communication as a result of inclement weather conditions.

Overall, the picture that emerges when it comes to product characteristics is one characterized by significant gaps between mass-market internet connections (based on shared capacity) and dedicated capacity connections.

Business subscriptions for fixed broadband (end of period)	March 2021	March 2022
Total	19,970	21,237
GO	9,632	10,501
Melita	8,056	8,414
Epic	1,978	2,018
Other – fixed wireless	304	304

Table 2: Number of business subscriptions for fixed broadband by operator

Based on figures outlined in Table 2, local operators recorded 21,237 business users with a standard fixed broadband subscription as at the end of March 2022, up by almost 6% year-on-year. Meanwhile, only around 350 dedicated capacity connections were recorded by the end of the same period. This means that dedicated capacity connections only account for a very small fraction of business connectivity users subscribed to local operators.

- **VPNs**

Those business users that are in search of resiliency but that do not require guaranteed bandwidth with 1:1 contention and/or SLAs may opt to purchase Layer 3 MPLS VPN technology, over and above their standard internet connection.

These VPN products are mainly tailored for encryption and authentication purposes for the flow of data over an existing connection. In practical terms, this means that demand for these products rests on the security requirements of the end-user, rather than the type of bandwidth connectivity that is required. Indeed, there could be several end-users that

also run a VPN over the top of their leased line service to secure (via encryption and firewalling) the flow/transmission of data between their sites.

Hence, the MCA considers that VPNs supplied over and above the standard fixed broadband would still translate into a product that lacks 1:1 contention and that does not feature symmetrical data rates.

- Dedicated microwave links

A number of business users opt for dedicated capacity supplied over microwave links, either as a stand-alone connection or else as a form of redundancy to Ethernet or WDM-based dedicated capacity connections. Only Epic currently supplies dedicated capacity via microwave, with 25 such connections recorded as at the end of March 2022.

From a functional perspective, however, microwave-based products and services tend to complement rather than act as direct substitutes to Ethernet-based and WDM-based connectivity. This has been confirmed by ad hoc market research carried out by the MCA, via questionnaires to local business users.

Microwave technology exhibits certain limitations compared to what could be offered by way of Ethernet or WDM-based dedicated capacity connections. For example, the deployment of the necessary infrastructure may be subject to planning restrictions. Furthermore, microwave antennas also present a higher risk of failure and are limited by the disruption of line-of-sight communication (for example in case of inclement weather conditions).

- B2B

Epic reported a number of B2B clients based on end-to-end fibre as at the end of March 2022. Upon the MCA's request for additional information on these connections, including their characteristics, Epic outlined that it did not consider B2B products as standard fixed broadband connections. Epic clarified that these B2B products were provided via its fibre backbone and the access technology, i.e. the connection from its fibre infrastructure to the customers' premises through fibre.

B2B products were essentially an internet connection, which is tailored for B2B needs and were offered either with dedicated bandwidth or shared bandwidth²⁰. Furthermore, Epic stated that *'These connections come with Service Level Agreements ('SLA'), 24/7 NOC monitoring, 24/7 Tech Support, B2B care hotlines, DDoS protection, much more favourable contention ratios, and are customisable according to clients' needs. The 'last mile' technological medium does not affect our SLA to the customer. Dedicated bandwidth refers to a fully symmetrical internet access (upload/download), with no contention ratio*

²⁰ As for the territorial spread of these B2B connections, data submitted by Epic shows that such connections are offered across different localities in Malta.

(1:1) between the customer premises and our Data Centre. Shared premium bandwidth is a shared internet service, offered with different contention mixes – ratios of 4:1, 8:1 and 20:1.'

The above goes to suggest that Epic's B2B connections share most if not all the characteristics of Ethernet-based dedicated capacity solutions. Epic reports 47 B2B connections sharing all the product characteristics of Ethernet-based solutions, including a fully symmetrical internet access (upload/download), with no contention ratio (1:1).

Epic also reported an additional B2B connections provided via its fibre backbone but based on microwave as the access technology (i.e. last mile based on microwave). However, for the reasons outlined earlier in case of microwave connectivity, the MCA does not consider these products as potential substitutes to Ethernet-based or WDM-based solutions.

Given the above, the MCA considers that there is a clear distinction between dedicated capacity connectivity and standard 'mass-market' broadband connectivity. This is mainly because products based on the latter type of connectivity tend to be asymmetric and contended compared to the symmetric and uncontended (or guaranteed) capacity of dedicated capacity products. VPNs are essentially an add-on to the standard fixed broadband connection, whilst connectivity via microwave links is characterised by some inherent limitations that could impact on their reliability as an always on connection and guaranteed capacity. The MCA however notes that products based on B2B connectivity share most if not all product characteristics of dedicated capacity products, namely those that are Ethernet-based and WDM-based. These considerations will feature in more detail throughout the market definition exercise in Chapter 4 to this document.

3.3.4 Consultation submissions concerning retail competition dynamics for dedicated capacity services

In its submission, Epic makes a number of statements to imply that retail market dynamics are not working effectively. On various instances, Epic asks the MCA to re-assess its conclusions on the SMP assessment, based on a complete set of B2B data, whilst adding that the '*MCA omitted to take into consideration certain economic characteristics of the relevant market in accordance with the SMP Guidelines*'. Epic also says that it '*disagrees with the MCA's conclusion that alternative service providers are able to compete directly with GO*'.

The MCA does not agree with such statements, noting that it took into account market developments and characteristics at both retail and wholesale level. From a retail standpoint, the MCA reiterates its view that the relevant market developments indicate that competition is working effectively at retail level and that such competition would also be effectively even absent wholesale regulation.

The MCA identifies Ethernet-based and WDM-based connectivity and B2B connectivity as encompassing the relevant retail market for the provision of dedicated capacity products. Traditional interface leased lines used to form part of this market but are no longer commercially available. The few such connections that remain active are being phased out. Connectivity products based on microwave access technology are also excluded from the market, as is the case with standard mass market broadband products and VPNs. No operator is commercially supplying dark fibre.

When assessing competition at the retail level, the MCA took into account the fact that competition dynamics for dedicated capacity are characterised by the presence of three network operators, GO, Melita and Epic, alongside the presence of two value-added resellers, Space Hellas and BMIT. All these operators and value-added service providers supply Ethernet-based connectivity products, whilst GO also supplies WDM products. GO, Melita and Epic also supply B2B products with 1:1 contention. When it comes to functionality of the services on offer, all operators supply dedicated capacity products at a range of bandwidths.

GO has since 2017 lost market share whilst alternative providers and value-added resellers built market share. GO’s retail market share now benchmarks below the 50 threshold, at 49% down from 74% at the end of 2017 (excluding TI leased lines). Excluding B2B figures from the workings, which figures are only available for Q1 2022, GO’s market share would also be down from 74% at the end of 2017 to 55% at the end of March 2021.

Dedicated capacity retail clients	2017	2018	2019	2020	2021	End of March 2022
Total	445	458	351	348	342	489
Ethernet connections	438	443	337	334	328	320
WDM connections	7	15	14	14	14	18
B2B connections (1:1 contention)	-	-	-	-	-	151

Table 3: Number of Ethernet, WDM and B2B connections

It is also relevant to underline that in 2017, GO reported 92 TI leased connections, which effectively means that this operator’s market share at the time was closer to 80%. GO reported only 11 TI leased line connections at the end of March 2022, adding that these are only supplied to legacy clients and no longer commercially offered to new clients.

Epic and Melita exhibit a strong market presence in the high bandwidth segment, as well as value-added resellers, which package dedicated connectivity services with other managed services. The developments in revenue-based market shares are testament to this, with GO’s share in this respect being lower than is the case with this operator’s market share in terms of connections. GO’s retail revenue-based market share stood at 34% in 2017, going down to 20% in 2021. Taking into account B2B products for the first quarter of 2022, GO’s revenue-based market share stands at 29%, which means that Melita and Epic together account for the major share of retail revenues generated by the dedicated capacity product segment.

Another important consideration for retail competition dynamics relates to price movements. In this regard, the MCA notes that retail prices for dedicated capacity products have generally declined since 2016/2017, markedly for high end products with highest bandwidths. For example, in the case of Ethernet-based connectivity, Table 4 below shows that the average monthly tariffs have gone down for almost all Ethernet-based categories²¹.

Average monthly fees - Ethernet based connections	2017	2021
Ethernet 10Mbit/s but less than 30Mbit/s	€285	€401
Ethernet 30Mbit/s but less than 50Mbit/s	€452	€398
Ethernet 50Mbit/s but less than 100Mbit/s	€360	€587
Ethernet 100Mbit/s but less than 500Mbit/s	€945	€610
Ethernet 500Mbit/s or more	€5,763	€4,185

Table 4: Reference monthly fees for retail Ethernet connections on an end-to-end circuit²²

These declines also underline the observed shift from connections on bandwidths lower than 100Mbit/s to connections with bandwidths of 100Mbit/s or more.

²¹ Workings in the table for average monthly fees are based on revenues per subscription, based on data submitted directly by operators.

²² Figures in the table only refer to the three operators, GO, Melita and Epic. Figures for value-added resellers are not included in the working given that these sell dedicated capacity in a package including managed services.

The above goes to suggest that the retail dedicated capacity market exhibits a competitive outcome, with no operator or service provider dependent excessively on GO to maintain market presence and to build market share.

The above goes to suggest that, in a greenfield scenario, Melita and Epic are in a position to provide a durable competitive constraint in the provision of dedicated capacity on a nationwide scale. The majority of the territory would be competitively served by these operators and two value-added resellers, that are active at retail level based on wholesale dedicated capacity connections that these providers get from all three mentioned operators. The prospects for competition are expected to remain strong absent regulation.

4 Market definition

4.1 Background

In this chapter the MCA sets out the proposed market definition, underpinned by a substitutability assessment to determine the range of products or services forming part of the relevant market. The substitutability assessment relies on the hypothetical monopolist test (HMT test) or the small but significant non-transitory increase in price (SSNIP) test, following the principle of technology neutrality. The test, used in competition analysis, seeks to define a market by establishing the closest substitute to the product being considered, such that the two products would be considered as part of the same relevant market.

Consistent with the EC SMP Guidelines, the substitutability assessment takes into account three main considerations:

- Demand-side substitutability, with a focus on the extent to which customers substitute from the focal product to an alternative product, on the merits of its characteristics and price, such as to render a SSNIP for a dedicated capacity product or service unprofitable;
- Supply-side substitutability, with a focus on the extent of switching in the supply of a product or service in the short-term, without incurring significant additional cost to provide a dedicated capacity product or service; and
- The extent of the geographic homogeneity of competition, with a focus on the prevailing competitive conditions of supply and demand across the national territory.

The assessment applies the Modified Greenfield Approach i.e. considering a hypothetical scenario in which there are no ex ante SMP remedies in the reference market(s), but ex ante SMP remedies in other markets continue to apply.

4.2 The focal product

A dedicated capacity connection typically comprises a link that goes all the way between the exchange and the customer premises, with fibre-based Ethernet and WDM being mainly used for such connectivity. As already outlined in the previous chapters, Traditional Interface Leased lines also qualify as dedicated capacity products but these are no longer being offered commercially and are being phased out.

The distinguishing characteristics of dedicated capacity products are the following:

- dedicated and uncontended connections;
- symmetric bandwidths;
- high quality of service metrics (including low latency, jitter and packet loss);

- guaranteed availability and high quality of service in all circumstances (including SLAs, uninterrupted customer support, short repair times and redundancy); and
- high-quality network management resulting in upload speeds appropriate for business use and in very low contention.

Dedicated capacity products are mainly acquired on an end-to-end basis, essentially incorporating two terminating segments each based on two ‘half-circuit’ interconnection links, as depicted in the diagram below.

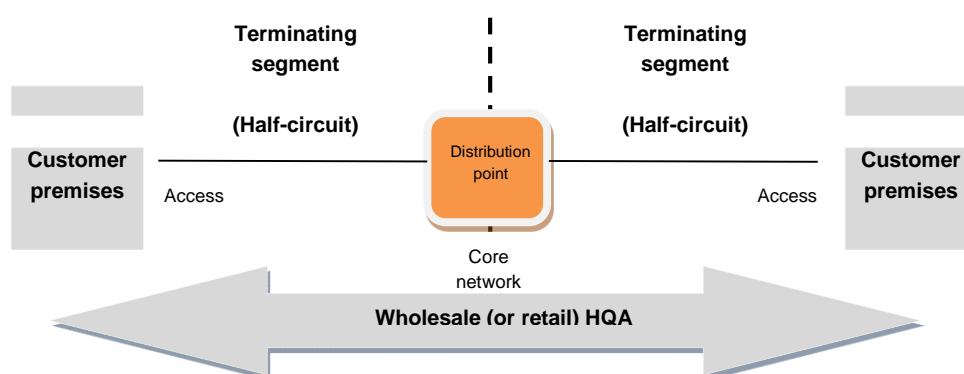


Diagram1: A wholesale (and retail) end-to-end leased line

In some instances, customers acquire half-circuit links, connecting their premises to the operators’ international gateway, for international connectivity purposes. The half-circuit concept encompasses a direct link between the end-users’ site to the network distribution point, typically referred to as a ‘terminating’ segment. An end-to-end connection would comprise two half-circuits linking the customer’s sites to the operator’s distribution point. Each direct link between the end-users’ site to the network distribution point would correspond to a ‘terminating’ segment. On this matter the Explanatory Note to the 2020 Recommendation states that ‘*The dedicated capacity market should comprise the terminating segments of leased lines providing dedicated capacity. The terminating segment can be defined as the portion of the PtP line service between the end-user site and the closest exchange*’.

4.3 Demand side substitution

The MCA applies the SSNIP test to assess demand-side substitution for the purposes of determining the focal product market. In this regard, the MCA takes into account the relationship between wholesale and retail dedicated capacity markets, given that wholesale demand is derived from retail demand.

The starting point of our market definition exercise is wholesale dedicated capacity products supplied by GO, including Ethernet and WDM of different bandwidths. Traditional Interface

leased lines supplied by this operator are excluded from the market definition given that these are no longer commercially available to new clients and have been largely phased out. The MCA notes that a 10% SSNIP implemented by GO would translate into demand-side substitution to Ethernet and WDM products supplied by Epic and Melita. Competitive pressure on GO would emanate wholesale in the merchant market, given the presence of value-added resellers that are currently purchasing wholesale from all operators to supply retail clients, and also indirectly via retail demand-side substitution. In view of the latter, the availability of Epic’s B2B products – specifically those that feature symmetrical data rates with no contention ratio (1:1) - are also deemed to constrain the SSNIP implemented by GO as the functional characteristics of these products are equivalent to those exhibited by Ethernet and WDM. Meanwhile, given their characteristics, standard mass-market broadband products, alongside VPNs, and products based on microwave links are unlikely to constrain a SSNIP in the dedicated capacity segment.

In addition to product characteristics and functionality considerations, the price element is another relevant factor when assessing demand-side substitutability. Wholesale demand for dedicated capacity is derived from demand at retail level. Hence, the relevance of retail prices for these products in the current assessment. The MCA notes that retail monthly access fees for dedicated capacity products based on Ethernet with bandwidths of 10Mbps start at an average of around €400 and go up gradually to above €7,000 for connections with bandwidths of 1,000 Mbit/s or more. Alongside the monthly access fees, retail clients also pay a fixed one-time connection fee. This fee is taken into account in the figures provided in the table below.

Average monthly fees in 2021/2022	GO	Melita	Epic
Ethernet			
10Mbit/s but less than 15Mbit/s	€412	€433	€357
20Mbit/s but less than 30Mbit/s	€311	€450	€512
50Mbit/s but less than 100Mbit/s	€639	€455	€700
100Mbit/s but less than 500Mbit/s	€891	€768	€854
500Mbit/s but less than 1000Mbit/s	€835	€1,900	-
1000Mbit/s or more	€7,185	€3,850	-
WDM	€340	-	-
B2B (symmetrical & 1:1 contention)	-	-	€762

Table 5: Average monthly fees for Ethernet, WDM and B2B products²³

²³ Overall average estimate for Ethernet, WDM and B2B products, based on revenue submissions by operators. Some caution is necessary in the interpretation of these monthly rates, given that the current workings are likely to be influenced by the profile of the customer. For example, a higher rate may mean that the operator would have more clients on the higher bandwidths.

These fees represent a significant step above the monthly access fees observed for standard 'mass-market' broadband, even when the latter are purchased with a VPN, and the monthly access fees that apply in case of microwave connections.

Moreover, Table 5 indicates that it is possible for business customers to get dedicated capacity products with similar or even better bandwidths from one operator at a fee that at times is cheaper than that applied by another operator. For example, if GO implements a 10% SSNIP for its '10Mbit/s but less than 15Mbit/s' product range²⁴, Melita's price within the '20Mbit/s but less than 30Mbit/s' product range would be cheaper. On various instances, GO, Melita and Epic also implement much cheaper prices for products falling within the same bandwidth category. This means that the different dedicated capacity products – Ethernet and WDM - supplied by GO, Melita and Epic form part of a chain of substitution dynamic on the basis of price. Also, the average price for B2B product falls within the chain of substitution dynamic and hence could be deemed to be a direct substitute to Ethernet and WDM.

A point that merits attention concerns the monthly access fees charged for connections of 1,000Mbit/s or more, given the significant differential that emerges compared to the rest of the products and service supplied on lower bandwidths. Such high-end connections are typically utilized by the larger corporate entities. Research carried out by the MCA shows that such entities are inclined to get multiple dedicated capacity connections in place, including on lower bandwidths, from different providers. This may suggest that dedicated capacity connections with lower bandwidths are complementary to the high-end dedicated capacity connections rather than substitutable.

It is also considered that dedicated capacity products resold by BMIT and Space Hellas pose a direct constraint at the retail level on the pricing behavior of GO, Melita and Epic, even though these are bundled with managed services.

Meanwhile, the MCA notes that prices (or monthly access fees) charged for standard 'mass-market' products earmarked for businesses generally do not fall within the price chain dynamic for Ethernet, WDM and B2B products²⁵. This is because the price entry-point is significantly lower than is the case with WDM, Ethernet and B2B. It is also relevant to underline that, even in the case of products at the higher end of the spectrum for download speeds, the applicable monthly access fees are far below the entry-level price points for Ethernet, WDM and B2B. Even in the case of a 1 Gbps standard fixed broadband connection, the monthly access fees charged by Melita, GO and Epic are significantly less than in the case of dedicated capacity products. In the case of Melita, the monthly access fee for a 1Gbps connection including fixed

²⁴ The MCA notes that GO prices are regulated, but it still considers that these represent a reasonable proxy for "the competitive level". The MCA only regulates the price for the 10 Mbit/s, 100Mbit/s and 1Gbit/s connections, leaving GO with some flexibility to charge its prices for other products offered within this bandwidth range.

²⁵ There are some exceptions but nonetheless the product characteristics differ to those featuring in Ethernet, WDM and B2B products.

telephony stands at €117.95 (including VAT). In the case of GO, the monthly access fee applicable for a 1Gbps connection including telephony and TV stands at €147.50, whilst in the case of Epic the monthly access fee for a 1Gbps connection stood at €147.49 (including VAT).

Conclusion on wholesale demand-side substitution

From a functional stand-point, the MCA considers that wholesale Ethernet-based connectivity, WDM-based connectivity and B2B connectivity are equivalent and feature the same product characteristics, such as dedicated and uncontended connectivity and the application of strict SLAs. These products also form part of the same chain of substitution dynamic on the basis of price and therefore qualify as demand-side substitutes.

Contended and asymmetric broadband products, even if combined with a VPN, are not deemed to be part of the focal product market. The chain of substitution pricing dynamic for these products at the retail level is ultimately indicative that pricing at the wholesale level also follows a similar break in the chain of substitution. It is observed that, in the event of a SSNIP for high-quality access and connectivity supplied over Ethernet and WDM, service providers are unlikely to opt for, say, wholesale broadband access, particularly if what they require is a dedicated and uncontended service with symmetric data rates.

4.4 Wholesale supply side substitutability

The MCA considers whether operators would be able to switch to supply the focal product in the short term, in response to a SSNIP in the price of the focal product. Operators would be deemed to be in a position to sufficiently constrain the SSNIP if they can switch supply at no significant additional costs and in a relatively short time such as to render the SSNIP implemented by the hypothetical monopolist unprofitable. In other words, the supply-side substitutability assessment would identify the alternative providers posing a competitive supply-side constraint on the hypothetical monopolist.

The MCA considers that there are currently three network operators – GO, Melita and Epic – that are offering different types of dedicated connectivity products. Given the investment that materialized over the past years in the roll-out of the access network infrastructure, all three operators have fibre connections in place, with their electronic equipment installed at the circuit ends, enabling the supply of dedicated capacity connections at a range of bandwidths.

All network operators are active on or are in a position to supply the merchant market with either Ethernet-based or WDM-based products. Currently, a number of wholesale transactions are being recorded, encompassing self-supply, supply between operators and also supply to 'value-added' resellers. Also, in the event of a SSNIP implemented by GO, the operators Melita and Epic are in a position to quickly adjust their network equipment to offer the relevant products at different bandwidths without incurring significant additional costs and sufficiently quickly as to render the price increase unprofitable. This consideration is also informed on the basis of what has been observed at the retail level, with all operators seamlessly shifting clients onto higher bandwidths.

Meanwhile, all operators have demonstrated an ability to gradually extend their access network infrastructures closer to the customer. This also explains why Melita and Epic increased their market share in the provision of dedicated capacity products over the years.

It is relevant to underline that all network operators, including Melita and Epic, have today a wider presence across urban areas than was the case in 2017, particularly the most densely populated ones which are likely to exhibit a higher incidence of business premises/districts²⁶.

The MCA acknowledges that extending a network infrastructure entails costs, particularly digging costs depending on the distances involved. Nonetheless, and as already argued earlier, all operators today record a presence across different urban areas where businesses are typically located. The MCA's assumption is that the extension in closer proximity to the customer has been a profitable exercise to date and that further extensions would not therefore be prohibitive, particularly in urban business zones. Given also the different bandwidth profiles for current customers, the MCA considers that bandwidth requirements do not have a strong impact on the economic feasibility of network extensions.

The MCA considers that all operators, including Melita and Epic, are in a position to establish closer proximity to business customers sufficiently quickly for four main reasons:

- Many customer sites are already connected and thus the service could be readily extended and made available to other new customers relatively quickly.
- This when considering the concentration of businesses across urban areas of the country and the fact that most businesses are located close to each other.
- All operators have an agreement to share the costs to roll out and deploy physical infrastructure in business complexes/districts. The operators share the installation costs and one of the operators will be responsible for the installation. Then either in the same agreement or separately sign an agreement with the landlords for accessing and using the passive infrastructure in the complex.
- A number of customers, particularly large corporate clients, are connected to multiple operators, whilst 'value-added' resellers are supplied by all three operators.

Conclusion on wholesale supply-side substitution

The MCA is therefore of the opinion that, given the scale of investment that has materialized to date with respect to the roll-out of the access network infrastructures and the proximity of the networks owned by GO, Melita and Epic to business customers, all operators are in a

²⁶ All three operators for example reach the localities of St Julians and Sliema, which encompass a good number of financial and gaming entities that use dedicated capacity products and services.

position to supply the full range of dedicated capacity products and services, namely Ethernet, WDM, and B2B at different bandwidths in direct competition to each other.

Ultimately, this means that Melita and Epic are posing a competitive supply-side constraint on GO.

4.5 Geographic scope

The EU Commission guidelines on market analysis and the assessment of SMP set out that a relevant geographical market comprises the area in which the undertakings concerned are involved in the supply of, and demand for, relevant products and services in relation to which the conditions of competition are sufficiently similar or sufficiently homogeneous and which can be distinguished from neighbouring areas in which the prevailing conditions of competition are appreciably different to those areas.

The EU Guidelines also refer to the use of two criteria in determining the geographical scope of a relevant market, namely the area covered by a network, and the existence of legal and other regulatory instruments.

The existing conditions of competition are deemed homogenous in the wholesale market for the provision of dedicated capacity in Malta. The merits of this conclusion are based on the fact that Ethernet, WDM and B2B products are currently offered on a nationwide scale, irrespective of bandwidth.

Considering Epic's and Melita's ability to build share over the past years, the MCA considers that competition is therefore also evolving on the basis of the presence of rival infrastructure. The fact that all network operators have an agreement in place for the sharing of physical infrastructure at business districts also facilitates network reach well beyond the densest urban areas. Meanwhile, the ability shown over the past years for network operators Melita and Epic to get new customers in direct competition to GO suggests that, to a large extent, a national pricing constraint applies for the provision of dedicated capacity products and services in Malta.

The MCA considers that there could be instances when prices are defined on a case-by-case basis, depending on a number of factors, predominantly but not limited to whether the network operator has fibre rolled out in the vicinity of the customer. However, the prevailing scenario is one where Melita and Epic are competing directly with GO on the basis of a national price.

The MCA therefore considers that the geographical scope of the identified wholesale market is national.

4.6 Submissions to consultation concerning market definition

4.6.1 Agreement with MCA's market definition

Melita and GO agree with the MCA's definition of the relevant wholesale market. Both Melita and GO outlined their agreement with the defined product and geographic dimensions of the relevant wholesale market.

Epic also 'by and large' agrees with the MCA's definition of the relevant wholesale market but raises a number of points outlined in the following sub-sections.

4.6.2 Exclusion of Traditional Interface Leased Lines

Epic says that the MCA should have considered Traditional Interface (TI) Leased Lines as posing a direct constraint on other products in the market and that clients of TI leased lines would ultimately, once this legacy technology is decommissioned, be absorbed by GO on other wholesale products that are offered by this operator.

Traditional interface (TI) leased lines are based on redundant technology and are no longer commercially available. Hence, the MCA considers that TI Leased Lines no longer pose a constraint on other products forming part of the relevant wholesale market. Overall, taking into account self-supply and pure wholesale, TI leased line connections amounted to just 13 by the end of March 2022. Considering a wholesale market comprising 527 connections, the MCA does not consider that the decommissioning of this legacy technology would translate into a material change to GO's market share. The MCA cannot also consider that the said decommissioning would automatically see GO fully absorbing the affected clients. The MCA notes that alternative operators Melita and Epic have managed to build market share also at a time when the number of Traditional Interface Leased Lines was in decline. In fact, the number of such lines / connections declined from 121 at the end of 2017 to 13 at the end of March 2022, and yet GO registered a drop in market share, which suggests that one cannot really assume GO's full absorption of ex TI Leased Line clients in the current market circumstances.

4.6.3 Exclusion of connections on microwave access technology

Epic agrees with the MCA's exclusion of products and services based on microwave as the access technology from the relevant market, based on planning restrictions, higher risk of

failure, disruption of line-of-sight communication, exposure to weather conditions and a technical limitation in terms of the throughput that the technology could sustain.

4.6.4 Inclusion of B2B products and network reach

Epic says that it *‘does not contest the MCA’s inclusion of the B2B product in the wholesale dedicated capacity market’* but asks the MCA to consider including in the market B2B products supplied by Melita and GO.

- On the demand-side substitutability assessment, Epic says that the MCA should consider GO’s and Melita’s B2B products. It also contends the MCA’s approach to the price chain of substitution dynamic. Epic says that it has not provided the actual prices for the different products on offer to the MCA given that *‘prices are defined on a case-by-case basis depending on a number of factors’*. It therefore asked the MCA to provide additional information *‘to understand on which submissions the MCA based its data used in the assessment’*.
- On the supply-side substitutability assessment, Epic expresses disagreement with the MCA that *‘in the event of a SSNIP by GO, Epic is in a position to quickly adjust its network equipment to offer the relevant products at different bandwidths without incurring significant additional costs and sufficiently quickly as to render the price increase unprofitable’*. Epic says that any such adjustment would require significant investment considering (i) the limited geographical reach of Epic’s own fibre network and backbone; and (ii) *‘some localities cannot be accessed by Epic at all or at a very high or prohibitive cost’*; and (iii) *‘to date operators do not enter into any standard agreement to share the costs to roll out and deploy physical infrastructure access in business complexes / districts’*.

Demand-side substitutability

The MCA notes that the demand-side substitutability assessment took into account all products that could pose a direct or indirect constraint on a SSNIP implemented by a hypothetical monopolist in the market under investigation. At the time, GO and Melita did not confirm that they were offering B2B products, so the demand-side substitutability assessment could not consider such products for the purposes of the analysis. Also, the fact that the MCA outlined Epic’s B2B products in the assessment did not by any means exclude the possibility for B2B products supplied by GO and Melita to be taken into account once their availability was confirmed.

The MCA notes that GO and Melita have now submitted the relevant figures for their B2B connections and revenues. These figures will be taken into account in the next chapter, with an overview of market shares based on this new data.

Based on an assessment of functionality and price, the MCA considers that B2B products supplied by GO and Melita, specifically those with symmetric rates and 1:1 contention, also form part of the relevant retail product market, alongside B2B products supplied by Epic with similar characteristics.

GO currently supplies B2B products that allow for dedicated connectivity with no contention ratio and fully symmetrical bandwidths, alongside others with 1:8 contention. According to GO these products are '*backed by competitive service-level agreements to support your most critical internet traffic*'²⁷. For the purposes of the current assessment and taking into account the afore-mentioned product characteristics, only those B2B products with symmetric rates and 1:1 contention are relevant to the current assessment.

Melita also supplies B2B products, allowing for symmetric bandwidth and 1:1 contention alongside SLAs²⁸. According to Melita these products are '*Ideal for mission-critical services such as live gaming, banking applications and video streaming*'. As is the case with other operators, Melita also supplied B2B products with 1:8 contention, but the latter are not relevant for the current analysis.

The MCA considers that, based on their characteristics, B2B products supplied by GO and Melita, as has been argued for similar B2B products supplied by Epic, can also be regarded as an alternative by end-users to Ethernet-based and WDM-based solutions. It can be expected that connectivity based on B2B technologies with symmetric rates and 1:1 contention are substitutable to Ethernet-based and / or WDM-based connectivity at retail level. In addition to product characteristics and functionality considerations, the MCA took into account the price element, which it deems as another relevant factor when assessing demand-side substitutability. Wholesale demand for dedicated capacity is derived from demand at retail level. Hence, the relevance of retail prices for these products in the current assessment. The MCA's approach in deriving average monthly fees for dedicated capacity products essentially rests on the average revenue per connection within the different reported bandwidth categories. Based on the figures presented in Table 5, the MCA considers that generally Ethernet-based products, WDM-based products and B2B products supplied by the different operators fall within the same chain of substitution dynamic and hence could be deemed to be a direct substitute to each other.

²⁷ Link to GO's B2B product portfolio description: <https://www.go.com.mt/business/connectivity>

²⁸ Link to Melita's B2B product portfolio description: <https://www.melitabusiness.com/solutions/fibre-internet-connectivity/>

Hence, the MCA considers that, in the event of a SSNIP implemented at wholesale level by a hypothetical monopolist, in this case assuming it is GO, there would be sufficient demand substitution at the wholesale level and at the retail level (based on direct and indirect constraints) such as to render the wholesale price increase unprofitable. The SSNIP would ultimately lead value-added resellers purchasing wholesale from GO to pass the hypothetical price increase to their retail customers, with the possibility of such retail customers switching to Ethernet and WDM solutions and B2B products supplied by Melita and / or Epic and not necessarily to similar retail products supplied by GO. Alternatively, value-added resellers may opt to purchase wholesale Ethernet and WDM-based solutions from Melita and / or Epic. In view of the above, the MCA remains of the opinion that Melita and Epic can pose a competitive wholesale demand-side constraint on GO.

Supply-side substitutability

On the supply-side substitutability assessment, the MCA reiterates its view that three player competition in the provision of wholesale dedicated capacity is happening to a significant extent across the national territory, particularly in most areas with high business density. Such competition is not dependent on regulated wholesale dedicated capacity from GO. Effectively, GO, Melita and Epic are active on the merchant market with value-added resellers getting wholesale dedicated capacity services from these three operators. Meanwhile, the three operators are self-supplying their own retail operations for dedicated capacity services, with fibre connections in place and the necessary electronic equipment to supply dedicated capacity connections at a range of bandwidths.

Meanwhile, all operators have demonstrated an ability to gradually extend their access network infrastructures closer to the customer. This also explains why Melita and Epic increased their market share in the provision of dedicated capacity products over the years. The MCA acknowledges that extending a network infrastructure entails costs, particularly digging costs depending on the distances involved. In this regard, Epic stands at a disadvantage considering that it lacks a ubiquitous infrastructure-based presence compared to GO and Melita. Nonetheless, even Epic has managed to establish a presence across different urban areas where businesses are typically located.

The MCA notes that Epic is currently deploying its own fibre network access infrastructure. The MCA understands that such deployment can only materialize over a number of years, but it notes progress in this respect. For example, at the time of writing of the consultation document, Epic's FTTH network was being deployed in the localities of Mosta and Attard. Now, deployment has been extended to the localities of Birkirkara and Balzan. More importantly, however, Epic itself confirms that it has invested over the years to establish a solid presence in the localities of St Julians and Sliema and the vicinities, with these two localities accounting for a large number of businesses that are or could be clients of dedicated capacity products.

Another consideration taken into account by the MCA is the onset of agreements (or arrangements) concerning the roll-out and deployment of physical infrastructure in business

complexes / districts. Epic confirms the existence of such agreements although it argues that such agreements *'are entered ad hoc...however there is no universal obligation to enter into such agreement'*.

Further to the above, the MCA notes that Epic and Melita have established a presence in those areas where the biggest clients are located, as evidenced by revenue-based indicators (see next chapter). Therefore, even considering GO's advantage of having a ubiquitous access network infrastructure, both Melita and Epic appear to be well-positioned to pose a competitive supply-side constraint on GO in those areas / locations with the largest clients in terms of turnover.

4.7 The relevant wholesale market

The MCA is hereby defining a single market for the provision of wholesale dedicated capacity in Malta, encompassing the following products:

- Ethernet-based solutions;
- WDM-based solutions; and
- B2B products (specifically those featuring symmetrical data rates and 1:1 contention).

Ethernet, WDM and B2B products are supplied at different bandwidths by GO, Melita and Epic on a national scale. There could be instances where prices are determined on the basis of specific circumstances but generally a national pricing constraint applies. Network operators Melita and Epic have shown a capability to enhance their proximity to the customer and to supply a suite of dedicated capacity products and services in direct competition to GO. This means that Melita and Epic are in a position to pose a direct competitive constraint on GO's market behaviour.

5 SMP Assessment

5.1 Main considerations in the assessment

The EU Commission guidelines on market analysis and the assessment of SMP set out that

This section presents the MCA's main findings emanating from the market power assessment for the wholesale market under investigation, namely the wholesale market for the provision of dedicated capacity in Malta, supplied over Ethernet-based solutions and WDM-based solutions.

The market is national in scope and therefore the assessment focuses on whether any provider has significant market power (SMP) – equivalent to the competition law concept of dominance - in the supply of the aforementioned wholesale dedicated capacity products and services in Malta. Such dominance would translate into a position of economic strength affording a provider to implement strategies and behave to an appreciable extent independently of competitors, customers and ultimately consumers.

Of relevance to underline at this juncture is that the current market definition remains largely unchanged to the one identified in the MCA's 2017 Decision, although the product and service market now includes B2B excludes the provision of dedicated capacity over traditional leased lines, as these products are being phased out and are no longer commercially on offer to new clients.

In addition, the MCA notes that GO is currently the designated SMP operator in the market under investigation. Hence the current SMP assessment will determine whether this is expected to be the case over the timeframe of this review, being that of five years, and therefore whether or not ex ante regulation would remain necessary.

5.1.1 Forward looking analysis - the Modified Greenfield Approach

The current SMP assessment is conducted from a forward-looking perspective over a given time horizon²⁹, and is guided by competition law, including, as appropriate, the relevant case law of the Court of Justice. According to the competition law concept of dominance, an SMP designation is equivalent to a position of economic strength affording an electronic communications service provider the power to behave to an appreciable extent independently of competitors, customers and ultimately consumers.

²⁹ Pursuant to Article 67 (5) of the Code the standard review period is now five years. NRAs should analyse the market without delay in case major developments change significantly the market conditions.

The MCA applies the Modified Greenfield Approach for the SMP assessment, making the assumption that there is no ex-ante regulation arising from a finding of SMP within the relevant market in question.

5.1.2 Criteria for SMP assessment

Having regard to the criteria for assessing SMP as set out in the EC SMP Guidelines, the current assessment is based on a selected list of criteria, which the MCA deems most appropriate for the relevant market.

The MCA considers that the following criteria are particularly relevant to the assessment of SMP in the wholesale market for dedicated capacity in Malta:

- market shares and market share trends;
- duplication of infrastructure;
- economies of scale and scope;
- vertical integration;
- potential competition; and
- switching and countervailing buyer power.

5.2 Market shares

Market share outcomes and the analyses of relevant trends bear significant relevance for the determination of SMP. This is not to say that the determination of SMP rests solely on the market share criterion, notwithstanding its relevance to measure of the outcome of competition, and as such, to provide an indication of how competition dynamics are evolving. In fact, the MCA's assessment rests on a number of criteria, as outlined in more detail in the forthcoming sub-sections.

5.2.1 Context

The MCA deems relevant to underline some of the main points addressed by the SMP Guidelines in view of the market share criterion. In this regard, the SMP Guidelines specify that *'According to established case-law, very large market share held by an undertaking for some time — in excess of 50 % — is in itself, save in exceptional circumstances, evidence of the existence of a dominant position'*. The SMP Guidelines add that *'Experience suggests that the higher the market share and the longer the period of time over which it is held, the more likely it is that it constitutes an important preliminary indication of SMP'*.

The SMP Guidelines also flag caution to NRAs in their interpretation of market share outcomes. In this respect the SMP Guidelines state that *'However, even an undertaking with a high market share may not be able to act to an appreciable extent independently of*

customers with sufficient bargaining strength. In addition, the fact that an undertaking with a strong position in the market is gradually losing market share may well indicate that the market is becoming more competitive, but does not preclude a finding of SMP.

Given the above, the MCA is hereunder listing specific circumstances that would merit attention in the context of the interpretation of market share outcomes for the market under investigation³⁰:

- Where market shares fluctuate significantly over time, thus indicating a lack of market power in the relevant market;
- A shown ability by a new entrant to rapidly increase its market share; and
- A high market share but still benchmarking below the 50% threshold. In this instance, the SMP Guidelines recommend that 'NRAs should rely on other key structural market features to assess SMP. They should carry out a thorough structural evaluation of the economic characteristics of the relevant market before drawing any conclusions on the existence of SMP.'

5.2.2 Trends and outcomes

The MCA's analysis of market shares in the wholesale provision of dedicated capacity in Malta spans from the first quarter of 2017 to the first quarter of 2022. The market share analysis is based on the number of connections in the focal product market and the revenues generated from this activity.

The analysis ultimately indicates the ability of alternative providers to build market share and thus to impact on GO's share of supply. Broadly speaking, the greater the ability of alternative operators to build market share, the less likely that SMP is determined.

The assessment starts at the retail level and thereafter moves wholesale. In this regard, the MCA considers relevant to underline the following:

- Three operators and a value-added reseller characterise the retail provision of dedicated capacity services in Malta, based on Ethernet and WDM as the interface for terminating segments of leased lines, and B2B products.

³⁰ EC SMP Guidelines, paragraphs 53-57.

- GO, Melita, and Epic are self-supplying wholesale dedicated capacity services to offer their retail clients with relevant retail products and services. These operators are also active in the merchant market, selling wholesale to Space Hellas and BMIT, which resell relevant dedicated capacity products and services to retail clients.
- Mainly, business enterprises and public entities encompass the retail client base for dedicated capacity products and services offered in Malta. The retail dedicated capacity client base accounted for 396 connections by the end of March 2022³¹.

All the data provided in this section is gathered directly from operators and service providers on a quarterly basis and is presented as such.

5.2.3 Market shares based on the number of connections

Retail connections

Based on operators' submissions to the MCA, the number of dedicated capacity retail connections (excluding traditional interface leased lines) has been recorded at 385 by the end of March 2022³². Table 6 below outlines operators' retail market share developments, taking into account products and services supplied over Ethernet technology, including B2B products (with 1:1 contention), and WDM-based products.

Dedicated capacity connections based on SDH leased line technology are no longer offered to new clients on the market, whilst existing connections are being phased out. Hence these type of connections are excluded from the table. In any case, their very small number would have no real impact on overall retail market share outcomes.

Retail market share by operator, based on number of connections		2017	2018	2019	2020	2021	Q1 2022
GO	Ethernet LLs + WDM	74%	75%	60%	62%	50%	48%
Melita	Ethernet LLs + WDM	7%	7%	16%	16%	15%	16%
Epic	Ethernet LLs + B2B	15%	14%	15%	12%	23%	24%
Space Hellas	Ethernet LLs	4%	5%	8%	9%	7%	7%
BMIT	Ethernet LLs	-	-	-	-	5%	5%

Table 6: Operators' retail market shares – as at end of period

³¹ More than 90% of all retail clients purchased an end-to-end connection, allowing for a direct link between two sites via a distribution point in the core network. The rest get a half-circuit connection linking their site to the international gateway. Given the market definition, microwave-based connections are not included in the market share assessment.

³² Total would be 396 with Traditional Interface Leased Lines.

Table 6 shows that GO’s market share fell from 74% as at the end of 2017 to 48% at the end of last March. This drop coincides with the onset of B2B products, specifically those that exhibit similar characteristics to dedicated capacity connections based on Ethernet technology interfaces, and the presence of value-added resellers.

A word of caution in this respect is that B2B connections are only accounted for in Table 6 for the end of 2021 and the end of March 2022. The relevant market shares without B2B connections would translate into a bigger share for GO, as outlined in Table 7 below. Nonetheless this operator’s market share would still exhibit a downward trajectory in its retail market share trend.

Retail market share by operator, based on number of connections		2017	2018	2019	2020	2021	Q1 2022
GO	Ethernet LLs + WDM	74%	75%	60%	62%	56%	55%
Melita	Ethernet LLs + WDM	7%	7%	16%	16%	17%	18%
Epic	Ethernet LLs	15%	14%	15%	12%	13%	13%
Space Hellas	Ethernet LLs	4%	5%	8%	9%	8%	8%
BMIT	Ethernet LLs	-	-	-	-	6%	6%

Table 7: Operators’ retail market shares as at end of period, without B2B connections

Table 7 shows that, even without B2B products, alternative operators would still have managed to win a higher proportion of the local customer base at the expense of GO. The market share of GO would have reduced from 74% at the end of 2017, the year in which the MCA published its previous analysis for the market under investigation, to 55% at the end of last March.

The trends observed from Tables 6 and 7 clearly outline GO’s drop in market share since 2017, given competition from two alternative operators and two value-added resellers, which managed to gradually increase their number of connections.

Another relevant retail market trend observation is the continued shift to connections supporting higher bandwidth speeds. In this case of Ethernet-based connections, for example those supporting bandwidths of 100Mbps or more, GO accounted for 38% of such connections reported by all operators at the end of March 2022.

Wholesale connections

Of significant relevance to the current SMP assessment are the market share trends at the wholesale level. Such an assessment takes into account developments at the retail level, as retail market competition dynamics impinge on the extent of market power at the wholesale level. In its market definition exercise, the MCA proposes a relevant wholesale product market that encompasses all dedicated capacity products and services that are self-supplied by GO, Melita and Epic to establish a presence in the relevant retail market. Retail dedicated capacity connections are hereunder referred to (within the wholesale context) as self-supplied

connections. Meanwhile, dedicated capacity products and services offered on the merchant market to third parties are referred to as pure connections. The latter type of connections are essentially wholesale connections utilised by operators themselves and third party service providers serving as resellers at the retail level. For this matter, the wholesale market shares of each operator are determined by adding the number of self-supplied connections and wholesale pure connections.

Based on this approach, Table 8 again shows a decline in GO’s wholesale market share compared to direct competitors, namely Melita and Epic. Significantly, GO’s market share was down from 77% as at the end of 2017 to 58% as at the end of last March³³.

Wholesale market share by operator, based on number of connections		2017	2018	2019	2020	2021	Q1 2022
GO	Self-supplied + pure	77%	72%	63%	68%	60%	58%
Melita	Self-supplied + pure	8%	9%	15%	16%	15%	16%
Epic	Self-supplied + pure	15%	19%	22%	17%	25%	26%

Table 8: Operators’ wholesale market shares – based on connections - as at end of period

One relevant consideration regarding the operators’ ability to build market share concerns their ability to develop and maintain the necessary physical infrastructure required for site connectivity purposes. Based on information submitted by operators, the MCA is aware of GO’s advantage over Melita and Epic given its ubiquitous physical network infrastructure, which spans across all national territory. Melita relies significantly on access to GO’s physical infrastructure, based on a legacy access agreement, to scale up its network territorial reach. There is however no such agreement for Epic, with the latter’s physical infrastructure concentrated in a small number of localities.

Nonetheless, the market share figures presented in Tables 3 to 6 show alternative operators together accounting for a bigger market share. In this respect, Melita’s ability to increase market share benefited from the legacy physical access agreement with GO, alongside own investment. Epic also managed to use their network to serve a bigger number of dedicated capacity customers, aided however by the agreements between operators to share the costs to roll out and deploy physical infrastructure in business complexes/districts. This was also possible given the concentration of businesses at specific localities in Malta, to which Melita and Epic extended its network in proximity to several customers.

³³ The market share figures take into account both end-to-end circuits (for national connectivity) and half-circuits (that are necessary to enable national connectivity to the international gateway). Taking only into account end-to-end circuits (for national connectivity) and excluding B2B connectivity, GO’s market share would be 54% as at the end of March 2022.

Also, there are a number of inter-exchange path connections (also referred to as IC Path connections) that each operator reports on a quarterly basis. These connections are not taken into account in the market share assessment, considering that these are offered on the basis of telecom regulatory requirements concerning interconnection. All operators are interconnected.

Also, ad hoc ground research carried out by the MCA in 2021 has shown that the largest retail customers connect their sites to various operators.

5.2.4 Market shares based on revenues

The MCA considers that an analysis of market shares based on revenues present a wider perspective on competitive conditions, highlighting for example on the ability of alternative operators to attract some of the big spenders within the local customer base.

Wholesale market share by operator, based on revenues		2017	2018	2019	2020	2021	Q1 2022
GO	Ethernet LLs + WDM	54%	53%	45%	45%	45%	44%
Melita	Ethernet LLs + WDM	17%	16%	26%	25%	23%	25%
Epic	Ethernet LLs + B2B IP Bandwidth	29%	31%	28%	30%	33%	31%

Table 9: Operators' wholesale revenues market shares³⁴

Market share trends at wholesale level are broadly consistent to what has been observed at retail level and take into account self-supply, i.e. the wholesale supply of dedicated capacity to provide the relevant services at the retail level. Table 9 shows that wholesale market shares of alternative operators increased since 2017, corresponding to a ten percentage point drop in GO's market share to 44% by the end of last March³⁵.

The above also goes to explain that, notwithstanding GO's nationwide physical infrastructure, compared to Melita's and more significantly compared to Epic, there is likely to be the necessary level of infrastructure-based competition in those areas where businesses are located. This is a result of the continued investment by all operators, including alternative operators, to extend their infrastructure to closer proximity to the customers' site(s). An ad hoc survey carried out by the MCA shows that several businesses are actually connected to different operators and that all operators are effectively present in the merchant market.

The MCA is hereunder presenting some key takeaways in light of the above:

³⁴ GO's market share as at end of March 2022 would stand at 38% if only national end-to-end circuits are taken into account. Figures in Table 7 take also into account half-circuits required for international connectivity.

³⁵ As with the case for wholesale connections, IC Path connections are excluded for the workings for the same reason outlined in footnote 28. It is also relevant to underline that in some instances operators forfeit I/C Path revenues given their reciprocity, which explains why the revenues generated by these connections are limited. I/C Path revenues reported by operators in 2021 totaled €262,252 compared to €3,149,878 in revenues for the activities taken into account for Table 7.

- The size of the market remains relatively small in terms of the number of customers. Nonetheless, market share figures suggest that rival competition between GO and alternative operators, with Melita and Epic consolidating their market share at GO's expense. Market share figures based on revenues show that these two operators have won retail contracts and are active at the merchant market.
- The MCA is of the opinion that the current market share trends are set to continue within the time frame of this review and that alternative service providers will continue to pose a direct competitive constraint on the incumbent GO.

5.3 Replicability of infrastructure

The MCA considers that the wholesale supply of dedicated capacity products and services requires significant investment to deploy a network that is as close as possible to the sites earmarked for connection. Such an investment would typically materialise over a span of years and would also entail significant sunk costs. In this regard, the MCA has already indicated, based on data gathered directly from operators, that GO currently owns a ubiquitous physical infrastructure network, including ducts, and can supply wholesale dedicated capacity to all sites across the whole national territory. GO can do so relatively quickly and without incurring substantial costs.

Melita is also in a similar position to GO, although this operator's presence in the market under investigation sees reliance on a legacy access agreement with GO alongside own infrastructure investment. Meanwhile, Epic managed to tailor its infrastructure investment to reach most of the sites requiring the supply of wholesale dedicated products and services. There could be some areas where Epic lacks the necessary network reach to provide wholesale dedicated capacity but that nonetheless this operator is in a position to address most market requirements relatively quickly. This has been confirmed by retail customers, when reporting connectivity with two or more rival operators. In addition, this operator is active on the merchant market as is the case for the other operators.

The MCA does however recognize that alternative operators to GO are not in a position nor have the ability or incentive to duplicate GO's network infrastructure, although it does recognize the potential for such investment to occur over a number of years, given that the costs of developing such an extensive network infrastructure would be very significant and considering that the small number potential customers in this market makes it difficult for the alternative operators to recover their investment costs.

5.4 Economies of scale and scope

There is a large asymmetry between GO and alternative operators when it comes to own network coverage. Notwithstanding, the market share assessment shows that alternative network operators have managed to build a customer base for dedicated capacity services.

The materiality of GO's advantage in the wholesale market under investigation remains on the basis of connections, with this operator accounting for 58% of the total by the end of last March. It may therefore be argued that GO has better economies of scale in the supply of dedicated capacity as it can split its costs over a bigger dedicated capacity customer base. Nonetheless alternative operators have used their networks to serve an increasing number of customers, with the market share assessment showing that these operators together account for almost 56% of all revenues that are generated in the wholesale segment, potentially as they serve customers with the highest bandwidth requirements at retail level and their contracts on the merchant market. This goes to suggest that alternative operators may in fact be better placed than GO in terms of scale economies for the high-end client segment. It can therefore be argued that, on a general level, all three operators have similar scale economies in the market under investigation.

When it comes to economies of scope, GO and Melita are in a very similar position considering their ability to share costs of production between a group of services including dedicated capacity products and services and standard fixed broadband³⁶. This gives rise to economies of scope with the average fixed cost decreasing in the total volumes of services in the group supplied. As already indicated, Melita's ability to generate economies of scope rests on the legacy duct access agreement with GO. Epic is not however in a position to serve a broadly similar scale of broadband customers and thus cannot generate the same economies of scope as GO and Melita. The potential for bigger economies of scope increases as Epic's FTTH roll-out advances, but this deployment is still at a very early stage.

Melita and Epic also offer multiple services which can lead to cost savings on common processes. The range of services in the case of Epic is slightly smaller than GO's – without TV. Whilst established networks operators may benefit from economies of scope, new entrants, on the other hand, would only be able to achieve such economies of scope upon entering a large number of markets and with sufficient scale. This may once again prove to be difficult as the entry costs involved would be high and similarly it would be difficult to recoup such costs on exit. Therefore, economies of scope, like economies of scale may impede new operators from entering the wholesale market under investigation.

5.5 Vertical integration

An undertaking may decide to enter a market by investing in both upstream access to infrastructure markets and downstream service provision markets. This strategy would generally lead to efficiency gains in the provision of electronic communications services.

All operators supplying dedicated capacity in Malta classify as vertically integrated operators given their provision of the necessary duct routes for site connectivity, the laying of the

³⁶ Melita and Epic also offer multiple services which can lead to cost savings on common processes. The range of services in the case of Epic is however limited to fixed telephony and fixed broadband. Meanwhile, GO and Melita are active in the provision of TV services. Epic would only be able to achieve economies of scope similar to GO's and Melita's upon entering the TV segment.

necessary fibre and the installation of the active electronics that are required to enable connectivity. It is also relevant to underline that the market share data is mainly based on the number of customers that are fibre connected, with the operators' networks extended in proximity to the customer site (or sites).

Alternative operators – Melita and Epic - do not rely on GO's supply of dedicated capacity, at least to such an extent that enables GO to put pressure on these operators by reducing the margin between the wholesale and the retail price and thus to inhibit alternative operators from covering retail costs.

This means that GO is not in a position to favour its own downstream business over third party providers by differentiating on price or terms and conditions. The risk that GO distorts competition at the retail level by placing third party providers at a disadvantage compared with its downstream retail business is minimal.

5.6 Switching and countervailing buyer power

The MCA considers that GO has not been able to maintain a high market share since the last market review. Alternative operators were able to build market share at the expense of GO, particularly in the high-end client segment seeking higher bandwidths.

The data gathered by the MCA suggests that the market continues to see a shift from low bandwidth to high bandwidth connectivity, alongside an ever-bigger focus on redundancy matters. Meanwhile, based on a survey carried out in 2021, the MCA determined that 97% of all medium and large enterprises acquiring dedicated capacity products and services did not switch operator over the previous two years. The interpretation of this finding has however to be seen in a wider context as, for example, almost all respondents say that they were satisfied with the quality of service and / or that no major issues were encountered in the provision of the relevant services.

The above goes to suggest that existing customers prefer sticking with their current supplier despite the availability of substitutes on the market. But this applies to the client base with all operators. Hence, the MCA considers that alternative operators are in fact able to compete directly with GO and that therefore this operator is not in a position to raise significant impediments to Melita and Epic when competing for new customers.

Effectively, this situation enables customers with a higher degree of countervailing buyer power, particularly as GO is faced with a credible switching threat if quality fails and prices are not competitively set. Customers of dedicated capacity products and services are therefore deemed to have sufficient countervailing buyer power given the availability of another source of supply (another supplier or self-supply). This notwithstanding GO's extensive network of ducts across Malta, while rival infrastructure is dependent on GO's network and / or is concentrated around the main business locations.

5.7 Potential competition and countervailing buyer power

Potential competition refers to the prospect of new undertakings entering the market within a short period of time and their ability to build market share. Effectively, the wholesale dedicated capacity market currently features two alternative operators to GO, which managed to build market share and are deemed to be in a position to constrain GO from raising prices above competitive levels.

Market developments have been significant over the past years and whilst GO retains the largest number of customers, its market share fell below the 50% threshold. Meanwhile, revenue-based figures show that the combined market share of Epic and Melita overtook that of GO. The evolving scenario underlines intensifying competition, with buyers on the merchant market also active in the high-end customer segment.

All operators have also indicated their plans to continue enhancing their network infrastructures, including via new roll-out and deployments. The MCA therefore considers that the prospects of competition to remain strong in the market under investigation, with alternative operators effectively in a position to keep constraining GO.

Meanwhile, ad hoc research carried out by the MCA confirms that several retail customers have a degree of buyer power where they purchase large volumes and at times from different operators, the main reason being redundancy. The ongoing shift to higher bandwidths and the strong position of alternative operators in this segment also suggests that customers have a credible threat to switch supplier or to meet their connectivity requirements.

5.8 Submissions to consultation concerning competitive assessment

The OC, Melita and GO share the MCA's view on the competitive assessment of the examined wholesale market and agree with the MCA's conclusion that the relevant market is competitive.

Epic however raises a number of points on the MCA's competition assessment, emphasizing on the data underpinning the analysis and considerations related to Epic's network reach. Epic's main points are outlined hereunder, with the MCA's reactions highlighted accordingly:

- Epic does not agree with the MCA's view that it is able to compete in the provision of dedicated capacity services in Malta. Epic says that it is disadvantaged to Melita and GO as its network presence is limited to two localities – Mosta and Attard. Epic adds that its coverage is nowhere close that of GO, with the latter's extensive system of ducts and poles. Epic considers that this situation is expected to persist over the next five years and that its limited network footprint means that any new customer opportunity is dictated by the presence of its fibre backbone in proximity to the customer's premises or feasibility to extend the last mile to the customer's premises. Epic underlines that GO and Melita face no such constraints.

Ultimately however, Epic concedes that *'its network currently reaches more urban areas than 2017'* and that *'the extension of its network is a result of significant investment over the years...to at least partially compete with other operators'*. Epic also adds that it cannot reach some localities in Malta with high business density such as Kalkara and Hal-Far, due to *'in the past attributable to discriminatory and anti-competitive behaviour by other operators'*. Epic considers that *'its access to certain locations is limited and / or non-existent, oppose to GO's nationwide reach'*, which in Epic's opinion means that *'GO could be the only operator able to provide dedicated capacity products in certain localities'*.

The MCA notes that its analysis took into account the extent of network presence of all operators in Malta. This is a very relevant consideration, as close(r) proximity to the client plays a vital role for a market player to be in a position to get new clients and thus to build / maintain market share. Based on research carried out over the past months, the MCA determined that only GO has ubiquitous market presence and that Melita's network relies on GO's physical infrastructure to ensure its 90% market presence in terms of coverage. Melita's use of GO's physical infrastructure is based on a legacy agreement between these two operators, originating at a time when GO was still a government-owned entity and which subsists after GO's privatisation. It is on this basis that the MCA acknowledges Epic's relative disadvantage compared to these two operators when it comes to network reach.

Epic has no such agreement for access to GO's physical infrastructure. Nonetheless, Epic has invested at enhancing its network reach and has managed to selectively extend its infrastructure to closer proximity to the business customers' site(s). Epic's infrastructure extension materialised markedly in those locations with the densest business presence, such as Sliema and St Julians. Several business customer sites at these localities are already connected to Epic. The MCA considers that, in such locations, Epic's network reach and service could be readily extended and made available to other new customers relatively quickly. This when considering the concentration of businesses in these locations.

The MCA considers it also relevant to underline that, based on information gathered directly from operators including Epic, there are a number of agreements when it comes to the roll out and deployment of physical infrastructure in business complexes/districts.

On Epic's claim that it cannot reach the localities of Smart City and Hal far, *'attributable to discriminatory and anti-competitive behaviour by other operators which refused to provide access'*, the MCA notes that this matter was raised by Vodafone Malta Limited (now EPIC) in a case it filed before the Administrative Review Tribunal ('ART') in 2016 contesting a ruling by the MCA following a dispute which Vodafone had with GO, which

dispute was referred to the MCA by Vodafone. In that dispute Vodafone had made similar arguments.

Vodafone's disagreed with the conclusions of the MCA in the dispute it raised. Subsequently Vodafone decided to appeal MCA's ruling before the ART. In substance in these proceedings Vodafone claimed that GO was acting discriminatorily against its interests by refusing access to its duct network and that the MCA was failing to implement the remedies that emanate from its Decision on Market 4 of the 2007 Recommendation. This appeal was not upheld by ART as per a final decision by ART dated 3rd February 2020. Vodafone (subsequently Epic) did not contest the ART's decision before the Court of Appeal.

The MCA considers also relevant to underline at this juncture GO's comments in its consultation submission that it *'strongly disagrees with ... claims'* that *'GO has the only ubiquitous network which spans across all national territory in Malta and that this gives GO an advantage over Melita and Epic'*. In this regard, GO says that *'a substantial part of GO's network is affixed to physical infrastructure owned by Enemalta, which GO has gained access to by means of a commercial agreement'*. GO also says that *'only a small portion of Melita's network relies on GO's duct infrastructure'*.

The MCA notes that statements made in respect of GO's physical infrastructure and the ubiquity of such infrastructure are based on operators' own submissions to a survey carried out by the MCA in 2021 on access to physical infrastructure in Malta. Throughout this survey, the MCA distinguished between the transportation and distribution elements of physical infrastructure owned by ECN and non-ECN providers. In its response to the afore-mentioned survey, GO indicated its use of ducts / manholes owned by non-ECN providers, specifying that only its distribution element is installed mainly over that of the electricity provider, Enemalta. GO did not specify the extent of its transportation network installed over the infrastructure of non-ECN providers, but given GO's responses to the survey, the MCA considers that this is likely to be minor. As for Melita's dependence of GO's duct infrastructure, information supplied by GO and Melita to the same survey shows that Melita's use of GO's ducts in kilometres is significant.

- Epic adds that *'to date operators does not enter into any standard agreement to share the costs to roll out and deploy physical infrastructure in business complexes/districts' but that 'such agreements are entered ad hoc'*.

This issue has already been addressed in sub-section 4.6.4 to this document. The MCA reiterates that it has to take into account agreements aimed for operators to share costs of roll out and deployment, irrespective of these being entered ad hoc. Epic itself has also submitted information to the MCA confirming its use of culverts owned by third party non-ECN providers leading to a number of business districts. Epic has also confirmed on various occasions that negotiations are also at an advanced stage

concerning *'a form of co-investment'* by the three operators *'with regard to the large business complexes that are being developed'*, *'wherein the 3 ECNs together with the developer have deployed/invested in the passive infrastructure allowing all parties to roll out and service their customers within the building'*. Epic also states in ad hoc correspondence with the MCA that in other instances access to business districts is facilitated by the landlords of the complexes themselves (such as by way of preparing a common installation point or the coordination of the agreement between operators).

- Epic says that its use of microwave access-based technology for the provision of dedicated capacity *'only evidences that Epic's limited access to other types of network infrastructure has resulted into the need of finding more costly and less reliant alternatives in order to service customers located in localities which Epic would not be able to reach otherwise'*.

Epic has not disclosed the localities where its microwave-based connections are located. Nonetheless, the MCA notes that the number of microwave-based connections accounts for less than half of Epic's business client base for dedicated and B2B connectivity (taking also into account contention ratios lower than 1:1 for the latter). Additionally, the MCA notes that the number of microwave-based connections has remained largely static since the end of the first quarter of 2021. Meanwhile, the number of retail connections with Epic based on Ethernet-based solutions and B2B (1:1 contention) was up by almost 11%. This may also suggest that ultimately Epic's investment over the past years alongside other ongoing FTTH investment has effectively enabled this operator to start moving away from its earlier reliance on microwave-based access technology.

- Epic says that the MCA *'only takes into consideration B2B products provided by Epic and lacks to include and consider product with the same characteristics offered by GO and Melita'* and thus the *'MCA's assessment fails to consider such products...marketed and offered directly by GO and Melita on their respective websites'*.

Further to this, Epic says that retail market share calculations need to take into account B2B connections with GO and Melita and argues that MCA attributes GO's market share drop to Epic's B2B products whilst ignoring any substitution to GO's and Melita's B2B product portfolio. Epic says that taking into account retail market share developments when excluding B2B products *'provides much more credible overview of the operators' retail market shares'*. In this regard, Epic observes that GO accounts to a 55% market share of the local client base. Epic adds that revenue-based market shares need also take into account those revenues generated by GO and Melita for B2B products. Epic also reiterates that the MCA needs to take into account the impact on market share resulting from GO's TI Leased Lines client base.

Finally, Epic says that there is a possibility for ‘*incorrect data submissions*’ by operators, with different data sets being submitted by operators. Epic also seems to imply that usage of data from ad hoc ground research / surveys may also lead to ‘*misalignment*’ of the data given the different interpretations.

The MCA compiled the relevant B2B data for Q1 2022 from GO and Melita, alongside B2B data for Epic. To this effect, the MCA derived the new market share figures for both retail and wholesale markets, based on the new B2B data.

Retail market share by operator, based on number of connections		2017	2018	2019	2020	2021	Q1 2022
GO	Ethernet LLS + WDM + B2B	74%	75%	60%	62%	56%	49%
Melita	Ethernet LLS + WDM + B2B	7%	7%	16%	16%	17%	13%
Epic	Ethernet LLS + B2B	15%	14%	15%	12%	13%	19%
Space Hellas	Ethernet LLS	4%	5%	8%	9%	8%	6%
BMIT	Ethernet LLS	-	-	-	-	5%	4%

Table 10: Operators’ retail market shares – based on connections - as at end of period

Table 10 shows that, taking into account B2B connections for all operators, GO’s market share fell from 74% as at the end of 2017 to 49% at the end of last March. Given that B2B connections are only reported for the end of March 2022, the MCA also outlines how market shares developed without the B2B product category. In this respect, the MCA notes that GO’s market share was down during the same period from 74% to 55% (see Table 7).

Looking at the relevant retail market shares with or without B2B connections, the MCA confirms that GO’s market shares in terms of connections dropped significantly between 2017 and March 2022. Even without taking into account B2B connections, alternative operators would still have managed to win a higher proportion of the local customer base at the expense of GO. These trends clearly underscore GO’s drop in market share since 2017, given competition from two alternative operators and two value-added resellers, which managed to gradually increase their number of connections.

When it comes to retail revenues, the market share trajectory is again on the downside for GO, with this operator seeing its share declining from 34% in 2017 to 22% in the first quarter of 2022. GO’s revenue-based market share has been below the 50% threshold for several years now, and has been confirmed to be the case even when taking into account B2B connectivity and the revenues generated by this product segment.

Retail market share by operator, based on revenues		2017	2018	2019	2020	2021	Q1 2022
GO	Ethernet LLS + WDM + B2B	34%	34%	24%	21%	20%	22%
Melita	Ethernet LLS + WDM + B2B	27%	25%	38%	38%	36%	42%
Epic	Ethernet LLS + B2B	23%	24%	22%	25%	27%	24%
Space Hellas	Ethernet LLS	16%	16%	15%	16%	16%	10%
BMIT	Ethernet LLS	-	-	-	-	2%	2%

Table 11: Operators’ retail market shares – based on revenues

The market share figures presented in Tables 12 and 13 also show alternative operators together accounting for a bigger market share in terms of wholesale connections. In this respect, Melita’s ability to increase market share benefited from the legacy physical access agreement with GO, alongside own investment. Epic also managed to use their network to serve clients with a bigger number of wholesale dedicated capacity connections.

Wholesale market share by operator, based on number of connections		2017	2018	2019	2020	2021	Q1 2022
GO	Self-supplied + pure	77%	72%	63%	68%	66%	57%
Melita	Self-supplied + pure	8%	9%	15%	16%	17%	13%
Epic	Self-supplied + pure	15%	19%	22%	17%	18%	21%

Table 12: Operators’ wholesale market shares – based on connections – as at end of period

Revenue-based market shares further confirm the declining trend for GO, with this operator’s wholesale market share standing at 44% in the first quarter of 2022, down from 54% in 2017.

Wholesale market share by operator, based on revenues		2017	2018	2019	2020	2021	Q1 2022
GO	Self-supplied + pure	54%	53%	45%	45%	46%	44%
Melita	Self-supplied + pure	17%	16%	26%	25%	24%	31%
Epic	Self-supplied + pure	29%	31%	28%	30%	30%	26%

Table 13: Operators’ wholesale market shares – based on revenues

Overall, the MCA considers that there is ultimately substitution from GO to alternative providers, based on observed market share trends at both retail and wholesale level. The observed trends have been consistent since 2017 and the MCA considers that these trends will persist within the timeframe of this review and that alternative service providers will continue to pose a direct competitive constraint on the incumbent GO.

As for the possibility of ‘*incorrect data submissions*’ by operators, the MCA notes that the data submitted by operators is validated internally prior to publication. The MCA considers that the data used throughout the current analysis has been submitted correctly by operators, even in view of the consistency observed for market share figures.

As for the inclusion of data related to TI leased lines, the MCA notes that market share outcomes would have not changed if these products were included in the market. GO’s retail market share on the basis of connections would have gone down from 78% as at the end of 2017 to 50% as at the end of March 2022. When it comes to revenue, GO’s market share would have dropped from almost 40% in 2017 to approximately 30% in the first quarter of 2022. Similar trends would have been observed at wholesale

level, with GO's market share in terms of connections dropping from 82% at the end of 2017 to 58% at the end of March 2022. In terms of wholesale revenues taking into account TI leased lines, GO's market share would have declined from 59% in 2017 to 48% in the first quarter of 2022. The MCA reiterates that it however excluded TI leased lines from the market given that these are no longer commercially available.

- On the replicability of infrastructure, Epic does not agree with the MCA's statement concerning Epic's ability to *'tailor its infrastructure investment to reach most of the sites requiring the supply of wholesale dedicated products and services'*. Epic says that it *'lacks the necessary network reach to provide wholesale dedicated capacity'* and that it is not in a position to *'address market requirements relatively quickly'*.

As already highlighted earlier, the MCA acknowledges Epic's disadvantage to GO when it comes to the ubiquity of its access network infrastructure. Nonetheless, the MCA considers that Epic's position in the provision of dedicated capacity services is today significantly stronger to that observed in 2017. One main consideration in this regard is Epic's reach to existing and potential new clients. In its correspondence with the MCA, Epic confirmed continued investment in certain localities including via deployment of own FTTH infrastructure and ad hoc agreements concerning reach to business districts. Epic has also started deployment of own FTTH infrastructure (including backbone) at the localities of Birkirkara and Balzan, alongside its now material FTTH coverage at the localities of Mosta and Attard. Both Mosta and Birkirkara host a good number of businesses and business districts / centres.

- Epic disagrees with the MCA's reasoning that wholesale revenue-based market shares show that all service providers have similar scale economies. Epic bases its argument on the fact that the MCA did not take into account B2B connections supplied by GO. Epic also argues that wholesale customers and retail clients do not have sufficient countervailing buyer power given that it lacks the necessary infrastructure in various localities and / or given the dependence on GO's physical infrastructure.

The MCA took into account developments both in terms of the number of connections and in terms of revenues. Both indicators are relevant in the analysis in order to ensure a proper interpretation as to how competition dynamics are evolving. The main observation in this respect is that the market standing of both Melita and Epic is currently much stronger than was the case in 2017, and more particularly so in the case of revenues. Melita and Epic are active on the merchant market, supplying value-added resellers, alongside GO whilst competing directly with this operator at the retail level. The analysis therefore takes into account the fact that whilst numbers in terms of connections still somewhat favour GO, Melita's and Epic's strength lies at their ability to conclude/maintain contracts with clients of a high margin. This explains why Melita's wholesale revenue-based market share improved from 17% in 2017 to 31% in the first quarter of 2022 and that of Epic saw a decline. However, the MCA considers it relevant to underline that wholesale dedicated capacity revenues generated by Melita and Epic

in the first quarter of 2022 together accounted for 56% of all wholesale revenues generated in this segment.

This means that alternative operators may be serving customers with the highest bandwidth requirements, thus positioning better than GO in terms of scale economies for the high-end client segment. The MCA has also taken into account the new data submitted by GO and Melita with respect to B2B connections when referring to the revenue-based market shares highlighted above. Workings with the new figures confirm the MCA's reasoning on the scale economies factor in the market under investigation

The MCA also reiterates its view that that several retail customers have a degree of buyer power as they purchase large bandwidth volumes and at times from the different operators, the main reason being redundancy. The ongoing shift to higher bandwidths and the strong position of alternative operators in this segment also suggests that customers pose a credible threat to switch supplier if prices rise or quality falters. The MCA considers that alternative operators, including Epic, are in fact able to compete directly with GO in the dedicated capacity segment.

- Ultimately Epic considers that *'GO should continue to be considered as enjoying a position equivalent to dominance'* and that therefore *'the existing obligations that are currently mandated on GO ... are still relevant and shall remain in place'*. Epic also does not agree with the 90-day time window for the withdrawal of existing regulations after the publication of the final decision. Epic calls for *'Such period ... to allow operators using currently regulated GO's leased lines to find alternative access to service their customers'* and that *'the withdrawal of existing obligation shall not impact the current contracts with existing customers and the regulatory wholesale obligations imposed on GO shall remain applicable in relation to such customer until their respective retail agreements expire'*.

For the reasons already provided earlier in this document, the MCA does not share Epic's views that the market under investigation is not competitive and that regulatory intervention is therefore required. Epic and Melita also do not depend on GO's regulated wholesale dedicated capacity services and are well positioned to largely address retail and wholesale market demand via their own infrastructures. The MCA notes the ability of alternative service providers, namely Melita and Epic, to compete directly with GO on the merchant market, with the supply of wholesale dedicated capacity to value-added resellers. The MCA also considers that alternative operators to GO have in fact managed to extend their physical networks to connect new customers.

Market share developments are also indicative in this respect. GO's wholesale market share at the end of March 2022 (accounting for both self-supply and pure wholesale) stood at 57% based on the number connections, down from 77% at the end of 2017.

Meanwhile, GO's revenue-based market share was down to 47% compared to 54% in 2017. The market shares of alternative operators improved during the same period.

5.9 A competitive wholesale market

The MCA has given careful consideration to several criteria upon which it could have determined SMP. Nonetheless, the MCA's findings underline a wholesale dedicated capacity market that exhibits intensifying competition, in view of the ability of alternative operators to build market share. Furthermore, wholesale and retail customers of dedicated capacity are generally satisfied with the service and tend to be large players with buying power.

- There are currently three operators – GO, Melita and Epic – supplying wholesale dedicated capacity services, for own self-supply purposes and / or to third party resellers on the merchant market. These three network operators are meeting the needs of the market with Ethernet, WDM and B2B products. GO is offering Ethernet and WDM connectivity alongside B2B connectivity, Melita is offering Ethernet and B2B connectivity although it could also offer connectivity via WDM and Epic is offering Ethernet connectivity whilst self-supplying B2B products.
- The potential for competition remains strong, given the presence of three operators with deployments of access infrastructure close to customers' premises. The MCA considers that alternative operators to GO have in fact managed to extend their physical networks to connect new customers.
- On a general level, dedicated capacity customers have the option to choose from three operators, both at retail and wholesale level. At the retail level, alternative operators gained market share at the expense of GO, and a good number of customers are connected to two or three operators for redundancy purposes. In addition, GO, Epic and Melita are active at the wholesale level, selling wholesale dedicated capacity to value added resellers and to each other at the merchant market. Both retail and wholesale customers have strong countervailing buyer power.

The MCA notes that, given the characteristics of the examined market, none of the local operators can afford to engage in anti-competitive behaviour by increasing the price of their services above the competitive level or decrease the level of their service quality without losing customers to competitors. All operators have sought their own approach to extend their networks closer to the customer and are offering wholesale dedicated capacity on a national scale, hence customers can switch between operators in the event of, say, an uncompetitive price increase. Any such price increase would therefore result in a shift of customers from that operator to the competition.

The MCA therefore concludes that this market is structurally conducive to competition and therefore customers are protected through market forces. Consequently, there is no scope for ex ante regulatory intervention. The MCA deems it very unlikely for these factors to change

within the timeframe of this review and therefore concludes that there is limited scope for competitive shortcomings in the market under investigation in the foreseeable future.

6 Regulatory Implications

6.1 Background to regulatory approach

In accordance with regulation 55(1) of the ECNSR, where an operator is designated as having significant market power (SMP) on a relevant market, either individually or jointly with others, the MCA is obliged to impose on such operator appropriate regulatory obligations, referred to in regulations 56 to 61 and 63 to 67 of the ECNSR, or to maintain or amend such obligations where they already exist.

However, in accordance with regulation 54(6) of the ECNSR, where the MCA concludes that a finding of dominance can no longer be ascertained in an already regulated market and that such market no longer justifies the imposition of regulatory obligations, it is to withdraw such obligations placed on undertakings. The withdrawal notice shall be subject to an appropriate period of notice to be given to all parties affected by such withdrawal. The MCA considers that GO no longer holds SMP in the market under investigations and that therefore the SMP designation on GO has to be withdrawn.

6.2 Existing obligations

The last market review carried out with respect to the wholesale provision of dedicated capacity in Malta (then referred to as wholesale high quality access and connectivity) was carried out in 2016, with the relevant decision published in January 2017. Under this review and the relevant Decision, the MCA established that GO held significant market power in the provision of wholesale high quality access and connectivity in Malta. To this effect, the MCA had therefore concluded that the relevant wholesale market was not effectively competitive.

Given the position of dominance held by GO, the MCA imposed the following ex ante regulatory remedies:

- an obligation to provide access to/and use of specific network facilities;
- a transparency obligation;
- an obligation of non-discrimination;
- price control & cost accounting; and
- accounting separation.

6.3 Withdrawal of regulatory intervention

With reference to the evidence presented in Chapter 5 on the SMP assessment, the MCA concludes that no undertaking enjoys SMP in the wholesale market for the provision of dedicated capacity in Malta. The MCA therefore considers that the relevant market is effectively competitive and expected to remain structurally so within the five-year timeframe of this review.

Therefore, the MCA does not deem it justifiable to maintain regulatory obligations on GO (listed in Section 6.2) and its draft decision is therefore to withdraw such obligations governing this operator. This withdrawal shall however be implemented without prejudice to any other general obligations at law or remedies emanating from other market analysis decision.

The MCA underlines that whilst all obligations are being withdrawn from the wholesale market concerning the provision of dedicated capacity in Malta, such withdrawal shall not affect existing wholesale obligations imposed on GO through other decisions, particularly the wholesale remedies imposed under the decision entitled '*Market 4 – Wholesale Unbundled Infrastructure Access Markets*' published on the 6th March 2013³⁷.

In order to have a smooth transition from a regulated market to a non-regulated market, the MCA shall withdraw the existing obligations within 90 calendar days following the publication of the final decision concerning these markets. This is in accordance with regulation 54(7) of the ECNSR, which calls for an appropriate period of notice for the withdrawal of existing obligations. The MCA believes that this notice period is justified and sufficient to allow all stakeholders to make necessary arrangements for the new regulatory approach to the wholesale market under investigation.

6.4 Submissions to consultation concerning regulatory approach

GO and Melita agree with the MCA's conclusion of a wholesale dedicated capacity market that is competitive and thus the proposed withdrawal of regulatory obligations currently enforced on GO.

The Office for Competition also took note of the MCA's proposal to withdraw regulatory obligations given the finding of a competitive market whilst highlighting its view that the MCA continues to monitor market developments, as the MCA itself outlined in Section 6.5 to this document.

Epic raised a number of points on the MCA's proposed deregulation of the market under review. Epic says that the MCA's conclusion that no operator holds SMP in the market rests on '*incomplete data or certain assumptions*' as intimated by this operator in its submission. Epic adds that the current regulatory of GO should therefore be maintained '*to discourage any uncompetitive behaviour that GO may engage in*'. Epic also says that it '*does not agree with the MCA that ninety (90) calendar days following the publication on the final decision allows for a smooth transition from a regulated market to a non-regulated market*' and that '*such period should be extended to allow operators using currently regulated GO's leased lines to find alternative access to service their customers*'. Additionally, Epic argues that the

³⁷ Link to relevant MCA Decision: <https://www.mca.org.mt/sites/default/files/decisions/final-decision-market-analysis-of-the-wholesale-infrastructure-access-market-market-4-060313.pdf>

'withdrawal of existing obligation shall not impact the current contracts with existing customers and the regulatory wholesale obligations imposed on GO shall remain applicable in relation to such customer until their respective retail agreement expire'.

Vanilla Telecoms also raised the point that some form of ex ante regulatory intervention needs to be maintained in the wholesale market under investigation, particularly in the area of prices charged for access.

The MCA considers that it has addressed in detail the concerns raised by Epic in view of the data used throughout this market analysis. The MCA has gathered all the necessary data from the three operators and service providers to ensure a proper assessment of market developments, based primarily on market share trends. The figures submitted by GO and Melita with respect to B2B connectivity confirmed that GO's market shares have been on a downward trend since 2017, both in terms of the number of connections and in terms of revenues. This, mainly as a result of Epic and Melita managing to compete directly with GO and to build market share at the expense of this operator. The current market circumstances leave no scope for GO to behave in an uncompetitive manner, as alternative operators Epic and Melita are in a position to constrain such behaviour, sufficiently quickly. To this effect, the MCA considers the wholesale market for the provision of dedicated capacity in Malta as competitive.

The MCA does acknowledge however Epic's concerns with respect to the potential impact of deregulation on operators using GO's wholesale dedicated capacity services and the current agreements/contracts with the existing customers. In this respect, the MCA understands that the proposed deregulation should not be interpreted by GO as a means to exit/default any agreement/contract that is currently in force with other operators on the basis of the current ex ante regulatory measures. GO must entertain its obligations pertaining to any such agreement/contract until expiry, even if such expiry would materialise after the lapse of the 90-day time-window following the publication of the final decision.

As for the comments by Vanilla Telecoms, the MCA considers that it has already explained in detail as to why no wholesale regulatory intervention can be maintained in the market under investigation. Ex ante regulatory measures would have been contemplated subject to the finding of an SMP. This is however not the case in the market under investigation, given the ability of alternative operators to pose a strong direct competitive constraint on GO.

6.5 Monitoring market developments

The MCA considers that it is necessary to keep a close watch on the competitive progress of the wholesale market identified in this review and the related retail market. To this end, the MCA intends to analyse market trends and developments on an ongoing basis and remains committed to issue a new market analysis at any point in time in response to any significant change in market conditions.

In accordance with its powers at law, the MCA is also reserving the right to change any of the above mentioned regulatory obligations following changes in the market structure.

7 Annex



Mizzli House, National Road, Blata l-Bajda FMR9010, Malta
www.mccaa.org.mt
+356 2395 2000

Office for Competition

1 November 2022

Mr Patrick Vella
Chief, Policy and Planning
Malta Communications Authority
Valletta Waterfront, Pinto Wharf,
Floriana, FRN1913
Malta.

Dear Mr Vella,

Re: MCA National Consultation on the analysis of the wholesale market for the provision of dedicated capacity in Malta (reference: MCA/C/22-4730)

This letter is in reference to the consultation document published by the Malta Communications Authority (MCA) on 30th September 2022 regarding its analysis of the wholesale market for the provision of ‘dedicated capacity’ in Malta.

The Office for Competition (henceforth ‘the Office’) understands that the analysis presented in the above-identified document relates to services that go beyond wholesale mass market connectivity because they typically target clients that require high and symmetrical upload and download speeds, dedicated connectivity and capacity, redundancy and high quality of service metrics, as well as high quality of service such as uninterrupted customer support and short repair times.

The Office notes that, back in 2017, the MCA had determined that the provision of wholesale dedicated capacity services in Malta were provided by three network operators (GO, Melita and Epic) that utilised these wholesale services to establish a retail market presence; and a reseller was also active at the retail level (Space Hellas). Notwithstanding the presence of multiple operators at the retail level, at the time, the MCA considered that the market was largely dominated by the operator GO and their competition assessment effectively determined that this operator had Significant Market Power (SMP) in the relevant wholesale market.

The Office also notes that the MCA is now revisiting its 2017 position and that it has carried out an analysis that takes into account how the market for wholesale dedicated capacity has changed. The updated analysis is presented in the consultation document and concludes that the wholesale market concerning the provision of dedicated capacity in Malta is effectively competitive and does not necessitate ex ante regulatory intervention. The MCA is therefore proposing to withdraw regulatory obligations that are currently imposed on GO via the MCA’s 2017 decision over a 90-day time window.



Mizzi House, National Road, Blata l-Bajda HMR9010, Malta
www.mccaa.org.mt
+356 2395 2000

The Office is of the view that the analysis presented in the consultation document follows standards that are in line with best practice for defining relevant markets in competition analysis.

To this end, the Office takes note of the findings and proposals in the consultation document on the analysis of the wholesale market for the provision of dedicated capacity in Malta, and is of the view that MCA should continue to monitor any developments in the relevant market.

The views of the Office are being submitted in the context of the specific provisions of the revised SMP guidelines relating to the relationship between markets defined for the purpose of the ex-ante regulation vis-à-vis competition law enforcement. The Office reserves the right to re-examine any of the issues underlying MCA's recommendations in light of evidence and facts that may arise in cases that it may assess in the future.

Yours sincerely,



Godwin Mangion
Director General



MALTA COMMUNICATIONS AUTHORITY

-  (+356) 2133 6840
-  info@mca.org.mt
-  www.mca.org.mt
-  Valletta Waterfront, Pinto Wharf,
Floriana FRN1913, Malta