

# Market Review 2019

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*Review of the Isle of Man Fixed Line Telecommunications  
Markets*

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## Foreword

- This consultation paper invites views on proposals for the definitions of relevant telecommunications markets, Significant Market Power determinations, and proposed obligations to remedy identified competition issues. Provisions for conducting market reviews and placing additional obligations on operators with significant market power are contained within the licences issued under Section 5 of the Telecommunications Act 1984 (of Tynwald).
- This document also includes draft Decision Notices which set out the proposed final determinations and additional obligations, and this constitutes a notification of proposed determinations as required in each operators' Licence. The Communications Commission (the Commission) will consider representations before publishing final Decision Notices. The draft Decision Notices can be found in the Annexes 2 to 8.
- The Commission is inviting written responses by Friday, 17th May 2019. When submitting any views please indicate if you are responding on behalf of an organisation. To ensure that the process is open and transparent, responses can only be accepted if you provide your name with your response. Unless specifically requested otherwise, any response received may be published either in part or in their entirety. Please mark your response clearly to confirm if you wish your response and name to be kept confidential. Confidential responses will be included in any statistical summary and numbers of comments received.
- If you think your response should be kept confidential, please specify which part(s) this applies to and explain why. Please clearly mark any confidential sections. If someone asks us to keep part or all of their response confidential, we will treat this request seriously and try to respect it. However, sometimes the Commission may be required to publish all responses, including those that are marked as confidential, in order to meet legal obligations.
- All information in responses, including personal information, may be subject to publication or disclosure in accordance with the access to information regimes (these are primarily the Freedom of Information Act 2015 and the Data Protection Act 2018).
- An automatic confidentiality disclaimer generated by your IT system will not, of itself, be regarded as binding.

- The purpose of this consultation is not to be a referendum, but an exercise to gather sufficient evidence with which to make the most informed decision possible. In any consultation exercise the responses received do not guarantee changes will be made to the Commission's proposals. Responses will be fully considered before the Commission publishes its final Decision Notices, which will constitute the market power determinations and remedies. As such it is important for respondents to ensure they have included sufficient rationale, objective justification, and/or evidence in their responses.
- If you want to discuss the issues and questions raised in this consultation, or simply seek clarification, please contact the Commission.
- This consultation can be viewed on the Government Consultation Hub <https://consult.gov.im> or through the Commission's web page [www.iomcc.im](http://www.iomcc.im)

## **Next Steps**

- Following the closing date all responses will be considered. The Commission will prepared and publish a summary of the responses and a final Decision Notice which will set out the final determinations and Directions to comply with any additional obligations, or remedies.

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# 1 Introduction

## 1.1 Background

- 1.1. The Commission is responsible for assessing whether the telecommunications markets in the Isle of Man are effectively competitive in accordance with the Island's regulatory framework. This framework creates an approach to regulation which is specific to the Isle of Man, and which both ensures competition in the provision of services, and ensures continuing infrastructure investment on the Island. The regulatory approach focuses on the Isle of Man's priorities and size of jurisdiction. The background to this regulation can be found in Legislative Basis.
- 1.2. The Commission conducted a consultation and market review of the telecommunications markets on the Isle of Man in 2011 with the "Response to Consultation and Notification of Market Power Determinations Decision Notice[s]" being published in 2012. These documents are available to view on the Commission's website<sup>1</sup>. This is the second round of market reviews.
- 1.3. The review of the telecommunications markets set out to identify the competitive conditions prevailing in a market by assessing systematically the competitive constraints which are faced by undertakings (licensees) in the market. A market review commences by defining a market, which is then analysed to assess the degree of effective competition.
- 1.4. In 2017 the Isle of Man Government released its Programme for Government, covering the period 2016-2021<sup>2</sup>. The Commission was pleased to note that telecommunications featured within this document as a priority. Relevant statements within the Programme for Government include:
  - a. Set out a more active role for the Communications Commission in the pricing and quality of our telecoms provision (page 7);
  - b. Ensure we are a digital Island, ready for new technologies like 5G, so we remain competitive now and in the future (page 7);
  - c. We have more responsive legislation and regulation (page 8);

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<sup>1</sup> <https://www.iomcc.im/telecoms/market-reviews/>

<sup>2</sup> <https://www.gov.im/media/1354840/programme-for-government-210917.pdf>

- d. Introduce new legislation for national telecommunications which creates a more effective regulatory framework in this area (page 9);
  - e. Consult on a minimum 10Mb universal service obligation for broadband<sup>3</sup> (page 16); and,
  - f. Modernise the Telecommunications Act and work with industry to review associated mechanisms so that consumers are better served (page 17).
- 1.5. In addition to the Government policy commitments above, a National Telecommunications Strategy was also unanimously agreed by Tynwald in October 2018<sup>4</sup>.
- 1.6. The legal basis for the Commission issuing licences for telecommunications is set out in Section 5 of the Telecommunications Act 1984 (of Tynwald)<sup>5</sup> (the Act). Section 1 of the Act sets out the general duties of the Commission.
- 1.7. Each licensee is required to abide by a licence condition called the "Fair Trading Condition" which is contained within the individual licences. This sets out the Commission's ex-post competition powers. In addition to this, there is a licence condition termed "Procedure for Market Power Determinations" which sets out in detail the process that the Commission should follow in making a determination that a licensee has Significant Market Power (SMP). It is this licence condition which sets out the ex-ante powers available to the Commission, which includes the ability to impose proportionate and objectively justified remedies onto a licensee designated with SMP. Consolidated versions of the licences, which include both of these provisions, are all published on the Commission's website<sup>6</sup>.
- 1.8. Ex-ante regulation imposes obligations on providers designated as having SMP and aims to address market failures. Ex-post competition measures on the other hand, serve to address or remove concerns in relation to illegal agreements, concerted

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<sup>3</sup> The Commission notes that this objective has since been superseded by the National Telecommunications Strategy, specifically in relation to the National Broadband Plan.

<sup>4</sup> <http://www.tynwald.org.im/business/opqp/sittings/20182021/2018-GD-0062.pdf>

<sup>5</sup> [https://legislation.gov.im/cms/images/LEGISLATION/PRINCIPAL/1984/1984-0011/TelecommunicationsAct1984\\_4.pdf](https://legislation.gov.im/cms/images/LEGISLATION/PRINCIPAL/1984/1984-0011/TelecommunicationsAct1984_4.pdf)

<sup>6</sup> <https://www.iomcc.im/licensing/full-and-internet-service-provider-consolidated-licences/>



practices, or unilateral abusive behaviours which restrict or distort competition. An SMP finding therefore, does not indicate abuse of that position. It merely identifies that the provider has and will have sufficient market power (and therefore the ability) to behave to an appreciable extent, independently of its competitors, its customers, and ultimately businesses and consumers.

- 1.9. The Commission consulted in 2015 on incorporating the SMP provisions into the new Communications Bill and removing these provisions from the licences. The primary purpose of this Bill is to update and replace the Telecommunications Act 1984 (of Tynwald) and to strengthen the powers available to the Commission by allowing for a suite of fines and penalties as well as placing the SMP provisions on the face of the Bill. The Bill also gives the Commission stand-alone competition powers. The Communications Bill has entered the Legislative Branches of Tynwald and the Commission expects to begin a phased implementation of the new legislation in 2020. The draft Bill and explanatory notes are available on the Tynwald website<sup>7</sup>.

## 1.2 Approach

- 1.10. The Commission has maintained its approach from the first round of market reviews, which involved adapting the methodology recommended by the European Commission (EC) for defining markets. Whilst the Commission is not legally obliged to follow EC recommendations, this constitutes a well-established process and is considered best practice. The market definition methodology is set out by the EC in its SMP Guidelines, and this review has adapted the EC methodology to the particular circumstances of the Isle of Man.
- 1.11. The approach of the Commission is to treat the EC Guidelines<sup>8</sup> as best practice in terms of their methodology, and to implement them in a pragmatic way which recognises the specificity of the Isle of Man. The Commission has also taken into account work carried out by European National Regulatory Authorities (NRAs) since the publication of these Guidelines, particularly where the methodology has been developed, and where the EC has engaged in dialogue with NRAs about the implementation of this methodology.

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<sup>7</sup> <http://www.tynwald.org.im/business/bills/Pages/default.aspx>

<sup>8</sup> [https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52018XC0507\(01\)&from=EN](https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52018XC0507(01)&from=EN)

1.12. The approach to the market review has also taken into account the provisions contained within "Additional Obligations on Operators with Significant Market Power", part of the licences issued under Section 5 of the Act which outlines the procedure to be followed in coming to a potential determination of SMP.

1.13. Should any undertaking (licensee) be found to have SMP, defined as the ability to behave independently of competitors, suppliers, and ultimately businesses and consumers in the market, then there is a case for the use of regulation designed to address any actual or potential abuse of dominance. Provisions for conducting market reviews and placing additional obligations on operators with SMP are contained within licences issued under Section 5 of the Act.

1.14. The procedures to be followed by the Commission for identifying relevant markets and determining any SMP are set out in Part 6 of Manx Telecom's (MT) Licence, Part 3 of the Licence granted to e-lan Communications Limited (e-lan) and Part 4 of the Licences issued to Sure (Isle of Man) Limited (Sure), Domicilium (IOM) Limited (Domicilium), Wi-Manx Limited (Wi-Manx), Continent8 Technologies PLC (Continent8) and BlueWave Communications Ltd (BlueWave).

1.15. The EC's current recommendation is that the following markets should be considered as susceptible to ex-ante regulation:

**Market 1:** Wholesale Call Termination on individual public telephone networks provided at a fixed location;

**Market 2:** Wholesale Voice Call Termination on individual mobile networks;

**Market 3a:** Wholesale Local Access provided at a fixed location;

**Market 3b:** Wholesale Central Access provided at a fixed location for mass-market products; and,

**Market 4:** Wholesale high-quality Access provided at a fixed location.

1.16. In practice, many EU member states continue to find a greater number of markets susceptible to ex-ante regulation than is set out in the Recommendation.

1.17. The Commission has separately assessed fixed and mobile markets. This review is concerned with fixed markets and a separate review will take place on the mobile markets at a later date. The review begins by considering the context, which is the development of the Retail and Wholesale Fixed Markets, before going on to the formal

definition of product and geographic markets, and then an evaluation of their susceptibility to ex-ante regulation. A competition assessment is then carried out for these markets deemed susceptible to ex-ante regulation, concluding with a determination as to whether any operator or operators have SMP. Where there is an SMP determination, the Commission then assesses the appropriate remedies.

- 1.18. The Commission has endeavoured to ensure that stakeholders remain informed throughout the market review process. A dedicated page was created on the Commission's website<sup>9</sup> which has been updated as necessary. This page also contains a list of frequently asked questions together with the relevant answers. The market review process was split into 10 separate stages and each of these are noted below. This report forms part of STAGE 8.

STAGE 1 – Preparatory work

STAGE 2 – Calls for inputs and business industry interviews

STAGE 3 – Data requests to licensed operators

STAGE 4 – Analysis of data requests

STAGE 5 – Market definition and SMP assessment

STAGE 6 – Drafting appropriate remedies

STAGE 7 – Drafting consultation document and decision notice

STAGE 8 – Consultation period on the review outcomes

STAGE 9 – Publication of final decisions

STAGE 10 – Implementation of final remedies

- 1.19. The Commission recognises the importance of seeking feedback and understanding the views of the Licenced Operators (LOs) operating within the telecommunications markets and acknowledges the fact that the LOs have been involved throughout this review process. Regular updates were provided at the LO Forum meetings alongside detailed presentations providing opportunities for all LOs to offer input, ask questions and raise queries or concerns throughout this process.

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<sup>9</sup> <https://www.ioncc.im/telecoms/market-reviews/2018-market-reviews/>

## 2 Market Overview

### 2.1 Introduction

2.1. Since the time of the last market reviews this section considers the changes which have taken place to the market structure, and to the trends associated with the provision of an access connection to a customer. It then considers the types of services offered over that connection. The aim of this section is to provide context for the market review analysis.

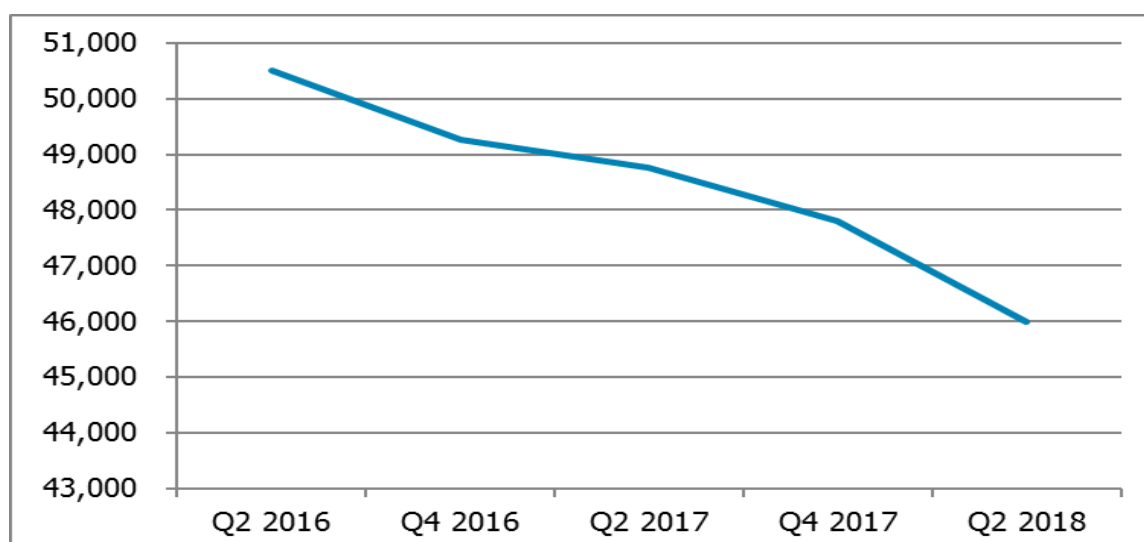
2.2. The below table summarises the retail products available from LOs<sup>10</sup>.

	BlueWave	Domicilium	Sure	Manx Telecom	Wi-Manx	Continent 8
<b>Retail Fixed Access</b>						
PSTN Line Rental	No	No	Yes	Yes	Yes	No
ISDN Fixed Access	No	No	Yes	Yes	No	No
Fixed Wireless Access	Yes	Yes	No	No	No	No
Fibre Access	No	Yes	Yes	Yes	Yes	No
<b>Retail Fixed Broadband Technology</b>						
ADSL Broadband	No	Yes	Yes	Yes	Yes	No
VDSL Broadband	No	Yes	Yes	Yes	Yes	No
FTTP Broadband	No	Yes	Yes	Yes	Yes	No
FWA Broadband	Yes	No	No	No	No	No
<b>Retail Fixed Calls</b>	No	No	Yes	Yes	Yes	No
<b>Leased Lines</b>	Yes	Yes	Yes	Yes	Yes	Yes
<b>Retail Fixed Bundles</b>						
Line Rental + Fixed Calls Bundles	No	No	Yes	No	No	No
Line Rental + Broadband Bundles	No	No	Yes	No	No	No
Line Rental + Calls + Broadband Bundles	No	No	Yes	No	No	No
Line Rental + Mobile Bundles	No	No	Yes	No	No	No
Line Rental + Calls + Mobile Bundles	No	No	Yes	No	No	No
Line Rental + Broadband + Mobile	No	No	Yes	Yes	No	No
Line Rental + Calls + Broadband + Mobile	No	No	Yes	Yes	No	No

<sup>10</sup> Broadly speaking the licences of Telecommunications operators fall into two types: Full Telecommunications Licences, which allow for the provision of telecommunications services of all kinds on Island; and ISP Licences which allow the provision of Internet based services. MT, Sure, Wi-Manx and BlueWave have full Telecommunications Licences. Continent 8 and Domicilium have ISP Licences.

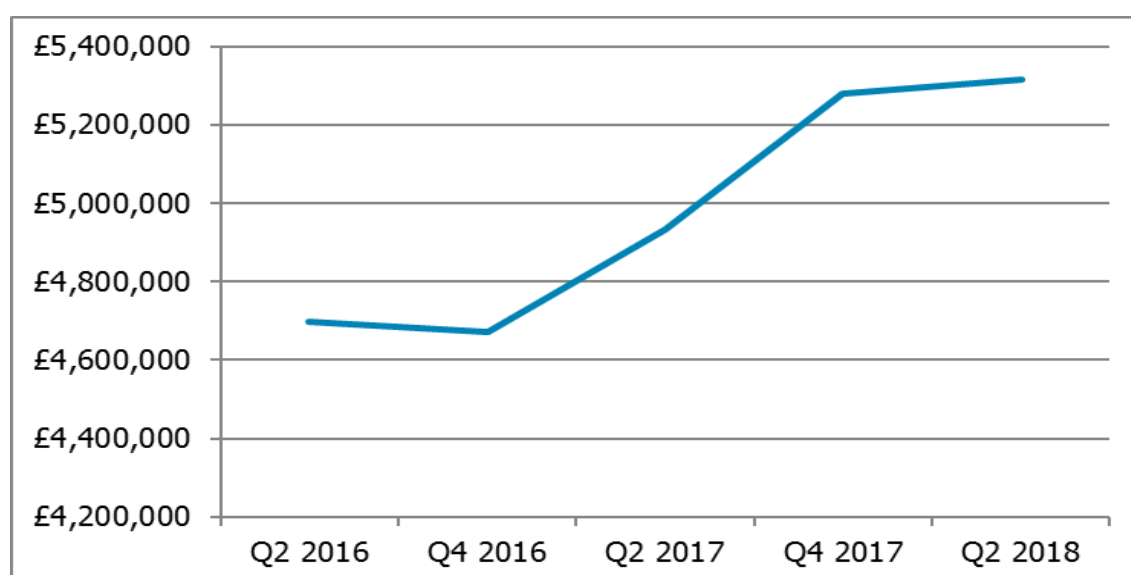
## 2.2 Retail access

- 2.3. A retail customer may access the public telephone network from a fixed location through the copper network (PSTN and ISDN), a fibre connection, or Fixed Wireless Access (FWA). Since the time of the last review, two new wholesale access products have been introduced. Wholesale Line Rental (WLR) has been made available, and LOs can offer Retail Fixed Access using WLR or over their own infrastructure. Fibre To The Premise (FTTP) is an access product offered over fibre, and can be used to provide retail customers with a range of retail services including broadband and voice services.
- 2.4. In the Isle of Man, Retail Fixed Calls are always bundled with Retail Fixed Access. Wholesale Carrier Pre Select (CPS) has been superseded by WLR, with CPS being formally withdrawn from wholesale supply in 2016. With CPS, a retail customer could buy calls separately from line rental, but with WLR, access and calls are not available separately. MT Retail (MTR) and Sure offer Retail Fixed Access over PSTN and ISDN, and BlueWave and Wi-Manx offer access services to consumers. FTTx services have very recently been introduced, and MTR and Sure reported subscribers for FTTP services in the last quarter of the data submission. Figure 1 shows overall subscriptions to Retail Fixed Access, where the number of fixed line subscribers has been steadily declining each quarter.



**Figure 1: Total Retail Fixed Access Market Subscribers**  
(Source: 2018 Market Review Data Collection)

- 2.5. Breaking down the market by type of access, the most dramatic decline is in ISDN access, reflecting that this technology is coming to the end of its life, and customers are migrating to alternatives. The number of PSTN subscribers is now around 5% lower than in mid-2016. The number of FWA subscribers has increased over the last two years, and is now around 15% higher than in mid-2016. Fibre access was introduced in Q1 2018 and as such, at the time of this review, subscriber numbers were negligible. However, it is noted that subscriber numbers have seen a marked increase throughout the second half of 2018.
- 2.6. Revenue trends for Retail Fixed Access are shown in Figure 2. They indicate that, although the number of subscribers is decreasing, revenue has been increasing. One possible explanation for this may be the increase in line rental for PSTN access which was introduced by both MT and Sure, however there may be other factors that have not been considered as part of this review.



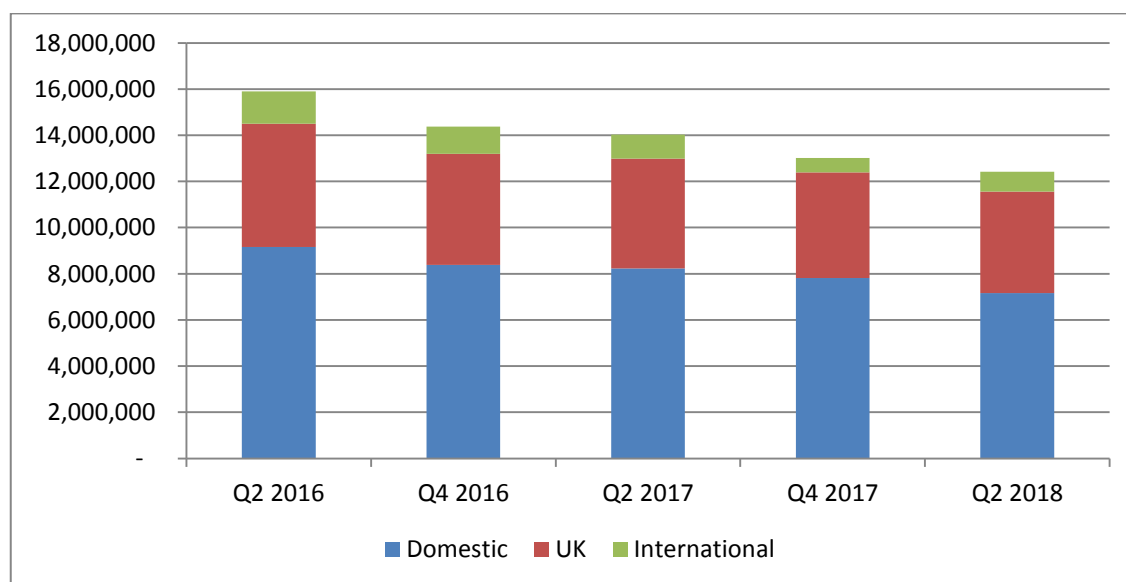
**Figure 2: Total Retail Fixed Access Market Revenue**

*(Source: 2018 Market Review Data Collection)*

- 2.7. Once a customer has access to the fixed network, they are able to make use of services running over that network. These services may be purchased separately, or may be purchased as part of a bundle. The key retail services discussed below are fixed voice calls and retail fixed broadband.

## 2.3 Retail calls

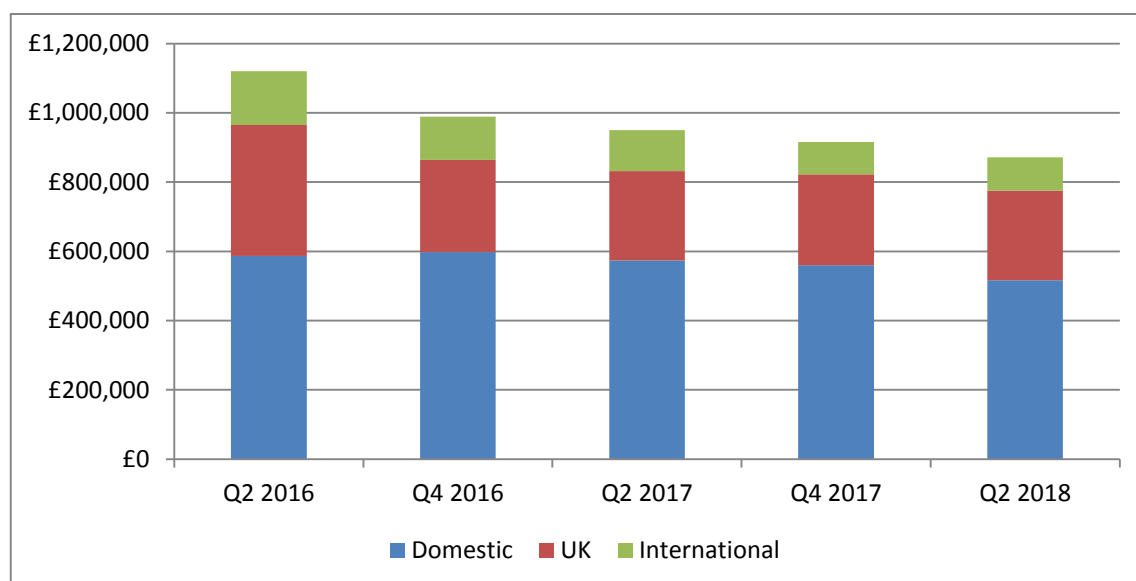
- 2.8. A customer at a fixed location can make a voice call over any of the access types discussed above. Circuit switched voice calls (typically this refers to traditional voice calls over copper or Plain Old Telephone Service (POTS)) can be made over the PSTN and ISDN. Where the customer also has a broadband connection (xDSL, fibre or FWA), managed and unmanaged VoIP calls can be made.
- 2.9. At present, MT, Sure and Wi-Manx provide circuit switched voice calls to retail customers. All ISPs are able to offer VoIP calls, but only fully licensed operators have direct access to IOM 01624 numbers.
- 2.10. Overall, there is a continuing decline in the volume of traditional voice calls. Figure 3 shows trends in the volume of fixed voice calls originating in the Isle of Man. Call volumes to all destinations (domestic, UK and international) are declining quarter on quarter. Between Q2 2016 and Q2 2018 call minute volumes reduced by 22% for domestic calls, 17% for UK calls and 39% for international calls. Overall, this equates to a reduction of 22%.



**Figure 3: Fixed Call Minutes by Destination**  
(Source: 2018 Market Review Data Collection)

- 2.11. The decline in call volume is matched by a decline in call revenue, and again this applies for calls to domestic, UK and international numbers. As shown in Figure 4, between Q2 2016 and Q2 2018, domestic call revenue declined by 12%, UK calls by

32% and international calls by 38%. Overall, this equals a 22% decline in overall call revenue during that period.



**Figure 4: Fixed Call Revenue by Destination**

*(Source: 2018 Market Review Data Collection)*

## 2.4 Retail fixed broadband

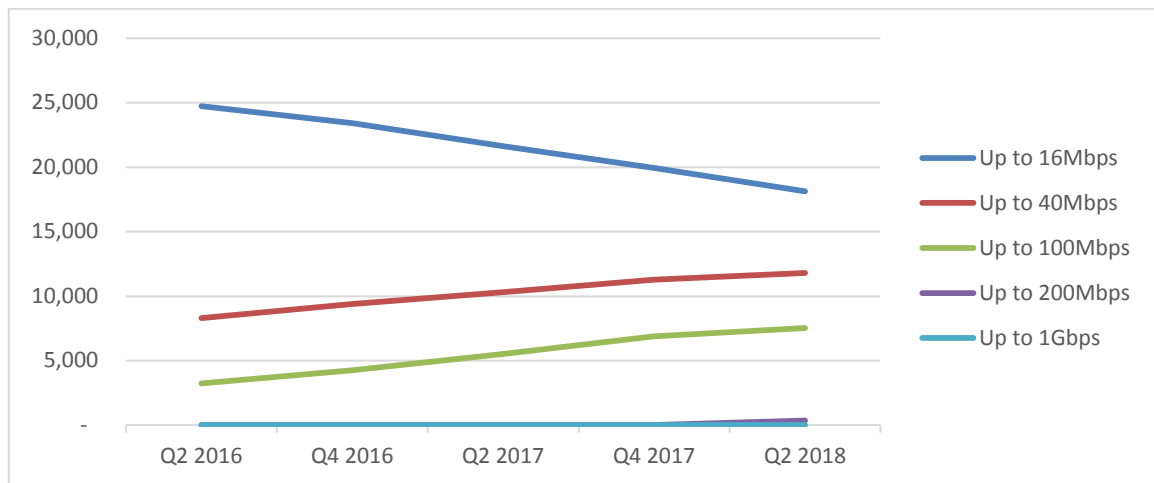
2.12. In the Isle of Man there are five providers offering retail broadband services at a fixed location. These are BlueWave, Domicilium, MT, Sure, and Wi-Manx. Asymmetric Digital Subscriber Line (ADSL) allows for internet access over the copper telephone line. Very-high-bit-rate Digital Subscriber Line (VDSL) provides a faster connection than ADSL by utilising fibre to the cabinet, and copper to serve the final length into consumer homes. Vectoring, which offers end users with FTTC products an increased download speed if they are within 2.5km of the cabinet, was also rolled out during 2017. Most recently, FTTP services have been launched, which provides a fibre connection from the exchange all the way to the home, and offers download speeds up to 1Gbps. The final technology available at a fixed location is Fixed Wireless Access (FWA), which in essence uses a radio link in place of the fixed line to provide services.

2.13. Domicilium, MT, Sure and Wi-Manx all offer ADSL and VDSL services. At the time of collecting data, MT and Sure offered retail FTTP, which could provide broadband over fibre. Wi-Manx now also offers retail FTTP, and BlueWave offers broadband over FWA.

2.14. Broadband subscriber numbers have been steadily increasing, from almost 37,000 in Q2 2016 to almost 38,400 in Q2 2018, which is equivalent to a 4% increase.

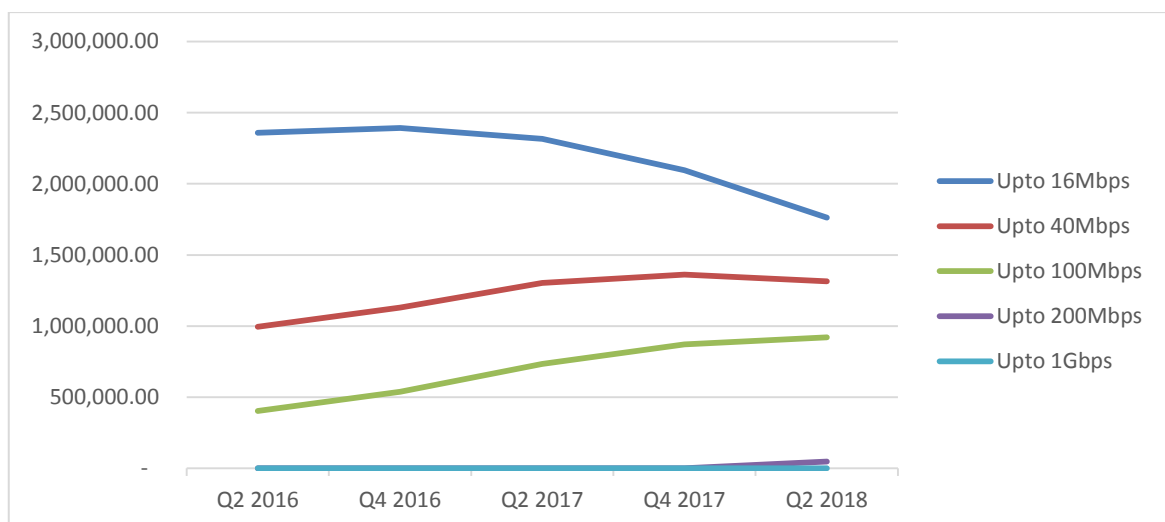


However, as shown in Figure 5, the number of subscribers of Broadband up to 16Mbps has fallen from 68% to 48% of all subscribers over this period.



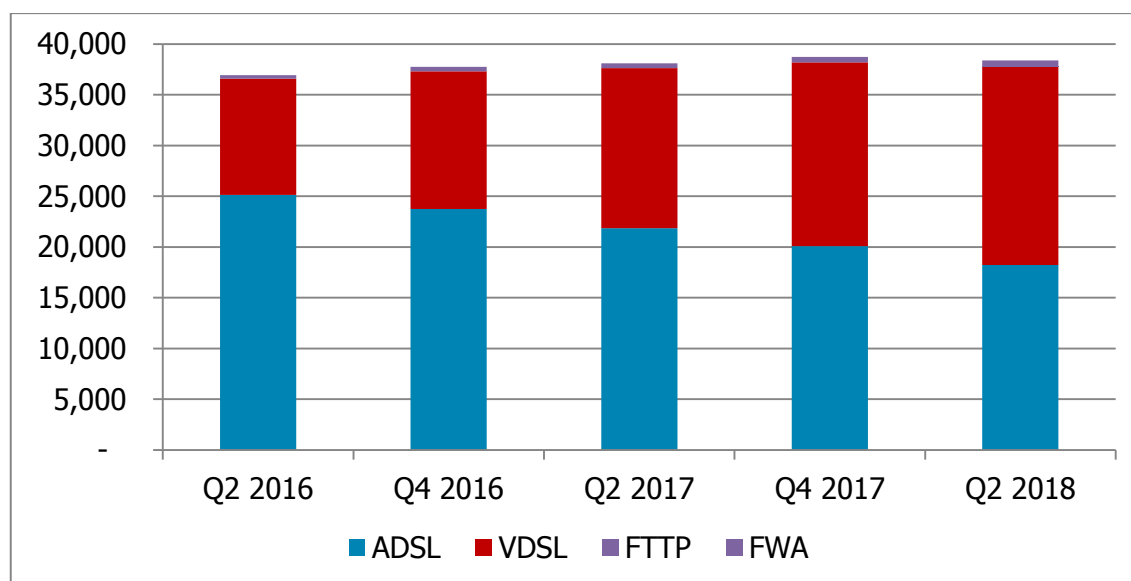
**Figure 5: Market Broadband Subscribers**  
(Source: 2018 Market Review Data Collection)

2.15. Total fixed broadband revenue has increased faster than subscriber growth, from £3.9million over the 6 months ending Q2 2016 to £4.2million in the 6 months ending Q2 2018. This equates to a 7% increase. As Figure 6 shows the revenue generated from the slowest speed Broadband, up to 16Mbps, has decreased significantly and since Q4 2017 has fallen below that generated from the faster speeds.



**Figure 6: Market Broadband Revenue**  
(Source: 2018 Market Review Data Collection)

2.16. This pattern reflects the shift away from ADSL broadband products (which are lower speed and lower priced) towards VDSL type products which offer increased speeds, but cost more. Figure 7 shows the trend in broadband use by technology.



**Figure 7: Broadband Subscribers by Technology**  
(Source: 2018 Market Review Data Collection)

## 2.5 Retail Leased Lines

2.17. Since the time of the last review, there have been significant changes in the provision of leased lines, principally associated with an increased use of Ethernet based technologies. At the time of the last review, Traditional Interface Leased Lines with analogue or digital interfaces were the most common in the Isle of Man. Analogue leased lines are typically used for voice transmission, with some low-bandwidth data transmission. Digital Traditional Interface Leased Lines are typically based on Time Division Multiplexing (TDM) technical transmission standards, which would include PDH<sup>11</sup> and SDH<sup>12</sup>, and are potentially available in bandwidths ranging from 64 Kbit/s up to 10 Mbit/s.

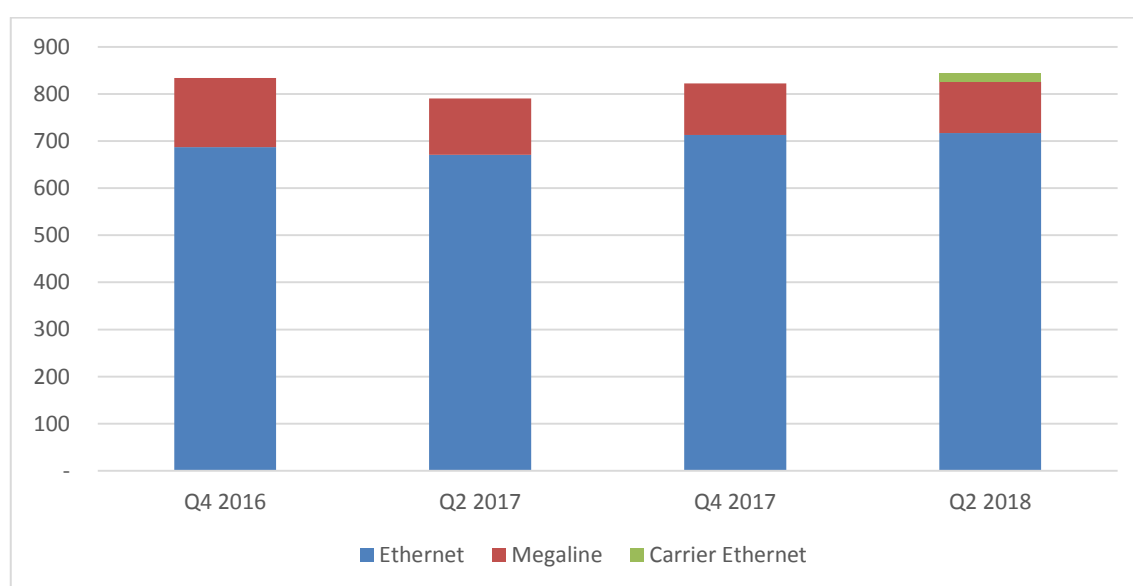
2.18. In contrast to Traditional Interface Leased Lines, all Modern Interface Leased Lines are digital, using an interface that is generally more suitable for the transmission of IP data, and more cost-effective for delivering high bandwidth services than legacy

<sup>11</sup> Plesiochronous Digital Hierarchy is a telecommunications network transmission technology designed for the transport of large data volumes across large scale digital networks. It is typically used in point-to-point applications.

<sup>12</sup> Synchronous Digital Hierarchy is a multiplex technology that is typically used to aggregate low bit-rate data streams on a telecoms network.

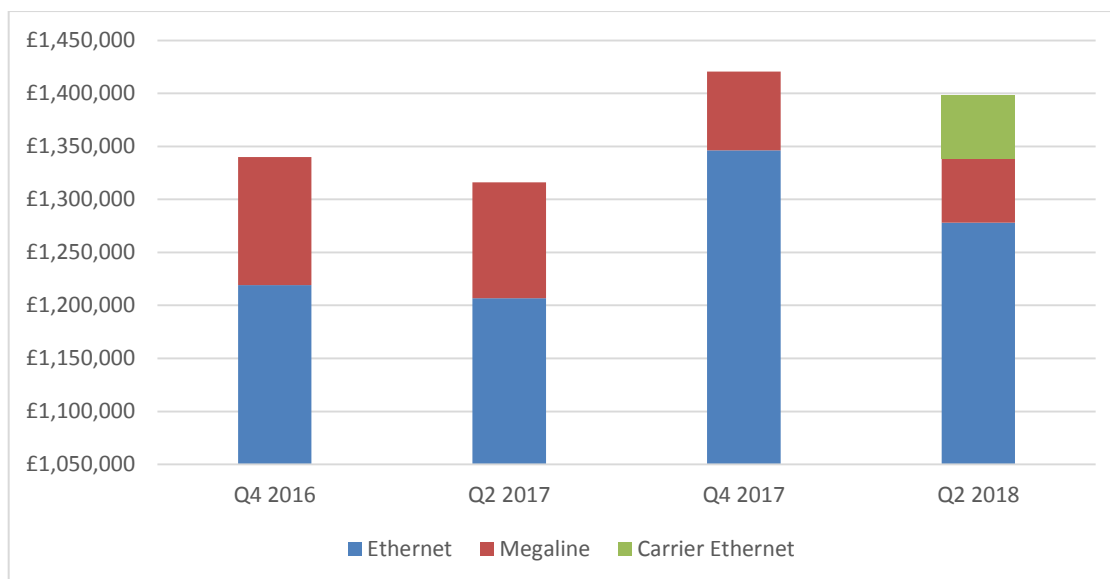
circuits. Ethernet is the most commonly used technology, and is typically available in bandwidths from 10 Mbit/s to 100 Gbit/s across Europe.

2.19. As shown in Figure 8, the number of Megaline circuits, which fall within the Traditional Interface market, have reduced by 26% between Q4 2016 and Q2 2018, whereas the number of Ethernet circuits, which fall within the Modern Interface market, have increased by 4%<sup>13</sup>. In Q4 2017 a new point-to-point wholesale Carrier Ethernet portfolio was launched, with Traditional Interface circuits being withdrawn from new supply (but current circuits still supported). This was supplemented in Q4 2018 by a wholesale Carrier Ethernet point-to-multipoint offering.



**Figure 8: Retail Leased Lines by Number of Circuits**  
(Source: 2018 Market Review Data Collection)

<sup>13</sup> The proportional increase in Modern Interface circuits is lower than the decline in Traditional Interface circuits as they typically offer higher bandwidth and carry greater volumes of data per circuit.



**Figure 9: Retail Leased Lines by Revenue**  
 (Source: 2018 Market Review Data Collection)

2.20. Figure 9 illustrates how revenue associated with leased lines has shifted markedly away from Traditional Interface (Megaline) towards Modern Interface (Ethernet). Between Q4 2016 and Q2 2018 there has been a 48% decrease in the revenue from Traditional Interface; at the same time, there has been a 10% increase in the combined Ethernet and Carrier Ethernet revenue for the same period. At the time of this review Traditional Interface revenue accounted for less than 5% of all Leased Line revenue.

## 2.6 Wholesale markets

2.21. The Wholesale Fixed Markets have developed significantly since the time of the last market reviews. The Decisions that were put in place imposed a set of obligations on MT in the markets where it was found to have SMP. As noted above, Wholesale Line Rental was introduced in 2015 in response to an access request from an LO, followed by FTTP. MT has introduced new Carrier Ethernet products. Fixed Number Portability was introduced in 2017<sup>14</sup>, and allows LOs to offer retail customers the option of keeping their number when they switch supplier.

2.22. For the most part, MT Wholesale has initiated wholesale product developments, particularly in broadband and leased lines.

<sup>14</sup> Number Portability is a condition in the full operator licences. MT licence condition 18; Sure licence Condition 15; Wi-Manx Licence Condition 16; BlueWave Licence Condition 16.

2.23. A Licensed Operators' Forum has been established with the purpose of facilitating the development and introduction of new wholesale products, and the improved implementation of existing products.

## 2.7 Looking Forward

2.24. Best practice suggests that market reviews should be forward-looking, and should take into account not just the current status and recent trends of telecommunications service, but also likely future developments which could impact on the market and on the conditions of competition.

2.25. As this section has shown, in common with most other jurisdictions, the use of fixed narrowband access is in decline. PSTN subscriptions are in decline, ISDN is coming to the end of its life, and the volume of legacy switched voice calls is decreasing. It is not necessarily the case that customers make fewer voice calls, but rather that there are now various alternative ways of making a voice call. Customers may choose to use an OTT service and make a VoIP call, or may use a mobile to make a voice call. The Commission expects that these trends will continue.

2.26. Operators in the Isle of Man are preparing for a move to all-IP networks. What the shift to an all-IP network means in practice is the end of discrete networks for voice, data and image, leading to the eventual withdrawal of the copper network and the end of the PSTN.

2.27. An all-IP network can carry services which are currently regulated (such as voice calls and Internet access), and services which are usually not (such as TV and OTT services). Some of the unregulated services may fulfil similar functions to the regulated services. The Commission does not expect that the copper network will become obsolete during the lifetime of this review, and it is important to note that there will remain a base of customers using the legacy fixed network for narrowband access and calls, and for xDSL broadband. However, the roll-out of fibre to date and the operators' plans for the future do clearly indicate a move away from copper and a move towards all-IP.

2.28. Fibre roll-out is likely to be accelerated by the National Telecommunications Strategy, which was unanimously agreed by Tynwald in October 2018<sup>15</sup>. Within the Strategy the

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<sup>15</sup> <http://www.tynwald.org.im/business/opqp/sittings/20182021/2018-GD-0062.pdf>

Government laid out its objective is for reaching 99% of the population in the next five years with fibre infrastructure.

- 2.29. A National Broadband Plan is being developed, led by the Department for Enterprise, to implement this objective. The impact of the National Broadband Plan on competitive conditions will not be definitive until the implementation plan is finalised. However, the Commission notes that it is unlikely that there will be competing infrastructure across all of the island, because one of the main purposes of the National Broadband Plan is to address areas which are not economically viable to supply commercially. The Commission will closely monitor the implementation of the National Broadband Plan, and will respond promptly to any change in competitive conditions that would affect the outcome of this review.
- 2.30. While the Commission is primarily concerned with communications on the Island, it is essential that off-island connectivity is of high quality and reasonably priced. At present, there are five cables connecting the Isle of Man with the rest of the world. Two are owned by BT; two by Vodafone; and one by e-Ilan. The Commission recognises the importance for on-island customers to have resilient alternatives for communicating off-island. The focus in this review is ensuring that on-island customers are able to access off-island connectivity.
- 2.31. One of the major changes in service over the last few years has been increasing retail demand for Over the Top (OTT) services, and the Commission expects that this will continue. For example, Ofcom noted that, in the UK, in 2018 the total number of subscriptions to the three most popular online streaming services (e.g. Netflix, Amazon Prime and Sky's Now TV) overtook for the first time the number of pay TV subscriptions<sup>16</sup>. Watching on-line video is perhaps the key driver of massive increases in fixed line data use. According to Ofcom's consumer research, the average UK residential broadband connection used 17 GB of data in 2011. By 2016, it used 132 GB, and in 2018, the figure was 190 GB<sup>17</sup>.

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<sup>16</sup> <https://www.ofcom.org.uk/about-ofcom/latest/media/media-releases/2018/streaming-overtakes-pay-tv>

<sup>17</sup> [https://www.ofcom.org.uk/data/assets/pdf\\_file/0022/117256/CMR-2018-narrative-report.pdf](https://www.ofcom.org.uk/data/assets/pdf_file/0022/117256/CMR-2018-narrative-report.pdf)

- 2.32. The increase in the use of OTT services is facilitated by the increasing availability of higher speed and higher quality broadband, over both fixed and mobile platforms, and by the increasing use of smartphones. The growth in OTT services is disruptive for operators (except where they also offer OTT services) because the service is often 'free' to the user, but requires an underlying infrastructure which is usually not provided by the OTT service provider.
- 2.33. For the purposes of the market reviews, there are two main aspects to consider associated with the increasing use of OTTs. First of all, the use of OTT services hugely increases data volumes that the operators need to manage on their networks. This has effects on network planning, and also on the operators' business models. Secondly, some of the OTT services are, from a customer's perspective, functionally similar to traditional telecoms services. For example, customers may make voice calls using Skype or FaceTime rather than making a switched voice call. As discussed in paragraphs 2.8 to 2.10 above, there has been a continuing decline in fixed voice calls, and this is likely to be explained by the range of alternatives on offer.
- 2.34. Since the time of the last reviews, mobile services have developed considerably. Retail customers now expect to be able to access the internet from their mobile device, as well as making calls and sending SMS, and mobile broadband use is growing. The Commission is conducting a parallel review of the mobile markets. For the purposes of this review of the fixed markets, the Commission recognises the growth in services available over mobile networks which may become functionally similar to services available over fixed networks. Looking forward, the Commission expects that the performance of mobile networks will continue to improve, but notes that the performance of fixed networks will also improve.

## 3 Market Definition

### 3.1 Introduction

- 3.1. The market definition procedures are designed to identify in a systematic way the competitive constraints encountered by providers of electronic communication networks and services. A relevant product market comprises all products or services that are sufficiently interchangeable or substitutable, not only in terms of the objective characteristics of those products, such as their prices or their intended use, but also in terms of the conditions of competition and/or the structure of supply and demand for the product in question. This leads to a definition of the market boundaries.
- 3.2. Market definition is about identifying the boundaries of a market for the purpose of applying ex-ante regulation. The process involves considering constraints arising on both the demand and supply sides of a market and their interaction. To this end the Commission uses the 'Hypothetical Monopolist Test' as it is widely accepted amongst regulatory authorities across Europe. The test examines constraints which would apply to a hypothetical monopolist, such that the hypothetical monopolist would be constrained in its price setting behaviour<sup>18</sup>. Hence, critical to the market definition process is the degree of substitution identified on the demand and supply-sides of the market. Key to this test is assessing how suppliers and end users would react to a Small but Significant Non-Transitory Increase in Price (SSNIP). Generally, this is assumed to be a 5-10% increase.
- 3.3. If there is a lack of current or potential substitutability on either the demand or supply-side of a market, the overall scope of the market would need to be more tightly defined. If substitutability or its potential exists, a broader definition may be appropriate. Once the market boundaries have been defined the competitive status of each relevant market can then be considered.
- 3.4. When considering demand side substitution, the Commission examines direct and indirect substitution. Direct substitution is where a product or service would itself be sufficiently similar to warrant inclusion in the market. Indirect substitution may arise

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<sup>18</sup> The Hypothetical Monopolist Test in essence examines whether a hypothetical monopolist could apply a Small but Significant Non Transitory Increase in Price (SSNIP) and remain profitable; if it could then the market is deemed to be correctly defined and the Commission can proceed to the competition assessment for said market.



when, even if a product is deemed not to be a direct substitute, an alternative operator's strength in the retail market may indirectly affect conditions in the wholesale market. For this to happen, three conditions would need to be met:

- a. There would need to be sufficient pass through of the price increase from the wholesale to the retail level;
- b. Demand substitution would need to be significant to impact on the market; and
- c. There would need to be minimal switching to the retail arm of the hypothetical monopolist.

3.5. In considering the pass through of the price increase from the wholesale to the retail level, the Commission notes that wholesale prices are just one element of the cost stack that makes up a retail price, and so any wholesale price increase is diluted when translated into a retail price increase. This effect is intensified because a supplier (including the hypothetical monopolist) could choose not to pass through the full wholesale price increase to the retail level.

3.6. Operator licences also require the area and locality in which the service is offered to be considered<sup>19</sup>. European guidelines consider this to be the geographic scope of markets. A relevant geographic market comprises the area in which the undertakings concerned are involved in the supply and demand of products and/or services, in which the conditions of competition are sufficiently homogeneous and which can be distinguished from neighbouring areas because the conditions of competition are appreciably different in those areas.

3.7. The Commission has followed the methodology recommended by BEREC<sup>20</sup> for geographic market assessment<sup>21</sup>. Should a market that has a scope that is less than national be defined, BEREC proposes that the such a market area should meet the following:

- a. They should be mutually exclusive and less than national;

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<sup>19</sup> Licence Condition MT 42.2; Sure 27.2; WiManx 29.2; BlueWave 29.2; Domicilium 16.2; e-Ilan 11.2; Continent8 11.2.

<sup>20</sup> Body of European Regulators for Electronic Communications was established by Regulation (EU) 2018/1971 of the European Parliament and of the Council of 11 December 2018.

<sup>21</sup> BEREC, 'Common position on geographical aspects of market analysis', BoR (14) 86, 12.06.14

- b. The network structure of all relevant operators and the services sold on the market should be able to be mapped onto the geographic units;
- c. Areas should have clear and stable boundaries;
- d. They should be small enough for competitive conditions to be unlikely to vary significantly within the unit, but at the same time large enough that the burden on operators and NRAs with regard to data delivery and analysis is reasonable.

3.8. Generally, three key criteria are to be examined:

- a. Coverage of alternative regional/local infrastructures that are suitable to exert competitive constraints on the services of the SMP operator(s);
- b. Number and relative size of operators offering retail services in a particular geographic area; and,
- c. Geographical differences or uniformity of prices. (Although BEREC notes that even if there are price differences, this could reflect underlying cost differences rather than distinguishable competitive constraints).

3.9. The licences currently in force set out the procedure for assessing whether a market is susceptible to ex-ante regulation. As part of this process, the Commission has a requirement<sup>22</sup> to abide by the following:

*In determining whether the identified market is a market in relation to which it is appropriate to consider whether to make a determination, the Commission shall have regard to the following factors:*

- (a) Whether the market is subject to high and non-transitory entry barriers;*
- (b) Whether the market has characteristics such that it will tend over time towards effective competition; and,*
- (c) The sufficiency of measures under the Fair Trading Act 1996 or the Fair Trading Condition of this licence (absent a determination under this Condition) to reduce or to remove such barriers or to restore effective competition*

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<sup>22</sup> MT Licence Condition 42.4; Sure Licence Condition 27.4; Wi-Manx Licence Condition 28.4; BlueWave Licence Condition 28.4, Domicilium Licence Condition 16.4; Continent 8 Licence Condition 11.4 ; E-Ilan Licence Condition 11.4

3.10. The Commission has met this requirement by carrying out a test on each preliminarily defined market in order to test whether it is susceptible to ex-ante regulation. The market definition exercise begins by assessing Retail Markets, before examining the Wholesale Markets that service these Retail Markets.

3.11. The factors listed in paragraph 3.9 are collectively known as the 'Three Criteria Test'. It is this test which the Commission uses to assess each market, and are designed to identify whether problems in the market are structural rather than behavioural. The three criteria must be met cumulatively, so that all of them must be satisfied for a conclusion to be reached that a market is susceptible to ex-ante regulation. A failure to meet any one of the criteria means that the market is not a candidate for ex-ante regulation<sup>23</sup>. At the end of each market section in the sub-section 'Susceptibility to Ex-Ante Regulation' there is a table which outlines the Commission's findings in relation to this Three Criteria Test.

## 3.2 Retail Fixed Markets

3.12. In the last round of Market Reviews<sup>24</sup>, the Commission defined the following Retail Fixed Markets:

- Retail Access;
- Retail Calls from a fixed location;
- Retail Broadband; and
- Retail Dedicated Capacity (Leased Lines).

3.13. This second round of Market Reviews is not limited to markets previously found to be susceptible to ex-ante regulation. It is incumbent on the Commission to conduct a comprehensive assessment of the overall telecoms market, and consider any potentially new markets that may have emerged since the time of the last reviews.

3.14. Underpinning the Retail Fixed Markets is the physical connection<sup>25</sup> that allows a user to connect to the public telecommunications network. This connection is then used to

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<sup>23</sup> Note that the three criteria test examines a market. Although it considers whether there is, or is likely to be, effective competition, this is not the same as assessing an individual operator's market power. The assessment of market power is carried out in Section 4 for those markets identified as being susceptible to ex-ante regulation.

<sup>24</sup> <https://www.iomcc.im/telecoms/market-reviews/2012-retail-fixed-market-reviews/>

provide services the customer wants to use (including narrowband switched voice telephony and broadband), but the importance and balance of these services may differ amongst users and may shift over time. For example, as the Commission has discussed in the preceding sections, the use of traditional fixed voice telephony is in decline, and even on legacy fixed access lines, voice services are increasingly provided through broadband, as an IP-based service.

### **3.2.1 Retail Fixed Access**

3.15. Most retail access subscribers' physical connection is via the PSTN, and PSTN access is therefore considered to be the Focal Product<sup>26</sup>. In order to determine the boundaries of the market, the Commission has considered whether:

- a. fixed access and fixed calls are in the same market;
- b. fixed and mobile access are in the same market;
- c. all forms of fixed access are in the same market; and,
- d. business and residential customers are in the same market.

#### **A. Are fixed access and fixed calls in the same market?**

##### Demand Side Substitution

3.16. Because fixed access and fixed calls are often sold as a bundle, the Commission must consider whether fixed access and fixed calls fall within the same product market. From a demand side perspective, Retail Fixed Access and Retail Fixed Calls are complementary in that a user needs fixed access to make and receive fixed calls. They are not substitutes – they fulfil different functions – and so on this basis would not fall within the same product market.

3.17. Further, the pricing of retail access and retail calls usually differs, in that access is priced as a fixed line rental charge, whereas calls are priced in different ways including as part of a bundle, or where out of bundle pricing is typically determined by calling destination and/or length of call.

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<sup>25</sup> The Commission considered Fixed Wireless Access as part of its review of the fixed markets, and while it is aware that the service is not delivered through a physical medium it is considered a 'physical connection' for the purposes of the market review process due to its delivery to a fixed location.

<sup>26</sup> The Focal Product is the product under investigation – usually the prevalent product

### Supply Side Substitution

- 3.18. Most customers buy fixed access and fixed calls from the same provider. However, just because services are sold as part of a bundle, it does not mean that they fall within the same market. The conditions of competition for voice calls differ from that of access; in general, an end user has more options when making calls than they do when considering alternative access. Additionally, the marginal cost of exercising these options is much smaller, and may even be zero. Evidence to support this would include the decrease in the average number of calls per fixed line, at the same time as an increase in calls from mobiles or over VOIP.
- 3.19. From a supply side perspective, it is unlikely that a provider of calls would enter the market to supply Retail Fixed Access in response to a Small but Significant Non-Transitory Increase in Price (SSNIP) in Retail Fixed Access, because (absent wholesale regulation) the provision of fixed access requires significant investment in infrastructure. It is arguable that there are no incentives to invest in traditional copper PSTN infrastructure given the higher bandwidths fibre-based infrastructure can provide. Furthermore, given the scale of the investment required to roll-out fibre, it is unlikely that a SSNIP would incentivise investment beyond the investments that already occur which are generally limited in their geographic scope.

### Conclusion

- 3.20. Based on their functional differences, and on the unlikelihood that a supplier of Retail Fixed Calls would be prepared to enter the Retail Fixed Access Market in response to a price increase for Retail Fixed Access, the Commission's preliminary conclusion is that Retail Fixed Access and Retail Fixed Calls do not fall within the same product market.
- 3.21. Therefore, the Commission proceeds on the basis that the Retail Fixed Calls Market will be considered as a separate market and continues with the assessment of the Retail Access Market.

## **B. Are Fixed and Mobile Access in the same Market?**

### Demand Side Substitution

- 3.22. There is a difference in the pattern of uptake of access for fixed and mobile users. A typical household generally has a single fixed access line that is shared by all members of the household. Similarly, business customers typically would have a limited number

of access lines which would serve a number of users. In contrast, each mobile customer would have their own “access line”.

3.23. There are also differences in functionality. For example, fixed access is attached to a specific location whereas mobile access is to a single handset/person. Because of the functional differences, and the different pricing models, it is difficult to directly compare the pricing of fixed and mobile access.

3.24. While a fixed access user may find mobile access to be a substitute, this substitution is likely to be one way. It is unlikely that, given the loss of mobility, a mobile user would find fixed access to be a functional substitute.

#### Supply Side Substitution

3.25. It is unlikely that a mobile operator would switch to supply Retail Fixed Access in response to a small but significant price increase in Retail Fixed Access because of the required investment in infrastructure. An investment in fixed line infrastructure is likely to decrease the level of investment in its mobile network to the detriment of its core business.

#### Conclusion

3.26. Taking the different uptake patterns for fixed and mobile access, and the lack of substitutability in both directions it would be unlikely that switching would occur. Furthermore, on the supply side, the lack of incentives for a mobile operator to invest in fixed line infrastructure indicates that fixed narrowband access and mobile access are not in the same market.

### **C. Are all forms of fixed access in the same market?**

#### Demand Side Substitution

3.27. All forms of fixed access lines available on-island offer fixed access to networks capable of supporting telephony services. All offer a similar quality of service for the purposes of making a voice call and the possibility of access to other narrowband and broadband services. In terms of functionality, a user would be likely to find that fixed access offered over copper, fibre, or FWA would be substitutable.

3.28. The Commission has considered whether access via ISDN should be in the same market as PSTN access. The Commission’s preliminary view is that ISDN Basic Rate Access (*BRA*) is effectively a multiple of PSTN lines, and it is likely that a customer

would find PSTN access to be a substitute. It is less likely that a customer would find multiple PSTN lines to be a good substitute for ISDN Primary Rate Access (*PRA*). However, given that this product will be withdrawn early in the lifetime of this review, the Commission does not consider that it is warranted to find a separate market for ISDN PRA at this time.

#### Supply Side Substitution

- 3.29. A supplier not currently active in the provision of Retail Fixed Access would be unlikely to enter the market in response to a SSNIP in the price of Retail Fixed Access because of the high investment costs associated with building and operating a fixed network.
- 3.30. While the investment costs, in financial terms, in deploying a fixed wireless access network may appear to be lower, there are other indirect costs that must be taken into account. For example:
- a. The radio spectrum is a finite resource and there is also no guarantee that an operator would obtain sufficient rights of use to roll-out a network that would potentially support as many customers as a comparable fixed line network;
  - b. To rival the capacity of a comparable fixed line network a very dense deployment strategy would be required which somewhat negates the lower cost (when taken on a per site basis); and,
  - c. Given the nature of wireless communications there would be a cost in engineering the network to overcome its inherent drawbacks, such as decreased network availability and quality of service<sup>27</sup>.
- 3.31. As a result it is unlikely that the overall investment costs in a fixed wireless network would be a more efficient than those of a fixed network, and it is therefore unlikely that a SSNIP would prompt such an investment.

#### Conclusion

- 3.32. The Commission's preliminary finding is that fixed access offered over PSTN, ISDN, fibre and FWA are in the same market. This is based on the high degree of substitutability that exists between the different technologies and the likelihood of

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<sup>27</sup> Network availability and quality of service are generally accepted as being lower on wireless networks due to circumstances that are outside of the network operators' control, but inherent to radio communications. Issues such as harmful interference, and fading due to adverse weather conditions must be considered when engineering a wireless network, whereas a fixed network is not typically susceptible to such factors.

switching between them on the demand side. It also takes into account the unlikelihood of a market entrant on foot of a SSNIP.

#### **D. Are business and residential customers in the same market?**

##### Demand Side Substitution

3.33. In terms of functionality, retail access supplied to a residential customer is similar to retail access supplied to a business customer. Although there may be some differentiation in terms of pricing, marketing, and contract conditions between residential and business customers, these are not likely to be significant. However, it can be noted that some forms of access are in practice used only by businesses – for example, ISDN.

##### Supply Side Substitution

3.34. Based on the fact that the infrastructure and technical requirements for the provision of service to residential and business customers are likely to be similar a supplier that currently supplies business access could easily switch to supply residential customers, and vice versa, at negligible cost and in the short term.

##### Conclusion

3.35. By virtue of the fact that the economic, technical, and infrastructural differences between residential and business markets are negligible, it is unlikely that a clear boundary could be defined between them. It is therefore the Commission's preliminary view that business and residential customers are in the same market.

#### **E. Summary of Retail Fixed Access product market**

The Commission's preliminary conclusions are that:

- a. Fixed calls are not in the same product market as fixed access
- b. Fixed and mobile access are not in the same market
- c. The product market includes retail access provided over copper, fibre and FWA networks
- d. Business and residential customers are in the same market



## F. Geographic market

3.36. The same PSTN and ISDN products are available throughout the island. The same is true for FWA. While the availability of fibre access is limited to areas of fibre roll-out, all operators currently offering fibre based access over their own infrastructure expect to roll out further, so there is no boundary between fibre and non-fibre areas that will be stable over time.

3.37. The pricing of all retail access products is uniform throughout the Island. The Commission is cognisant that the Government's National Broadband Plan may ultimately exert an influence on this market. However, there is sufficient uncertainty about the outcomes of this process to consider it in detail in this market review. The Commission will maintain a watching brief and will take any actions it deems necessary should such a need arise.

3.38. With the foregoing in mind the Commission's preliminary view is that the geographic scope of the market is the Isle of Man.

## G. Susceptibility to Ex-Ante Regulation

Entry barriers	Market structure trend	Sufficiency of ex post measures
<ul style="list-style-type: none"> <li>▶ Presence of strong economies of scale, scope and density in telephone networks</li> <li>▶ Entry into the market through building own infrastructure requires significant levels of investment &amp; large sunk costs</li> <li>▶ Entry could take place through wholesale fixed access remedies if in place and if effective.</li> <li>▶ Take-up of wholesale products limited to WLR.</li> <li>▶ No wholesale access products available that could allow an LO to offer full range of</li> </ul>	<ul style="list-style-type: none"> <li>▶ Widespread use of wholesale access remedies could lead to more competitive market, but likely to remain limited within lifetime of review</li> <li>▶ Competition only from alternative infrastructure providers (self-supply)</li> <li>▶ Alternative infrastructure geographically limited</li> </ul>	<ul style="list-style-type: none"> <li>▶ In the absence of any ex-ante regulation, a dominant operator might engage in entry deterring practices that would erect or reinforce barriers to entry that would protect its dominant position against potential, or actual, entrants.</li> <li>▶ Competition law not sufficient to address structural problems</li> </ul>

retail services		
▶ Entry barriers are high and non-transitory		

*Table 1 - Key considerations in determining if the Retail Fixed Access market is susceptible to ex-ante regulation.*

3.39. Based on Table 1 above the Commission's preliminary conclusion is that the market for Retail Fixed Access is susceptible to ex-ante regulation.

1. Do you agree with the Commission's preliminary views on the definition of the product and geographic market for Retail Fixed Access?
2. Do you agree that this market is susceptible to ex-ante regulation?

### 3.2.2 Retail Fixed Calls

3.40. In the Isle of Man, Retail Fixed Calls may be made over all of the types of access infrastructure found to fall within the Retail Fixed Access market – that is, over copper (PSTN and ISDN), fibre, and FWA. Calls over PSTN and ISDN have traditionally been legacy switched telephony calls (although this will change in a move to all-IP) while calls over a fibre or FWA network are typically VoIP calls. As most telephony users still use the PSTN to make fixed calls, this is considered the focal product.

3.41. In determining the boundaries of the market, the Commission has considered whether:

- a. all types of call from a fixed location are in the same market;
- b. domestic and international calls are in the same market;
- c. residential and business calls are in the same market; and,
- d. calls to non-geographic numbers are in the same market as calls to geographic numbers.

#### A. Are all types of calls from a fixed location in the same market?

3.42. The key consideration is whether VoIP calls should fall within the same market as legacy switched voice calls. There are broadly two categories of VoIP call:

- a. **'Managed VoIP'** means that the Service Provider provides calls services and an IP access path to its customer, either directly on its own network, or indirectly by renting the IP access path from a third party (e.g. by purchasing Wholesale

Broadband Access). A Managed VoIP Service Provider will also typically have its own switching platform, interconnect path(s) and numbering allocations. A Managed VoIP Service Provider can also manage its network so that it can proactively manage data traffic or can manage the quality of VoIP traffic on the IP access path in order to ensure that minimum quality of service requirements for the provision of fixed voice calls are met.

- b. **Unmanaged** or **Over the Top (OTT) VOIP** means that the Service Provider itself does not provide the access paths to its customers and does not have a switching platform and interconnection path(s). Its customers must access the Unmanaged VOIP service via the public internet or over other applications using their broadband connection provided by another supplier.

#### Demand Side Substitution

- 3.43. An end user would be likely to view a Managed VoIP call as being a close functional substitute for a traditional fixed voice call, for a number of reasons. The service is provided at a fixed location and a geographic number can be allocated to the line. Typical Network Termination Equipment has functionality and performance equivalent to a traditional phone. The process of making a call is similar, in that the user hears a dial tone and dials the desired number. The user can purchase additional call functionality which is similar to that available via traditional fixed telephony. The quality of a managed VoIP call is likely to be equivalent to the quality of a fixed telephony call. However, customers who would consider managed VoIP to be a good substitute are limited to those customers who also choose to buy a broadband service, as this is a prerequisite for the use of managed VoIP. This would limit the number of customers who could switch to using managed VoIP in response to a SSNIP of fixed narrowband voice calls.
- 3.44. Unmanaged VoIP calls can be made using a computer, smartphone or tablet, or using a VoIP enabled handset or adaptor. An end user can make and receive calls with devices that have interoperable hardware and software. There may be limitations to the service compared with managed services (e.g. switched voice or managed VoIP) where both users require a data connection and compatible hardware and software and to be connected simultaneously (for example, where the service is provided over an OTT application to which users must be logged-in). However, in some cases unmanaged VoIP users may be able to make and receive calls from a fixed voice

caller, and some unmanaged VoIP services may also offer the possibility of being allocated a geographic number<sup>28</sup>.

3.45. A key differentiating factor between managed VoIP and unmanaged VoIP is the quality of the service. An unmanaged VoIP service provider is unlikely to have control over the broadband connection over which the service is carried, and so cannot guarantee the quality of service associated with fixed voice calls or managed VoIP. Research in other jurisdictions<sup>29</sup> suggests that the quality issue means that managed VoIP is more commonly used by businesses. As with managed VoIP, customers who would consider unmanaged VoIP to be a good substitute are limited to those customers who also choose to buy a broadband service.

3.46. Unmanaged VoIP may be free to the caller for certain call types (e.g. to similar platform), and even when charged, is likely to be significantly cheaper than both traditional voice calls and managed VoIP.

#### Supply Side Substitution

3.47. A supplier of fibre access could technically switch to provide 'fixed narrowband access' in response to a SSNIP in the price of narrowband access, in that narrowband access can be provided over fibre. For example, MT is offering a voice-only FTTP wholesale product that will allow LOs to offer a retail voice service over fibre, without obliging the customer to also have a broadband service. The development of voice-only offerings for FTTP is an example of how a fibre network operator may take into account customers who only want narrowband access. However, the difference in pricing would mean that a supplier of fibre access would be unlikely to find it profitable to offer fixed narrowband retail access alone, because the fibre access business model depends on the customer purchasing broadband services.

3.48. It is expected that over the lifetime of this review, managed VoIP based call services will increasingly replace traditional circuit switched calls delivered over the copper based network. From a supplier perspective, this is inherent in upgrading network

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<sup>28</sup> While some operators offer geographic numbers this is unlikely to be an Isle of Man 01624 or 07624 number given the current restrictions on the use of this range (<https://www.iomcc.im/media/1076/principles-for-use-of-iom-numbers-april-2016.pdf>).

<sup>29</sup> See for example Ofcom:

[https://www.ofcom.org.uk/\\_data/assets/pdf\\_file/0020/108353/final-statement-narrowbandreview.pdf](https://www.ofcom.org.uk/_data/assets/pdf_file/0020/108353/final-statement-narrowbandreview.pdf)

infrastructure as they move to all-IP, and it is not necessarily the case that managed VoIP automatically translates into a new or separate calls market.

- 3.49. A supplier of unmanaged VoIP services would be unlikely to switch to provide switched telephony because to provide a similar functionality, they would need to have access to geographic numbers, and usually their own switching path and access path to the customer. This would incur investment cost, and would not be a likely short term response to a SSNIP in the price of traditional voice calls.

### Conclusion

- 3.50. Due to functional similarities and usage patterns, managed VoIP calls are considered to be in the same market as legacy switched telephony calls. Functional and quality differences indicate that unmanaged VoIP calls do not fall within the same market. However, given the trends observed in the markets over the last few years and the increasing number of OTT services, the impact of unmanaged VoIP services on the retail and wholesale calls markets will be considered again in the three criteria assessment (3.9) and in the competition assessment (Chapter 4).

## **B. Are domestic and international calls in the same market?**

### Demand Side Substitution

- 3.51. From a demand side, an end user is unlikely to switch to making domestic calls from international calls in relation to a SSNIP (or vice versa) given the person or business that they wish to make calls to are in that location. However, a consumer is likely to expect to be able to make calls to all destinations.
- 3.52. For a customer of Retail Fixed Calls, the cost of calling a domestic number differs from the cost of calling an international number. However, this reflects tariff structures that take into account the higher transit and termination costs associated with international calls, rather than necessarily indicating separate product markets.

### Supply Side Substitution

- 3.53. A supplier of fixed domestic calls could readily switch to provide fixed international calls (and vice versa). The initial phase of a retail call involves the same network equipment regardless of the destination of the number called. All providers of call services must interconnect either directly or indirectly with other providers of call services in order to offer a calls service in the first place, and this involves routing

and the handover of originated calls for transit or termination, assuming the caller and receiver are not on the same network. Therefore, a service provider that has the facilities in place to offer one type of outbound call is generally well-placed to offer all outbound calls. This suggests a high degree of supply-side substitutability.

#### Conclusion

3.54. The Commission's preliminary view is that domestic and international calls fall within the same product market. This is based on the reasonable consumer expectations of being able to make calls to any location and the nature of interconnected networks at the supply side as outlined above.

### **C. Are residential and business calls in the same market?**

#### Demand Side Substitution

3.55. In terms of functionality, retail calls supplied to a residential customer are the same product as retail calls supplied to a business customer. There is minimal differentiation in terms of pricing and marketing between calls targeted at residential and business customers. For example, MT offers its Global Choice, Island Choice, Standard Choice and Choice packages of access and calls to residential and business customers at the same price.

#### Supply Side Substitution

3.56. A supplier who currently supplied business calls could easily switch to supply residential calls in response to a SSNIP in the price of residential calls, and vice versa. Such an operator would be likely to require only marginal investment in its network and retail activities to service either set of customers or both.

#### Conclusion

3.57. Based on the fact that there is in essence no functional or pricing difference between the services available to business or residential customers the Commission holds the preliminary view that residential and business calls from a fixed location are in the same market. Additionally, given the lack of constraints on supply side substitution it would be impossible to define a clear market boundary between them.

#### **D. Are calls to non-geographic numbers in the same market as calls to geographic numbers?**

3.58. Calls to non-geographic numbers involve the provision of services via the call, and could include, for example, calls to technical helplines, advice centres, and entertainment services. In some cases, the caller is charged for the service, and in some cases, the calling party is charged (for example for Freephone).

##### Demand Side Substitution

3.59. For a retail customer, even though calls to different types of number are unlikely to be direct functional substitutes, a customer of retail calls is able to call a range of categories of number, as customers typically purchase a cluster of calls services. The customer would expect to be able to call all types of number. This suggests that calls to all categories of number would be in the same market.

##### Supply Side Substitution

3.60. While there are some differences between geographic and non-geographic calls, from the supplier's point of view, the same network equipment is required regardless of the destination of the called number. A supplier of calls to non-geographic numbers would be likely to respond readily to a SSNIP on the price of geographic calls as such potential entrants would be likely to have access to the necessary wholesale inputs (through existing access and interconnection arrangements) needed to provide these services. In practice, all operators in the Isle of Man who offer voice call services already offer calls to all categories of number.

##### Conclusion

3.61. Considering both the demand and the supply side, the Commission's preliminary view is that fixed calls to geographic and non-geographic numbers are in the same market.

## E. Summary of retail calls product market

The Commission's preliminary conclusions are that:

- a. All types of call from a fixed location are in the same market
- b. The product market includes calls to domestic and international locations
- c. Residential and business calls are in the same market
- d. Calls to non-geographic numbers are in the same market as calls to geographic numbers

## F. Geographic market

3.62. Retail calls services are available on the same terms and conditions throughout the island. There is no geographic variation.

3.63. The geographic scope of the market is the Isle of Man

## G. Susceptibility to Ex-ante Regulation

Entry barriers	Market structure trend	Sufficiency of ex post measures
<ul style="list-style-type: none"><li>▶ Entry could take place through Wholesale Fixed Access remedies if in place and if effective.</li><li>▶ Licence potentially required prior to offering such a service</li><li>▶ FNP reduces barriers to entry</li></ul>	<ul style="list-style-type: none"><li>▶ Widespread use of wholesale access remedies could lead to more competitive market, but likely to remain limited within lifetime of review</li><li>▶ Market shares stable and show no signs of change</li><li>▶ Increasing constraint from alternatives such as calls from mobile and OTT calls</li></ul>	<ul style="list-style-type: none"><li>▶ In the absence of any ex-ante regulation, a dominant operator might engage in entry deterring practices that would erect or reinforce barriers to entry that would protect its dominant position against potential, or actual, entrants.</li><li>▶ Competition law not sufficient to address structural problems</li></ul>

Table 2 - Key considerations in determining if the Retail Fixed market for fixed calls is susceptible to ex-ante regulation.

3.64. Based on the criteria listed in Table 2 above, the Commission's preliminary conclusion is that the retail market for fixed calls is not susceptible to ex-ante regulation.



3. Do you agree with the Commission's preliminary views on the definition of the product and geographic market for Retail Fixed Calls?
4. Do you agree that this market is susceptible to ex-ante regulation?

### 3.2.3 Retail Leased Lines

3.65. Dedicated capacity, or leased lines, refers to the supply of dedicated transmission capacity between fixed locations, potentially via fixed or wireless connections. Leased line services typically include guaranteed high quality service levels, symmetric upload and download speeds, and guaranteed availability.

3.66. Typically, retail leased line services are used by organisations in both private and public sectors to support a wide variety of ICT applications. This may include access to the internet, private voice and data networks, cloud based services, backup and disaster recovery, remote monitoring and telemetry applications. Retail leased line services are also used to build Virtual Private Networks ('VPNs') that allow organisations to link business sites together, including data centres, so that offices can exchange data and access corporate applications<sup>30</sup>. This also allows retail organisations to offer a range of services to business and retail consumers via the internet or data networks.

3.67. The Commission notes that most retail purchasers of leased lines do not buy them on a standalone basis, but will most often buy various applications and services (for example, SIP voice, data storage, VPNs) alongside the connectivity. However, the focus for the purposes of this market review is on the connectivity, because it is the local access part of the circuit where competition problems are most likely to arise, and where barriers to entry are potentially highest. The assessment below therefore considers only the connectivity, and not the services that may be carried over a leased line.

3.68. As discussed in Section 2, the most prevalent retail leased lines product is Modern Interface Leased Lines, and this is therefore considered to be the focal product. The Commission notes that a customer of a retail leased line in the Isle of Man will buy an

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<sup>30</sup> VPNs are not always constructed from leased lines. They may be underpinned by alternative core network provided by a telco, notably by ADSL or fibre broadband.

end-to-end service, and that while one end may be in the Isle of Man, the other end may be on-island or off-island. All providers of retail leased line services sell circuits that may terminate on or off island, and at the retail level<sup>31</sup>, the on/off island distinction is not relevant.

3.69. In considering the boundaries of the market for retail leased lines, the Commission assesses whether:

- a. Traditional Interface and Modern Interface Leased Lines are in the same product market;
- b. leased lines of all capacities should be in the same retail market;
- c. P2P wireless leased lines are in the same market as fixed leased lines; and,
- d. dark fibre is in the same market as leased lines.

#### **A. Are traditional interface and modern interface leased lines in the same product market?**

##### Demand Side Substitution

3.70. Both Traditional Interface and Modern Interface Leased Lines share functional characteristics in offering a dedicated symmetric connection with low contention, jitter, and latency, and high level Service Level Agreements (SLAs). In spite of the functional similarities, it would be unlikely that a user of Modern Interface Leased Lines would switch to Traditional Interface Leased Lines in response to a SSNIP in the price of Modern Interface Leased Lines.

3.71. Firstly, Traditional Interface Leased Lines are generally more expensive than Modern Interface Leased Lines. The Commission notes that it is difficult to find reliable and verifiable retail leased line pricing, because pricing is often bespoke and is not published. To overcome this problem, in other jurisdictions<sup>32</sup> the regulator has taken a cost-oriented wholesale price as the basis for calculating an imputed retail price. In most cases, a Modern Interface Leased Line was around half the annual rental price of a Traditional Interface Leased Line. The price differential in favour of Modern Interface

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<sup>31</sup> Note that this does not preclude finding a distinction at the wholesale level given the functional differences between both markets.

<sup>32</sup> For example, Ofcom in the UK and ComReg in Ireland use this approach

Leased Lines was therefore considerably more than a SSNIP of 5-10% in the price of Modern Interface Leased Lines.

3.72. In applying this in the Isle of Man, the Commission notes that, according to MT's wholesale price list, the price for a one year, same exchange 2 Mb Megaline circuit is [£<] connection fee and [£<] rental, totalling [£<]. A 2 Mb Ethernet circuit would cost [£<] connection and [£<], totalling [£<]. The differences between higher capacity circuits is even greater. This price difference is well in excess of the level of a SSNIP of 5-10%.

3.73. While Traditional Interface Leased Lines are still being ordered by end users, the migration to Ethernet would suggest that there is asymmetric substitution, in that end users are switching from TDM to Ethernet based leased lines, but not the reverse.

3.74. The Commission notes also that TDM-based Customer Premises Equipment (CPE) is now reaching obsolescence. For example, in the UK, very low bandwidth (up to 2Mbps) leased lines have been withdrawn from new supply.<sup>33</sup> This would also affect the likelihood of a user switching from Modern Interface to Traditional Interface Leased Lines.

#### Supply Side Substitution

3.75. Given the general trend of migration to Ethernet, it would be unlikely that any provider of only Modern Interface Leased Lines would switch to supply Traditional Interface Leased Lines. It is highly likely that this would represent an inefficient investment given the ongoing decline of the market. As such it can be assumed that a network operator is unlikely to invest in the required infrastructure.

3.76. A supplier of Ethernet leased lines would not be incentivised to roll out legacy infrastructure (even if legacy equipment was available) in order to offer Traditional Interface Leased Lines.

3.77. Additionally, a supplier of Traditional Interface Leased Lines that did not already offer Modern Interface Leased Lines would not be readily able to switch with minimal cost to offer Modern Interface Leased Lines in response to a SSNIP in the price of Modern Interface Leased Lines because of required investment in infrastructure.

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<sup>33</sup> [https://www.ofcom.org.uk/data/assets/pdf\\_file/0018/63225/final-statement.pdf](https://www.ofcom.org.uk/data/assets/pdf_file/0018/63225/final-statement.pdf)

## Conclusion

3.78. Based on the differences explored above, the Commission holds the preliminary view that Traditional Interface Leased Lines are not an effective substitute for Modern Interface Leased Lines, and do not form part of the same product market.

### **B. Should leased lines of all capacities be included within the same market?**

#### Demand Side Substitution

3.79. As noted above, the functions of all leased lines are similar, which would suggest that an end user would find that it could substitute a higher bandwidth leased line with multiples of lower bandwidth circuits. This would suggest that, in terms of functionality, there is close demand side substitutability across the range of products. However, while it may be technically and functionally feasible, it would not always be economic for a customer seeking a high capacity leased line to buy multiples of lower bandwidth leased lines. There are a much wider range of speeds for leased lines in the market now than were available at the time of the previous market review. While substitution is unlikely between the bottom of the range and the top, it is possible that there is a chain of substitution<sup>34</sup> along the product range.

3.80. The data which have been collected indicate that users are steadily increasing their demand for bandwidth. The Commission expects that a significant proportion of customers will upgrade to a higher capacity product during the lifetime of this review, and that this is the case for Traditional Interface and Modern Interface products (although Traditional Interface customers may well choose to migrate to Modern Interface rather than to higher capacity Traditional Interface). Any reduction in the price differential between higher and lower capacity products could bring forward the migration which would occur in any event.

3.81. In the case of the Modern Interface market, the Commission is of the view that all bandwidths should be included within the same product market. The functionality, usage, and pricing would indicate that there is a chain of substitution amongst all Modern Interface products. The Commission notes that it does not need to be the case that the capacities and prices multiply exactly – the Commission would not expect

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<sup>34</sup> The market may contain products that differ substantially in terms of characteristics and price, but where products are constrained along a chain – for example, the pricing of product A may be constrained by Product B but not by Product C. Even if products A and C are not direct substitutes, their substitutability through Product B renders them in the same market.

for example that 10 X 1Gbit/s circuits would cost the same as one 10 Gb/s circuit – but rather that a broad continuum in pricing can be seen.

#### Supply Side Substitution

3.82. A supplier of Traditional Interface or Modern Interface Leased Lines would be able to offer leased lines of all bandwidths over the relevant technology. For example, Sure<sup>35</sup> offers Ethernet circuits of 2, 4, 6, 8, 10 and 100 Mbps and 1 Gbps, and MT<sup>36</sup> offers Ethernet circuits of 10, 100 Mbps and 1 and 10 Gbps. Wi-Manx<sup>37</sup> offer a range of Ethernet circuits from 10 Mbps to 1 Gbps.

#### Conclusion

3.83. Having considered the evidence available the Commission has formed the preliminary view that:

- a. Leased lines of all bandwidths are in the same product market for Traditional Interface products; and,
- b. Leased lines of all bandwidths are in the same product market for Modern Interface products.

### **C. Are Point to Point wireless leased lines in the same market as fixed leased lines?**

#### Demand Side Substitution

3.84. As point-to-point (P2P) radio link based retail leased lines are used to provide uncontended, symmetric, high quality access similar to fixed line based retail leased lines there is no discernible difference in their intended use at a retail level. Users are therefore likely to find a wireless leased line to be a good functional substitute for both Traditional Interface and Modern Interface fixed Leased Lines. However, this may not be the case for fixed leased lines at higher bandwidths, where wireless leased lines may not be an effective substitute.

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<sup>35</sup> <https://international.sure.com/assets/Uploads/11-PRIVATE-CIRCUITS-IOM.pdf>

<sup>36</sup> <https://www.manxtelecom.com/business/connectivity/private-circuits/on-island-private-circuits/on-island-ethernet-services>

<sup>37</sup> <https://www.wimanx.com/connectivity/ethernet/>

3.85. While P2P radio links are functional substitutes for fixed line leased lines, for example a customer is unlikely to notice a marked difference in service, there are some technical differences that may limit this. For example, the latency associated with P2P radio links is lower than that of fixed line services, as such a user primarily concerned with achieving low latency for mission critical applications would be unlikely to switch. The network availability of P2P radio links is typically lower than that of fixed line services (see footnote 27 above), so a user with a high network availability requirement would be unlikely to switch.

3.86. Based on the data currently available to the Commission, the pricing of wireless retail leased lines is comparable to that of fixed retail leased lines. For example, BlueWave offers a 100 Mbit/s retail wireless circuit for an annual rental of £5940 plus £995 connection, totalling £6,935. MT offers a wholesale 100Mb circuit for a total of [£3<], which when subject to a retail mark-up<sup>38</sup>, would be likely to compare with the price of the wireless circuit.

#### Supply Side Substitution

3.87. A provider currently supplying only wireless retail leased lines may not be able to readily switch to provide fixed leased lines without incurring additional costs, due to the need to have appropriate infrastructure.

#### Conclusion

3.88. Given the functional similarities of fixed and wireless leased lines, and noting the limited instances in which they could not be considered substitutable the Commission holds the preliminary view that wireless leased lines fall within the same product market as fixed leased lines.

### **D. Is dark fibre in the same market as leased lines?**

3.89. Dark fibre is a passive optical connection between two sites, and is provided with no equipment at either end to light the fibre. It is up to the customer to manage the active electronics needed to provide the required service. This is in contrast to an active connection which would be supplied with electronics at either end of the fibre connection.

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<sup>38</sup> This assessment is made on the basis of assumptions about the retail markup, and is for broad comparative purposes only

### Demand Side Substitution

3.90. Leased lines of any bandwidth and interface can be provided over dark fibre. However, to enable leased line connections, retail customers would need to provide additional inputs and operational resources, because dark fibre is provided as an unmanaged service and requires the operation of physical infrastructure. Consumer research carried out in the UK<sup>39</sup> suggested that 3-8% of leased line customers would consider dark fibre as an alternative to a leased line, with most customers preferring a third party managing the service, and raising issues over cost and availability. Dark fibre is therefore not a functional substitute for a retail leased line. While some customers would find dark fibre to be a substitute for retail leased lines, these customers would be likely to have higher levels of technical capability and resources. The Commission's preliminary view is that an insufficient number of customers would switch in response to a SSNIP to render a price increase unprofitable.

### Supply Side Substitution

3.91. The Commission considers it unlikely that a supplier of dark fibre not currently offering Traditional Interface or Modern Interface retail Leased Lines would enter the leased lines market in response to a SSNIP in leased lines due to functional differences in the products and the requirement for investment on the part of the supplier.

### Conclusion

3.92. The Commission's preliminary view is that dark fibre should not be included in the same product market as retail leased lines. As a product, it is upstream from leased lines, and requires more technical capability and resources from its customers than does leased lines.

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<sup>39</sup> [https://www.ofcom.org.uk/data/assets/pdf\\_file/0025/124729/llcc-bcmr-2018-volume-1.pdf](https://www.ofcom.org.uk/data/assets/pdf_file/0025/124729/llcc-bcmr-2018-volume-1.pdf)

## **E. Summary of retail leased lines product market**

The Commission's preliminary conclusions are that:

- a. There are separate markets for Traditional Interface (TI) and Modern Interface (MI) Leased Lines
- b. leased lines of all capacities are in the same respective retail market;
- c. wireless leased lines are in the same market as fixed leased lines; and,
- d. dark fibre is not in the same market as leased lines

## **F. Geographic market definition**

3.93. The Commission recognises that there is some geographic variation in the conditions of competition in the retail leased lines market. Operators supplying retail leased lines are more likely to invest in areas where there is a concentration of business customers (such as a business park) because they can benefit from economies of scale and density.

3.94. However, the definition of a geographic market requires the identification of stable and persistent boundaries, within which the conditions of competition are appreciably different from those in neighbouring areas. It is the Commission's preliminary view that no such areas are apparent on island, which is supported by pricing practices implemented and maintained by network operators. While MT prices wholesale leased lines differentiated by metro and non-metro areas, according to the responses to the data request, it is not the case that retail pricing strictly follows this differentiation. There does not appear to be any such differentiation at the retail level.

3.95. The Commission's preliminary conclusion is that the geographic scope of the market is the Isle of Man.



## G. Susceptibility to Ex-ante Regulation

Entry barriers	Market structure trend	Sufficiency of ex post measures
<ul style="list-style-type: none"> <li>▶ Presence of strong economies of scale, scope and density in leased line networks</li> <li>▶ Entry into the market through building own infrastructure requires significant levels of investment &amp; large sunk costs</li> <li>▶ Entry could take place through wholesale leased line remedies if in place and if effective.</li> <li>▶ Entry barriers are high and non-transitory</li> </ul>	<ul style="list-style-type: none"> <li>▶ Widespread use of wholesale access remedies could lead to competitive market, but likely to remain limited within lifetime of review</li> <li>▶ Competition from alternative infrastructure providers (self-supply) in certain locations</li> <li>▶ Increasing competition at retail level between LOs for Modern Interface circuits</li> <li>▶ Alternative infrastructure geographically limited</li> <li>▶ Stable and high market share for incumbent supplier</li> </ul>	<ul style="list-style-type: none"> <li>▶ In the absence of any ex-ante regulation, a dominant operator might engage in entry deterring practices that would erect or reinforce barriers to entry that would protect its dominant position against potential, or actual, entrants.</li> <li>▶ Competition law not sufficient to address structural problems</li> </ul>

*Table 3 - Key considerations in determining if the markets for Traditional Interface and Modern Interface retail Leased Lines are susceptible to ex-ante regulation.*

3.96. The Commission's preliminary conclusion is that the markets for Traditional Interface and Modern Interface retail Leased Lines are susceptible to ex-ante regulation.

5. Do you agree with the Commission's preliminary views on the definition of the product and geographic market for retail Traditional Interface Leased Lines and for retail Modern Interface Leased Lines?

6. Do you agree that these markets are susceptible to ex-ante regulation?

### 3.2.4 Retail Broadband

3.97. For retail broadband to be delivered to an end user in the Isle of Man, it must be supplied over a physical access product, such as line rental over PSTN, or a fibre or FWA connection. PSTN line rental and fixed broadband may be purchased from the same provider, or from different providers. The most used retail broadband product on-Island is broadband delivered over xDSL (i.e. including ADSL and VDSL) and so the focal product is xDSL broadband.

3.98. In identifying the boundaries of the Retail Broadband market, the Commission has considered whether:

- a. broadband provided over fibre should be in the same market as xDSL broadband;
- b. mobile broadband or FWA broadband is in the same market as fixed broadband;
- c. retail leased lines services are in the same market as Retail Broadband;
- d. all retail broadband speeds available should form part of the same market; and,
- e. retail broadband offerings used by business and residential customers form part of the same market.

**A. Should broadband services provided over fibre be included in the same market as xDSL broadband?**

Demand Side Substitution

3.99. A customer who purchases broadband delivered over xDSL is likely to find that broadband provided over a fibre connection is a good substitute in terms of product functionality. The product characteristics and intended use of broadband provided over fibre are broadly similar to those of broadband provided over copper allowing for (at least) the same speeds and an 'always on' capability.

3.100. In terms of achievable speeds, there is an overlap between the speeds available in the mid-high end of advertised xDSL speeds and the bottom end of fibre.

3.101. Furthermore, the monthly cost of broadband offered over each technology overlaps, allowing consumers to move between these technologies to achieve faster download speeds, while maintaining the average monthly cost of their broadband service<sup>40</sup>. This is shown below in the summary table indicating the relative speeds and prices:

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<sup>40</sup> Note that the indicative price for xDSL does not include the cost of access, whereas access is included in the fibre price. This means that the cost of line rental should be added to the xDSL price for comparison.

	Advertised download speeds	Caps on download allowance	Average monthly price (£)	Maximum monthly price (£)	Minimum monthly price (£)
Broadband services provided over xDSL	Up to 16Mbps	15GB (MT rest unlimited)			
	Up to 40Mbps	40GB			
	Up to 100Mbps	150GB	£30.99 - (if pay cap release ave = £32.66)	£46 (@200Mbps)	£18 (@16Mbps with 15GB cap)
	Up to 200Mbps	Unlimited			
Broadband services provided over Fibre -Optima Fibre	20 Mbps				
	40 Mbps				
	100 Mbps	Unlimited ( with fair use conditions)	£64.07	£146 (@100Mbps)	£36 (@20Mbps)
	200Mbps				
	500 Mbps				
	1000 Mbps				

Table 4: Summary of Retail Broadband Services  
(source: Licenced Operators Websites)

3.102. Given similarities in functionality and usage, a hypothetical monopolist currently offering xDSL broadband would be unlikely to sustain a profitable SSNIP. This is because, in response to a price increase in xDSL broadband, a sufficient number of customers would be likely to switch to broadband provided over fibre (with the qualification that this applies only where fibre is actually available).

3.103. It is suggested that substitution is likely to be asymmetric due to the higher upload/download speeds available over fibre. This means that customers are likely to switch up the chain, but not down. Further, it is unlikely that there would be switching between products situated at either end of the chain. For example, while a customer of xDSL broadband is likely to find broadband over fibre to be an effective substitute (subject to availability and price), the converse is unlikely to be true.

#### Supply Side Substitution

3.104. The consideration of supply side substitution is not relevant given the asymmetric nature of demand side substitution. A broadband provider offering broadband over fibre would be unlikely to switch to provide broadband over xDSL in response to a SSNIP in the price of retail xDSL broadband.

#### Conclusion

3.105. It has been shown that there is a relatively high degree of substitutability between broadband products provided over xDSL and fibre. It has also been shown that a hypothetical monopolist of xDSL is likely to be constrained by the presence of operators providing fibre based products. Based on this the Commission has formed a

preliminary view that broadband services provided over xDSL and fibre are in the same market.

## **B. Is broadband provided over 4G or FWA in the same market as fixed broadband services?**

3.106. Customers can access the internet using the data included as part of their retail mobile package. For the purposes of this review, this is not characterised as “broadband access” but is instead considered as part of the assessment as to whether mobile access falls within the same market as fixed access. This is because the broadband access element is an inseparable part of a cluster of retail mobile services. However, mobile broadband can also be purchased as a standalone product. These services are marketed as distinct 4G services, separate from the cluster of mobile services, advertised as a standalone ‘broadband’ connection, often accessed with the use of a dongle, data only SIM or “MiFi” device which allows for multiple devices to connect simultaneously.

3.107. In the Isle of Man, broadband is also available over FWA. Although FWA is available at a fixed location, the functional characteristics are similar to 4G mobile broadband. Specifically the trend across the EU is that LTE (or 4G) technologies are being used to provide FWA. While this has brought the services closer in performance to xDSL services there are still some significant differences between the two services. As a result, what has been seen since the introduction of FWA is that it is most prevalent in areas that it may not be economically viable to service customers using fixed lines, such as in rural areas. The rollout of FWA in areas where there is an xDSL or fibre service available tends to be much more limited.

### Demand Side Substitution

3.108. Considering functional characteristics, a customer of xDSL or fibre based broadband is likely to find that the download speeds available over 4G broadband are more variable than over a fixed network, largely because the ability of customers to roam across a mobile network means that the number of users within the footprint of a specific coverage area of a mobile base station can be variable.

3.109. One impact of this is a marked discrepancy between advertised speeds and actual speeds. For example, research carried out in Ireland showed that the average

advertised download speeds for mobile broadband ranged from 7.2 Mb to 150Mb, but that two thirds of customers achieved less than 15 Mb<sup>41</sup>.

3.110. Most mobile broadband packages have strict data usage caps, and both MT and Sure offer packages starting at 500 MB per month. The highest allowance Sure offers is 100 GB per month<sup>42</sup>, while MT offers a tariff plan for up to 200 GB per month), with users facing additional prices or slower speeds if they exceed their download allowance. Given the generally lower speeds achievable, and strict data caps, a user would not be likely to use mobile broadband for data intensive applications (e.g. video streaming, live streaming, and gaming.) in the same way as a user of fixed Retail Broadband, particularly those using the higher bandwidth VDSL or fibre products.

3.111. Consumer research carried out by the Commission in 2017/18<sup>43</sup> highlighted that around 20% of users use the internet for online gaming and around 70% for streaming videos. This is in keeping with worldwide trends and forecasts, for example the Cisco VNI Forecast<sup>44</sup> expects that by 2022, 80% of internet traffic will be video and that gaming traffic will grow 9-fold within the same period<sup>45</sup>. Both groups of users would be very unlikely to find mobile data would provide suitable functionality for these purposes. In addition, this research highlighted that over 80% of customers see mobile data as a complement to, rather than a replacement for, fixed broadband.

3.112. Overall, the Commission's preliminary view is that the variability and reliability of download speeds, coupled with (often) more limited download allowances, impacts on the ways in which mobile broadband is used. The Commission notes that, while some customers may avail of a 4G offer that provides unlimited data, the number of customers on this plan is limited, and unlikely to be sufficient to constrain the behaviour of a hypothetical monopolist of xDSL and fibre based broadband. For these reasons, the Commission's preliminary view is that mobile broadband is not likely to be an effective demand side substitute for fixed broadband. The Commission recognises that the performance available over 4G mobile broadband and FWA is likely to

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<sup>41</sup> ComReg, "Market Review, WHOLESale LOCAL ACCESS and WCA", ComReg Document 18/94, 20 November 2018

<sup>42</sup> Sure initially offered an unlimited 4G broadband plan, which its website describes as 'oversubscribed'. It is available for order in some, but not all, areas.

<sup>43</sup> <https://www.iomcc.im/media/1278/consumer-habits-broadband-survey-results-report.pdf>

<sup>44</sup> [https://www.cisco.com/c/en/us/solutions/collateral/service-provider/visual-networking-index-vni/white-paper-c11-741490.html#\\_Toc529314188](https://www.cisco.com/c/en/us/solutions/collateral/service-provider/visual-networking-index-vni/white-paper-c11-741490.html#_Toc529314188)

<sup>45</sup> This represents only 4% of expected internet traffic but it should be kept in mind that online gaming is still in relative infancy and it is the growth rate that is notable in this instance. It is also likely that as telecoms networks evolve gaming will account for an increasing share of traffic.

continue to improve. However, so too is the performance available over fibre networks.

#### Supply Side Substitution

3.113. In general, a provider of mobile broadband would not switch to offer fixed broadband in response to a SSNIP in the price of fixed broadband, because the two services use different infrastructure and a switch would require significant investment. In practice, both mobile operators in the IOM already offer mobile and fixed broadband, suggesting that they see the products as complementary rather than substitutable. Their continuing investment in both fixed and mobile networks is further evidence that the network operators will continue to view both as complementary for at least the medium-term.

#### Conclusion

3.114. Primarily due to the complementary nature of fixed and mobile and FWA broadband services the Commission has adopted the preliminary view that mobile and FWA broadband services are not in the same market as fixed broadband services. This is supported by the investment patterns in both fixed and mobile networks outlined above. It is reasonable to assume that if the services were substitutable an operator would be likely to invest in one or the other, but not both.

### **C. Are leased line services in the same market as retail broadband services?**

#### Demand Side Substitution

3.115. There is some overlap in certain product characteristics between the lower specification of leased lines, and the higher specification of broadband services, particularly broadband aimed at business customers. However, leased lines offer dedicated capacity with low or no contention, and generally have higher levels of security and higher SLAs when compared with broadband, and customers who value these characteristics would be unlikely to find the products comparable.

3.116. The price differential between leased lines and broadband would suggest that customers of broadband would be unlikely to switch to leased lines in response to a SSNIP in the price of retail broadband. For example, using prices quoted on MT's website for comparison, a retail Ethernet 10Mbps Metro circuit on a one year contract

costs £377.22 per month<sup>46</sup>, whereas the highest specification fibre broadband costs £146 per month. The difference between lower specification broadband packages and leased lines is obviously even greater. This is far in excess of the level of a SSNIP that would be considered in the substitutability assessment.

#### Supply Side Substitution

3.117. A retail leased line supplier not currently active in supplying broadband services would not easily switch from providing retail leased lines to providing retail broadband in response to a SSNIP in the price of retail broadband, because the provision of retail broadband requires investment in infrastructure and could not be realised in the short term and at negligible cost.

#### Conclusion

3.118. Due to functional differences and pricing differences, the Commission's preliminary view is that leased line services are not in the same market as retail broadband services.

### **D. Should retail broadband provided at all speeds be included in the same market?**

#### Demand Side Substitution

3.119. If the price of a broadband product was to increase by a small but significant amount, customers would be likely to be able to switch to an alternative product at a similar price (or receive a higher performance product for a similar price).

3.120. The Commission's preliminary view is that substitution would be asymmetric, in that customers would be likely to switch to higher speeds but not lower, and it would be unlikely that customers would switch from one end of the range of options directly to the other end. As discussed above in paragraph 3.101, there would therefore be a chain of substitution, where customers would be likely to switch to products up the chain, but would not be likely to switch down the chain, nor to switch from one end of the chain directly to the other.

#### Supply Side Substitution

3.121. A supplier of one speed of broadband would be able to switch to supply other speeds, within the constraint of the infrastructure over which the service was offered.

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<sup>46</sup> This includes connection fee

All broadband providers currently offer a range of speeds at different price points, and could readily switch customers between speeds.

#### Conclusion

3.122. As retail customers would be likely to switch to higher speed broadband products in response to a SSNIP in the price of their existing package, the Commission's preliminary view is that all speeds of broadband service are included in the same market.

### **E. Do retail broadband offerings used by business and residential customers form part of the same market?**

#### Demand Side Substitution

3.123. There are no distinct broadband products targeted at consumers or businesses. The pricing for broadband provided to business and residential users is largely the same<sup>47</sup>. The Commission's consumer research identified business as well as residential use of broadband services. Given the lack of differentiation between business and consumer use, the market will contain both categories of user.

#### Supply Side Substitution

3.124. As suppliers do not differentiate between business and residential users, it is unlikely that a significant investment in either infrastructure or retail activities would be required to switch between markets, or to serve both. As such it would be impossible to define a clear boundary between business and residential customers placing them in different markets.

#### Conclusion

3.125. Based on the foregoing, the Commission has formed the preliminary view that fixed broadband services used by consumers and businesses are in the same market. As has been demonstrated there are insufficient grounds to find otherwise.

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<sup>47</sup> There are some differences in some products provided by some operators, but on the whole, the pricing is similar



## F. Summary of Retail Broadband product Market

The Commission's preliminary conclusions are that:

- a. broadband provided over fibre or FWA is in the same market as xDSL broadband
- b. mobile broadband is not in the same market as fixed broadband
- c. provided at all speeds forms part of the same market
- d. retail leased lines services are not in the same market as Retail Broadband
- e. Retail Broadband used by business and residential customers are in the same product market.

## G. Geographic market definition

3.126. There is no geographic differentiation in products or pricing for retail broadband.

While xDSL broadband is the only ubiquitous product available, broadband delivered over fibre is limited only by the network roll-out. Given operator plans to continue to expand fibre roll-out, this limitation cannot be taken to represent a clear and persistent boundary for the purposes of geographic market definition. The Commission is cognisant that the Government's National Broadband Plan may ultimately exert an influence on this market. However, there is sufficient uncertainty about the outcomes of this process to consider it in detail in this market review. The Commission will maintain a watching brief and will take any actions it deems necessary should such a need arise.

3.127. The Commission's preliminary conclusion is that the geographic scope of the Retail Broadband market is the Isle of Man.

## H. Susceptibility to Ex-ante Regulation

Entry barriers	Market structure trend	Sufficiency of ex post measures
▶ Presence of strong economies of scale, scope and density in broadband	▶ Widespread use of wholesale access remedies could lead to competitive market	▶ In the absence of any ex-ante regulation, a dominant operator might engage in

<p>networks</p> <ul style="list-style-type: none"> <li>▶ Entry into the market through building own infrastructure requires significant levels of investment &amp; large sunk costs</li> <li>▶ Entry could take place through Wholesale Fixed Broadband Access remedies if in place and if effective.</li> <li>▶ Take-up of wholesale products limited to white label products.</li> <li>▶ No Wholesale Access products available that could allow an LO to offer product allowing for differentiation</li> <li>▶ Entry barriers lowered by availability of ISP licences</li> </ul>	<ul style="list-style-type: none"> <li>▶ Increasing platform competition from mobile and FWA</li> <li>▶ Alternative technology products and infrastructure geographically limited, but expected to extend roll-out</li> <li>▶ Incumbent market share remains high with limited switching away</li> </ul>	<p>entry deterring practices that would erect or reinforce barriers to entry that would protect its dominant position against potential, or actual, entrants.</p> <ul style="list-style-type: none"> <li>▶ Competition law may be sufficient to address structural problems</li> </ul>
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*Table 5 - Key considerations in determining if the Retail Broadband Market is susceptible to ex-ante regulation.*

3.128. The Commission's preliminary conclusion is that, on balance, and in the presence of effective wholesale regulation, the Retail Broadband market is not susceptible to ex-ante regulation.

7. Do you agree with the Commission's preliminary views on the definition of the product and geographic market for Retail Broadband?
8. Do you agree that this market is not susceptible to ex-ante regulation?

### 3.3 Wholesale Fixed Markets

3.129. Having defined the retail product markets and their geographic scope, the next step in the analysis is to consider the wholesale markets that address these retail markets. The markets discussed below are:

- Wholesale Local Access
- Wholesale Fixed Voice Call Termination
- Wholesale Fixed Voice Call Origination
- Wholesale Transit
- Wholesale Broadband Access
- Wholesale Leased Lines

#### 3.3.1 Wholesale Local Access

3.130. The previous market review did not define a market for wholesale access, but rather defined wholesale markets specifically addressing Retail Voice Calls (markets for call origination, transit and termination) and Retail Broadband (wholesale physical network internet access and Wholesale Broadband Access). As the Commission's discussion of the Retail Access Market has indicated, technological developments since the time of the last review suggest that it may be more appropriate to now consider a wholesale market addressing Retail Fixed Access. Specifically one that is neutral in terms of the services accessed, and which focusses on the connection between a fixed location and the public telecommunications network. This recognises that all customers of Retail Fixed Access can access voice and broadband services, and that the importance of each service will vary amongst customers.

3.131. A Wholesale Local Access product which addresses the Retail Fixed Access Market as defined would be likely to consist of physical or passive infrastructure products<sup>48</sup> enabling the transmission of the range of voice and internet services demanded by

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<sup>48</sup> 'physical infrastructure' means any element of a network which is intended to host other elements of a network without becoming itself an active element of the network, such as pipes, masts, ducts, inspection chambers, manholes, cabinets, buildings or entries to buildings, antenna installations, towers and poles; cables, including dark fibre,

retail customers. In the Isle of Man, Wholesale Line Rental (WLR) and FTTP have been introduced since the time of the last review. WLR allows the wholesale purchaser to rent the physical connection from an end-user's premises to the public telephone network, and so provide a combined access and calls (but not broadband) retail offering. FTTP allows the wholesale purchaser to take the physical connection and offer a range of retail services, including voice and broadband, or to offer only a voice service. In other jurisdictions, other Wholesale Local Access products include Local Loop Unbundling (LLU) and Virtual Unbundled Local Access (VULA).

3.132. The previous market review distinguished between physical access products like LLU and non-physical or active access products like Bitstream. The roll-out of Next Generation fibre networks, and developments like VDSL vectoring, call into question the boundary between physical and non-physical access products. With a legacy copper network, LLU typically offers connection at the Main Distribution Frame (MDF), whereas Bitstream connection is provided at higher points in the network, usually at regional or national interconnection points. It is therefore relatively straightforward to identify wholesale products according to their physical and non-physical nature, and according to the network level at which access is obtained.

3.133. This is less obvious with fibre networks. Depending on the network architecture, optical fibre may extend from the MDF (or Optical Distribution Frame) to the retail subscriber's premises, and physical unbundling may not be technically or economically feasible.

3.134. The Commission therefore proposes that, when considering the boundaries of the Wholesale Access Market, the focus should be on the functionality and characteristics of the product, rather than on whether or not it can be considered to be a physical or a non-physical product. This is in line with the EU approach, and the EC identifies three key characteristics to help with this analysis<sup>49</sup>:

- a. **Location of the point of handover:** differentiation where traffic is handed over locally, close to the customer or at a regional or national interconnection point;

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<sup>49</sup> Explanatory Note accompanying the Commission Recommendation on relevant product and service markets, Brussels, 9.10.2014 SWD(2014) 298

- b. **Topology and core transmission features** (particularly contention): some wholesale products are contended and so limit the wholesale purchaser in what retail services can be offered; and,
- c. **Flexibility**: ability of the wholesale purchaser to differentiate its retail offer.

3.135. These characteristics are considered in the substitution analysis below. The Commission notes that there is currently no LLU or VULA product available in the Isle of Man. However, the analysis should consider the functionality and characteristics of products which could allow the provision of retail access, without being limited to those that exist in the market at present. It should be noted that this situation arises as to date there have been no access requests made of MT for wholesale local access beyond white label Wholesale Line Rental products. The Commission does not believe it would be appropriate to mandate specific products; it is of the view that the industry itself is best placed to determine market demands in this regard.

3.136. Operators that have access infrastructure supply notional wholesale local access to themselves in order to offer a Retail Fixed Access product. That is, where an operator with its own infrastructure is vertically-integrated and offers a retail service over that infrastructure, it is providing to itself all the inputs required to offer the retail service. This notional self-supply would form part of a wholesale access market where self-supply could readily be switched from providing inputs to the operator's own retail operation to provide a wholesale service for other operators.

3.137. The Commission takes WLR as its focal product<sup>50</sup>, because it is the most prevalent wholesale access product currently available. WLR is offered over the copper network. A purchaser of WLR is able to offer retail access and retail calls, and the offer of retail access provides a channel over which xDSL broadband can be supplied (although the supply of broadband services is not included in the WLR product). The consideration of the boundaries of the wholesale access market examines whether other types of access product, such as passive access products like LLU or VULA, should fall within the same market. The Commission also assesses whether access products on different types of network should fall within the same product market as WLR over copper.

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<sup>50</sup> For the avoidance of doubt, the Commission considers MT's FTTP0 product, which is effectively WLR for fixed calls on a fibre network, to be part of the WLR product for the purposes of this review. In areas where fibre may be discussed as not being substitutable for WLR means all fibre products other than FTTP0.

3.138. The Commission's consideration of the wholesale market examines all products which may pose a direct constraint in the first instance. A direct constraint would come from an alternative wholesale product. The assessment also takes into account products and services which may pose an indirect constraint.

3.139. The Commission's consideration of a wholesale access market includes whether:

- a. LLU products would fall within the wholesale access market;
- b. VULA and other access products provided over a fibre network would fall within the wholesale access market;
- c. Wholesale Local Access (WLA) products offered over an FWA network would fall within the Wholesale Local Access market; and,
- d. Wholesale Local Access products offered over platforms not included in the Retail Fixed Access market would fall within the Wholesale Local Access market.
- e. Would access to civil engineering infrastructure (eg ducts and poles) be included in the same market?
- f. Would a vertically-integrated supplier pose an indirect constraint on wholesale access due to its presence in the retail market?

**A. Would unbundled local loop products (LLU) fall within the wholesale access market?**

Demand Side Substitution

3.140. An access seeker currently purchasing WLR services would find that LLU enabled it to offer the retail services that it could offer using WLR, and this would indicate that LLU could be considered as a substitute for WLR. The Commission notes that the converse is not likely to be true, and that an access seeker currently using LLU would not find WLR to be a good substitute because LLU enables the access seeker to offer a wider range of retail products, and to exercise a much higher degree of control over the parameters of these products. Substitutability would therefore be one-way.

Supply Side Substitution

3.141. Based on its ownership of an access network, a supplier of WLR would be able to switch to offer an LLU service. However, this would not be likely in the short term or without incurring costs in developing an LLU product.

### Conclusion

3.142. The Commission's preliminary view is that, in principle, LLU should fall within the wholesale access market. The Commission recognises that LLU is not currently available in the Isle of Man, and it is in decline in other jurisdictions, and as such, the Commission would not expect LLU to be demanded or introduced at this stage. However, the Commission would include it in the market based on the functionality which would enable an access seeker to provide retail access services.

3.143. Furthermore, due to the fact that there are incompatibilities between LLU and the rollout of VDSL services, it is unlikely that any operators would see LLU as a viable option. This is based on the fact that there would be, for the most part, a decrease in the speeds that network operators could offer their customers, something which is likely to be highly undesirable. This potential negative impact on customers would also feature in the assessment of any access request for LLU, and likely work against it.

## **B. Would VULA and fibre products such as FTTP fall within the wholesale access market?**

### Demand Side Substitution

3.144. A purchaser of WLR and LLU would be likely to find that FTTP and VULA would be a functional substitute. Generally, the customer handover point for a VULA product is similar to that of an LLU product. The wholesale purchaser has a guaranteed and uncontended bandwidth, and has sufficient control over transmission capacity to offer a high degree of control in defining its retail offering. A VULA product is generally flexible and configurable. The FTTP product currently available is akin to a white label product, and is less flexible and configurable than a VULA product.

3.145. The higher download speeds available over a fibre network means that FTTP and VULA can be used to provide a broader range of services than copper-based LLU and WLR<sup>51</sup>, and so substitution is likely to be one way. The Commission has considered

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<sup>51</sup> For example, the use of access products such as LLU and VULA affords a service provider greater scope to provide added value to its customers through centralised management of firewalls, virus protection, storage, etc. Unlike WLR, VULA would also allow the provision of broadband

other fibre products such as unbundled fibre. In EU member states, VULA is seen as an intermediate product in a move towards full fibre unbundling<sup>52</sup>. However, the technical and economic feasibility of fibre unbundling has delayed its introduction. The Commission's preliminary view is that unbundled fibre would be included in principle in the Wholesale Local Access market, but the Commission recognises the practical issues associated with its implementation.

#### Supply Side Substitution

3.146. Supply side substitution would involve a supplier not currently offering a wholesale access product entering the market in response to a SSNIP in wholesale local access. This would entail an operator who currently had a fibre network making a wholesale VULA product available in response to a SSNIP in wholesale local access. The Commission considers that it is unlikely that such a wholesale product would be made available without a regulatory obligation, in the short term and without incurring significant costs. The Commission notes also that fibre networks are currently geographically limited, and that this would limit the number of customers who could demand a VULA product.

3.147. The Commission also considers whether self-supply of a notional VULA product should fall within the Wholesale Local Access market. All owners of fibre infrastructure self-supply a notional VULA product in order to offer retail services. While any constraint that could be imposed would be limited due to the limited availability of fibre networks, in principle, the Commission proposes that self-supply should be included.

#### Conclusion

3.148. Based on demand side substitutability, the Commission is of the preliminary view that fibre access products including, but not limited to, FTTP and VULA fall within the wholesale local access market.

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<sup>52</sup> See for example, [http://europa.eu/rapid/press-release\\_IP-10-654\\_en.htm](http://europa.eu/rapid/press-release_IP-10-654_en.htm) and

<https://ec.europa.eu/digital-single-market/en/news/european-commission-requires-portuguese-regulator-grant-regulated-access-fibre-rural-and-remote>



**C. Would Wholesale Local Access products offered over an FWA network fall within the Wholesale Local Access market?**

Demand Side Substitution

3.149. A wholesale purchaser of WLR may be likely to find wholesale products offered over a FWA network to be a substitute because the functionality offered would allow the purchaser to provide a similar range of retail products. However, substitutability would be likely to be more limited between LLU/VULA and FWA.

Supply Side Substitution

3.150. Supply side substitution is likely to be limited because there are few examples of wholesale products available over FWA networks, and those that exist are resale. This means that offering a FWA wholesale product would entail significant investment and would not be likely in the short term.

Conclusion

3.151. Based on demand side substitution, and in particular a chain of substitution, the Commission has formed the preliminary view that wholesale access products offered over an FWA network should be included in the Wholesale Local Access market.

**D. Would Wholesale Local Access products offered over platforms not included in the Retail Fixed Access market fall within the Wholesale Local Access market?**

3.152. The Retail Fixed Access market as defined does not include access over alternative platforms including mobile and leased lines. It is the Commission's view that the reasons why retail access over platforms such as mobile and leased lines were found not to be part of the Retail Fixed Access market apply also at a wholesale level. These reasons include a lack of functional similarity, and pricing differences. To this should be added, in the case of mobile, the technical infeasibility of a wholesale variant which would be a substitute for a Wholesale Fixed Access product.

3.153. For all of these reasons, (notional) Wholesale Access products offered over platforms not included in the Retail Fixed Access and Call Origination market would not pose a direct constraint in the Wholesale Access Market.

## **E. Would access to civil engineering infrastructure (e.g. ducts and poles) be included in the same market?**

3.154. Access to civil engineering infrastructure (CEI) such as an SMP operator's ducts and poles could be an option for an operator to establish connectivity to an end user. Such an option would entail an alternative operator using mainly its own infrastructure, which may be less interested in a Wholesale Access product on the SMP operator's network, and more interested in connecting deeper into the network.

### Demand Side Substitution

3.155. A wholesale purchaser of LLU or VULA would not be likely to find access to civil engineering infrastructure to be a good functional substitute because CEI requires a significantly greater investment in own infrastructure, in particular in core network infrastructure. In the Isle of Man context, to date there has been no demand expressed for a Wholesale Local Access product other than WLR, and there would be no direct substitution between WLR and CEI.

### Supply Side Substitution

3.156. Supply side substitution would arise where an operator that had its own infrastructure and offered CEI would switch to offer a Wholesale Local Access product in response to a SSNIP in the price of Wholesale Local Access. While this may be possible in theory, in practice, an infrastructure owner would not be likely to supply access to civil engineering infrastructure absent a regulatory obligation.

### Conclusion

3.157. The Commission's preliminary view is that access to civil engineering infrastructure is upstream from Wholesale Local Access, and as such does not fall within the same product market. The Commission notes that this view is consistent with that of other European jurisdictions<sup>53</sup>.

## **F. Would a vertically-integrated supplier pose an indirect constraint on wholesale access due to its presence in the retail market?**

3.158. In addition to considering potential direct substitutes for Wholesale Local Access, the Commission has examined whether there may be indirect substitutes that could constrain a supplier of Wholesale Local Access. This could arise where a vertically-

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<sup>53</sup> For example, neither Ofcom nor ComReg includes CEI in its definition of the Wholesale Local Access market.

integrated operator on a platform not considered as a direct substitute (for example, a mobile operator) has a sufficiently strong position in the Retail Market to limit the Wholesale Local Access supplier's ability to impose a profitable price increase in Wholesale Local Access. The Commission set out in paragraphs 3.4 to 3.5 its approach to the analysis of indirect substitution.

3.159. In considering the pass through of the price increase from the wholesale to the retail level, the Commission notes that Wholesale Access prices are just one element of the cost stack that makes up a retail price, and so any wholesale price increase is diluted when translated into a retail price increase. This effect is intensified because a supplier (including the hypothetical monopolist) could choose not to pass through the full wholesale price increase to the retail level.

3.160. The Commission has considered the proportion of the retail price for fixed access that is accounted for by the WLR wholesale input. Depending on the choice of retail access and calls bundle, the ratio is between 31% and 53%, which would mean that a 5-10% SSNIP in the price of WLR would translate into an increase in the retail price of 1.5%-5.3%. Experience with products in other jurisdictions indicates that, for example, a VULA wholesale product is likely to account for around 45% of the retail cost stack, so would produce a diluted SSNIP of 2.3-4.5%. In both these examples, the pass through of an increase in the wholesale price is considerably less than a full 5-10% SSNIP.

3.161. The Commission's view is that switching behaviour at the retail level in response to a diluted wholesale price increase in the price of Wholesale Access would not be sufficient to constrain the supplier of Wholesale Access. The Commission notes that an increase in the price of line rental did not result in switching away from Retail Fixed Access and calls to the extent that rendered the price increase unprofitable.

3.162. Furthermore, if the supplier of Wholesale Local Access was to increase the price of Wholesale Local Access, it would not necessarily (absent regulation) pass on the price increase to its own retail customers. This would mean that a proportion of alternative LO retail customers would switch to the wholesale supplier's retail arm, because it would then be cheaper than its competitors. The Commission does not therefore consider that indirect constraints from vertically-integrated operators offering retail services on other platforms such as mobile need to be taken into account at this stage of the analysis.

## **G. Summary of product market definition**

The Commission's preliminary conclusions are that:

- a. Unbundled Local Loop products would fall within the Wholesale Local Access Market;
- b. Virtual unbundled local access (VULA) products provided over a fibre network would fall within the Wholesale Local Access Market;
- c. Wholesale Local Access (WLA) products offered over an FWA network would fall within the Wholesale Local Access Market;
- d. Wholesale Local Access products offered over platforms not included in the Retail Fixed Access Market would not fall within the Wholesale Local Access Market;
- e. Access to civil engineering infrastructure (e.g. ducts and poles) would not be included in the same market; and,
- f. A vertically-integrated supplier would not pose an indirect constraint on Wholesale Access due to its presence in the Retail Market.

## **H. Geographic market definition**

3.163. There is no evidence of geographic differentiation in the Wholesale Local Access product (WLR) currently in the market. WLR is available throughout the island, and the same terms and conditions apply. While there may be some localised differences in competitive pressure associated with fibre roll-out, the Commission's preliminary view is that these would not be sufficient to constrain the pricing of Wholesale Local Access services overall.

3.164. The Commission is cognisant that the Government's National Broadband Plan may ultimately exert an influence on this market. However, there is sufficient uncertainty about the outcomes of this process to consider it in detail in this market review. The Commission will maintain a watching brief and will take any actions it deems necessary should such a need arise.

## I. Susceptibility to Ex-ante Regulation

Entry barriers	Market structure trend	Sufficiency of Competition Law
<ul style="list-style-type: none"> <li>▶ Wholesale Local Access service can only be provided by operators with access networks in place.</li> <li>▶ Presence of strong economies of scale, scope and density in access networks.</li> <li>▶ Entry into the market through building own infrastructure requires significant levels of investment &amp; large sunk costs.</li> <li>▶ Barriers to entry are high.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Demand for WLR likely to continue, but not likely to increase</li> <li>▶ Unlikely to be demand for LLU, as declining technology. No expressed demand for VULA to date.</li> <li>▶ Wholesale Access may be provided by operators who have invested in alternative networks and who have infrastructure in place. However, there may be little commercial incentive to do so.</li> <li>▶ While it is expected that there will continue to be investment in alternative networks (and so self-supply of access), this is likely to be geographically limited</li> <li>▶ Continuing dependency on MT's ubiquitous network.</li> </ul>	<ul style="list-style-type: none"> <li>▶ As a key upstream input for competitors at the retail level, refusal to supply or discriminatory pricing could have immediate damaging consequences for access seekers.</li> <li>▶ Ex-post application of competition law is likely to be too slow to address these concerns effectively.</li> </ul>

Table 6 - Key considerations in determining if the market for Wholesale Local Access is susceptible to ex-ante regulation.

3.165. Based on the analysis in Table 6 above, the Commission's preliminary view is that the market for Wholesale Local Access is susceptible to ex-ante regulation.

9. Do you agree with the Commission's preliminary views on the definition of the product and geographic market for Wholesale Local Access?

10. Do you agree that this market is susceptible to ex-ante regulation?

### 3.3.2 Wholesale Voice Call Termination

3.166. In order for a voice call to be made successfully, wholesale interconnection services are required to convey voice calls between different points on the telephone network. This is illustrated in Figure 10 below, where the Commission assumes the calling and called party are on different operator networks.

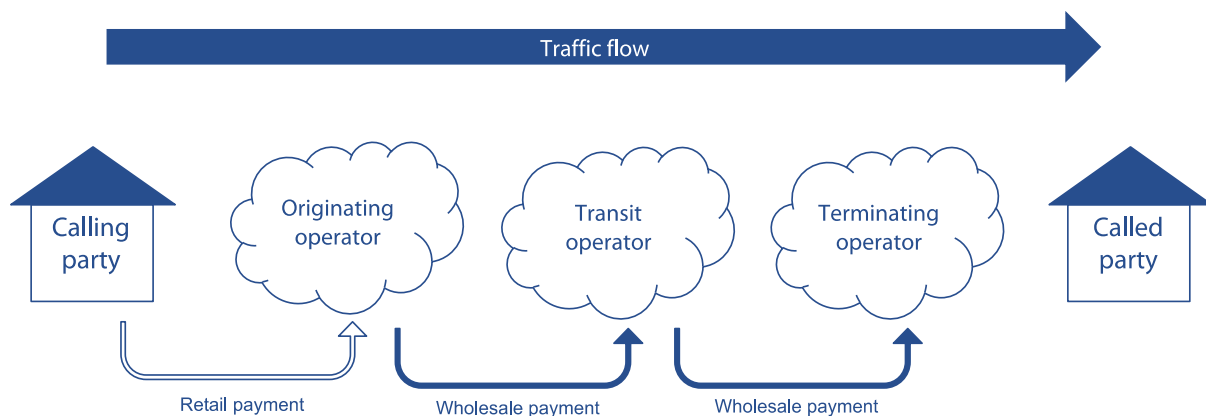


Figure 10: Interconnection services on the telephone network

3.167. The analysis begins by considering Wholesale Voice Call Termination. All fixed operators are responsible for terminating calls to their network. It is technically infeasible to terminate voice calls on a network other than that of the operator to which the called party is subscribed. Therefore, all operators have a monopoly on voice call termination on their network. The price of termination is set by the called party network and must be paid for by the calling party network. This is referred to as the calling party pays principle (CPP).<sup>54</sup>

3.168. In order to determine the boundaries of the market, the Commission must consider whether:

- a. Managed VoIP call termination should be included in the same market;
- b. Fixed Call Termination and Mobile Call Termination fall within the relevant market(s) for call termination;
- c. Wholesale termination for calls to end-users and calls to service providers fall within the same relevant product market; and,
- d. There are any indirect constraints.

#### **A. Should managed VoIP call termination be included in the same market?**

3.169. At the retail level the Commission proposes that managed VoIP calls would be in the same retail market as switched voice calls. This was primarily because of similar functionality and substitutability that exist. The Commission also found that

<sup>54</sup> Under the CPP regime, the called party is not charged for termination of a call to a geographic number and therefore, end-users are generally not sensitive to the termination fee charged by the operator to whom they are subscribed.

unmanaged VoIP calls were not in the same market. It follows that the wholesale market would mirror the on-Island retail market that it serves.

#### Demand Side Substitution

3.170. There are no demand side substitutes to the termination of a voice call, irrespective of how that call originates. The control which a terminating operator has can be linked to the operator's control of its number range – an operator has a monopoly over the termination of calls to its number range, and so to the users of these numbers. Where a VoIP call terminates on a number controlled by a fixed-line operator that call would fall within the same market. In practice, this would be likely to apply only to managed VoIP services, which are often associated with geographic numbers, while unmanaged VoIP services may or may not be.

#### Supply Side Substitution

3.171. A supplier that was already able to terminate managed VoIP calls to IOM numbers on its fixed network would also be able to terminate all types of call to that number.

#### Conclusion

3.172. The Commission's preliminary view is that wholesale termination of managed VoIP calls falls within the same market as wholesale termination of switched voice calls, because of functional similarities on the demand and the supply side.

### **B. Are fixed call termination and mobile call termination in the same market?**

#### Demand Side Substitution

3.173. A wholesale purchaser of Fixed Termination services would not find mobile termination to be a good substitute because the purchaser would be unable to terminate calls on the end user's fixed number.

#### Supply Side Substitution

3.174. There are no supply side substitutes for Fixed Call Termination.

#### Conclusion

3.175. The Commission's preliminary view is that Fixed Call Termination and Mobile Call Termination wholesale services should be considered in separate markets.

### **C. Is wholesale termination for calls to geographic numbers and calls to non-geographic numbers in the same market?**

3.176. Calls to non-geographic numbers involve the provision of services via the call, and could include, for example, calls to technical helplines, advice centres, and entertainment services. In some cases, the caller is charged for the service, and in some cases, the calling party is charged (for example for freephone).

#### Demand Side Substitution

3.177. Termination services for calls to geographic numbers and calls to non-geographic numbers are acquired by originating operators. Wholesale termination to both types of call are likely to be complements from the perspective of the originating operator.

3.178. Calls to fixed end-users (calls to geographic numbers) are terminated by the network operator controlling the termination point (i.e. the network operator of the called party). The calling party originating operator must pay the termination costs (CPP).

3.179. In contrast, for calls to service providers using non-geographic numbers, the wholesale termination rate may affect the price paid by the service provider for accepting the call. For example, in the case of Freephone services and shared cost services where the service provider contributes to the cost of the call, that might be influenced by the termination rate. Therefore the demand for termination services from the provider of wholesale termination. However, the low volumes of such calls is likely to limit the constraint which would be imposed.

#### Supply Side Substitution

3.180. On the supply side a fixed operator providing wholesale termination services to geographic numbers is also likely to be already providing termination services for calls to non-geographic numbers.

#### Conclusion

3.181. The Commission's preliminary view is that the wholesale termination of calls to geographic and non-geographic numbers fall within the same market.

### **D. Indirect constraints**

3.182. An indirect constraint in the market for Wholesale Voice Call Termination would arise if retail customers of alternative services such as mobile switched away from fixed



voice calls in response to a SSNIP in Wholesale Fixed Voice Call Termination. The Commission has proposed that, in the retail market, alternatives such as mobile and unmanaged VoIP calls are not sufficient substitutes to warrant their inclusion in the same retail market as fixed voice calls, and this would limit the number of retail customers who would be likely to switch.

3.183. In considering potential indirect constraints, the Commission noted earlier the need to consider the proportion of the price of the retail service that is accounted for by the price of the wholesale input, because an increase in the price of the wholesale input would be diluted when passed through to the retail level. The Commission notes that, in practice, many calls are included in a retail access and calls bundle. However, for the purposes of this calculation, the Commission has considered MT's wholesale PSTN call termination charge as a proportion of the retail call charges outside of bundle. The wholesale termination charge is around 10% of the retail call charge, which would mean that a 5-10% SSNIP in the wholesale call termination charge would be diluted to an increase of 0.5-1% in the retail market. This would be a very small part of the retail customer's overall access and calls bundle, and would be unlikely to generate switching behaviour that would constrain the pricing behaviour of a hypothetical monopolist.

## **E. Summary of product market definition**

The Commission's preliminary conclusions are that:

- a. VoIP Call Termination should be included in the same market as Traditional Fixed Voice Call Termination;
- b. Fixed Call Termination and Mobile Call Termination do not fall within the same relevant market;
- c. Wholesale termination for calls to end-users and calls to service providers fall within the same relevant product market.

## F. Geographic market definition

3.184. The retail calls market was found to be a national market, and the Commission is also of the view that the associated Wholesale Markets addressing retail calls would also be national in scope.

## G. Susceptibility to Ex-ante Regulation

Entry barriers	Market structure trend	Sufficiency of ex post measures
<ul style="list-style-type: none"><li>▶ Every fixed operator controls access to its subscribers via Wholesale Fixed Voice Call Termination</li><li>▶ No operator can provide call termination on any network other than its own</li><li>▶ It is not technically feasible for an operator to provide termination services to another operator</li></ul>	<ul style="list-style-type: none"><li>▶ There is no competitive pressure on terminating operators to reduce termination charges, due to Calling Party Pays</li><li>▶ Each fixed operator has 100% market share of termination on its own network</li><li>▶ There is no scope for this power to be undermined</li><li>▶ There is no trend towards competition</li></ul>	<ul style="list-style-type: none"><li>▶ Lack of competition in this market is a systemic, structural problem that can only be addressed through regulated charges.</li><li>▶ Ex post application of competition law alone would be insufficient to control market power</li></ul>

Table 7 - Key considerations in determining if Wholesale Voice Call Termination market is susceptible to ex-ante regulation.

3.185. The Commission's preliminary view is that the market for Wholesale Voice Call Termination is susceptible to ex-ante regulation.

11. Do you agree with the Commission's preliminary views on the definition of the product and geographic market for Wholesale Voice Call Termination?

12. Do you agree that this market is susceptible to ex-ante regulation?

### 3.3.3 Wholesale Fixed Voice Call Origination

3.186. In order to address the Retail Voice Calls Market, an operator who owns access infrastructure would self-supply call origination to its own downstream retail operation, and could potentially offer Wholesale Fixed Call Origination services to other operators.

3.187. A Wholesale Fixed Call Origination product was previously offered in the Isle of Man in the form of CPS, but that product is no longer available as it was superseded by WLR. WLR subsequently bundled the provision of Wholesale Calls services with

Wholesale Access. In addition to this, the decline in demand for CPS is evident throughout the EU. There are currently no purely wholesale call origination products available on the market in the Isle of Man.

3.188. In considering what wholesale market would address the Retail Calls Market as defined; we can take as a focal product Wholesale Call Origination offering switched voice calls. At present, this would include the voice calls element of MT's WLR product, and MT's self-supply of Wholesale Voice Call Origination to its retail operation. We then consider the following:

- a. Should Wholesale Call Origination self-supplied over FWA or fibre networks be included in the same market?
- b. Should a vertically-integrated supplier on a platform not considered as a direct constraint pose an indirect constraint on Wholesale Call Origination due to its presence in the retail market?

**A. Should Wholesale Call Origination self-supplied over FWA or fibre networks be included in the same market?**

3.189. The Commission has included, on a preliminary basis, managed VoIP calls in the retail market. In considering the wholesale market, the question is whether an operator that has an FWA or fibre network, and so is able to offer a retail customer an equivalent voice service to switched voice calls would be able to constrain the pricing of Wholesale Call Origination through its self-supply of an equivalent service on its own platform.

Demand Side Substitution

3.190. The retail market for voice calls includes calls provided over FWA and fibre networks. MT has just launched an FTTP0 product which allows a voice-only retail product to be made available over its FTTP network. The Commission's preliminary view is that a wholesale customer would find this product to be a substitute for a Wholesale Call Origination product, but notes that the product bundles access and calls in the same way as WLR. To this extent, the Commission has considered FTTP0 as a product falling within the access market. There are currently no purely wholesale call origination products available to wholesale purchasers over FWA or fibre, but operators owning FWA or fibre access could self-supply a notional wholesale call

origination product. The reasoning would be similar to the inclusion of voice calls over FWA and managed VoIP calls in the retail market.

#### Supply Side Substitution

3.191. The consideration of supply side substitution is not relevant because the supply of Wholesale Call Origination depends on the ownership of an access channel to the retail customer.

#### Conclusion

3.192. The Commission's preliminary view is that Wholesale Call Origination self-supplied over FWA or fibre networks should be included in the same market, because of functional similarities and comparable pricing at the retail level.

### **B. Should a vertically-integrated supplier on a platform not considered as a direct constraint pose an indirect constraint on wholesale call origination due to its presence in the retail market?**

3.193. To exercise an indirect constraint, a vertically-integrated operator on a platform not already considered as a direct constraint (e.g. mobile) would need to have a significant presence in providing retail calls, such that sufficient retail customers would switch away from Retail Fixed Calls in response to a SSNIP, and prevent a hypothetical monopolist Wholesale Local Access supplier from profitably sustaining an increase in wholesale prices.

3.194. Following the methodology described earlier, the Commission needs to determine the impact of a Wholesale Call Origination price increase on the retail price of call origination. Even a full SSNIP of 5-10% would still be a very small part of the retail customer's overall access and calls bundle, and would be unlikely to generate switching behavior that would constrain the pricing behavior of a hypothetical monopolist.

3.195. In considering potential indirect constraints, the Commission must consider the proportion of the price of the retail service that is accounted for by the price of the wholesale input. This is due to the fact that an increase in the price of the wholesale input would be diluted when passed through to the retail level. The Commission notes that, in practice, many calls are included in a retail access and calls bundle. However, for the purposes of this calculation, the Commission has considered MT's wholesale

call origination charge as a proportion of the retail call charges outside of bundle. The wholesale call origination charge is around 10% of the retail call charge, which would mean that a 5-10% SSNIP in the wholesale call origination charge would be diluted to an increase of 0.5-1% in the retail market.

3.196. The Commission has already proposed that while some customers will find mobile calls to be a substitute for fixed calls, sufficient functional differences remain that would prevent fixed and mobile calls falling within the same market. When this is added to the very small part of the retail customer's overall access and calls bundle associated with a SSNIP in wholesale call origination, it would be unlikely to generate switching behaviour that would constrain the pricing behaviour of a hypothetical monopolist.

### C. Summary of product market definition

The Commission's preliminary conclusions are that:

- a) Wholesale Call Origination self-supplied over FWA or fibre networks should be included in the same market; and,
- b) A vertically-integrated supplier on a platform not considered as a direct constraint would be unlikely to pose an indirect constraint on Wholesale Call Origination.

### D. Geographic market definition

3.197. It is proposed that the Retail Calls Market would be a national market, and the Commission is of the preliminary view that the wholesale markets addressing that market would also be national in scope.

### E. Susceptibility to Ex-ante Regulation

Entry barriers	Market structure trend	Sufficiency of ex post measures
<ul style="list-style-type: none"> <li>▶ Strong economies of scale, scope and density in access networks</li> <li>▶ Function of wholesale call origination provided by WLR and FTTP0 products, which have reduced barriers to</li> </ul>	<ul style="list-style-type: none"> <li>▶ Volume of switched voice calls declining</li> <li>▶ Move to all-IP reduces importance of wholesale voice call origination</li> </ul>	<ul style="list-style-type: none"> <li>▶ Ex post application of competition measures would be sufficient</li> </ul>

<p>entry</p> <ul style="list-style-type: none"> <li>▶ Availability of wholesale broadband input reduces barriers to offering voice over IP</li> <li>▶ No evidence of demand for separate wholesale call origination product</li> </ul>		
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*Table 8 - Key considerations in determining if Wholesale Voice Call Origination market is susceptible to ex-ante regulation.*

3.198. The Commission notes that there is a steady decline in the volume of switched voice calls, at the same time as there is an increase in the volume of mobile calls, and managed and unmanaged VoIP calls. Since the time of the last review, the Wholesale Call Origination product (CPS) available in the market was withdrawn in favour of a combined access and calls product (WLR). There has been no further expressed demand for a wholesale call origination product.

3.199. Looking forward, the Commission expects these trends to continue. Indeed, the move to all-IP networks will render discussion about call origination redundant. The Commission has therefore come to a preliminary view that, in the presence of ex-ante regulation of the Wholesale Local Access Market (which would ensure the wholesale supply of Wholesale Local Access products including WLR and potentially VULA) and ex-ante regulation of the Wholesale Broadband Market (which would ensure the wholesale supply of Wholesale Broadband Access products), the market for Wholesale Call Origination is no longer susceptible to ex-ante regulation.

13. Do you agree with the Commission's preliminary views on the definition of the product and geographic market for Wholesale Voice Call Origination?

14. Do you agree that this market is not susceptible to ex-ante regulation?

### **3.3.4 Wholesale Transit**

3.200. Transit services include the transmission or routeing of calls within an operator's network, ultimately for the purposes of procuring termination on that network, and the routeing and conveyance of calls between two different networks providing a link between the point-of-interconnection in the originating network and the point-of-interconnection in the terminating network (but not including the origination or

termination services). The services may be self-supplied, and may also be used by operators who are not directly interconnected to other operators that their customers will want to call.

3.201. Transit services may be used to convey traffic on-Island, and traffic terminating off-Island. For the avoidance of doubt, transit within the Isle of Man includes transit up to and including off-island gateways. There cannot be a gap between the end of the wholesale Transit product and the off-island gateway – a wholesale Transit service must allow the purchaser to access off-island connectivity.

3.202. Origination, transit, and termination are complementary inputs into the provision of call services at the retail level, because all three elements are required to complete a fixed call. Therefore, the specification of call origination and termination implicitly defines the scope of transit. The boundaries of transit services are defined by the boundaries of origination and termination services.

3.203. Operators generally provide transit to its own retail operation (self-supply), and may also provide transit to other operators. The transit of all calls included in the Retail Fixed Calls market should be included in the Wholesale Transit Market, and so the wholesale supply and self-supply of transit of switched and managed VoIP calls over copper, fibre and FWA networks all fall within the Wholesale Fixed Transit Market.

3.204. It is the Commission's view that a technologically-neutral approach is appropriate, and so transit should include both switched and IP based traffic. The Commission has already proposed that wholesale call origination via managed VoIP would fall within the Wholesale Call Origination Market, largely because the move to IP would be a technical upgrade and replacement of existing fixed call products, and the same reasoning applies to Wholesale Transit.

3.205. In defining the boundaries of the Wholesale Transit Market, the following questions are considered whether:

- a. a relevant product market for Wholesale Transit exists across all fixed networks, or across each individual network;
- b. leased lines would be a substitute for wholesale transit; and,
- c. a vertically-integrated supplier would pose an indirect constraint on wholesale transit due to its presence in the retail market.

**A. Does a single relevant product market for wholesale transit exist across all fixed networks, or only across each individual network?**

3.206. Unlike with wholesale termination services, the purchaser of wholesale transit does not need to connect to each and every provider of transit services in order to provide a retail service for calls to all numbers. It could choose to purchase wholesale transit services from any operator offering the service; transit services from different operators would therefore be substitutes.

3.207. Therefore, the market can be defined with respect to all fixed networks (and not separately, for each individual fixed network, as required with termination).

**B. Are leased lines a substitute for wholesale transit?**

3.208. Leased lines would involve an operator establishing a direct connection between two fixed points for the conveyance of calls.

Demand side substitution

3.209. There are significant functional differences between leased lines and wholesale transit. Leased lines are generally a connection between two points, while transit services are provided over the top of a network, conveying calls between multiple points. These functional differences are translated into differences in pricing structure. Transit prices are generally based on a per minute or per call fee, while leased lines involve a connection fee, then a rental charge.

3.210. The Commission's view is that an access seeker with considerable traffic between two specific points may find that a leased line would be an alternative approach, but that leased line and transit services cannot normally be seen as functional substitutes.

Supply side substitution

3.211. A supplier of leased lines may consider switching to supply wholesale transit in response to a SSNIP, but only where the supplier already had leased lines infrastructure in place. The supply of leased lines can be seen as upstream from the supply of transit.

Conclusion



3.212. The Commission's preliminary view is that leased lines are not in the same product market as Wholesale Transit services, primarily because of functional differences and differences in pricing.

**C. Would a vertically-integrated supplier pose an indirect constraint on wholesale transit due to its presence in the retail market?**

3.213. To exercise an indirect constraint, a vertically-integrated operator on a platform not already considered as a direct constraint (e.g. mobile) would need to have a significant share of the Retail Calls Market, such that sufficient retail customers would switch away from Retail Fixed Calls in response to a SSNIP, and prevent a hypothetical monopolist Wholesale Transit supplier from profitably sustaining an increase in wholesale prices.

3.214. In considering potential indirect constraints, the Commission must consider the proportion of the price of the retail service that is accounted for by the price of the wholesale input. This is due to the fact that an increase in the price of the wholesale input would be diluted when passed through to the retail level.

3.215. The Commission notes that, in practice, many calls are included in a retail access and calls bundle. However, for the purposes of this calculation, the Commission has considered MT's Wholesale on-island Transit Service charge as a proportion of the retail call charges outside of bundle. The wholesale transit charge is around 0.4% of the retail call charge, which would mean that a 5-10% SSNIP in the wholesale call termination charge would be very diluted in the retail market. This would be an insignificant part of the retail customer's overall access and calls bundle, and would be unlikely to generate switching behaviour that would constrain the pricing behaviour of a hypothetical monopolist.

**D. Summary of product market definition**

The Commission's preliminary conclusions are that:

- a. The Wholesale Transit Market includes transit services to all call types;
- b. Self-supply is also part of this market;

- c. The market is not constrained to individual operator networks (as was the case for call termination), as there is scope for multiple transit providers who each have the necessary interconnections. An operator would have a choice over which transit provider it chose, or use multiple different transit operators for different calls. Therefore, the market for transit services is not network-specific;
- d. Leased lines are not part of the Wholesale Transit Market; and,
- e. There is no sufficiently strong indirect constraint.

## E. Geographic market definition

3.216. The Commission has proposed that Retail Calls Market would be a national market, it follows that the wholesale markets serving it would also be national in scope.

## F. Susceptibility to Ex-ante Regulation

Entry barriers	Market structure trend	Sufficiency of Competition Law
<ul style="list-style-type: none"> <li>▶ Entry barriers have largely been overcome, in that the only significant on-island transit is provided by Sure to Wi-Manx</li> <li>▶ No evidence of unmet demand for wholesale transit</li> </ul>	<ul style="list-style-type: none"> <li>▶ Volume of switched voice calls declining, and volume of transit likely to reflect this</li> <li>▶ Move to all-IP reduces importance of Wholesale Voice Call Origination</li> </ul>	<ul style="list-style-type: none"> <li>▶ Ex post application of competition law would be sufficient</li> </ul>

*Table 9 - Key considerations in determining if the market for Wholesale Transit is susceptible to ex-ante regulation.*

3.217. The Commission notes that there is a steady decline in the volume of switched voice calls, at the same time as there is an increase in the volume of mobile calls, and managed and unmanaged VoIP calls. This is translated into a diminishing demand for transit.

3.218. Looking forward, the Commission expects these trends to continue. The Commission notes that the response to the data request indicated that transit in the Isle of Man is limited to transit provided by Sure for Wi-Manx, and that this was as a result of a commercial negotiation and not as a result of a regulatory obligation. The Commission's preliminary view is that barriers to entry have been overcome, and so the market for Wholesale Transit is not susceptible to ex-ante regulation.

15. Do you agree with the Commission's preliminary views on the definition of the product and geographic market for Wholesale Transit?
16. Do you agree that this market is not susceptible to ex-ante regulation?

### **3.3.5 Wholesale Broadband Services**

3.219. Use of Retail Broadband services require that the user has an appropriate transmission channel that is capable of passing data in both directions at speeds appropriate for the service. The retail user must also have a broadband service, which may be provided by the supplier of the physical connection, or may be provided separately. To service its customers an Internet Service Provider (ISP) must either build its own network infrastructure or obtain wholesale access to already existing infrastructure in order to connect to the user. Access to an incumbent's network can take place at different network levels (see sub-section 3.3.1), and allows an access seeker to replicate more or less of the network.

3.220. In the discussion of Wholesale Local Access, the Commission noted that full replication of the network refers to the entire access transmission channel. For example, an access seeker that unbundled the local loop (or purchased an equivalent wholesale fibre product such as VULA) would be able to offer a range of retail services, including switched and managed VoIP telephony as well as broadband, and would have a high degree of control over the specification and performance of its retail offerings. An access seeker that sought less replication of the incumbent's network could access at a higher and more central layer in the network architecture. Retail Broadband would then be provided using a wholesale Bitstream-type service, which includes the use of broadband equipment and may include some element of backhaul and handover, but excludes direct access to the local copper and/or fibre loop. Bitstream can be provided over copper (current generation) or fibre (next generation) networks.

3.221. The previous market review recognised this distinction between physical network access (e.g. via LLU) and non-physical access (e.g. Bitstream) in defining two Wholesale Access markets addressing Retail Broadband.

- 3.222. Since the time of the last review, technological developments (in particular the increased roll-out of fibre networks) have led to a review of the boundaries between physical and non-physical access. As discussed above, the Commission proposes to consider the functionality of wholesale products when determining which market they belong to, rather than defining them in terms of whether they are strictly a physical or a non-physical product. It should be noted that this approach is in line with the EU best practice, and is commonly used elsewhere.
- 3.223. The Commission has already proposed to define the Wholesale Local Access Market as an input to Retail Fixed Access. This approach recognises that all fixed access customers are able to use voice and broadband services over their fixed connection, and that a wholesale product such as WLR, LLU or VULA would allow the supplier to provide switched voice or managed VoIP telephony as well as broadband services. It is therefore appropriate that the Wholesale Local Access Market takes into account that, from both the demand and supply sides, products that fall within the market offer both voice and broadband services.
- 3.224. The consideration in this section is therefore of Wholesale Broadband Access which is used to provide retail broadband services. The analysis of the Wholesale Broadband Market notes the presence of an upstream market, which is the Wholesale Local Access Market. In principle, products offered in the Wholesale Local Access Market can be used to supply access to a range of retail services (including broadband) and can also be used to supply wholesale products such as Bitstream in the downstream Wholesale Broadband Access Market.
- 3.225. An access seeker using a Bitstream-type product to provide a Retail Broadband service needs to consider how much of the service to the end user they will supply over their own network, and how much of the provider's network will be required. Generally, Bitstream can be provided at different handover levels, and the choice (or availability) of handover level determines the level of control that the access seeker would have over the parameters of the retail products that can be offered.
- 3.226. Another potential option for a LO seeking to offer is to purchase wholesale naked DSL (nDSL). This is a DSL broadband connection without the dial tone, or voice, element. The retail customer would not be able to use the fixed line to make traditional switched voice calls, but could of course make calls over their broadband connection. While the main appeal for a retail customer is that they would not be

charged line rental (as the line is considered to be “inactive”), there are costs associated with the supply of any fixed connection, and the supplier would seek to recover these. From a wholesale perspective, the difference in cost of supplying xDSL with a voice element and nDSL without a voice element is not significant. This means that the saving to the retail customer will not necessarily amount to the equivalent of the price of line rental.

3.227. In the Isle of Man, the wholesale broadband product that is currently available is more akin to a resale product than to full Bitstream, and as such requires less input from the purchasing access seeker than would be the case with Bitstream. This limits the differentiation that the LO can offer to its retail customers, and also decreases the margin available to the LO, because a resale product is a more expensive input than a wholesale product. The Commission notes that MT offered the current wholesale broadband product prior to the imposition of ex-ante regulation, and that there has been no demand expressed by LOs for a fully Wholesale Broadband Access product.

3.228. The most prevalent Wholesale Broadband Access product in the Isle of Man is xDSL based wholesale broadband; as such this is considered as the focal product. The following questions are considered whether:

- a. Wholesale Broadband products offered over a fibre network (eg Next Generation Bitstream) would fall within the same market as xDSL based current generation broadband;
- b. Wholesale Broadband Access products offered over platforms not included in the Retail Fixed Access market would fall within the Wholesale Broadband Access market; and,
- c. A vertically-integrated supplier on an alternative platform would pose an indirect constraint on wholesale broadband due to its presence in the retail market?

**A. Would wholesale broadband products offered over a fibre network fall within the same market as Current Generation (CG) xDSL?**

Demand Side Substitution

3.229. In considering the Retail Broadband Market, the Commission proposed that there was likely to be substitution between copper and fibre based broadband, based on functionality and pricing. However, substitution is likely to be one way, because a

purchaser of broadband over copper would be likely to switch to broadband over fibre, but not necessarily vice versa. A similar effect would occur in the wholesale market, where a purchaser of wholesale broadband over xDSL would be likely to switch to fibre, but not the reverse.

#### Supply Side Substitution

3.230. A supplier of wholesale broadband over its own fibre network would be unlikely to switch to supply wholesale xDSL, particularly given the one-way substitution identified in the retail market.

#### Conclusion

3.231. Based on demand side substitution, the Commission's preliminary conclusion is that Next Generation Bitstream (fibre) would fall within the same market as Current Generation (copper) Bitstream.

### **B. Would Wholesale Broadband Access products offered over platforms not included in the Retail Fixed Access Market (for example, mobile broadband) fall within the Wholesale Broadband Access Market?**

#### Demand Side Substitution

3.232. For the reasons outlined in the retail market assessment, a purchaser of wholesale xDSL inputs would be unlikely to find a wholesale mobile product to be an effective substitute (see sub-section 3.2.4). Further, although limited wholesale mobile broadband products have been made available in other jurisdictions<sup>55</sup>, there are no such products currently available in the Isle of Man.

#### Supply Side Substitution

3.233. At the wholesale level, it is unlikely that a wholesale supplier of a notional mobile broadband product would switch to supply Wholesale Fixed Broadband in response to a SSNIP in the price of wholesale broadband over copper and fibre, in the short term and without incurring significant costs.

#### Conclusion

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<sup>55</sup> For example, Three in Ireland provided a wholesale mobile broadband product for some time, but it was not further developed.

3.234. The Commission's preliminary view is that Wholesale Broadband Access products offered over alternative platforms do not exercise a sufficient direct constraint to warrant inclusion in the market.

**C. Would a vertically-integrated supplier pose an indirect constraint on wholesale broadband due to its presence in the retail market?**

3.235. The Commission has considered whether a vertically-integrated supplier of broadband over an alternative platform would be likely to sufficiently constrain the supplier of Wholesale Broadband Access. For this to happen, an increase in the price of Wholesale Broadband Access would have to prompt switching at the retail level to a product that is not included in the Retail Broadband Market. For example, this could arise if there was a likelihood of sufficient switching to a mobile or an FWA Broadband product. The methodology for assessing this is set out above in paragraphs 3.158**Error! Reference source not found.** to 3.161 above.

3.236. The Commission notes that, if Wholesale Broadband Access products were to increase in price between 5-10%, not all of this increase would pass through to the retail market, since the price of the wholesale product only accounts for a proportion of the retail cost. The Commission has assessed the proportion of the retail price accounted for by the cost of the wholesale input, and notes that this ranges from 54% to 82% depending on the individual product<sup>56</sup>. A 5-10% price increase would therefore equate to an increase of 2.7-8% in the retail price<sup>57</sup>.

3.237. It is the Commission's view that even this lower level of price increase would not necessarily be passed on in full to the retail customer. Absent a regulatory obligation not to cause a margin squeeze, a hypothetical monopolist could choose to absorb some or all of the increase, because the wholesale price represents a notional transfer charge from wholesale to retail. However, a price increase to a non-vertically integrated LO represents an actual cash impact and the scope for absorption would be much lower. It could therefore be expected that (absent regulation) the hypothetical monopolist's retail price would remain the same, while the price of its retail competitors would increase, and so a proportion of customers responding to the wholesale increase would switch to the hypothetical monopolist's retail service.

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<sup>56</sup> Note that the wholesale charges used for comparison are not the only costs that an LO would incur in providing a retail service, and that the data used does not therefore represent a margin

<sup>57</sup> The wholesale broadband product in the Isle of Man is a white label product. For comparison, the price-cost ratio for Bitstream is generally less than 20% for CG Bitstream, and around 45% for fibre based Bitstream

3.238. In the discussion of the Retail Broadband Market, the Commission's preliminary view was that the number of customers that would find mobile broadband or FWA broadband to be a good substitute for fixed broadband was not sufficient to constrain the pricing of retail fixed broadband. The assessment of indirect constraints indicates that further limitations would apply, including the diluted effect of a wholesale price increase, and the ability of a hypothetical monopolist to absorb a wholesale price increase, and so the Commission does not consider that indirect effects would act as a sufficient constraint.

#### **D. Summary of product market definition**

The Commission's preliminary conclusions are that:

- a. Wholesale Broadband products offered over a fibre network (eg Next Generation Bitstream) would fall within the same market as xDSL based current generation broadband;
- b. Wholesale Broadband Access products offered over platforms not included in the Retail Fixed Access Market would not fall within the Wholesale Broadband Access market; and,
- c. A vertically-integrated supplier would not pose a sufficiently strong indirect constraint on wholesale broadband due to its presence in the retail market.

#### **E. Geographic market definition**

3.239. The Commission has considered whether there are defined parts of the island where the conditions of competition for Wholesale Broadband Access are appreciably different from those in other areas. The assessment assumes that there is no SMP regulation in the Wholesale Broadband Access Market. While regulation of the upstream Wholesale Local Access market could be considered, in practice, there is currently no Wholesale Local Access product in the Isle of Man that offers wholesale. MT is the only provider of Wholesale Broadband Access on the merchant market (i.e. actual sale of wholesale products to other operators, excluding self-supply). As MT offered a similar product before ex-ante regulation was imposed, it has to be considered that MT could offer a wholesale product absent regulation.



3.240. There are inevitable geographic differences in competition associated with the roll-out of networks other than MT's copper network. MT's copper network is the only ubiquitous fixed network on the island, so xDSL Wholesale Broadband Access will be subject to different competitive conditions in areas where there is also a fibre network. However, the Commission is not convinced that this warrants the definition of separate markets.

3.241. The Commission notes experience in other jurisdictions, where a finding of separate geographic markets has been made. Typically, differentiation would be based on a number of alternative service providers with network presence and significant market shares. The assessment depends on being able to identify the boundaries of a potential geographic market that are likely to be stable over time.

3.242. For example, in Ireland, ComReg uses the SMP operator's exchange area. This can be problematic, because other operator networks do not necessarily map directly onto the SMP operator's network. ComReg<sup>58</sup> sets out five cumulative criteria to distinguish exchange areas. These criteria include exchange areas where there are at least three suppliers; where the incumbent's market share is below 50%; where at least three other operators have coverage of at least 30% of the exchange area; where at least three other operators have market shares above 10% of the exchange area; and, even if one criterion is failed, where an alternative operator has a market share above 60%. This illustrates the difficulty in identifying areas that have a persistent and stable boundary, and also illustrates the level of competitive presence that may demonstrate a constraint on the SMP operator.

3.243. It is the Commission's preliminary view that there is not likely to be sufficiently significant variation in competition between different parts of the island to warrant the definition of separate geographic markets. The Commission is cognisant that the Government's National Broadband Plan may ultimately exert an influence on this market. However, there is sufficient uncertainty about the outcomes of this process to consider it in detail in this market review. The Commission will maintain a watching brief and will take any actions it deems necessary should such a need arise.

## Conclusion

3.244. The geographic scope of the market is the Isle of Man.

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<sup>58</sup> ComReg 'Market review: WHOLESALE LOCAL ACCESS provided at a fixed location; WCA provided to a fixed location for mass market products', Document 18/94, Decision D10/18, 19 November 2018

## F. Susceptibility to Ex-ante Regulation

Entry barriers	Market structure trend	Sufficiency of ex post measures
<ul style="list-style-type: none"> <li>▶ Service can only be provided by operators with access networks in place.</li> <li>▶ Presence of strong economies of scale, scope and density in access networks.</li> <li>▶ Entry into the market through building own infrastructure requires significant levels of investment &amp; large sunk costs.</li> <li>▶ Barriers to entry are high.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Wholesale broadband access may be provided by operators who have invested in alternative networks and who have infrastructure in place. However, there may be little commercial incentive to do so.</li> <li>▶ While it is expected that there will continue to be investment in alternative networks (and so self-supply of access), this is likely to be geographically limited</li> <li>▶ Continuing dependency on MT's ubiquitous network</li> <li>▶ Continuing reliance on white label broadband products.</li> </ul>	<ul style="list-style-type: none"> <li>▶ As a key upstream input for competitors at the retail level, refusal to supply or discriminatory pricing could have immediate damaging consequences for access seekers.</li> <li>▶ Ex-post application of competition law is likely to be too slow to address these concerns effectively.</li> </ul>

*Table 10 - Key considerations in determining if the market for Wholesale Broadband Access is susceptible to ex-ante regulation.*

3.245. The Commission's preliminary view is that the market for Wholesale Broadband Access is susceptible to ex-ante regulation.

17. Do you agree with the Commission's preliminary views on the definition of the product and geographic market for Wholesale Broadband Access?

18. Do you agree that this market is susceptible to ex-ante regulation?

### 3.3.6 Wholesale Leased Lines

3.246. Telecom operators may supply wholesale leased lines to each other, either on a commercial basis or as a regulated service. A wholesale leased line is technically similar to a retail leased line, and the difference between wholesale and retail offerings is primarily to do with pricing. The distinction arises where a wholesale sale to another operator will be at a lower price than a retail sale to an end user. An operator purchasing wholesale leased lines may use them as components to provide a retail

service to end user organisations, or supplement its own network (for example for backhaul).

3.247. The Commission's Retail Market assessment found that there were single markets for Traditional Interface Leased Lines and for Modern Interface Leased Lines sold in the Isle of Man, and did not differentiate between those terminating on-Island or off-Island. This reflects the fact that, at the retail level, an end user buys an end-to-end service. This is not necessarily mirrored at a wholesale level. In the Isle of Man, wholesale off-island leased lines are provided over subsea cables. At present, these cables are owned by BT, Vodafone and e-Ilan.

3.248. In order to provide a retail leased line terminating off-island, LOs (with the exception of e-Ilan, which can self-supply an off-island wholesale leased line) must purchase or self-supply a wholesale on-island input from one operator and an off-island leased line from another. This means that, to provide off-island connectivity, Isle of Man operators (with the exception of e-Ilan) are dependent on purchasing wholesale leased lines from operators owning subsea cables. The Commission recognises the importance for wholesale and retail customers of off-island connectivity of having multiple fibres. In addition to providing resilience, the existence of multiple operators owning multiple fibres also acts as a competitive constraint.

3.249. For the purposes of this review, the concern is to ensure that all IOM operators are able to access off-island connectivity in the most efficient and cost-effective manner possible. The definition of the on-island markets for leased lines therefore include connectivity up to and including access to off-island gateways.

3.250. The Commission notes that, in other jurisdictions, the leased lines markets usually differentiate between trunk and terminating segments of leased lines. For regulatory purposes, this is a distinction between leased lines provided over different parts of the network, and there are often different competitive conditions associated with supplying trunk segments over core network capacity and supplying terminating segments in the access network.

3.251. A terminating segment will usually link an end-user's site to the purchasing operator's network node. This will allow the purchasing operator to build an end-to-end service using a combination of wholesale inputs and its own network. A

terminating segment can also be provided as backhaul between a local access node and the purchasing operator's own core network.

3.252. A trunk segment will typically be a leased line carried over aggregated links between major network nodes. Trunk segments will connect, for example, main urban centres characterised by concentrated demand for leased lines and high volumes of traffic between them. However the Commission has not been furnished with any data that suggests such differentiation should apply in the Isle of Man.

3.253. In its discussion of the retail leased lines markets, the Commission noted that there have been significant changes in the markets since the time of the last review. Changes include the move away from Traditional Interface (Traditional Interface) Leased Lines towards Ethernet (Modern Interface) Leased Lines, and the Commission expects that, although there remains an installed base of Traditional Interface services, the use of Traditional Interface will continue to decline.

3.254. The Commission noted in the retail market discussion that the focal product for retail leased lines was Ethernet Modern Interface Leased Lines, and consequently the focal product for the wholesale market is wholesale Modern Interface Leased Lines.

3.255. In considering the wholesale market for leased lines, the Commission examines whether:

- a. wholesale Traditional Interface Leased Lines are in the same market as wholesale Modern Interface Leased Lines;
- b. all bandwidths of leased line are in the same market;
- c. wireless leased lines are in the same market as fixed leased lines;
- d. wholesale broadband products are in the same market as leased lines; and,
- e. dark fibre is in the same market as leased lines.

#### **A. Are wholesale Traditional Interface Leased Lines in the same market as Modern Interface Leased Lines?**

##### Demand Side Substitution

3.256. The migration from Traditional Interface to Modern Interface services at the retail level is mirrored at the wholesale level. While there may still be some purchase of

wholesale Traditional Interface Leased Lines, the overall trend is that wholesale purchasers replace Traditional Interface circuits with Modern Interface circuits, suggesting that substitution is asymmetric.

#### Supply Side Substitution

3.257. In response to a SSNIP in the Modern Interface market an operator currently supplying Traditional Interface Leased Lines would not be likely to switch to supply Modern Interface Leased Lines due to the need for significant upfront investment. In addition, any potential switch would be limited as the purchase of Traditional Interface Leased Lines is in decline, and TDM equipment is approaching obsolescence.

#### Conclusion

3.258. The Commission's preliminary view is that Traditional Interface wholesale Leased Lines are not in the same market as Modern Interface wholesale Leased Lines. This means that there will be separate markets for on-Island wholesale Traditional Interface and Modern Interface Leased Lines.

### **B. Are all bandwidths of leased line in the same market?**

#### Demand Side Substitution

3.259. The Commission's view is that the wholesale market mirrors the retail market, in that there is a functional substitutability between different bandwidths of leased line. Clearly, wholesale customers have varied demands for bandwidth, and this could in principle be met by a single service or by multiples of lower bandwidth services. This suggests demand-side substitutability along a chain of substitution, and would apply to Traditional Interface and Modern Interface Leased Lines.

#### Supply Side Substitution

3.260. On the supply side, the physical network infrastructure of buildings, trenches, fibre and ducts is a prerequisite to the provision of wholesale leased lines, and the construction of such a network requires considerable investment. However, once built, infrastructure can be used to provide leased lines of all bandwidths and interfaces, as these are determined at the connection to the end user.

#### Conclusion

3.261. The Commissions' preliminary view is that, due to a chain of substitution, all bandwidths of Traditional Interface and Modern Interface Leased Lines fall within the same markets for on-Island Traditional Interface and on-island Modern Interface Leased Lines.

### **C. Are wireless leased lines in the same market as fixed leased lines?**

#### Demand Side Substitution

3.262. Developments in wireless technologies mean that wireless leased lines can provide bandwidths up to 1Gbit/s. As noted in the retail market definition, wired and wireless leased lines share similar product characteristics and similar pricing, and this would be mirrored at the wholesale level. A purchaser of wired leased lines who did not seek the higher capacities of circuit would find a wireless leased line to be a good substitute. The Commission notes that Mobile Network Operators are large customers of both fixed wired and wireless leased lines to provide backhaul, and wireless circuits may be preferred in locations where wired infrastructure is not available and where the traffic load on backhaul may be lower compared to more densely populated areas.

#### Supply Side Substitution

3.263. The main differences between wireless and wired leased lines is that the provision of wireless leased lines needs access to radio spectrum and line-of-sight between wireless service end points. This means that a purchaser of wholesale wired leased lines might find that there were constraints on the substitutability of a wireless leased line. There are some limited cases in which a wireless link would be preferable to a wired one, for example in an application where latency was a mission critical factor. However, for the most part wired leased lines are preferable due to their increased resilience and network up-time.

#### Conclusion

3.264. The Commission notes that regulators in some jurisdictions have found that supply side constraints indicate that wireless leased lines should not be in the same market as wired leased lines. However, other regulators have found the opposite, principally because a relatively low population density and topography appropriate to establishing good sightlines can mitigate the problems caused by spectrum scarcity and congestion. The Commission's preliminary view is that, in the Isle of Man, wireless leased lines should form part of the same market as fixed leased lines.

3.265. This applies both to wholesale Traditional Interface Leased Lines and to wholesale Modern Interface Leased Lines.

#### **D. Are wholesale broadband products in the same market as leased lines?**

##### Demand Side Substitution

3.266. The Commission's assessment of the retail market proposed that broadband services would not be a sufficiently effective substitute for either retail Traditional Interface Leased Lines or retail Modern Interface Leased Lines, as there are significant differences in terms of functionality, pricing and use of these services. The Commission's view is that these same distinctions apply at the wholesale level, and wholesale broadband services are not a good substitute for wholesale leased lines.

##### Supply Side Substitution

3.267. The Commission's view is that a supplier of wholesale broadband services not currently supplying wholesale leased lines would not be able to readily switch to supply wholesale leased lines without incurring significant upfront costs.

##### Conclusion

3.268. The Commission's preliminary view is that due to differences in functionality, pricing and use, wholesale broadband services are not in the same market as wholesale Traditional Interface or Modern Interface Leased Lines.

#### **E. Is dark fibre in the same market as leased lines?**

##### Demand Side Substitution

3.269. It is unlikely that a purchaser of wholesale leased lines would find dark fibre to be a good substitute. Although dark fibre can be used to provide capacity at all bandwidths, there are additional fixed on-going costs and additional technical expertise associated with using dark fibre to provide an active leased line product.

##### Supply Side Substitution

3.270. The Commission has considered whether a supplier of dark fibre not currently active in supplying wholesale leased lines would be likely to enter into the wholesale leased lines market in response to a SSNIP in the price of wholesale leased lines. The Commission notes that some other NRAs (for example Ofcom) have found dark fibre to be included in the wholesale leased lines market on the basis of supply side

substitution, while others (for example ComReg) have not. The Commission is not convinced that supply side substitution on its own would warrant the inclusion of dark fibre in the wholesale leased lines product market.

### Conclusion

3.271. The Commission's preliminary view is that dark fibre is passive infrastructure upstream from the product market for wholesale Traditional Interface and wholesale Modern Interface Leased Lines. As such, it is not within the wholesale leased lines product markets.

## **F. Summary of product market definition**

The Commission's preliminary conclusions are that:

- a. Wholesale Traditional Interface Leased Lines are not in the same market as Modern Interface Leased Lines;
- b. All bandwidths of leased line are in the same market;
- c. Wireless leased lines are in the same market as fixed leased lines;
- d. Wholesale broadband products are not in the same market as leased lines; and,
- e. Dark fibre is not in the same market as leased lines.

## **G. Geographic market definition**

3.272. The Commission has considered whether there are defined parts of the island where the conditions of competition for Modern Interface or Traditional Interface Leased Lines are appreciably different from those in other areas. At present, MT, Sure and e-Ilan all offer wholesale leased lines. MT offers both Traditional Interface and Modern Interface Leased Lines, while Sure and e-Ilan offer only Modern Interface. Only MT is subject to a regulatory obligation to provide wholesale leased lines, but the existence of wholesale products from other suppliers would suggest that at least some wholesale



leased line products would be made available absent SMP regulation, because this is happening now.

3.273. Leased lines are a product for businesses, and it would be expected that use of leased lines will be greatest where there is a concentration of business customers. The economics of supplying leased lines is such that the supplier's costs are lowest where traffic can be aggregated: the pattern on the Isle of Man reflects this with areas where there is a concentration of business customers proving the most attractive areas for alternative infrastructure investment.

3.274. While recognising that there is geographic variation between areas where there is a concentration of business customers, and areas where there is not, the Commission notes that the existence of alternative infrastructure is not enough in itself to demonstrate separate geographic markets. The Commission has therefore considered the presence and behaviour of alternative operators.

3.275. The Commission has reviewed approaches taken in other jurisdictions. Of the 33 NRAs who responded to a BEREC data request<sup>59</sup>, only 3 found sub-national markets for leased lines<sup>60</sup>. A further 4 NRAs found national markets, but imposed geographically differentiated remedies<sup>61</sup>. To give an example of how BEREC's criteria were applied, in the UK, Ofcom considers that an area may be considered potentially competitive where businesses have on average five or more Communications Providers within 100m, and/or on average four or more Communications Providers within 100m and 90% of businesses are within 100m of at least two Communications Providers<sup>62</sup>.

3.276. In the Isle of Man, there is no alternative Traditional Interface infrastructure, all roll-out by operators other than MT is based on Modern Interface infrastructure. The Commission notes that MT's pricing decision to differentiate between the price for wholesale leased lines provided in Metro and non-Metro areas was largely justified due to differences in the cost of supply, rather than due to competitive pressure.

3.277. In considering BEREC's proposed criteria, the Commission does not consider that areas can easily be defined that would exhibit stable and persistent boundaries, where the conditions of competition would be significantly different from neighbouring areas.

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<sup>59</sup> BEREC, 'Report on the application of the common position on geographic aspects of market analysis', BoR (18) 213, 6 December 2018

<sup>60</sup> Finland, UK, Austria

<sup>61</sup> France, Ireland, Belgium, Portugal

<sup>62</sup> Ofcom, 'Business Connectivity Market review, vol 1', 28 April 2016

3.278. It is the Commission’s preliminary view that there is not likely to be sufficiently significant variation in competition between different parts of the island to warrant the definition of separate geographic markets.

## H. Susceptibility to Ex-ante Regulation

Entry barriers	Market structure trend	Sufficiency of ex post measures
<ul style="list-style-type: none"> <li>▶ For Traditional Interface Leased Lines, incumbent has advantages associated with economies of scale and sunk costs</li> <li>▶ Barriers to entry may be reduced in areas of concentrated demand for Modern Interface circuits, and on particular routes</li> <li>▶ Entry into the market through building own infrastructure requires significant levels of investment &amp; large sunk costs.</li> <li>▶ Dependence on access infrastructure close to the end user – advantage of ubiquitous network</li> </ul>	<ul style="list-style-type: none"> <li>▶ Unlikely to be significant new investment in Traditional Interface Leased Lines, but there is an installed base</li> <li>▶ While it is expected that there will continue to be investment in alternative networks and Modern Interface Leased Lines, this is likely to be geographically limited</li> <li>▶ Continuing dependency on MT’s ubiquitous network</li> </ul>	<ul style="list-style-type: none"> <li>▶ As a key upstream input for competitors at the retail level, refusal to supply or discriminatory pricing could have immediate damaging consequences for access seekers.</li> <li>▶ Ex post application of competition law is likely to be too slow to address these concerns effectively.</li> </ul>

*Table 11- Key considerations in determining if the Wholesale markets for Traditional Interface and Modern Interface leased Lines are susceptible to ex-ante regulation.*

3.279. The Commission’s preliminary view is that the wholesale market for on-island Traditional Interface Leased Lines and the wholesale market for on-island Modern Interface Leased Lines are both susceptible to ex ante regulation.

19. Do you agree with the Commission’s preliminary views on the definition of the product and geographic market for wholesale Traditional Interface Leased Lines?
20. Do you agree with the Commission’s preliminary views on the definition of the product and geographic market for wholesale Modern Interface Leased Lines?

21. Do you agree that these markets are susceptible to ex-ante regulation?

## 4 Competition assessment

### 4.1 Approach to competition assessment

- 4.1. The purpose of competition assessment is to identify whether there is an operator (or operators) with Significant Market Power (SMP). In this context, SMP means the power to behave to an appreciable extent independently of competitors, customers and ultimately of consumers.
- 4.2. The approach to competition assessment entails an analysis of the level of competition in each relevant market that has been found to be susceptible to ex-ante regulation, examining how effectively competitive forces are at work. The assessment draws on quantitative and qualitative data available to the Commission, including that collected specifically for this market review. SMP can be individual or collective.
- 4.3. Operator licences<sup>63</sup> indicate the factors that the Commission may choose to take into account when making an SMP determination. Not all factors will be relevant in all markets, and some factors will be more significant than others. Broadly, these factors can be categorised as considering:
  - a. Existing competition;
  - b. Potential competition; and,
  - c. Countervailing buyer power.
- 4.4. Market shares and their variation over time provide a useful indication of the market structure and the relative importance of operators active in the market. According to established EU case law, a market share persistently above 50% is, save in exceptional circumstances, evidence of a dominant position. However, there may be factors in the market that mitigate even a high market share, and so a market share above 50% is seen as a rebuttable presumption of dominance.
- 4.5. The competition assessment examines the current and historic structure and trends in the market, and considers how competition may change over the next 2-3 years.
- 4.6. The assessment also considers whether there is any countervailing buyer power (CBP). CBP refers to the ability of a customer or customers, because of their position in the

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<sup>63</sup> MT Licence Condition 42.6; Sure Licence Condition 27.6 ; Wi-Manx Licence Condition 28.6 ; BlueWave Licence Condition 28.6 , Domicilium Licence Condition 16.5 ; Continent 8 Licence Condition 11.6 ; E-Ilan Licence Condition 11.6

market, successfully to resist supplier price increases. The source of this negotiating strength may come from a customer's size; its commercial significance to the supplier; its ability to credibly threaten to switch, within a reasonable time frame, to alternative suppliers; its ability to sponsor a new entrant; and/or its ability to engage in self-supply. However, mere size and commercial significance of customers does not necessarily prove that they have CBP, and the ability of large customers to negotiate on price (for example, to receive volume discounts) is not the same as the exercise of CBP. The exercise of buyer power by one customer may benefit that customer, but may not benefit sufficient customers to render a price increase unprofitable.

- 4.7. When the Commission assesses CBP, the key question is the extent to which buyer power mitigates the market power of the supplier. The Commission therefore takes into account not only the size of the customer, and the proportion of sales it represents, but also whether the customer could credibly switch to alternative suppliers or self-supply within a reasonable timeframe. The Commission then assesses what impact such behaviour would be likely to have on the market, and in particular how other customers may be affected
- 4.8. The conclusion of the competition assessment is the designation of any operator or operators that are found to have SMP in the market in question.
- 4.9. In Section 3, the Commission set out its preliminary findings that the following wholesale and retail markets are susceptible to ex-ante regulation:
  - a. Wholesale Local Access;
  - b. Wholesale Voice Call Termination;
  - c. Wholesale Broadband Access;
  - d. Wholesale On-Island Traditional Interface Leased Lines;
  - e. Wholesale On-Island Modern Interface Leased Lines;
  - f. Retail Fixed Access;
  - g. Retail Traditional Interface Leased Lines; and
  - h. Retail Modern Interface Leased Lines.

4.10. Defined markets found not to be susceptible to ex-ante regulation are not considered further in the analysis. This section examines each of the wholesale fixed markets found, on a preliminary basis, to be susceptible to ex-ante regulation, and then carries out the same exercise for the retail markets.

## **4.2 Wholesale markets**

### **4.2.1 Wholesale Local Access**

#### Existing competition

4.11. The Wholesale Local Access product currently in the market is WLR. MT is the only provider of WLR, and so has 100% market share. Since the time of the last market review, MT has been subject to an obligation to provide access upon reasonable request. There have been no requests by LOs for alternative wholesale local access products other than WLR.

4.12. When self-supply is included in the market, market shares would include all operators that offer Retail Fixed Access over their own infrastructure. This would include access over fibre and FWA.

4.13. In examining the wholesale market including self-supply, MT's market share remains well in excess of 50%, and indeed over 98%, which would be presumptive of dominance.

4.14. The Commission notes that MT's share of the retail access market is 92%, as at Q2 2018, and has declined from 96% over the last two years. This is in the presence of ex-ante regulation, and presumably due to the purchase of regulated wholesale inputs.

#### Potential competition

4.15. Barriers to entry and expansion in this market are high, arising from the significant sunk costs associated with building an access network. MT benefits from economies of scale, scope, and density, and its network would not be easily replicated. MT also has the benefit of its legacy network. MT is vertically-integrated, and is active in all relevant markets in the value chain – it offers wholesale and a range of retail services.

4.16. It is the Commission's view that operators are unlikely to make a Wholesale Local Access product available absent regulation, and this would be likely to be the case for

all operators. Potential competition is therefore more likely to be associated with self-supply. While FWA has been included in the retail access market, its substitutability is limited because its functionality is similar to the lower specification xDSL products, and not to higher specification VDSL or fibre broadband products, and this would limit the constraint it could exercise. Self-supply over fibre could constrain a Wholesale Local Access provider. However, the Commission notes that fibre roll-out by all operators is still geographically very limited. The Commission notes that both Sure and MT have indicated that they expect to continue to roll out fibre.

4.17. The Commission has considered the extent to which the implementation of the National Broadband Plan could impact on the conditions of competition in the Wholesale Local Access market. The implementation of the National Broadband Plan envisages a more rapid roll out of fibre to more parts of the island, and a more rapid shift from services delivered over copper to services delivered over fibre. However, from a competition perspective, there would still be a ubiquitous access network, and it is unlikely that there would be parallel competing networks throughout the island. The advantages afforded by the ownership and control of a ubiquitous access network are similar, whether that network is copper or fibre (See Section 2.7).

4.18. Until the detail of the implementation is more definitive, it is difficult to be more precise about the consequences from a competition perspective. However, the Commission undertakes to respond promptly should changing conditions in the market so demand.

#### Countervailing Buyer Power

4.19. MT is currently the only provider of Wholesale Local Access services and Sure is the only purchaser. Sure depends on this wholesale input to offer retail access services, and is not in a position to constrain MT's market power.

#### Preliminary SMP determination

4.20. The Commission's preliminary view is that MT has SMP in the market for Wholesale Local Access.

### **4.2.2 Wholesale Fixed Voice Call Termination**

#### Existing competition

4.21. All operators that can terminate fixed voice calls have 100% market share for the termination of calls on their own networks.

#### Potential competition

4.22. These monopoly positions have not changed, and will not change going forward, as the issue is structural. The monopoly position is not contestable – no other operator can provide termination services on another operator's network. The Commission recognises the increasing use of OTT voice services that do not incur termination charges, and notes the continuing decline of traditional voice calls. However, this does not alter the underlying structural issue in the market, as even though the volume may decline, any switched voice call still requires the purchase of wholesale termination from an operator that is a monopolist.

#### Countervailing Buyer Power

4.23. Given the CPP regime for retail calls, there is no countervailing buyer power.

#### Preliminary SMP determination

4.24. The Commission's preliminary view is that all operators that can terminate fixed voice calls have SMP for the termination of calls on their own networks. In practice, this means all operators terminate calls to their allocated 01624 numbers.

### **4.2.3 Wholesale Broadband Access**

#### Existing competition

4.25. MT is the only provider of a Wholesale Broadband Access product, and so has 100% market share. It provides ADSL and VDSL wholesale inputs on its copper network, and an FTTP access product, all of which are white label versions of MT's own product. Since the time of the last market review, MT has been subject to an obligation to provide access to wholesale broadband products upon reasonable request. There have been no requests by LOs for alternative wholesale broadband products other than MT's white label product.

4.26. When self-supply is included in the market, market shares would include all operators that self-supply retail broadband over their own infrastructure. This would include operators offering access over fibre.



4.27. Taking the broadest possible market definition, and including self-supply from all operators that provide broadband over their own infrastructure (whether or not they are likely to make a wholesale offer available), MT still has a persistently high market share of over 98% of the Wholesale Broadband Access market.

#### Potential competition

4.28. The Commission notes that MT did make a wholesale broadband product available prior to ex-ante regulation. However, the Commission does not expect that any operator other than MT will make a wholesale broadband product available absent a regulatory obligation.

4.29. This means that any potential competitive constraint would come from LOs self-supplying inputs required to offer a retail broadband service. The small share of the market accounted for by LOs providing broadband over their own infrastructure highlights LO dependence on MT's wholesale broadband product to be able to compete in the retail market. This dependence is likely to reduce as fibre is rolled out by other LOs. However, such roll-out is likely to be geographically limited, and the Commission expects that LOs will continue to be dependent on MT wholesale inputs for the lifetime of this review, particularly in areas where there is no alternative infrastructure.

4.30. The Government's National Broadband Plan and the Commission's approach is discussed in more detail at 4.17.

4.31. MT is likely to continue to enjoy economies of scale, scope, and density arising from its ownership of a ubiquitous copper network. As a vertically-integrated entity, MT is active in relevant wholesale and a range of retail markets. MT's share of the Retail Broadband market has remained at around 80% over the last two years, even in the presence of ex-ante regulation. All of these reasons indicate that barriers to entry into the Wholesale Broadband Access market remain high, and that LOs remain dependent on Wholesale Broadband Access inputs to compete in the Retail Broadband market.

4.32. The Commission has extended its analysis to consider the implications of defining an even broader Retail Broadband market, to include broadband provided over 4G mobile and FWA (even although the Commission's preliminary view is that these products are not demand or supply side substitutes for xDSL and fibre based broadband). The

Commission notes that MT's market share of such a retail market would still be just under 78%.

#### Countervailing Buyer Power

- 4.33. The largest purchaser of MT's wholesale broadband product is MT Retail. No other customer purchases a significant enough volume to allow it to exercise countervailing buyer power.

#### Preliminary SMP determination

- 4.34. The Commission's preliminary view is that MT has SMP in the market for Wholesale Broadband Access.

### **4.2.4 Wholesale on-island Traditional Interface Leased Lines**

#### Existing competition

- 4.35. MT is the only provider of wholesale on-island Traditional Interface Leased Lines, and so has 100% market share. MT is also the only provider of retail Traditional Interface Leased Lines. MT's supply of wholesale Traditional Interface Leased Lines is therefore all self-supply from its wholesale operation to its retail operation.

#### Potential competition

- 4.36. In the Commission's view, it is unlikely that there will be entry into this market, because LOs seeking to enter or expand their supply of wholesale leased lines would be likely to offer only Modern Interface Leased Lines. The Commission would also expect that MT would not intend to expand in the Traditional Interface Leased Lines market, and that new and renewing wholesale or retail customers would choose Modern Interface circuits. The Commission expects that the size of the Traditional Interface Leased Lines market will continue to decrease over the lifetime of this review. The competition concerns in this market are therefore not to do with encouraging market entry or expansion, but rather to ensure that the installed base of retail customers is not disadvantaged.

#### Countervailing Buyer Power

- 4.37. The only purchaser of MT's wholesale Traditional Interface Leased Lines is MT's own retail operation. Countervailing Buyer Power is therefore not an issue.

#### Preliminary SMP determination

4.38. The Commission's preliminary view is that MT has SMP in the wholesale market for Traditional Interface on-island leased lines.

#### **4.2.5 Wholesale on-island Modern Interface Leased Lines**

##### Existing competition

4.39. Wholesale on-island Modern Interface Leased Lines are offered by MT, Sure and e-lan. MT's market share has reduced from 99% in Q2 2016, but remains above 90% in Q2 2018. Market shares do not vary significantly whether measured by volume of circuits or by revenue.

##### Potential competition

4.40. The Commission's preliminary view is that potential competition in this market is most likely to come from Sure's self-supply, as it rolls out its own infrastructure. This is likely to be geographically limited, which means that LOs will continue to be dependent on MT's infrastructure.

4.41. The Commission notes that an increasing volume of LO retail circuits are being provided over operators' own infrastructure. This trend is limited to Sure – other LOs remain dependent on wholesale inputs to compete in the retail market. The Commission also notes that, in the areas where most businesses are concentrated, LOs often have a choice of wholesale provider. Retail customers in such areas may benefit from this, particularly as the lower costs of providing leased lines services in these areas is reflected in MT's Metro/non Metro pricing structure. However, given MT's continuing high share of the wholesale market (even when including self-supply), there is on-going dependence on MT's infrastructure for LOs to be able to compete.

4.42. The Commission's preliminary view is that barriers to entry in the wholesale market for on-island Modern Interface Leased Lines are lower in areas of the highest concentration of business customers, and this is evidenced by actual market entry in the form of Sure and e-lan's infrastructure build, self-supply and the provision of wholesale products in such areas. The Commission expects that there will continue to be more competition in concentrated business areas, and notes that this pattern is consistent with all other jurisdictions. The Commission considers that, during the lifetime of this review, the competitive presence of LOs other than MT will be consolidated in some key business areas, but that this process is still at a relatively early stage. The Commission is mindful, given LO dependence on wholesale leased

lines, that only an SMP operator is required to provide access on reasonable request, and that wholesale products provided absent ex-ante obligations can easily be withdrawn. It is the Commission's preliminary view that the conditions of competition, even in the most concentrated business areas, do not indicate an established wholesale market absent ex-ante regulation.

#### Countervailing Buyer Power

- 4.43. The purchaser of most of MT's wholesale Modern Interface Leased Lines is MT Retail. The Commission is of the view that no other LO would have sufficient buyer power to constrain the SMP operator in the wholesale market for Modern Interface Leased Lines.

#### Preliminary SMP determination

- 4.44. The Commission's preliminary view is that MT has SMP in the wholesale market for on-island Modern Interface Leased Lines.

22. Do you agree with the Commission's preliminary views on the SMP determinations in the Wholesale Markets?
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## 4.3 Retail markets

### 4.3.1 Retail access

#### Existing competition

4.45. Retail access as defined includes access provided to residential and business customers via the PSTN, ISDN, FWA, and fibre. MT, Sure, and WiManx provide PSTN while only MT and Sure provide ISDN access. Additionally, BlueWave and Domicilium provide FWA access. Fibre access (FTTP) was introduced in the last quarter of the reporting period, and both MT and Sure reported subscribers for that quarter. Since the data submissions for the market reviews, Wi-Manx has also started offering retail FTTP.

4.46. Overall, the number of PSTN and ISDN subscribers is steadily declining. The number of FWA subscribers is increasing, but makes up a very small proportion (less than 1%) of fixed access subscribers. MT's market share measured by number of subscribers has been declining since 2016, but remains above 90%.

#### Potential competition

4.47. The Commission expects a rapid decline in ISDN subscriptions as the product is withdrawn and users migrate to alternative technologies as a result. It can be expected that PSTN subscription will also decline, particularly as fibre roll out continues. The Commission's preliminary view is that MT's share of the Fixed Access Market will continue to decline during the lifetime of this review, but not at a speed that would indicate any significant change in the conditions of competition.

4.48. The Government's National Broadband Plan and the Commission's approach is discussed in more detail at 4.17.

4.49. Until the detail of the implementation is more definitive, it is difficult to be more precise about the consequences from a competition perspective. However, the Commission undertakes to respond promptly should changing conditions in the market so demand.

#### Countervailing Buyer Power

4.50. The Commission notes that, generally, in a mass market like retail access, individual end users are unlikely to have credible countervailing buyer power when negotiating

contracts with operators, and even individual business customers are unlikely to have sufficient size or commercial significance to be able to constrain an SMP operator's market power<sup>64</sup>. However, in a small market like the Isle of Man, an individual end user such as government or the larger corporate customers may be able to influence the SMP operator's behaviour more than would be possible in a larger market.

4.51. The Commission notes that the exercise of countervailing buyer power is not the same as a customer managing to negotiate a discount. For a customer to exercise countervailing buyer power, it must account for a significant proportion of the SMP operator's total volume, such that its actions could render a price increase unprofitable.

4.52. The Commission's preliminary view is that no retail customer in the Isle of Man can exercise countervailing buyer power to the extent that would constrain an SMP operator, and mitigate its market power.

#### Preliminary SMP determination

4.53. The Commission's preliminary view is that MT has SMP in the market for retail access

### **4.3.2 Retail Traditional Interface Leased Lines**

#### Existing competition

4.54. MT is the only supplier of retail Traditional Interface Leased Lines, and so has 100% market share.

#### Potential competition

4.55. In the Commission's view, it is unlikely that other LOs will seek to enter this market. It is also unlikely that MT will seek to expand in this market. The Commission expects that this market will continue to shrink as customers migrate to Ethernet.

#### Countervailing Buyer Power

4.56. The Commission's preliminary view is that no retail customer in the Isle of Man can exercise countervailing buyer power to the extent that would constrain an SMP operator, and mitigate its market power.

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<sup>64</sup> See European Commission staff working document accompanying 'Guidelines on market analysis and the assessment of SMP under the EU regulatory framework for electronic communications networks and services', 07.05.2018 2018/C 159/01

#### Preliminary SMP determination

- 4.57. The Commission's preliminary view is that MT has SMP in the market for retail Traditional Interface Leased Lines

#### **4.3.3 Retail Modern Interface Leased Lines**

##### Existing competition

- 4.58. BlueWave, Domicilium, MT, Sure and Wi-Manx are all active in the retail Modern Interface Leased Lines market. The number of circuits on-island has been increasing over the last two years, although the total leased line revenue has been decreasing. MT is the largest supplier, and its market share by volume of circuits has remained constant and above 65%. MT's market share by revenue has been declining steadily, and by Q2 2018, it was just above 50%.

##### Potential competition

- 4.59. The operators active in the market (other than MT) have had market shares that have remained stable or increased over the last two years. The Commission notes that an increasing volume of LO retail circuits are being provided over own infrastructure. However, given MT's continuing high share of the Wholesale Market (even when including self-supply), there is on-going dependence on MT's infrastructure for LOs to be able to compete. The Commission's preliminary view is that the number of operators active in the market, and their increasing market shares, indicate a market that is tending towards competition during the lifetime of this review. However, this is strongly dependent on effective regulation of the Wholesale Modern Interface Leased Lines Market.

##### Countervailing Buyer Power

- 4.60. The Commission notes that the Isle of Man Government is a significant purchaser of retail leased lines. However, even if the Government as a retail customer is not able to exercise Countervailing Buyer Power, the ownership of the government contract for leased lines will contribute significantly to the providing operator's share of the market. The Commission is aware that Government intends to tender for its leased lines contracts during the life of this review. The Commission will closely monitor any changes to market share that may arise as a consequence of Government's decisions.

### Preliminary SMP determination

4.61. The Commission's preliminary view is that no operator has SMP in the retail market for Modern Interface Leased Lines. This is because it is expected that the market will tend towards competition in the lifetime of this review, in the presence of an effectively regulated wholesale market for Modern Interface Leased Lines.

23. Do you agree with the Commission's preliminary views on the SMP determinations in the Retail Markets?

## **4.4 Summary of preliminary SMP determinations**

<b>Market</b>	<b>Preliminary SMP determinations</b>
Wholesale Local Access	MT
Wholesale Voice call termination	All operators for termination on their fixed network
Wholesale Broadband Access	MT
Wholesale on-island Traditional Interface Leased Lines	MT
Wholesale on-island Modern Interface Leased Lines	MT
Retail Access	MT
Retail Traditional Interface Leased Lines	MT
Retail Modern Interface Leased Lines	No SMP



## 5 Remedies in Wholesale Fixed Markets

### 5.1 Approach

- 5.1. The Commission's approach to identifying remedies is to target remedies at competition problems that are likely to exist in the absence of ex-ante regulation. This means that it is not necessary to catalogue examples of actual abuse of market power, nor to provide exhaustive examples of potential abuses. If an operator has been identified with SMP, then it has the ability and incentive to engage in exploitative and exclusionary behaviour to the detriment of competition and particularly to the detriment of end users.
- 5.2. In general, the types of competition problems that may arise involve conduct by an SMP operator that is aimed at:
- a. Exploiting customers by virtue of its SMP position. Exploitative practices could include excessive pricing, where absent regulation, prices could be persistently high with no effective pressure to bring them down. An SMP operator could also be insulated from the need to innovate, and to improve its efficiency and quality of service. This may limit the development of new technologies, or delay investment.
  - b. Leveraging market power into adjacent vertically or horizontally related markets with a view to foreclosing competitors in downstream and/or upstream markets. Leverage allows an SMP operator to transfer its market power from one market to another. This enables the SMP operator to strengthen its position in both markets. Examples of leverage could include the denial of access to a downstream competitor; quality discrimination; exploiting information asymmetries; unwarranted withdrawal of access already granted; and margin squeeze.
  - c. Excluding or delaying investment or market entry. Examples of this type of competition problem could include predatory pricing; refusal to supply access; or raising customer switching costs.
- 5.3. As this is a second-round market review, the Commission has emphasised the importance of learning from the implementation of remedies imposed following the previous market reviews. The Commission welcomes the steps that have been taken

by the industry to date towards developing competition in telecommunications services on the Island, and wishes to acknowledge the constructive engagement of operators.

5.4. According to operators' licence conditions<sup>65</sup>, where the Commission has determined that a communications provider has SMP in a defined market, the Commission should consider whether the imposition of any condition is proportionate and objectively justified. It should also take into account the following objectives as deemed by the Commission to be appropriate:

- a. ensuring that there are provided throughout the Island, except where impracticable or not reasonably practicable, such Electronic Communications Services as satisfy all reasonable demands for them;
- b. ensuring that users derive maximum benefit in terms of choice, price and quality;
- c. ensuring efficient investment in infrastructure and promoting innovation;
- d. encouraging the efficient use and effective management of radio frequencies and numbering resources; and
- e. ensuring efficient and sustainable competition.

5.5. These principles have been taken into account in the preliminary view of remedies presented below.

5.6. In designing remedies to address actual and potential competition problems, the Commission seeks to balance the need to provide detail on proposed measures with the need to ensure that proposed remedies are able to evolve in line with the market. Issues that have arisen since the time of the last reviews are discussed in terms of each remedy below. In order to achieve this balance, the obligations that are set out in the Draft Decision are high level, and will be supplemented as required by a more detailed further specification in separate documents. This approach has worked well when implementing previous remedies and the Commission proposes to maintain this approach. This approach to remedies seeks to formalise requirements, even where a less formal approach has worked until now. It is the Commission's view that this provides the greatest degree of certainty for all market participants.

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<sup>65</sup> Licence Conditions - MT 42.14; Sure 27.14; WiManx 28.14; BlueWave 8.14; Continent8 11.14; e-llan 11.4; Domicilium 16.14

- 5.7. As discussed in Chapter 4, the Commission's preliminary view is that MT has SMP in the following Wholesale Fixed markets:
- a. Wholesale Local Access;
  - b. Wholesale Broadband Access;
  - c. Wholesale Voice Call Termination (for termination on each operator's own fixed network);
  - d. Wholesale on-island Traditional Interface Leased Lines; and,
  - e. Wholesale on-island Modern Interface Leased Lines.
- 5.8. The Commission maintains the view that all operators that can terminate voice calls on their own network have SMP for the termination of voice calls on their network. In particular, this currently applies to MT, Sure and Wi-Manx, but in general will apply to all operators that can terminate calls on their network. BlueWave has access to Isle of Man number ranges but, at the time of publication, is yet utilise them.
- 5.9. The discussion below considers remedies for each fixed market where there is a designated SMP operator or operators in terms of the following categories of remedy:
- a. Access
  - b. Non-discrimination
  - c. Transparency
  - d. Accounting separation
  - e. Cost accounting and price controls.
- 5.10. The Commission has considered whether the full range of remedies should apply in all wholesale markets. The Commission's preliminary view is that a lighter approach is required in the wholesale market for Traditional Interface Leased Lines. MT is the only supplier of wholesale and retail Traditional Interface Leased Lines, and it is unlikely that there will be market entry. The Commission expects the market to continue to decline, and recognises that it may not exist at the time of the next market reviews. For that reason, the Commission proposes only to apply transparency remedies and

accounting separation remedies in the wholesale market for Traditional Interface Leased Lines.

5.11. The Commission has also considered whether the full range of remedies should apply to all operators determined with SMP in the wholesale market for voice call termination on their own networks. The Commission's preliminary view is that access, non-discrimination, transparency and cost accounting and price control remedies should apply to all SMP operators. However, the Commission proposes that it would not be proportionate to oblige operators other than MT to produce separated accounts for their activities in this market.

5.12. The analysis that follows sets out current remedies, discusses issues that have arisen since the time of the last reviews, and proposes remedies for consultation.

## 5.2 Access remedies

### 5.2.1 Current remedies

5.13. In the previous Decision, MT was directed to meet all reasonable requests for the provision of network access in the wholesale markets where MT had been designated with SMP. See Extract 1 below for full text.

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*xv. As provided for in Condition 43.4 of its Licence, MT is directed to behave in a manner which is fair, reasonable and timely in the way in which it deals with access requests, both in terms of responding to requests and in implementing successful requests.*

*xvi. MT is directed to negotiate in good faith with access seekers.*

*xvii. MT is directed not to withdraw access to facilities already granted without justification and consultation*

*Extract 1 - from Decision Notice 2012/02 (page 4)*

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5.14. Conditions were attached to the access obligation, such that MT was directed to behave in a manner which is fair, reasonable, and timely, both in terms of responding to access requests and in implementing successful requests. MT was also directed to

negotiate in good faith with access seekers, and directed not to withdraw access to facilities already granted, without justification and consultation.

### **5.2.2 Discussion**

#### **Product availability and demand**

- 5.15. Since the time of the last review, two products have been introduced in the Wholesale Local Access market. WLR allows a Licensed Operator to purchase a wholesale input which it can use to offer a retail access and calls service. The WLR product is a narrowband product, available on the copper network. It was requested by an LO (Sure), and the requesting LO is the only operator to take up this product.
- 5.16. The second wholesale local access product is wholesale FTTP. This service allows the the purchasing LO to provide internet access over FTTP to retail customers. The product consists of an FTTP connection to the retail customer's premises, and an IP Stream Central interconnection service to the customer's premises<sup>66</sup>. The product includes a voice only variant (FTTP0).
- 5.17. Both wholesale local access products currently in the market can be characterised as the resale of MT products, and so LOs are limited in the extent to which they can differentiate their retail products.
- 5.18. In the Wholesale Broadband Access market, the products that are currently used are generally white label - the resale of MT's own broadband product. This can be contrasted with the situation in many other jurisdictions, where wholesale products such as Bitstream allow a purchasing operator a much higher degree of control over the parameters of the product that can be offered in the retail market. Bitstream products do, however, involve more input by the purchasing Licensed Operator.
- 5.19. There are two main advantages for an LO choosing to use a wholesale input like Bitstream rather than a resale product. First, the LO would be able to differentiate its retail product much more than is possible with a resale product. Second, the margin available between a Wholesale Access product and a retail product is typically larger than that between a resale product and a retail product.

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<sup>66</sup> Taken from Manx Telecom Wholesale web page – FTTP Service Description, Paragraph 4.

- 5.20. Although there has been frequent discussion in the LO Forum of alternative wholesale inputs for the provision of retail broadband, to date LOs have not requested any alternative Wholesale Broadband products.
- 5.21. There has recently been a strong shift away from Traditional Interface Leased Lines towards Modern Interface Leased Lines, particularly Ethernet. MT initiated and installed a new Carrier Ethernet network, providing wholesale point-to-point and point-to-multipoint Ethernet services. This has extended the range of wholesale products available.
- 5.22. The entry of other operators to the market for Wholesale Call Termination means that all operators that terminate calls on their own networks (i.e. all operators that have allocations of 01624 numbers) have wholesale call termination offers.

### **Addressing demand for wholesale products**

- 5.23. With the exception of Wholesale Line Rental, new wholesale products have been initiated by MT and not by LOs.
- 5.24. A key issue that has been discussed regularly at the Licensed Operators' Forum concerns the processes and timing associated with the development of new products. MT has introduced a Business Requirement Specification (BRS) process to be followed by Licensed Operators seeking new wholesale products, or seeking changes to existing wholesale products. While this is a welcome development, there are on-going issues around the level of detail required, and around the time taken to move through the process. These issues apply both to Licensed Operators and to MT Wholesale, because delays caused by either side in the process impacts on the other party, and on the overall development schedule.
- 5.25. While the BRS process addresses access requests initiated by LOs, it is not appropriate for dealing with new products, or changes to existing products, identified by MT Wholesale. MT Wholesale may propose changes such as network enhancements, or vendor-initiated product upgrades that impact on LO wholesale inputs, but are not designed to directly address the retail market. For such products, there is not necessarily a direct connection between a product offered in the retail market and a specific wholesale input. Further, MT Wholesale has a longer term perspective on network development, and the LO Forum identified the desirability of LOs having early insight into potential network developments that may affect them. Ideally, this would

then facilitate increased LO input into MT's development plans, which would benefit all parties. Over the last year, MT Wholesale has voluntarily provided a rolling six monthly non-binding roadmap, which outlines key issues. This mechanism which has been developed to allow LOs early sight of changes is proving to be useful, but is currently informal and provided on a voluntary basis.

### **5.2.3 Preliminary remedies**

- 5.26. The Commission's preliminary view is that, where MT has been found with SMP, MT should continue to be required to provide all Wholesale Access products and associated facilities requested by a Licensed Operator, where the request for these products is reasonable. The onus will be on MT to justify any refusal to provide requested products by demonstrating to the Commission that the Licensed Operator's request is unreasonable on the basis of objective criteria such as those set out in MT's licence<sup>67</sup>. This includes technical and economic viability, feasibility, and efficiency of the required investment, the need to secure effective competition, and intellectual property rights where relevant. The obligation to provide access on reasonable request will apply in all wholesale markets where MT has SMP, except for the Wholesale Market for Traditional Interface Leased Lines. The obligation will apply to all SMP operators in the Wholesale Fixed Voice Call Termination market.
- 5.27. The Commission proposes to maintain its approach that products will not be mandated in advance of demand, but will be made available on the basis of a reasonable request. Where other regulators have mandated products, this has often been to ensure the continuation of an existing product, or to comply with EU regulation. It is the Commission's view that the development of sustainable competition is best served by allowing Licensed Operators the greatest flexibility to identify wholesale products that will meet their needs in developing innovative products and services. At the same time, it is important that MT is not required to develop and supply wholesale products for which there is no reasonable commercial demand.
- 5.28. Examples of the types of products that could be considered by LOs could include, for example, a reasonable request for LLU, VULA, in the wholesale local access markets, or Bitstream in the Wholesale Broadband Access market. All of these wholesale products allow a Licensed Operator to offer a highly differentiated retail product based

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<sup>67</sup> MT Licence, para 43.3

on the wholesale input and use of elements of their own networks and services. LLU is primarily used on a copper network, and VULA is mainly offered on a fibre network. Bitstream can be copper or fibre based.

5.29. Given the trend towards fibre on the island, in the Commission's view it is highly unlikely that any LO would find LLU to be an attractive proposition, and it is unlikely that a request for MT to develop a product which is becoming out-of-date in other jurisdictions would be considered reasonable. Furthermore, the Commission again notes the incompatibilities that exist between LLU and VDSL and points out that the timeframe within which LLU would be considered in the best interests of all stakeholders is likely to have passed.

5.30. The Commission has considered examples of Wholesale Access products developed and/or offered in other jurisdictions. While the EU has promoted the desirability of unbundled fibre, it has not yet been implemented within Europe. There are plans for a wholesale unbundled fibre product to be introduced in New Zealand in 2020<sup>68</sup>, but to date there are few details of the specification and crucially, the likely pricing of such a product. However, in principle, an unbundled fibre product would fall within the Wholesale Local Access market.

5.31. The Commission notes that regulators in other jurisdictions have put in place an obligation to allow access to Civil Engineering Infrastructure (CEI) as a remedy in the Wholesale Local Access market. For instance, Ofcom has imposed a physical infrastructure access (PIA) remedy obliging BT to make access available to its ducts and poles<sup>69</sup>. ComReg has imposed an access remedy for CEI<sup>70</sup>, in particular for access to ducts and poles, and where this is not available, access to dark fibre (where this is reasonably available). It should however be noted that in other jurisdictions it took a considerable period of time to reach the point where there is ready access to CEI, and it is likely that the Isle of Man would be no different. Notwithstanding the Commission's preliminary views outlined in Section 3.3.1 it notes that the scope still

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<sup>68</sup> [https://comcom.govt.nz/\\_data/assets/pdf\\_file/0019/111970/Vodafone-Submission-on-new-regulatory-framework-for-fibre-21-December-2018.pdf](https://comcom.govt.nz/_data/assets/pdf_file/0019/111970/Vodafone-Submission-on-new-regulatory-framework-for-fibre-21-December-2018.pdf)

<sup>69</sup> [https://www.ofcom.org.uk/\\_data/assets/pdf\\_file/0023/112469/Wholesale-Local-Access-statement-vol-3.pdf](https://www.ofcom.org.uk/_data/assets/pdf_file/0023/112469/Wholesale-Local-Access-statement-vol-3.pdf)

<sup>70</sup> [https://www.comreg.ie/?dln\\_download=3a-3b-market-analysis-decision](https://www.comreg.ie/?dln_download=3a-3b-market-analysis-decision)



exists for a LO to request access to CEI. While access to CEI is upstream of the Wholesale Local Access market, such a request would be likely to be dealt with in the same manner as request for Wholesale Local Access.

5.32. The Commission proposes to maintain the conditions currently attached to the access obligation. This means that MT should be obliged to behave in a manner that is fair and reasonable<sup>71</sup> and to negotiate in good faith with Licensed Operators seeking access. MT would not be permitted to withdraw access to products and facilities already granted, without justification and the prior approval of the Commission.

5.33. Given issues that have arisen concerning timeliness of product development, the Commission proposes that there should also be a condition attached to the access obligation obliging MT to meet its access requirements in a timely manner<sup>72</sup>. The Commission expects to work with MT to agree a more structured process and timetable for product development.

5.34. The issue discussed in paragraph 5.25 of products introduced or changed by MT Wholesale is addressed as a transparency remedy in paragraph 5.45 below.

## 5.3 Non-discrimination remedies

### 5.3.1 Current remedies

5.35. MT is currently obliged not to unduly discriminate between Licensed Operators, and not to discriminate between LOs and MT's own retail operation.

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*xviii. As provided for in Condition 43.2.2 of its Licence, MT is hereby directed not to discriminate unduly in respect of access.*

*xix. MT is directed to ensure that it does not discriminate unduly between OLOs in equivalent circumstances providing equivalent services, and that all services and information are provided to OLOs under the same conditions and of the same quality as the services and information that MT provides for itself.*

*Extract 2 - from Decision 2012/02 (page 4)*

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<sup>71</sup> MT Licence Condition 43.4.1

<sup>72</sup> MT Licence Condition 43.4.2

### **5.3.2 Discussion**

- 5.36. While the current obligation provides a high level principle of how MT is to behave, it does not indicate how MT can demonstrate its compliance with the obligations, nor does it provide a mechanism for reporting alleged non-compliance.
- 5.37. For example, in order to show that the quality of services provided to other operators is of a similar quality to those provided to its own downstream operation, MT would need to be able to compare some Key Performance Indicators (KPIs). For example, KPIs are likely to be required in relation to installation times and practices across the retail markets to ensure that there are no barriers to switching, or frustration of same, occurring. Similarly, in order to assess whether the prices charged to other operators are comparable with those charged to its own downstream operation, MT would need to have suitably disaggregated pricing information.
- 5.38. The Commission notes that supporting obligations, in particular transparency and accounting separation obligations, are designed to ensure that compliance can be assessed with other obligations like non-discrimination. However, greater certainty in the market may be achieved by making the link between those other obligations clearer.

### **5.3.3 Preliminary remedies**

- 5.39. The Commission proposes to maintain the overall non-discrimination obligation as currently expressed<sup>73</sup>, but notes the obligation will not apply in the wholesale market for Traditional Interface Leased Lines.
- 5.40. The Commission proposes to address MT's demonstration of compliance by requiring MT to produce an annual compliance statement, to be signed by appropriate dual signatories within MT. The content of the statement will be further specified by the Commission and will have due regard to KPIs that may be in effect.

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<sup>73</sup> MT Licence Condition 43.2.2

## 5.4 Transparency remedies

### 5.4.1 Current remedies

5.41. MT is currently subject to a general transparency obligation, which includes (but is not limited to) Directions to publish a Reference Offer, Service Level Agreements (SLAs), and price and non-price terms and conditions for each wholesale product.

5.42. MT is obliged to notify LOs and the Commission in advance of changes to wholesale prices. MT is also required to notify LOs and the Commission three months in advance of the launch of a new wholesale product, and the notice period may be varied by the Commission. See **Error! Reference source not found.**below for further details.

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xx. In accordance with Conditions 43.2.3, 43.2.4, 43.2.5 and 43.2.6 of its Licence, MT shall have an obligation of transparency.

xxi. Without prejudice to the generality of this obligation, in all of the wholesale fixed markets in which it is designated with SMP, MT is hereby directed to:

- publish a Reference Offer for each wholesale product, including appropriate technical specifications, and including a mechanism explaining how changes to the Reference Offer will be made and notified.
  - publish a standard SLA which would govern MT's relationship with the OLO. This will include Key Performance Indicators.
  - publish prices and non-price terms and conditions for wholesale products. MT is not obliged to publish prices for wholesale leased lines at or above 155 Mbit/s, but prices shall be notified on a confidential basis to the Commission. Decision Notice 2012/02 Standalone Document.
  - notify OLOs and the Commission in advance of changes to wholesale prices. Advance notification must give sufficient time to respond to proposed retail price changes.
  - notify OLOs and the Commission in advance of the launch of a new wholesale product. The notice period for new wholesale products is 3 months. For all new products, this time period may be varied in agreement with the Commission.
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*Extract 3 - from Decision 2012/02 (pages 4 & 5)*

### 5.4.2 Discussion

- 5.43. Experience in implementing transparency remedies suggests that greater clarity is required on the sequencing of notification and publication, both for potential new products and for changes to existing products. The Commission notes that, in spite of the lack of detail in the previous Decision, MT has cooperated constructively in providing required information. In practice, MT notifies the Commission of potential new wholesale products, and proposed changes to existing wholesale products, before it informs LOs. However, this practice is not formally supported by the current obligation.
- 5.44. It is the Commission's view that the transparency remedy should set out a clear sequence of steps and associated timing to be followed by MT, LOs, and the Commission when MT plans to introduce new wholesale products or change existing products.
- 5.45. Following discussion at the LO Forum, it was agreed that MT Wholesale would provide a roadmap of likely network and service developments, and this has been introduced over the last year. The roadmap is updated every six months, and is non-binding. The intention is to provide early signals to Licensed Operators of changes that may impact their service offerings, and also to allow LOs to consider whether changes may generate new product requests, which they can feed into MT at an early stage. At present, the roadmap is produced on a voluntary basis by MT.

### 5.4.3 Preliminary remedies

- 5.46. The Commission proposes to maintain the requirement that MT should publish a Reference Offer for each wholesale product<sup>74</sup>. The Reference Offer should be kept up-to-date and should include sufficient technical information, and a price list.
- 5.47. In the market for wholesale Traditional Interface Leased Lines, the Commission proposes that MT should only be required to maintain the current wholesale documentation for Traditional Interface Leased Lines. MT will not be required to publish prices for wholesale Traditional Interface Leased Lines, but will be required to notify the Commission of any changes to wholesale prices.

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<sup>74</sup> MT Licence Condition 43.2.5, 43.2.6

- 5.48. The Commission proposes to maintain the requirement that MT should publish a standard SLA<sup>75</sup>. The Commission proposes that the Direction that the SLA will include KPIs should be maintained. The content of KPIs will be further specified by the Commission.
- 5.49. For new wholesale products, the Commission proposes that MT should be obliged to inform LOs at least 6 months before the product is launched. LOs should be made aware of product specifications, and should be provided with indicative pricing where possible<sup>76</sup>. The final pricing should be provided to LOs at least 3 months in advance of product launch.
- 5.50. MT should notify the Commission one month before informing LOs (i.e. 7 months before product launch).
- 5.51. The Commission notes that this proposal provides a longer notice period for LOs than is currently in place. The Commission is of the view that the longer notice period is ultimately justified based on the experience of introducing new products since the time of the last review; it is also in line with the approach in other jurisdictions. The Commission intends to reserve the right to vary all timings.
- 5.52. For changes to existing products, the Commission proposes that MT should be obliged to inform LOs at least 3 months before the change comes into effect. MT should notify the Commission one month before informing LOs (i.e. 4 months before changes come into effect). The Commission proposes to reserve the right to vary all timings.
- 5.53. The Commission proposes that MT should be subject to a transparency obligation to share an updated roadmap with LOs at each and every LO Forum (and at least every six months). The roadmap will continue to be indicative and non-binding<sup>77</sup>.

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<sup>75</sup> MT Licence Condition 43.2.4

<sup>76</sup> The Commission is aware of the difficulties in pricing a product at this point in time, however on balance LOs do require sight of at least indicative pricing to be in a position to fully consider their interest in the product and to feed into developing same. The Commission fully accepts that indicative pricing should be done on a best efforts basis and be non-binding.

<sup>77</sup> MT Licence Condition 43.2.3

## 5.5 Accounting separation remedies

### 5.5.1 Current remedies

5.54. The Accounting Separation remedies put in place in the last round of market reviews require MT to produce separated accounts. The format, timing, and reporting requirements were to be agreed with the Commission.

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*xxii. In accordance with Condition 43.2.7 of its Licence, MT is hereby directed to produce separated accounts. The format, timing, and reporting requirements of these accounts will be subject to agreement with the Commission.*

*Extract 4 - from Decision 2012/02 (page 5)*

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### 5.5.2 Discussion

5.55. Since the time of the last reviews, MT has developed, with the Commission, a format for producing separated accounts, and has published those accounts on their website following Notices issued by the Commission<sup>78</sup>. The 2014 and 2015 separated accounts were published in September 2017, the 2016 separated accounts in March 2018 and the 2017 separated accounts in January 2018 with further supporting documentation. The separated accounts are available on the MT website<sup>79</sup>.

### 5.5.3 Preliminary remedies

5.56. The Commission proposes to maintain the approach that MT will be required to produce Separated Accounts, and that the format, timing and reporting requirements will be agreed with the Commission<sup>80</sup>. The Commission's intention will be to continue to produce supporting documentation and guidelines to deal with the implementation of the high level Accounting Separation obligation.

5.57. The Commission proposes that an obligation to produce separated accounts will not apply to operators other than MT where they have been determined to have SMP in the market for wholesale voice call termination on their own network.

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<sup>78</sup> <https://www.iomcc.im/telecoms/manx-telecom-separated-accounts/>

<sup>79</sup> <https://www.manxtelecom.com/about/corporate-responsibility/regulatory-responsibility>

<sup>80</sup> MT Licence Condition 43.2.7

5.58. The Commission notes that it does not 'approve' MT's Separated Accounts. The content and publication is a matter for MT. However, MT must produce the Separated Accounts in accordance with the approach and guidelines set out by the Commission, and according to the timetable agreed with the commission.

## 5.6 Cost accounting and price control remedies

### 5.6.1 Current remedies

5.59. In the previous decision, MT was obliged to maintain Cost Accounting Systems with

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*xxiii. A price control obligation is proposed in accordance with Condition 44.2.1 such that MT is directed not to cause a margin/price squeeze. This is a proportionate measure designed to address the objectives outlined in Condition 44.3. In accordance with Condition 44.2.2 of its Licence, MT is directed to comply with rules which the Commission may make in relation to the measures imposed under Condition 44.2.1, regarding the recovery of costs and cost orientation.*

*xxiv. In accordance with Condition 44.2.3 of its Licence, MT is hereby directed to maintain appropriate cost accounting systems in respect of the price controls imposed in accordance with Condition 44.2.1 regarding products, services or facilities in the wholesale fixed markets. In accordance with Condition 44.2.3 (a) and (b), MT is required to make publicly available a description of the cost accounting system, including details of (i) the main categories under which costs are brought into account for the purposes of that system; and (ii) the rules applied for the purposes of that system with respect to the allocation of costs.*

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*Extract 5 - from Decision 2012/02 (page 5)*

respect to Price Controls. MT was also obliged not to cause a Margin Squeeze.

### 5.6.2 Discussion

5.60. At the time of the previous reviews, the Commission highlighted the desirability of moving towards cost-oriented pricing, but recognised the practical difficulty of implementing cost based pricing in the absence of reliable and robust cost information. MT undertook to develop a BU-LRIC cost model. This model underpins MT's ability to demonstrate that its wholesale pricing is Cost Oriented.

5.61. Since the time of the last reviews, the Commission has further specified its expectations for Margin Squeeze tests (Economic Replicability Tests) and its approach to Cost Orientation<sup>81</sup>. The Commission has produced draft guidelines setting out what information MT is required to provide, and explaining how the information will be assessed. It is also the view of the Commission that these are areas that are ever evolving and it intends to ensure that its guidelines are kept up to date and reflect best practice.

### **5.6.3 Preliminary remedies**

5.62. The Commission proposes to continue the obligation that MT will be required to maintain Cost Accounting Systems with respect to Price Controls<sup>82</sup>.

5.63. The Commission proposes that prices charged by MT for all Wholesale Access products and services shall be subject to a Cost Orientation obligation<sup>83</sup>. The Commission will continue to provide guidance and further specification on the implementation of this measure.

5.64. The Commission proposes that a cost orientation obligation will not apply in the Wholesale Market for Traditional Interface Leased Lines.

5.65. The Commission proposes to maintain an obligation that MT shall not cause a Margin Squeeze between wholesale products, and between wholesale and retail products. This is more specific than the current general obligation. It recognises that, absent regulation, there would be potential for a Margin Squeeze between a wholesale access product such as VULA and a Wholesale Broadband Access product such as Bitstream, and that this could constitute a Margin Squeeze between wholesale products. There would also be potential for a Margin Squeeze between a wholesale product and a retail product.

5.66. The Commission notes that the obligation not to cause a Margin Squeeze is imposed on wholesale products in certain wholesale markets, on the basis of a finding of SMP in that market. In order to demonstrate its compliance with this obligation (i.e. that it has not caused a margin squeeze) MT will be required to provide information to the Commission on products that do not necessarily fall within a regulated market. For

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<sup>81</sup> <https://www.iomcc.im/media/1305/cost-orientation-assessment.pdf>

<sup>82</sup> MT Licence Condition 44.2.3

<sup>83</sup> MT Licence Condition 44.2.2



example, MT may be required to provide information about the volume of sales and pricing for retail products that are not in a regulated market in order to demonstrate that there is no Margin Squeeze from the wholesale to the retail market.

5.67. The Commission proposes that the obligation not to cause a margin squeeze will not apply in the Wholesale Market for Traditional Interface Leased Lines.

## 6 Remedies in Retail Fixed Markets

### 6.1 Introduction

- 6.1. The Commission's overall approach to remedies was set out earlier in paragraphs 5.1 to 5.6, and this approach applies to the Retail Markets as well as to the Wholesale Markets.
- 6.2. As discussed in Chapter 4, the Commission's preliminary view is that MT has SMP in the following Retail Fixed Markets:
  - a. Retail Access; and,
  - b. Retail Traditional Interface Leased Lines.
- 6.3. The previous Decision imposed remedies in terms of:
  - a. Non-Discrimination;
  - b. Transparency;
  - c. Accounting Separation; and,
  - d. Cost Accounting and Price Controls.
- 6.4. The Commission has considered whether to maintain the remedies that are currently in place. As discussed in more detail below, the Commission proposes that, in the market for Retail Access, current remedies will broadly be maintained. This is because, even in the presence of ex-ante regulation, MT's market share remains high and is not significantly mitigated by other factors.
- 6.5. However, in the market for Retail Traditional Interface Leased Lines, the Commission's view is that this market is in decline, and is not likely to exist at the time of the next market review. As discussed in the consideration of the Wholesale on-island Traditional Interface market, the Commission does not propose that there is any need to encourage market entry, and MT Wholesale's only LO customer is MT Retail. The only potential competition problem in the Retail Market would be if, given the lighter remedies proposed in the Wholesale Market, MT decided to unreasonably increase retail prices. The Commission's view is that this would be unlikely.

6.6. The Commission proposes that the remedies that should apply in the Retail Market for Traditional Interface Leased Lines are those for transparency, and for accounting separation. The Commission's preliminary view is that this is sufficient to ensure the continuing functioning of the market, and the protection of the installed base of retail Traditional Interface leased Line customers.

## **6.2 Non-discrimination**

### **6.2.1 Current remedies**

6.7. The previous Decision directed that MT should not discriminate unduly between its retail customers.

### **6.2.2 Discussion**

6.8. Since the time of the last reviews, there have been no instances of undue discrimination between customers of retail access.

6.9. The Commission's preliminary view is that a non-discrimination remedy is no longer required in the market for Traditional Interface Leased Lines, because it is unlikely that there will be sales to new customers.

### **6.2.3 Preliminary remedies**

6.10. The commission's preliminary view is that, in the Retail Access market, MT should continue to be obliged not to discriminate unduly between its retail customers.

## **6.3 Transparency**

### **6.3.1 Current remedies**

6.11. The transparency remedies put in place in the last round of reviews included an overarching obligation of transparency, and a specific obligation that MT should make available, and keep updated, information as described in Conditions 8 and 9 of its licence. A requirement was included that any proposed changes to price and non-price terms and conditions should be published 30 days before coming into effect. The obligation to publish prices did not apply to retail Leased Lines at or greater than 155 Mbit/s, although prices for such leased lines were to be notified to the Commission.

### **6.3.2 Discussion**

6.12. The transparency remedies put in place following the last round of market reviews have been sufficient to address concerns in the markets to which they applied.

### **6.3.3 Preliminary remedies**

6.13. The Commission proposes to maintain the obligation that, in the Retail Access market and the retail Traditional Interface Leased Lines market, MT should make available, and keep updated, information as described in Conditions 8 and 9 of its Licence. In the Retail Access market, the requirement should be maintained that any proposed changes to price and non-price terms and conditions should be published 30 days before coming into effect.

6.14. The Commission proposes that there should be no requirement for MT to publish prices of retail Traditional Interface Leased Lines. However, any increase in the prices of retail Traditional Interface Leased Lines should be notified to the Commission.

## **6.4 Accounting separation**

### **6.4.1 Current remedies**

6.15. MT is currently directed to produce separated accounts. The format and reporting requirements are subject to agreement with the Commission.

### **6.4.2 Discussion**

6.16. Since the time of the last reviews, MT has developed a format for producing separated accounts, and has published separated accounts and associated accounting documentation on its website<sup>84</sup>.

### **6.4.3 Preliminary remedies**

6.17. In the markets for Retail Access and retail Traditional Interface Leased Lines, the Commission proposes to maintain the approach that MT will be required to produce separated accounts, and that the format, timing and reporting requirements will be agreed with the Commission<sup>85</sup>. The Commission's intention will be to continue to

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<sup>84</sup> <https://www.manxtelecom.com/about/corporate-responsibility/regulatory-responsibility>

<sup>85</sup> MT Licence Condition 43.2.7

produce supporting documentation and guidelines to deal with the implementation of the high level accounting separation obligation.

## **6.5 Cost accounting and price controls**

### **6.5.1 Current remedies**

6.18. MT is required to maintain appropriate cost accounting systems. The obligation includes elements of the system that are to be made publicly available.

6.19. Two price controls were imposed. First, MT was directed not to unreasonably bundle. Second, MT was directed not to cause a margin squeeze.

### **6.5.2 Discussion**

6.20. The Commission's preliminary view is that an obligation not to unreasonably bundle remains necessary, given MT's continuing high market shares in all retail markets.

6.21. The Commission notes that it has proposed measures dealing with the prevention of margin/price squeeze in the relevant wholesale markets, and does not consider it necessary to repeat these measures in the retail market. For the avoidance of doubt, in wholesale markets where MT is obliged not to cause a margin/price squeeze, MT will be required to make available data pertaining to retail markets as required to demonstrate that there is no margin/price squeeze. This may include retail markets where MT has no ex-ante obligations.

### **6.5.3 Preliminary remedies**

6.22. The Commission proposes to continue the obligation that MT will be required to maintain cost accounting systems with respect to price controls<sup>86</sup>.

6.23. In the retail access market, the Commission proposes to maintain the obligation that MT should not unreasonably bundle.

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<sup>86</sup> MT Licence Condition 44.2.3

## 7 Regulatory Impact Assessment

### 7.1 Background

- 7.1. When considering implementing regulation on the industry as a whole, or individual players, the Commission should first consider the impact its decision to ensure it is proportionate, appropriate, and justified. This recognises that regulation, regardless of its potential benefits, is not without its cost. To that end a Regulatory Impact Assessment (RIA) is widely used to analyse the potential benefits and impacts that a decision or decisions may have on stakeholders.
- 7.2. The RIA is used to establish that regulation is required, that it is proportionate, appropriate, and justified, and that available options have been considered in an objective manner. The Commission has had due regard to the Isle of Man Government's Guidelines on the Use of Impact Assessments for Primary Legislation<sup>87</sup> and European guidelines and best practice<sup>88</sup>. It should also be noted that the remedies and the associated obligations are consistent with the conditions licences issued under the Telecommunications Act 1984 and in that sense can be considered appropriate and proportionate.
- 7.3. On foot of the Market Review process the Commission proposes to impose a number of regulatory obligations, primarily on MT as the market incumbent. These decisions take the form of remedies designed to prevent competition issues from arising in the downstream retail markets on an ex-ante basis. The full details of the remedies are discussed in further detail in Chapters 5 and 6.
- 7.4. Detailed consideration of the markets that are to be regulated can be found in Chapters 3 and 4, however for convenience and clarity the markets to which it is proposed ex-ante regulation should apply are:
  - a. Retail Fixed Access;
  - b. Retail Traditional Interface Leased Lines;

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<sup>87</sup> While there is no obligation on the Commission to follow the Isle of Man Government's Guidelines on the Use of Impact Assessments for Primary Legislation in respect of this Market Review process it does set out some principles that the Commission believes are valid. For example, it espouses principles such as proportionality, consistency, accountability, and transparency, which are equally valid in the preparation of a RIA.

<sup>88</sup> [https://ec.europa.eu/info/law/law-making-process/planning-and-proposing-law/better-regulation-why-and-how/better-regulation-guidelines-and-toolbox\\_en](https://ec.europa.eu/info/law/law-making-process/planning-and-proposing-law/better-regulation-why-and-how/better-regulation-guidelines-and-toolbox_en)

- c. Wholesale Local Access;
  - d. Wholesale Voice Call Termination;
  - e. Wholesale Broadband Access;
  - f. Wholesale Traditional Interface Leased Lines; and
  - g. Wholesale Modern Interface Leased Lines.
- 7.5. In line with the abovementioned guidelines and its legislative obligations the Commission must consider all options taking account of Relevant Stakeholders. In this context Relevant Stakeholders are the incumbent, its competitors, consumers, and in a general sense the wider interests of the Isle of Man.
- 7.6. For the avoidance of doubt the Commission has previously considered the susceptibility of markets to ex-ante regulation and does not intend to revisit this assessment as part of the RIA. Only markets in which an ex-ante obligation is proposed are considered hereafter.

## **7.2 Regulatory Objectives**

- 7.7. Ex-ante regulation is intended to address competition issues that may arise as a result of one or more entities enjoying SMP resulting in an ability to prevent the market from functioning properly. Where the Commission explores the ability or incentives to distort or prevent competition it is simply acknowledging that the potential for abuse or anti-competitive behaviours exist. It does not automatically follow that such behaviours are occurring in practice, a finding of SMP does not in itself indicate that abuse or anti-competitive behaviour has occurred.
- 7.8. The primary objective of the remedies being considered on foot of the current Market Review is to promote the development of sustainable, effective competition in the downstream Retail Markets. It is the view of the Commission that this is best achieved through ex-ante regulation as it is unlikely that competition law alone would be sufficient.
- 7.9. It is also an objective of the Commission is to ensure that any obligations imposed to not add to the regulatory burden to a greater extent than is necessary. Unnecessary regulation is unlikely to be in the interests of any of the Relevant Stakeholders as it often adds to the cost of providing a service which results in higher prices at the retail

level. There is also a risk that unnecessary regulation can stifle innovation. With this in mind the Commission deems it most appropriate to consider regulatory obligations in the Wholesale Markets first instance. Where regulation at the wholesale level is unlikely to be sufficient to deal with potential competition issues the Commission considers ex-ante regulatory obligations in the Retail Markets where there has been a finding of SMP at that point.

7.10. The Commission considers that regulation of all currently defined on-Island Wholesale Markets is necessary. The Commission bases this on the fact that currently:

- a. The Wholesale Markets are currently subject to ex-ante regulation and there is no evidence of any appreciable change in competitive conditions;
- b. Products in the Wholesale Markets are key inputs to any operator wishing to compete in some or all of the Retail Markets;
- c. MT has SMP in all of the markets with an incentive to act in an anti-competitive fashion;
- d. There is no meaningful competition for MT in the Wholesale Markets which allows the possibility of foreclosing Retail Market through leveraging dominance at the wholesale level; and,
- e. Barriers to entry are significant and as a result there is unlikely to be natural competition.

7.11. There are only two Retail Markets within which it is proposed to impose ex-ante obligations; Retail Fixed Access and Retail Traditional Interface Leased Lines (see X for further detail). The Commission bases this on the fact that currently:

- a. The Wholesale Markets are currently subject to ex-ante regulation and there is no evidence of any appreciable change in competitive conditions;
- b. MT enjoys SMP in both markets with the ability and incentive to engage in anti-competitive behaviours, including for example vertical leverage, margin squeeze, and predatory pricing;
- c. There are significant barriers to entry and since the time of the last Market Review there has been limited significant investment in infrastructure on the part of competitors;



- d. There is a relative dearth of Access Products at the wholesale level<sup>89</sup>, the absence of which means competitors have limited opportunity to differentiate; and,
- e. It is unlikely that ex post competition measures alone would be sufficient to foster sustainable competition in the markets.

7.12. A further objective is to facilitate LOs investing in their networks. One of the main barriers to entry in the Wholesale Markets is the requirement for significant sunk costs to rollout a network. Operators have limited incentive to make such investments without ex-ante regulation of the Wholesale Markets; as coupled with the up-front sunk cost, it would be likely to take a significant amount of time to begin generating revenue in the Retail Markets. Simply put, by facilitating both access to MT's network infrastructure and competition in the downstream retail markets LOs can stagger their investment in their core networks while building market share in the Retail Markets. Access products such as LLU, VULA, and Bitstream all facilitate such investment<sup>90</sup>.

7.13. With the foregoing in mind the Commission has formed the view that the imposition of ex-ante regulatory obligations is necessary, proportionate, and appropriate. The Commission has ruled out conducting a full cost-benefit analysis of all proposed regulatory obligations as to do so would:

- a. Put a disproportionate burden on MT, and to some extent the other operators in the market;
- b. Place an unreasonable burden on the limited resources available to the Commission and result in other regulatory work being neglected; and,
- c. Unacceptably increase the length of the Market Review process.

### **7.3 Identification of Regulatory Options**

7.14. In Chapters 5 and 6 the Commission has outlined a number of remedies that it believes could mitigate the risks to competition that have been identified. For clarity the options that would apply to the Wholesale Markets and Retail Markets are dealt

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<sup>89</sup> It is noted that this is not necessarily a result of any actions taken by Manx Telecom, it is in many regards incumbent on its competitors to seek specific access products.

<sup>90</sup> The same arguments can be made for access to civil infrastructure, such as ducts and poles. However the Commission's view at this time is that facilitating such an access request would only be proportionate and appropriate if higher level access products, such as Bitstream and VULA, were being fully exploited. Such a step could be seen as 'the last rung' on the 'ladder of investment'.

with separately in this section. These obligations have been brought together in groups, each has been summarised here for convenience.

### **7.3.1 Remedies Available in the Wholesale Markets**

#### **A. Access Remedies**

7.15. Access remedies are key to promoting competition in the Retail Markets and investment in LOs core networks. It can also be seen that it is unlikely that other operators would be in a position to compete with the incumbent in a meaningful way absent suitable Wholesale Access products.

7.16. While the Commission acknowledges that there has been some investment in fibre by operators other than MT, it is currently not sufficiently rolled out to warrant removing regulation of the Wholesale Markets. The fact that another operator is rolling out network infrastructure is no in itself grounds to deem that there is effective competition in the market or that there is no longer a SMP.

7.17. The obligations would require the incumbent to make available suitable access products on foot of a reasonable request. MT would be obliged to behave in a manner that is fair and reasonable, and negotiate with access seekers in good faith. Additionally, access could not be unreasonably refused or withdrawn.

#### **B. Non-Discrimination Remedies**

7.18. There is currently an obligation on MT not to unduly discriminate between Licensed Operators, and not to discriminate between competitors and its own retail operations. The absence of such obligations creates an incentive for MT to attempt to foreclose Retail Markets through its SMP in the Wholesale Markets.

7.19. For example, MT could offer more favourable timelines for installations at customer's premises to its own retail operation, or create untenable delays for installations for its competitors customers. The net effect would be that consumers would be strongly incentivised to opt for a MT service over that of a competitor. The same is also true of network monitoring tools and interfaces that could allow an operator to provide customers with enhanced service level agreements, etc.

7.20. The Commission intends to maintain the non-discrimination obligations that are currently in force. Given the fact that the obligations have been in place for a number

of years without any issues being raised it would seem that they are appropriate. However, one shortcoming with the current remedy is that there is no mechanism for MT to demonstrate its compliance.

### **C. Transparency Remedies**

7.21. MT currently has an obligation to maintain transparency around its operations, as noted in Chapter 5 this includes publishing information on its website in relation to its wholesale products. Information related to Reference Offers, Service Level Agreements, pricing, and non-price related Terms and Conditions. The obligation also requires MT to provide both the Commission and LOs with advance notice of material changes to, and the launch of new wholesale products.

7.22. The Commission intends to maintain transparency remedies, and in practice much of the detail remains unchanged. There is however some additional detail, mostly the inclusion of more defined timelines, that should provide all stakeholders with sufficient certainty.

7.23. In relation to new wholesale products it is proposed that MT be required provide the industry with at least 6 months' notice of the intention to launch. It would also be a requirement to provide the Commission with an additional month's notice, i.e. 7 months' notice. It is recognised that all of the information required to formulate prices may not be available at such a remove from launch, however it would be feasible to provide indicative pricing and product specifications. There would then be a requirement to publish final pricing and specifications not less than 3 months in advance of launch. The Commission would retain the right to vary the timings as appropriate.

### **D. Accounting Separation Remedies**

7.24. There are currently obligations in place that require MT to put in account for its wholesale and retail operations separately. The purpose of this is to allow MT to demonstrate compliance with other obligations, such as not causing a margin squeeze or not cross-subsidising services for example. It also allows MT to demonstrate that its wholesale operations are cost oriented.

- 7.25. The Commission proposes to keep the obligation to maintain accounting separation and publish the appropriate accounts and associated documentation, as agreed with the Commission, on a periodic basis. The Commission will also produce clarifying documentation and guidelines, as required, to facilitate the implementation of this obligation. While noting that the production of the accounts is solely a matter for MT, it must be done within the timetable, guidelines, and approach agreed with the Commission.
- 7.26. Since the introduction of the current obligations MT has published separated accounts for 2015, 2016, and 2017<sup>91</sup>. In 2017 MT also issued more detailed Primary Accounting Documentation as an accompaniment to the accounts themselves. This should be seen as a positive step forward in terms of MT's commitment to demonstrating its compliance with the obligations in place. It can also be seen through the iterations of the accounts that this is an area in which there is scope for continued development.

## **E. Cost Accounting and Price Control Remedies**

- 7.27. Remedies in relation to Cost Accounting and Price Control were put in place following the last market review process. The obligations in place relate to MT and includes, not causing a margin squeeze, to maintain appropriate cost accounting systems in respect of price controls, and to make publically available information in relation to cost accounting system. There is also a requirement for MT to be actively moving towards cost orientated pricing in the Wholesale Markets.
- 7.28. The Commission intends to maintain the current obligations that are currently in place in respect to Cost Accounting and Price Controls. The obligations have been in place for a number of years and during that period no issues have arisen that would give the Commission reason to question their appropriateness. Furthermore, the risks to competition that necessitated the imposition of the obligations in the first instance still exist.
- 7.29. It is important that MT has a method to demonstrate its compliance with its obligations in relation to margin squeeze and cost orientation, which is achieved through the BU-LRIC cost models. To that end it is important that the models are revised periodically to ensure their relevance and accuracy.

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<sup>91</sup> <https://www.manxtelecom.com/about/corporate-responsibility/regu-atory-responsibility>

### **7.3.2 Remedies Available in the Retail Markets**

#### **A. Non-Discrimination Remedies**

7.30. There is currently an obligation on MT not to unduly discriminate between its retail customers, this is similar to the obligation in place for the Wholesale Markets. The absence of such obligations creates an incentive for MT to attempt to foreclose Retail Markets through its leveraging its SMP.

7.31. For example, MT could offer more favourable pricing and terms for customers that may be perceived as more lucrative. The net effect would be that such consumers would be strongly incentivised to opt for a MT service over that of a competitor. This is likely to prevent other operators from competing on a like-for like basis.

7.32. The Commission intends to maintain the non-discrimination obligations that are currently in force. Given the fact that the obligations have been in place for a number of years without any issues being raised it would seem that they are appropriate. The one exception to this is that the Commission proposes to remove the obligation from the Traditional Interface Leased Lines Retail Market; as discussed in Section 6.2.

#### **B. Transparency Remedies**

7.33. MT currently has an obligation to maintain transparency around its operations, specifically in relation to making available and maintaining information described in Conditions 8 and 9 of its licence. This includes, but is not limited to providing notice of contractual changes, pricing and contract information, and dispute resolution mechanisms.

7.34. The Commission intends to maintain transparency remedies, and in practice much of the detail remains unchanged. There is however some additional detail, mostly the inclusion of more defined timelines, that should provide all stakeholders with sufficient certainty.

#### **C. Accounting Separation Remedies**

7.35. The remedies in relation to Accounting Separation for the Retail Markets are in essence an extension of the remedies in place for the Wholesale Markets. There are currently obligations in place that require MT to put in account for its wholesale and retail operations separately.

7.36. The Commission proposes to maintain the obligation to maintain accounting separation and publish the appropriate accounts and associated documentation, as agreed with the Commission, on a periodic basis.

#### **D. Cost Accounting and Price Control Remedies**

7.37. Remedies in relation to Cost Accounting and Price Control were put in place following the last market review process. The obligations in place on obligation on MT not to unreasonably bundle its products and not to create a margin squeeze. This is in line with the general obligation on MT to maintain appropriate cost accounting systems.

7.38. The Commission intends to maintain the current obligation not to unreasonably bundle its products. In relation to the obligation not to create a margin squeeze the Commission is of the preliminary view that it is unnecessary to maintain the obligation in the Retail Markets at this time. The obligation not to cause a margin squeeze proposed for the Wholesale Markets should be sufficient as there would still be an onus on MT to provide data on its retail operations to demonstrate its compliance.

#### **7.3.3 Regulatory Options Available in the Wholesale Markets**

7.39. Based on the competition problems that have been identified in Chapter 5<sup>92</sup> (see paragraph 5.2), and the remedies that are available, the Commission must consider the options that are available to it. The options available for consideration at this time are:

**Option 1:** Forbearance – the Commission would not impose any regulatory obligations as it believes that sustained competition will develop absent intervention;

**Option 2:** Impose Wholesale Access obligations only;

**Option 3:** Impose Wholesale Access and Non-Discrimination obligations;

**Option 4:** Impose Wholesale Access, Non-Discrimination, and Transparency obligations;

**Option 5:** Impose Wholesale Access, Non-Discrimination, Transparency, and Accounting Separation obligations; and,

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<sup>92</sup> Wherever ‘competition problems’ are referred to in this chapter it should be taken to be a reference to those identified in Chapter 4 unless otherwise specified.

**Option 6:** Impose Access, Non-Discrimination, Transparency, Accounting Separation, and Cost Accounting and Price Control obligations.

#### 7.3.4 Determining the Impact of the Regulatory Options in the Wholesale Markets

7.40. In its analysis the Commission considers the impact of the available options on both competition and stakeholders. In this regard the stakeholders are:

- a. The Incumbent;
- b. Other Licensed Operators; and,
- c. Consumers<sup>93</sup>.

7.41. An assumption has been made that consumers are likely to favour any option that is beneficial to sustainable competition in downstream Retail Markets; such measures are likely to result in greater choice, better service quality, and better value for consumers. As such obligations that are seen to promote competition in the Retail Markets are not considered again from the consumers' perspective to avoid repetition. In cases where an obligation may arguably not be in the consumers' interests they are specifically considered.

7.42. **Option 1** is likely to have a negative impact on competition as MT has SMP in all of the on-Island Wholesale Markets and has no meaningful competition. In reality this option would require the Commission to remove, or at least relax the regulatory obligations that are already in place. This may be favourable to the incumbent but is likely have a detrimental impact on all other stakeholders and competition.

7.43. The Commission is of the view that **Option 2** would go some way towards addressing competition problems and as a result imposing Wholesale Access obligations on MT is, on its face, a proportionate response. Without access to MT's network on an equivalent basis there is unlikely to be any incentive for LOs to continue investing in core network infrastructure likely preventing the development of sustainable competition. However, the Commission notes that it is necessary for LOs to seek access deeper into the MT network for sustainable competition to truly grow, the current situation which sees 'white label' products being resold is unlikely to increase

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<sup>93</sup> Consumers in this regard is a broad category which includes, domestic consumers, commercial consumers, and Government as a consumer.

competition beyond where it currently exists. In this regard the Commission feels it is appropriate to maintain the existing obligations in relation to Wholesale Access given the benefits that is likely to accrue for stakeholders.

- 7.44. The Commission does not believe that it is appropriate to mandate specific access products; should the Commission take the decision to mandate products it could inhibit competition from developing as it is not certain that mandated products would be aligned with those needed by LOs. The Commission believes that LOs are best positioned to determine what access products is most likely to result in innovative services and products in Retail Markets. As such, the Commission believes it would be appropriate to adopt the approach where it would assume that an access request is reasonable unless MT can provide an objective justification to the contrary. It is important that MT be afforded the right to object to access requests on this basis as it would not be proportionate to expect MT to incur costs developing access products for which there is no commercial demand.
- 7.45. Being cognisant of the arguments for maintaining obligations in respect of Wholesale Access, **Option 3** goes some way towards addressing the problems identified in the previous paragraph. With this in mind it would seem that in principle imposing obligations in relation to non-discrimination in addition to access remedies is a proportionate response that would benefit competition and stakeholders.
- 7.46. There is no evidence to suggest that maintaining the current Non-Discrimination obligations would be an excessive regulatory burden on the incumbent. The obligations have been in place since the previous market review and there have been no apparent ill-effects on MT, nor have they impaired its ability to compete at the retail level. However, there is some evidence to suggest that the Commission should consider further remedies as there is presently no mechanism for formally demonstrating compliance with the current obligations.
- 7.47. Certainty surrounding compliance is likely to be of benefit to all stakeholders; being able to demonstrate compliance with its regulatory obligations is likely to be beneficial to MT in relation to how it is perceived in the market, and in relation to raising funds for investment purposes. It is also in the interests of the wider industry to have mechanisms that provide some assurances that all operators are afforded the opportunity to compete on an equal basis in terms of network access.



7.48. Adding a requirement to produce an Annual Statement of Compliance in relation to its non-discrimination obligations is, in the Commission's view, the most appropriate way to address this issue. There must be a balance struck between having sufficient evidence to check for compliance and the regulatory burden on MT. The Commission is of the view that to go further than an Annual Statement of Compliance at this point would not be proportionate. The proposed approach represents incremental regulation which is preferable in most instances. Furthermore, as there has been no obligation similar to this in the past it would not be reasonable to assume that more intrusive measures are required.

7.49. To make assumptions as to the effectiveness, or otherwise, of a Statement of Compliance at this point is to overlook three key points:

- a. The final form and content of the Annual Statement of Compliance has not yet been finalised. The Commission intends to specify this on foot of an appropriate consultation process to ensure that the views of all parties have been taken into account;
- b. Such a measure would require MT to hold evidence of its compliance with its obligations and actively acknowledge the ongoing nature of those obligations; and,
- c. The Annual Statement of Compliance would not be, in and of itself, a presumption of overall compliance, it is still at the Commission's discretion to conduct further compliance investigations as it deems appropriate.

7.50. In addition to the arguments for the Wholesale Access and Non-Discrimination obligations previously outlined, **Option 4** addresses some of the issues identified in the previous paragraph. Transparency Obligations are likely to be highly valued by LOs competing in the Retail Markets.

7.51. Absent Transparency obligations it is unlikely that LOs would be in a position to effectively compete with MT's retail operation. For example, without advance notice of the launch new wholesale products it is likely that it would be difficult for OLOs to launch products in the Retail Markets in as timely a fashion as MT. This would be primarily be due to the differing scale of operations and levels of resourcing between the incumbent and its competitors. While there is an argument that the advance notice

of wholesale products dilutes the possibility of 'first-mover advantage' is it likely to be of less concern to OLOs.

7.52. In practice MT provides information to OLOs that strictly goes beyond the requirements of the remedies currently in place. Most notable is the indicative roadmap of network and service developments. This shows that greater transparency<sup>94</sup> is beneficial to all industry players, including MT. It has long been held by MT that early engagement of all interested parties in the product development process is preferable. With this in mind obligations in relation to maintaining its roadmap are unlikely to be unduly burdensome to MT.

7.53. It has already been outlined that OLOs are likely to require a greater amount of time to develop a competitive response to a new product and this helps ensure a greater choice for consumers at the time of launch. However, there is cost associated with this, specifically that consumers must wait for new or improved services to be rolled out. The Commission is ultimately attempting to strike a balance between these opposing forces and feels that it has come as close as it can to doing so.

7.54. It is likely that the greater risk of harm is underestimating the time required for OLOs to develop a competitive response resulting in market foreclosure on the part of the incumbent<sup>95</sup>. Conversely, it is unlikely that the delay in launching a wholesale product would have a negative impact on the competitiveness of the Isle of Man as a whole. The roadmaps for technology development tend to be both long and forward looking, this provides network operators with ample opportunity to align their own product development to minimise the impact of the notice period. Furthermore, the Commission has reserved the right to vary the timelines and should a situation arise where it would best serve the Island to have a shorter period it could be facilitated.

7.55. **Option 5** adds an Accounting Separation obligation to the already discussed obligations in an attempt to remedy some of the competition issues that are not fully addressed elsewhere.

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<sup>94</sup> In the interest of clarity the Commission does acknowledge that there are limits to transparency; some information can be rightly considered commercially sensitive. The Commission is of the view that Manx Telecom enjoys a right to compete on a like-for-like basis in the Retail Markets and as a consequence the right to maintain confidentiality around information that could be deemed commercially sensitive. The Commission reserves the right to make determinations as to the commercial sensitivity of information on a case-by-case basis taking into account prevailing market conditions.

<sup>95</sup> There is evidence to show that consumer switching on the Island is low and it is therefore reasonable to assume that should one operator gain a dominant position in a particular market that it is likely to be able to maintain it over the medium to long term.

7.56. The objective of the Accounting Separation obligation is to demonstrate that the incumbent:

- a. Implements transfer charges at the same market rates as applicable to its competitors for wholesale input, thus ensuring there is fair competition in Retail Markets;
- b. Prices its wholesale products at a rate that is reflective of cost and reduces the incentive to engage in excessive or predatory pricing at the wholesale level; and,
- c. Has taken steps to mitigate against causing a margin squeeze.

7.57. With the foregoing in mind it can be seen that Accounting Separation is a proportionate response to the risks to competition that exist. The alternative to Accounting Separation is Structural Separation of the incumbent. However, given the size of the market in the Isle of Man and the subsequent inefficiencies that such a move would introduce it is unlikely that on balance any interested parties would opt for this. As such this would be an entirely disproportionate response.

7.58. In the absence of Accounting Separation it is likely there would be a continuing cycle of investigations in order for the Commission to satisfy itself that there are no ongoing compliance issues. Such an approach would be costly and would add considerably to the regulatory burden on MT as such investigations are resource intensive and costly. This in turn would impact on the wider industry which ultimately bears the cost of regulation and it is likely this would ultimately be passed to the consumer. It is unlikely that this approach would be preferable to any stakeholders.

7.59. As an obligation Accounting Separation is also in keeping with the principles and rationale of the Transparency Remedies (see section C. Transparency Remedies above).

7.60. Finally, **Option 6**, in addition to the obligations already explored, includes the imposition of Cost Accounting and Price Control obligations. While the Commission acknowledges the practical difficulties in implementing cost based pricing from the ground up it does not see any alternatives that would achieve the same objectives. Some of these objectives include, but are not limited to demonstrating:

- a. That the charges in the Wholesale Markets are set at a level appropriate of costs incurred;

- b. That costs are incurred on a reasonable basis; and,
- c. There is no Margin Squeeze occurring that would stifle competition at the retail level.

7.61. There have been some notable developments in this space. In the period since the last market review MT has taken significant steps towards having cost orientated pricing in the Wholesale Markets, including developing a Bottom-Up, Long Run Incremental Cost (BU-LRIC) model. Consequently maintaining the obligations currently would not be placing an undue burden on the incumbent as the required structures are already in place and the costs involved in maintaining them are likely to be marginal when taken in the context of the business as a whole.

7.62. It is also likely to be in the interests of other stakeholders that the obligations are maintained. Absent such obligations the risk of anti-competitive behaviours, such as creating a margin squeeze, predatory pricing, and cross-subsidisation increases significantly. All of the examples listed above have the effect of stifling competition and can ultimately allow an operator with SMP to foreclose a market.

### **7.3.5 Choosing the Best Option for the Wholesale Markets**

7.63. In relation to **Option 1** the Commission holds that the need for regulation has been established and as such this represents an unsuitable option. It has been outlined that the ex-post competition law is, in isolation, not suitable to deal with competition problems. As such, application of one or more ex-ante regulatory obligations would be proportionate and appropriate.

7.64. While the imposition of obligations in relation to Wholesale Access under **Option 2** addresses some of the potential negative competitive outcomes, there are still other areas in which the potential for anti-competitive behaviour exists. For example granting access alone does not ensure that all access seeker would be treated equally. There would be scope for MT to abuse its dominant position by offering its own retail arm more favourable terms, conditions, and prices. As a result the Commission is of the view that further regulation of the Wholesale Markets is appropriate and that **Option 2** is not suitable.

7.65. While the Commission feels that the inclusion of remedies considered in relation to non-discrimination in **Option 3** will help to ensure sustainable competition is fostered

at the retail level they will not address all identified competition problems. For example, anti-competitive behaviours involving transparency, accounting separation, and cost accounting and pricing controls are not addressed by any of the remedies considered thus far. It is therefore reasonable to conclude that further regulation of the Wholesale Markets is appropriate and that **Option 3** is not sufficient to address the competition problems that exist.

7.66. In relation to **Option 4**, the Commission is of the view that the proposed remedies are both proportionate and appropriate and serve to both foster and protect competition in the Retail Markets. However, the obligations therein, while addressing real risks, are not in-and-of themselves sufficient to address all competitions that may arise. They would only have a limited effect in other areas, for example price control and preventing unfair cross subsidisation. With that in mind the Commission holds the view that **Option 4** is not sufficient to fully address the competition issues that have been previously identified.

7.67. The Commission concludes that the obligations proposed in **Option 5** are appropriate but likewise do not address the competition issues that have been identified in their entirety. For example, the obligations considered to date do not address the issue of Cost Orientation, nor do they fully address the risk of MT creating a Margin Squeeze. For that reason the Commission is of the view that **Option 5** would be insufficient to address competition problems.

7.68. With the foregoing in mind the Commission is of the view that **Option 6** is the most favourable option as it addresses the identified competition problems; other options at the Commission's disposal do not. It has also been shown that the obligations that would be imposed under **Option 6** would achieve the regulatory objectives while not imposing any unnecessary burden on the incumbent or industry.

7.69. Accordingly the Commission intends to adopt the obligations outlined in **Option 6** in its formal decisions (See Chapter 5).

### **7.3.6 Regulatory Options Available in the Retail Markets**

7.70. Based on the competition problems that have been identified in Chapter 5<sup>96</sup> (see paragraph 5.2), and the remedies that are available (described in Chapters 5 and 6

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<sup>96</sup> Wherever 'competition problems' are referred to in this chapter it should be taken to be a reference to those identified in Chapter 4 unless otherwise specified.

above), the Commission must consider the options that are available to it. The options available for consideration at this time are:

**Option 1:** Forbearance – the Commission would not impose any regulatory obligations as it believes that sustained competition will develop absent intervention;

**Option 2:** Impose Non-Discrimination obligations only;

**Option 3:** Impose Non-Discrimination and Transparency obligations;

**Option 4:** Impose Non-Discrimination, Transparency, and Accounting Separation obligations; and,

**Option 5:** Impose Non-Discrimination, Transparency, Accounting Separation, and Cost Accounting and Price Control obligations.

### **7.3.7 Determining the Impact of the Regulatory Options in the Wholesale Markets**

7.71. Once again the Commission considers the impact of the available options on both competition and stakeholders as outlined in paragraph 7.40. The assumptions made in relation to the preferences of consumers continue to apply.

7.72. **Option 1** is likely to have a negative impact on competition as there is still the potential for harm to competition and consumers should MT choose to leverage its SMP. This option would require the Commission to remove the regulatory obligations that are already in place. This may be favourable to the incumbent but is likely to have a detrimental impact on all other stakeholders and competition.

7.73. The Commission is of the view that **Option 2** goes some way towards addressing the problems identified in the previous paragraph. With this in mind it would seem that in principle imposing Non-Discrimination obligations as proposed is a proportionate response that would benefit competition and stakeholders.

7.74. There is no evidence to suggest that maintaining the current Non-Discrimination obligations would be an excessive regulatory burden on the incumbent. The obligations have been in place since the previous market review and there have been no apparent ill-effects on MT, nor have they significantly impaired its ability to compete at the retail level. However, there is some evidence to suggest that the

Commission should consider further remedies as there is presently no mechanism for formally demonstrating compliance with the current obligations.

7.75. In addition to the arguments for applying Non-Discrimination obligations, **Option 3** addresses some of the competition problems that are not address by **Option 2**. Transparency Obligations are likely to be highly valued by OLOs competing in the Retail Markets.

7.76. Absent Transparency obligations it is unlikely that OLOs would be in a position to effectively compete with MT's retail operation. For example, without sufficient clarity surrounding the pricing and terms on which MT intends to compete the possibility of market foreclosure remains. It should also be noted that the obligations that are currently in force do not appear to have hampered the incumbent's ability to compete and the Commission is not proposing any changes at this point.

7.77. In line with the obligations in the Wholesale Markets, **Option 4** adds an Accounting Separation obligation to those already discussed in an attempt to remedy some of the competition issues that are not fully addressed elsewhere.

7.78. The objective of the Accounting Separation obligation is to demonstrate that the incumbent:

- d. Implements transfer charges at the same market rates as applicable to its competitors for wholesale input, thus ensuring there is fair competition in Retail Markets;
- e. Prices its wholesale products at a rate that it reflective of cost and reduces the incentive to engage in excessive or predatory pricing at the wholesale level; and,
- f. Has taken steps to mitigate against causing a margin squeeze.

7.79. With the foregoing in mind it can be seen that Accounting Separation is a proportionate response to the risks to competition that exist. In the absence of Accounting Separation there is likely to be a continuing cycle of investigations in order for the Commission to satisfy itself that there are no ongoing compliance issues. Such an approach would be costly and would add considerably to the regulatory burden on MT as such investigations are resources intensive and costly. This in turn would impact on the wider industry which ultimately bears the cost of regulation and it is likely that

this would ultimately be passed to the consumer. It is unlikely that this approach would be preferable to any stakeholders.

7.80. Finally, **Option 5**, in addition to the obligations already explored, includes the imposition of Cost Accounting and Price Control obligations. The Commission has previously dealt with the practicalities of the requirement to maintain adequate Cost Accounting Systems and does not intend to address it further.

7.81. In contrast to the obligations that would apply in the Wholesale Markets the Cost Accounting and Price Control remedies that are proposed in the Retail Markets are relatively less onerous.

7.82. The Commission is satisfied that in addition to not creating an undue regulatory burden on MT the interests of other stakeholders are met. Absent the proposed obligations in relation to unreasonably bundling products or creating a margin squeeze, the risk of anti-competitive behaviours remains.

### **7.3.8 Choosing the Best Option for the Retail Markets**

7.83. It is the Commission's view that **Option 1** is untenable as the need for regulation has been established. While the need for ex-ante regulation in the Retail Markets is not as acute as in the Wholesale Markets, to completely deregulate would likely have a net negative impact on stakeholders. Ex-post regulation through competition law provisions is likely to be sufficient to address some of the problems that may arise, however in some cases it would not be as the harm would already have occurred.

7.84. While the Commission feels that the inclusion of remedies considered in relation to non-discrimination in **Option 2** will help to ensure sustainable competition is fostered in regulated markets at the retail level they will not address all identified competition problems. For example, anti-competitive behaviours involving transparency, accounting separation, and cost accounting and pricing controls are not addressed. It is therefore reasonable to conclude that further regulation of the Wholesale Markets is appropriate and that **Option 2** is not sufficient to address the competition problems that exist.

7.85. In relation to **Option 3**, the Commission is of the view that the proposed remedies are both proportionate and appropriate and serve to both foster competition and protect stakeholders' interests. However, the obligations therein are not in-and-of themselves



sufficient to address all competitions that may arise. They would only have a limited effect in other areas, for example price control and preventing unfair cross subsidisation. With that in mind the Commission holds the view that **Option 3** would be insufficient to fully address the competition issues that have been previously identified.

7.86. The Commission concludes that the obligations proposed in **Option 4** are also appropriate but do not address the competition issues that have been identified in their entirety. The obligations considered to date do not address the issue of unreasonably bundling products to pressure or foreclose markets, nor do they fully address the risk of MT creating a margin squeeze. For that reason the Commission is of the view that **Option 4** would be insufficient to address all competition problems.

7.87. With the foregoing in mind the Commission is of the view that **Option 5** is the most favourable option as it addresses all of the identified competition problems. It has also been shown that the obligations that would be imposed under **Option 5** would achieve the stated regulatory objectives while not imposing any unnecessary burden on the incumbent or industry as a whole.

7.88. Accordingly the Commission intends to adopt the obligations outlined in **Option 5** in its formal decisions (See Chapter 6).

## 7.4 Conclusion

7.89. The Commission is satisfied that for the reasons set out in this chapter that its preliminary decisions to impose regulatory obligations on MT as the incumbent in the market are unlikely to create an undue regulatory burden. It is also the view of the Commission that the obligations that it would impose are in keeping with the interests of the wider industry and ultimately consumers.

7.90. In relation to its regulatory objectives (see Section 7.2), the Commission is satisfied that the proposed obligations would ultimately act to further them and as such it would be appropriate to impose such obligations.

## Annex 1 Legislative Basis

- A1.1 The Commission is responsible for issuing telecommunications licences on Island. The licences are issued under s.5 of the Telecommunications Act 1984.
- A1.2 Provisions for placing additional obligations on operators with significant market power are contained in the licences.
- A1.3 The procedures to be followed by the Commission for identifying relevant markets and determining any SMP are set out in Part 6 of MT Limited's Licence, Part 3 of the Licence granted to e-llan Communications Limited and Part 4 of the Licences issued to Sure (Isle of Man) Limited, Domicilium (IOM) Limited, Wi-Manx Limited, Continent 8 Ltd and BlueWave Communications Ltd.
- A1.4 These parts state that the Commission is expected to take account of "generally accepted principles regarding the identification of markets as are applied from time to time in such other European jurisdictions as, in the opinion of the Commission, may be relevant to the circumstances of the Island".
- A1.5 The Commission has adapted the methodology recommended by the European Commission (EC) for defining markets. While the Communications Commission is not legally obliged to follow EC recommendations, this constitutes a well-established process and is considered as best practice. The market definition methodology is set out by the EC<sup>97</sup> in its SMP Guidelines, and this review has adapted this methodology to the particular circumstances of the Isle of Man.
- A1.6 The approach is to treat the EC guidelines as best practice in terms of their methodology, and to implement them in a pragmatic way which recognises the specificity of the Isle of Man. The Commission has also taken into account work carried out by European National Regulatory Authorities (NRAs) particularly where the methodology has been developed, and where the EC has engaged in dialogue with NRAs about the implementation of the methodology.
- A1.7 The objective of ex-ante regulation is ultimately to produce benefits for end users by making retail markets competitive on a sustainable basis. While competition law methodologies are used in the market definition exercise, the application of competition law or ex post competition measures is generally directed to a specific

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<sup>97</sup> <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32014H0710>

complaint against a particular form of behaviour which has already occurred, while the market review process considers the dynamic of an overall market, and is a prospective analysis which does not depend on instances of abuse of a dominant position. Competition law and ex-ante regulation are therefore complementary approaches in telecommunications regulation. The Commission does not currently have specific competition powers in primary legislation and is seeking to address this in the Communications Bill 2018<sup>98</sup>. General competition powers for the Island at present are contained in the Fair Trading Act 1996 as amended, which empowers the Office of Fair Trading to conduct investigations into prices and instances of anti-competitive practice. There is a fair trading condition in the operators' licences.

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<sup>98</sup> Communications Bill 2018 – progressing through the legislative branches  
[http://www.tynwald.org.im/business/bills/Bills/Communications\\_Bill\\_2018.pdf](http://www.tynwald.org.im/business/bills/Bills/Communications_Bill_2018.pdf)

## Annex 2 Draft Decision Notice Wholesale Local Access

### Notification of Proposed Market Power Determination: Wholesale Local Access

#### Proposed Decision Notice 2019/xx

##### Statutory powers

- i. This Notification of Market Power Determination is issued in accordance with Part 6 “Additional Obligations on Operators with Significant Market Power” of the Licence granted to Manx Telecom Limited (MT) under Part 5 of the Telecommunications Act 1984 (of Tynwald).
- ii. This Decision Notice comes into effect on [X date] and applies to MT. This proposed Decision applies to MT. With reference to Condition 42.7 of the MT Licence, this proposed Decision identifies relevant markets, and makes a market power determination. The Commission has presented its preliminary review of the telecommunications markets in the consultation set out above.
- iii. The provisions of the consultation document shall, where appropriate, be construed with this proposed Decision. The analysis set out through the consultation above explains the reasoning behind and for making the proposals and indicates the effects the proposals are expected to have.
- iv. In line with Condition 42.9 of the MT Licence, representations may be made to the Commission on this proposed Decision within a period of six weeks from the date of its publication. The Commission will consider all representations received within that period before reaching a final Decision.

##### Wholesale Local Access definition

- v. Condition 42 of the MT Licence requires that, before making a market power determination, the Commission must identify relevant markets, and in accordance with Condition 42.5 assess whether a Communications Provider has Significant Market Power (“SMP”). The method to be followed is set out in Condition 42 of the MT Licence.
- vi. The relevant Wholesale Fixed market which has been identified is **Wholesale Local Access**.
- vii. The geographic scope for this market is the Isle of Man.

### **SMP designation**

- viii. The assessment of market power was carried out in accordance with generally accepted principles and took into account relevant factors as provided for in Conditions 42.5 and 42.6 of the MT Licence. Having determined that the **Wholesale Local Access Market** is not effectively competitive, MT is designated as having SMP in this market.
- ix. The Commission reserves the right to give further non-binding guidance on the implementation of any proposed measures on the eventual publication of the final Decision.
- x. According to Condition 42.14 of the MT Licence, where the Commission has determined that a Communications Provider has SMP on a market, the Commission may consider proportionate and objectively-justified SMP obligations, taking into account such of the following objectives as appear to the Commission to be appropriate:
- ensuring that there are provided throughout the Island, except where impracticable or not reasonably practicable, such Electronic Communications Services as satisfy all reasonable demands for them;
  - ensuring that users derive maximum benefit in terms of choice, price and quality;
  - ensuring efficient investment in infrastructure and promoting innovation;
  - encouraging the efficient use and effective management of radio frequencies and numbering resources; and
  - ensuring efficient and sustainable competition.
- xi. Condition 43 of the MT licence provides that MT shall comply with such conditions as the Commission may specify by direction in accordance with Condition 42 and paragraphs 43.2, 43.3 and 43.4.
- xii. Condition 44.2.1 of the MT Licence provides for the Commission to direct price controls, as long as this is done in a way consistent with the provision in Condition 44.3, such that it appears to the Commission, from the market analysis carried out for the purpose of setting that condition, that there is a risk that the Communications Provider might sustain prices at an excessively high level or apply a price squeeze to the detriment of End Users; and it appears to the Commission that any such conditions are proportionate and appropriate for the purposes of:-

- promoting efficiency;
- promoting sustainable competition; and
- conferring the greatest possible benefits on the End-Users having taken account of the extent of the investment by the Communications Provider in the matters to which the condition relates.

xiii. Having considered those objectives, the Commission specifies by direction that the following SMP conditions be imposed in the **Wholesale Local Access market** pursuant to the Conditions of the MT licence:

***Obligations to provide access***

xiv. In accordance with Condition 43.1 of its Licence, MT is directed to and shall meet all reasonable requests from LOs for the provision of network access to a relevant network, and the use of a relevant network, in the **Wholesale Local Access market** where MT has been designated with SMP. The onus is on MT to justify any refusal to provide requested products is unreasonable on the basis of objective criteria such as those set out in the MT licence condition 43.3.

***Access obligations – general conditions attached***

- xv. As provided for in Condition 43.4 of its Licence, MT is directed to behave in a manner which is fair in the way in which it deals with access requests, both in terms of responding to requests and in implementing successful requests.
- xvi. MT is directed to behave in a timely manner in the way it deals with access requests, both in terms of responding to requests and in implementing successful requests.
- xvii. MT is directed to behave in a reasonable manner in the way in which it deals with access requests, both in terms of responding to requests and in implementing successful requests.
- xviii. MT is directed to negotiate in good faith with access seekers.
- xix. MT is directed not to withdraw access to facilities already granted with the prior approval of the Commission and in accordance with terms and conditions as may be determined by the Commission.

### ***Obligation of non - discrimination***

- xx. As provided for in Condition 43.2.2 of its Licence, MT is hereby directed not to discriminate in respect of access.
- xxi. MT is thus directed to ensure that it does not discriminate unduly between Licensed Operators (LO) in equivalent circumstances providing equivalent services, and that all services and information are provided to LOs under the same conditions and of the same quality as the services and information that MT provides for itself.
- xxii. MT to produce an annual compliance statement to be signed by appropriate dual signatories within MT. The content of this statement will be further specified by the Commission and will have due regard to Key Performance Indicators that may be in effect.

### ***Obligation of transparency***

- xxiii. In accordance with Conditions 43.2.3, 43.2.4, 43.2.5 and 43.2.6 of its Licence, MT shall have an obligation of transparency.
- xxiv. Without prejudice to the generality of this obligation, in the **Wholesale Local Access market** MT is hereby directed to:
  - publish a Reference Offer for each **Wholesale Local Access** product, including appropriate technical specifications, and including a mechanism explaining how changes to the Reference Offer will be made and notified. The Reference Offer should be kept up to date and should include a price list.
  - publish a standard SLA which would govern MT's relationship with the LO. This will include Key Performance Indicators.
  - publish prices and non-price terms and conditions for **Wholesale Local Access** products.
  - notify LOs and the Commission in advance of the launch of a new **Wholesale Local Access** product. MT must inform LOs at least 6 months before the product is launched. LOs should be made aware of product specifications and should be provided with indicative pricing where possible. The final pricing should be provided to LOs at least 3 months in advance of product launch. This time period may be varied in agreement with the Commission.

- notify the Commission of the launch of a new **Wholesale Local Access** product one month before informing LOs (i.e. 7 months before product launch) of the product specifications and indicative pricing. For all new products, this time period may be varied in agreement with the Commission.
- inform LOs at least 3 months before a change to an existing product comes into effect. MT should notify the Commission one month before informing LOs (i.e. 4 months before changes come into effect). This time period may be varied in agreement with the Commission.
- to share an updated roadmap of likely network and service developments with LOs at each and every LO Forum (and not less frequently than every 6 months). The roadmap will be indicative and non-binding.

#### ***Obligation of accounting separation***

- xxv. In accordance with Condition 43.2.7 of its Licence, MT is hereby directed to produce separated accounts. The format and reporting requirements of these accounts will be subject to agreement with the Commission.

#### ***Obligations relating to price controls and cost accounting***

- xxvi. A price control obligation is proposed in accordance with Condition 44.2.1 such that MT is directed not to cause a margin/price squeeze a) between wholesale products in the **Wholesale Local Access** market and products in downstream wholesale markets; and b) between wholesale products in the **Wholesale Local Access** market and retail products.
- xxvii. This is a proportionate measure designed to address the objectives outlined in Condition 44.3. In accordance with Condition 44.2.2 of its Licence, MT is directed to comply with rules which the Commission may make in relation to the measures imposed under Condition 44.2.1, regarding the recovery of costs and cost orientation.
- xxviii. MT is directed that prices charged to any LO for access to or use of products, services and facilities in the **Wholesale Local Access** market shall be subject to a cost orientation obligation.
- xxix. In accordance with Condition 44.2.3 of its Licence, MT is hereby directed to maintain appropriate cost accounting systems in respect of the price controls imposed in



accordance with Condition 44.2.1 regarding products, services or facilities in the **Wholesale Local Access** market. In accordance with Condition 44.2.3 (a) and (b), MT is required to make publicly available a description of the cost accounting system, including details of (i) the main categories under which costs are brought into account for the purposes of that system; and (ii) the rules applied for the purposes of that system with respect to the allocation of costs.

### Question

24. Wholesale Local Access - Do you have any comments on this Decision Notice?
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## **Annex 3 Draft Decision Notice Wholesale Broadband Access**

### **Notification of Proposed Market Power Determination: Wholesale Broadband Access**

#### **Proposed Decision Notice 2019/xx**

##### **Statutory powers**

- i. This Notification of Market Power Determinations is issued in accordance with Part 6 “Additional Obligations on Operators with Significant Market Power” of the Licence granted to Manx Telecom Limited (MT) under Part 5 of the Telecommunications Act 1984 (of Tynwald).
- ii. This Decision Notice comes into effect on [X date]. This proposed Decision applies to MT. With reference to Condition 42.7 of the MT Licence, this proposed Decision identifies relevant markets, and makes a market power determination. The Commission has presented its preliminary review of the telecommunications markets in the consultation set out above.
- iii. The provisions of the consultation documents shall, where appropriate, be construed with this proposed Decision. The analysis set out through the consultation above explains the reasoning behind and for making the proposals and indicates the effects the proposals are expected to have.
- iv. In line with Condition 42.9 of the MT Licence, representations may be made to the Commission on this proposed Decision within a period of six weeks from the date of its publication. The Commission will consider all representations received within that period before reaching a final Decision.

##### **Wholesale Broadband Access definition**

- v. Condition 42 of the MT Licence requires that, before making a market power determination, the Commission must identify relevant markets, and in accordance with Condition 42.5 assess whether a Communications Provider has Significant Market Power (“SMP”). The method to be followed is set out in Condition 42 of the MT Licence.
- vi. The relevant Wholesale Fixed market which has been identified is **Wholesale Broadband Access**.

- vii. The geographic scope for this market is the Isle of Man.

**SMP designation**

- viii. The assessment of market power was carried out in accordance with generally accepted principles and took into account relevant factors as provided for in Conditions 42.5 and 42.6 of the MT Licence. Having determined that the **Wholesale Broadband Access Market** is not effectively competitive, MT is designated as having SMP in this market.
- ix. The Commission reserves the right to give further non-binding guidance on the implementation of any proposed measures on the eventual publication of the final Decision.
- x. According to Condition 42.14 of the MT Licence, where the Commission has determined that a Communications Provider has SMP on a market, the Commission may consider proportionate and objectively-justified SMP obligations, taking into account such of the following objectives as appear to the Commission to be appropriate:
- ensuring that there are provided throughout the Island, except where impracticable or not reasonably practicable, such Electronic Communications Services as satisfy all reasonable demands for them;
  - ensuring that users derive maximum benefit in terms of choice, price and quality;
  - ensuring efficient investment in infrastructure and promoting innovation;
  - encouraging the efficient use and effective management of radio frequencies and numbering resources; and
  - ensuring efficient and sustainable competition.
- xi. Condition 43 of the MT licence provides that MT shall comply with such conditions as the Commission may specify by direction in accordance with Condition 42 and paragraphs 43.2, 43.3 and 43.4.
- xii. Condition 44.2.1 of the MT Licence provides for the Commission to direct price controls, as long as this is done in a way consistent with the provision in Condition 44.3, such that it appears to the Commission, from the market analysis carried out for the purpose of setting that condition, that there is a risk that the Communications

Provider might sustain prices at an excessively high level or apply a price squeeze to the detriment of End Users; and it appears to the Commission that any such conditions are proportionate and appropriate for the purposes of:-

- promoting efficiency;
- promoting sustainable competition; and
- conferring the greatest possible benefits on the End-Users having taken account of the extent of the investment by the Communications Provider in the matters to which the condition relates.

- xiii. Having considered those objectives, the Commission specifies by direction that the following SMP conditions be imposed in the **Wholesale Broadband Access market** pursuant to the Conditions of the MT licence:

***Obligations to provide access***

- xiv. In accordance with Condition 43.1 of its Licence, MT is directed to and shall meet all reasonable requests from LOs for the provision of network access to a relevant network, and the use of a relevant network, in the **Wholesale Broadband Access market** where MT has been designated with SMP. The onus is on MT to justify any refusal to provide requested products is unreasonable on the basis of objective criteria such as those set out in the MT licence condition 43.3.

***Access obligations – general conditions attached***

- xv. As provided for in Condition 43.4 of its Licence, MT is directed to behave in a manner which is fair in the way in which it deals with access requests, both in terms of responding to requests and in implementing successful requests.
- xvi. MT is directed to behave in a timely manner in the way it deals with access requests, both in terms of responding to requests and in implementing successful requests.
- xvii. MT is directed to behave in a reasonable manner in the way in which it deals with access requests, both in terms of responding to requests and in implementing successful requests.
- xviii. MT is directed to negotiate in good faith with access seekers.

- xix. MT is directed not to withdraw access to facilities already granted with the prior approval of the Commission and in accordance with terms and conditions as may be determined by the Commission.

***Obligation of non - discrimination***

- xx. As provided for in Condition 43.2.2 of its Licence, MT is hereby directed not to discriminate in respect of access.
- xxi. MT is thus directed to ensure that it does not discriminate unduly between LOs in equivalent circumstances providing equivalent services, and that all services and information are provided to LOs under the same conditions and of the same quality as the services and information that MT provides for itself.
- xxii. MT to produce an annual compliance statement to be signed by appropriate dual signatories within MT. The content of this statement will be further specified by the Commission and will have due regard to Key Performance Indicators that may be in effect.

***Obligation of transparency***

- xxiii. In accordance with Conditions 43.2.3, 43.2.4, 43.2.5 and 43.2.6 of its Licence, MT shall have an obligation of transparency.
- xxiv. Without prejudice to the generality of this obligation, in the **Wholesale Broadband Access market** MT is hereby directed to:
- publish a Reference Offer for each **Wholesale Broadband Access** product, including appropriate technical specifications, and including a mechanism explaining how changes to the Reference Offer will be made and notified
  - the Reference Offer should be kept up to date and should include a price list.
  - publish a standard SLA which would govern MT's relationship with the LO. This will include Key Performance Indicators.
  - publish prices and non-price terms and conditions for **Wholesale Broadband Access** products.
  - notify LOs and the Commission in advance of the launch of a new **Wholesale Broadband Access** product. MT must inform LOs at least 6 months before the product is launched. LOs should be made aware of product specifications and should be provided with indicative pricing where possible. The final pricing should be

provided to LOs at least 3 months in advance of product launch. This time period may be varied in agreement with the Commission.

- notify the Commission of the launch of a new **Wholesale Broadband Access** product one month before informing LOs (i.e. 7 months before product launch) of the product specifications and indicative pricing. For all new products, this time period may be varied in agreement with the Commission.
- inform LOs at least 3 months before a change to an existing product comes into effect. MT should notify the Commission one month before informing LOs (i.e. 4 months before changes come into effect). This time period may be varied in agreement with the Commission.
- to share an updated roadmap of likely network and service developments with LOs at each and every LO Forum (and not less than every 6 months). The roadmap will be indicative and non-binding.

### ***Obligation of accounting separation***

- xxv. In accordance with Condition 43.2.7 of its Licence, MT is hereby directed to produce separated accounts. The format and reporting requirements of these accounts will be subject to agreement with the Commission.

### ***Obligations relating to price controls and cost accounting***

- xxvi. A price control obligation is proposed in accordance with Condition 44.2.1 such that MT is directed not to cause a margin/price squeeze a) between wholesale products in the **Wholesale Broadband Access** market and products in downstream wholesale markets; and b) between wholesale products in the **Wholesale Broadband Access** market and retail products.
- xxvii. This is a proportionate measure designed to address the objectives outlined in Condition 44.3. In accordance with Condition 44.2.2 of its Licence, MT is directed to comply with rules which the Commission may make in relation to the measures imposed under Condition 44.2.1, regarding the recovery of costs and cost orientation.
- xxviii. MT is directed that prices charged to any LO for access to or use of products, services and facilities in the **Wholesale Broadband Access** market shall be subject to a cost orientation obligation.

- xxix. In accordance with Condition 44.2.3 of its Licence, MT is hereby directed to maintain appropriate cost accounting systems in respect of the price controls imposed in accordance with Condition 44.2.1 regarding products, services or facilities in the **Wholesale Broadband Access** market. In accordance with Condition 44.2.3 (a) and (b), MT is required to make publicly available a description of the cost accounting system, including details of (i) the main categories under which costs are brought into account for the purposes of that system; and (ii) the rules applied for the purposes of that system with respect to the allocation of costs.

### Question

25. Wholesale Broadband Access - Do you have any comments on this Decision Notice?
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## **Annex 4 Draft Decision Notice: Wholesale Fixed Voice Call Termination**

### **Notification of Proposed Market Power Determination: Wholesale Fixed Voice Call Termination**

#### **Proposed Decision Notice 2019/xx**

#### **Statutory powers**

- i. This Notification of Market Power Determination is issued in accordance with the relevant part "Additional Obligations on Operators with Significant Market Power" of the Licences granted to Manx Telecom Limited (MT), Sure, WiManx and BlueWave under Part 5 of the Telecommunications Act 1984 (of Tynwald)<sup>99</sup>.
- ii. This Decision Notice comes into effect on [X date]. This proposed Decision applies to all operators terminating calls on their own networks on the Isle of Man. With reference to the Condition 'Procedure for issuing determinations'<sup>100</sup>, this proposed Decision identifies relevant markets, and makes a market power determination. The Commission has presented its preliminary review of the telecommunications markets in the consultation set out above.
- iii. The provisions of the consultation documents shall, where appropriate, be construed with this proposed Decision. The analysis set out through the consultation above explains the reasoning behind and for making the proposals and indicates the effects the proposals are expected to have.
- iv. In line with Condition x.9 of the operators' licences<sup>101</sup>, representations may be made to the Commission on this proposed Decision within a period of six weeks from the date of its publication. The Commission will consider all representations received within that period before reaching a final Decision.

#### **Wholesale Fixed Voice Call Termination**

- v. The Conditions requires that, before making a market power determination, the Commission must identify relevant markets, and in accordance with the relevant

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<sup>99</sup> Licence MT Part 6, Sure Part 4, WiManx Part 4, BlueWave Part 4

<sup>100</sup> Licence Condition MT 42.7; Sure 27.7, WiManx 28.7, BlueWave 28.7

<sup>101</sup> Licence Condition MT 42.9, Sure 27.9, WiManx 28.9, BlueWave 28.9



Condition<sup>102</sup> assess whether a Communications Provider has Significant Market Power ("SMP"). The method to be followed is set out in the "The Procedure for Market Power Determinations" in the operators' licences<sup>103</sup>.

- vi. The relevant wholesale fixed market which has been identified is **Wholesale Fixed Voice Call Termination**.
- vii. The geographic scope for this market is the Isle of Man.

#### **SMP designation**

- viii. The assessment of market power was carried out in accordance with generally accepted principles and took into account relevant factors as provided for in "The Procedure for Market Power Determinations" in the operators' licences<sup>104</sup>. Having determined that the **Wholesale Fixed Voice Call Termination** is not effectively competitive, all operators terminating calls on their own network are designated as having SMP in this market.
- ix. For the purposes of this Decision a SMP obligation only applies to a Licensed Operator insofar as, and to the extent that, the Licensed Operator is terminating voice calls on its own network.
- x. For the avoidance of doubt this decision would apply to any future operator that would terminate calls on its own network.
- xi. The Commission reserves the right to give further non-binding guidance on the implementation of any proposed measures on the eventual publication of the final Decision.
- xii. According to the conditions in the Operators' Licences<sup>105</sup> where the Commission has determined that a Communications Provider has SMP on a market, the Commission may consider proportionate and objectively-justified SMP obligations, taking into account such of the following objectives as appear to the Commission to be appropriate:

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<sup>102</sup> Licence Condition MT 42.5, Sure 27.5, WiManx 28.7, BlueWave 28.5

<sup>103</sup> Licence Condition MT 42, Sure 27, WiManx 28, BlueWave 28

<sup>104</sup> Licence Condition MT 42, Sure 27, WiManx 28, BlueWave 28

<sup>105</sup> Licence Condition MT 42.14, Sure 27.14, WiManx 28.14, BlueWave 28.14,

- ensuring that there are provided throughout the Island, except where impracticable or not reasonably practicable, such Electronic Communications Services as satisfy all reasonable demands for them;
  - ensuring that users derive maximum benefit in terms of choice, price and quality;
  - ensuring efficient investment in infrastructure and promoting innovation;
  - encouraging the efficient use and effective management of radio frequencies and numbering resources; and
  - ensuring efficient and sustainable competition.
- xiii. Condition x in relation to Network Access in the operators' licences<sup>106</sup> provides that the operators will comply with such conditions as the Commission may specify by direction in accordance with "The Procedure for Market Power Determinations" in the operators' licences<sup>107</sup> and relevant paragraphs in the Network Access licence condition<sup>108</sup>.
- xiv. Condition x.2.1 of the operators' licences<sup>109</sup> provides for the Commission to direct price controls, as long as this is done in a way consistent with the provision in Condition 44.3<sup>110</sup>, such that it appears to the Commission, from the market analysis carried out for the purpose of setting that condition, that there is a risk that the Communications Provider might sustain prices at an excessively high level or apply a price squeeze to the detriment of End Users; and it appears to the Commission that any such conditions are proportionate and appropriate for the purposes of:-
- promoting efficiency;
  - promoting sustainable competition; and
  - conferring the greatest possible benefits on the End-Users having taken account of the extent of the investment by the Communications Provider in the matters to which the condition relates.
- xv. Having considered those objectives, the Commission specifies by direction that the following SMP conditions be imposed in the **Wholesale Fixed Voice Call Termination** pursuant to the Conditions of the operators' licences:

<sup>106</sup> :Licence Condition MT 43, Sure 27A, WiManx 28, BlueWave 28

<sup>107</sup> Licence Condition MT 42, Sure 27, WiManx 29, BlueWave 29

<sup>108</sup> Licence Conditions MT 43.2, 43.3 and 43.4; Sure 27A.2 27A.3 and 27A.4; WiManx 29.2, 29.3 and 29.4; BlueWave 29.2, 29.3 and 29.4

<sup>109</sup> Licence Condition MT 44.2.1, Sure 28.2.1, WiManx 30.2.1, BlueWave 30.2.1

<sup>110</sup> Licence Condition MT 44.3, Sure 28.3, WiManx 30.3, BlueWave 30.3

### ***Obligations to provide access***

- xvi. In accordance with Network Access Condition x.1 of the operators' licences<sup>111</sup>, operators who terminate fixed voice calls on their own networks are directed to and shall meet all reasonable requests from LOs for the provision of network access to a relevant network, and the use of a relevant network, in the **Wholesale Fixed Voice Call Termination Market** where an operator has been designated with SMP. The onus is on the operator to justify any refusal to provide requested products is unreasonable on the basis of objective criteria such as those set out in licence condition x.3<sup>112</sup>.

### ***Access obligations – general conditions attached***

- xvii. In accordance with Network Access Condition x.1 of the operators' licences<sup>113</sup> operators who terminate fixed voice calls on their own network are directed to behave in a manner which is fair in the way in which it deals with access requests, both in terms of responding to requests and in implementing successful requests.
- xviii. All operators who terminate calls on their own network are directed to behave in a timely manner in the way it deals with access requests, both in terms of responding to requests and in implementing successful requests.
- xix. All operators who terminate calls on their own network are directed to behave in a reasonable manner in the way in which it deals with access requests, both in terms of responding to requests and in implementing successful requests.
- xx. All operators who terminate calls on their own network are directed to negotiate in good faith with access seekers.
- xxi. All operators who terminate calls on their own network are directed not to withdraw access to facilities already granted with the prior approval of the Commission and in accordance with terms and conditions as may be determined by the Commission.

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<sup>111</sup> Licence Condition MT 43.1, Sure 27A.1, WiManx 29.1, BlueWave 29.1

<sup>112</sup> Licence Condition MT 43.4, Sure 27A.4, WiManx 29.4, BlueWave 29.4

<sup>113</sup> Licence Condition MT 43.4, Sure 27A.4, WiManx 29.4, BlueWave 29.4

### ***Obligation of non - discrimination***

- xxii. As provided for in x.2.2 Condition<sup>114</sup> of their licences all operators who terminate fixed voice calls on their own network are hereby directed not to discriminate in respect of access.
- xxiii. All operators who terminate calls on their own network are thus directed to ensure that it does not discriminate unduly between LOs in equivalent circumstances providing equivalent services, and that all services and information are provided to LOs under the same conditions and of the same quality as the services and information that they provide for themselves.

### ***Obligation of transparency***

- xxiv. In accordance with the Conditions in their licence all operators who terminate fixed voice call on their own network have an obligation of transparency.<sup>115</sup>
- xxv. Without prejudice to the generality of this obligation, in the **Wholesale Fixed Voice Call Termination market** all operators who terminate calls on their own network are hereby directed to:
- publish a Reference Offer for **Wholesale Fixed Voice Call Termination**, including appropriate technical specifications, and including a mechanism explaining how changes to the Reference Offer will be made and notified. The Reference Offer should be kept up to date and should include the Fixed Termination Rates.
  - publish a standard SLA.
  - publish prices and non-price terms and conditions for **Wholesale Fixed Voice Call Termination** products.
  - notify LOs and the Commission 30 days in advance of date of effect of changes to **Wholesale Fixed Voice Call Termination** rates.

### ***Obligation of accounting separation***

- xxvi. In accordance with Condition 43.2.7 of its Licence, MT is hereby directed to produce separated accounts. The format and reporting requirements of these accounts will be subject to agreement with the Commission. This obligation only applies to MT.

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<sup>114</sup> Licence Condition MT 43.2.2, Sure 27A.4, WiManx 29.4, BlueWave 29.4

<sup>115</sup> Licence Conditions MT 43.2.3, 43.2.4, 43.2.5 and 43.2.6; Sure 27A.2.3, 27A.2.4, 27A.2.5 and 27A.2.6; WiManx 29.2.3, 29.2.4, 29.2.5 and 29.2.6; BlueWave 29.2.3, 29.2.4, 29.2.5 and 29.2.6

### ***Obligations relating to price controls and cost accounting***

- xxvii. In accordance with Condition x.2.2 of their Licence<sup>116</sup>, operators who terminate fixed voice calls on their own network are directed to comply with rules which the Commission may make in relation to the measures imposed under Condition x.2.1<sup>117</sup> regarding the recovery of costs and cost orientation.
- xxviii. All operators who terminate fixed voice calls on their own networks are directed to comply with a cost orientation obligation in **Wholesale Fixed Voice Call Termination** Markets in accordance with licence condition x.2.2.<sup>118</sup>
- xxix. In accordance with Condition x.2.3 of their Licences<sup>119</sup>, operators who terminate fixed voice calls on their own networks are hereby directed to maintain appropriate cost accounting systems in respect of the price controls imposed in accordance with Condition x.2.1<sup>120</sup> regarding products, services or facilities in the **Wholesale Fixed Voice Call Termination** market. In accordance with Condition x.2.3<sup>121</sup> (a) and (b), operators who terminate fixed voice calls on their own networks are required to make publicly available a description of the cost accounting system, including details of (i) the main categories under which costs are brought into account for the purposes of that system; and (ii) the rules applied for the purposes of that system with respect to the allocation of costs.

### **Question**

26. Wholesale Fixed Voice Call Termination – Do you have any comments on this Decision Notice?

<sup>116</sup> Licence Condition MT 44.2.2, Sure 28.2.2, WiManx 30.2.2, BlueWave 30.2.2.

<sup>117</sup> Licence Condition MT 44.2.1, Sure 28.2.1, WiManx 30.2.1, BlueWave 30.2.1.

<sup>118</sup> Licence Condition MT 44.2.2, Sure 28.2.2, WiManx 30.2.2, BlueWave 30.2.2.

<sup>119</sup> Licence Condition MT 44.2.3, Sure 28.2.3, WiManx 30.2.2, BlueWave 30.2.2.

<sup>120</sup> Licence Condition MT 44.2.1, Sure 28.2.1, WiManx 30.2.1, BlueWave 30.2.1.

<sup>121</sup> Licence Condition MT 44.2.3, Sure 28.2.3, WiManx 30.2.2, BlueWave 30.2.2.

## **Annex 5 Draft Decision Notice Wholesale Traditional Interface Leased Lines**

### **Notification of Proposed Market Power Determination: Wholesale Traditional Interface Leased Lines**

#### **Proposed Decision Notice 2019/xx**

##### **Statutory powers**

- i. This Notification of Market Power Determination is issued in accordance with Part 6 “Additional Obligations on Operators with Significant Market Power” of the Licence granted to Manx Telecom Limited (MT) under Part 5 of the Telecommunications Act 1984 (of Tynwald).
- ii. This proposed Decision applies to MT. With reference to Condition 42.7 of the MT Licence, this proposed Decision identifies relevant markets, and makes a market power determination. The Commission has presented its preliminary review of the telecommunications markets in the consultation set out above.
- iii. The provisions of the consultation documents shall, where appropriate, be construed with this proposed Decision. The analysis set out through the consultation above explains the reasoning behind and for making the proposals and indicates the effects the proposals are expected to have.
- iv. In line with Condition 42.9 of the MT Licence, representations may be made to the Commission on this proposed Decision within a period of six weeks from the date of its publication. The Commission will consider all representations received within that period before reaching a final Decision.

##### **Wholesale Traditional Interface Leased Lines**

- v. Condition 42 of the MT Licence requires that, before making a market power determination, the Commission must identify relevant markets, and in accordance with Condition 42.5 assess whether a Communications Provider has Significant Market Power (“SMP”). The method to be followed is set out in Condition 42 of the MT Licence.

- vi. The relevant wholesale fixed market which has been identified is **Wholesale Traditional Interface Leased Lines**.
- vii. The geographic scope for this market is the Isle of Man.

#### **SMP designation**

- viii. The assessment of market power was carried out in accordance with generally accepted principles and took into account relevant factors as provided for in Conditions 42.5 and 42.6 of the MT Licence. Having determined that the **Wholesale Traditional Interface Leased Lines** is not effectively competitive, MT is designated as having SMP in this market.
- ix. The Commission reserves the right to give further non-binding guidance on the implementation of any proposed measures on the eventual publication of the final Decision.
- x. According to Condition 42.14 of the MT Licence, where the Commission has determined that a Communications Provider has SMP on a market, the Commission may consider proportionate and objectively-justified SMP obligations, taking into account such of the following objectives as appear to the Commission to be appropriate:
  - ensuring that there are provided throughout the Island, except where impracticable or not reasonably practicable, such Electronic Communications Services as satisfy all reasonable demands for them;
  - ensuring that users derive maximum benefit in terms of choice, price and quality;
  - ensuring efficient investment in infrastructure and promoting innovation;
  - encouraging the efficient use and effective management of radio frequencies and numbering resources; and
  - ensuring efficient and sustainable competition.
- xi. Condition 43 of the MT licence provides that MT shall comply with such conditions as the Commission may specify by direction in accordance with Condition 42 and paragraphs 43.2, 43.3 and 43.4.
- xii. Condition 44.2.1 of the MT Licence provides for the Commission to direct price controls, as long as this is done in a way consistent with the provision in Condition 44.3, such that it appears to the Commission, from the market analysis carried out

for the purpose of setting that condition, that there is a risk that the Communications Provider might sustain prices at an excessively high level or apply a price squeeze to the detriment of End Users; and it appears to the Commission that any such conditions are proportionate and appropriate for the purposes of:-

- promoting efficiency;
- promoting sustainable competition; and
- conferring the greatest possible benefits on the End-Users having taken account of the extent of the investment by the Communications Provider in the matters to which the condition relates.

xiii. Having considered those objectives, the Commission specifies by direction that the following SMP conditions be imposed in the **Wholesale Traditional Interface Leased Lines** pursuant to the Conditions of the MT licence:

***Obligation of transparency***

xiv. In accordance with Conditions 43.2.3, 43.2.4, 43.2.5 and 43.2.6 of its Licence, MT shall have an obligation of transparency.

xv. Without prejudice to the generality of this obligation, in the **Wholesale Traditional Interface Leased Lines market** MT is hereby directed to:

- maintain a Reference Offer for each **Wholesale Traditional Interface Leased Lines** product, including appropriate technical specifications, and including a mechanism explaining how changes to the Reference Offer will be made and notified
- maintain a standard SLA which would govern MT's relationship with the LO. This will include Key Performance Indicators.
- notify the Commission 30 days in advance of changes to wholesale prices.
- to share an updated roadmap of likely network and service developments with LOs at each and every LO Forum (and not less frequently than every 6 months).. The roadmap will be indicative and non-binding.

***Obligation of accounting separation***

xvi. In accordance with Condition 43.2.7 of its Licence, MT is hereby directed to produce separated accounts. The format and reporting requirements of these accounts will be subject to agreement with the Commission.



## Question

27. Wholesale Traditional Interface Leased Lines – do you have any comments on this Decision Notice?

## **Annex 6 Draft Decision Notice Wholesale Modern Interface Leased Lines**

### **Notification of Proposed Market Power Determination: Wholesale Modern Interface Leased Lines**

#### **Proposed Decision Notice 2019/xx**

#### **Statutory powers**

- i. This Notification of Market Power Determination is issued in accordance with Part 6 “Additional Obligations on Operators with Significant Market Power” of the Licence granted to Manx Telecom Limited (MT) under Part 5 of the Telecommunications Act 1984 (of Tynwald).
- ii. This Decision Notice comes into effect on [X date]. This proposed Decision applies to MT. With reference to Condition 42.7 of the MT Licence, this proposed Decision identifies relevant markets, and makes a market power determination. The Commission has presented its preliminary review of the telecommunications markets in the consultation set out above.
- iii. The provisions of the consultation documents shall, where appropriate, be construed with this proposed Decision. The analysis set out through the consultation above explains the reasoning behind and for making the proposals and indicates the effects the proposals are expected to have.
- iv. In line with Condition 42.9 of the MT Licence, representations may be made to the Commission on this proposed Decision within a period of six weeks from the date of its publication. The Commission will consider all representations received within that period before reaching a final Decision.
- v. **Wholesale Modern Interface Leased Lines** Condition 42 of the MT Licence requires that, before making a market power determination, the Commission must identify relevant markets, and in accordance with Condition 42.5 assess whether a Communications Provider has Significant Market Power (“SMP”). The method to be followed is set out in Condition 42 of the MT Licence.
- vi. The relevant wholesale fixed market which has been identified is **Wholesale Modern Interface Leased Lines**.

- vii. The geographic scope for this market is the Isle of Man.

**SMP designation**

- viii. The assessment of market power was carried out in accordance with generally accepted principles and took into account relevant factors as provided for in Conditions 42.5 and 42.6 of the MT Licence. Having determined that the **Wholesale Modern Interface Leased Lines** is not effectively competitive, MT is designated as having SMP in this market.
- ix. The Commission reserves the right to give further non-binding guidance on the implementation of any proposed measures on the eventual publication of the final Decision.
- x. According to Condition 42.14 of the MT Licence, where the Commission has determined that a Communications Provider has SMP on a market, the Commission may consider proportionate and objectively-justified SMP obligations, taking into account such of the following objectives as appear to the Commission to be appropriate:
- ensuring that there are provided throughout the Island, except where impracticable or not reasonably practicable, such Electronic Communications Services as satisfy all reasonable demands for them;
  - ensuring that users derive maximum benefit in terms of choice, price and quality;
  - ensuring efficient investment in infrastructure and promoting innovation;
  - encouraging the efficient use and effective management of radio frequencies and numbering resources; and
  - ensuring efficient and sustainable competition.
- xi. Condition 43 of the MT licence provides that MT shall comply with such conditions as the Commission may specify by direction in accordance with Condition 42 and paragraphs 43.2, 43.3 and 43.4.
- xii. Condition 44.2.1 of the MT Licence provides for the Commission to direct price controls, as long as this is done in a way consistent with the provision in Condition 44.3, such that it appears to the Commission, from the market analysis carried out for the purpose of setting that condition, that there is a risk that the Communications Provider might sustain prices at an excessively high level or apply a price squeeze to

the detriment of End Users; and it appears to the Commission that any such conditions are proportionate and appropriate for the purposes of:-

- promoting efficiency;
- promoting sustainable competition; and
- conferring the greatest possible benefits on the End-Users having taken account of the extent of the investment by the Communications Provider in the matters to which the condition relates.

- xiii. Having considered those objectives, the Commission specifies by direction that the following SMP conditions be imposed in the **Wholesale Modern Interface Leased Lines market** pursuant to the Conditions of the MT licence:

***Obligations to provide access***

- xiv. In accordance with Condition 43.1 of its Licence, MT is directed to and shall meet all reasonable requests from Licensed Operators (LOs) for the provision of network access to a relevant network, and the use of a relevant network, in the **Wholesale Modern Interface Leased Lines market** where MT has been designated with SMP. The onus is on MT to justify any refusal to provide requested products is unreasonable on the basis of objective criteria such as those set out in the MT licence condition 43.3.

***Access obligations – general conditions attached***

- xv. As provided for in Condition 43.4 of its Licence, MT is directed to behave in a manner which is fair in the way in which it deals with access requests, both in terms of responding to requests and in implementing successful requests.
- xvi. MT is directed to behave in a timely manner in the way it deals with access requests, both in terms of responding to requests and in implementing successful requests.
- xvii. MT is directed to behave in a reasonable manner in the way in which it deals with access requests, both in terms of responding to requests and in implementing successful requests.
- xviii. MT is directed to negotiate in good faith with access seekers.

- xix. MT is directed not to withdraw access to facilities already granted with the prior approval of the Commission and in accordance with terms and conditions as may be determined by the Commission.

***Obligation of non - discrimination***

- xx. As provided for in Condition 43.2.2 of its Licence, MT is hereby directed not to discriminate in respect of access.
- xxi. MT is thus directed to ensure that it does not discriminate unduly between LOs in equivalent circumstances providing equivalent services, and that all services and information are provided to LOs under the same conditions and of the same quality as the services and information that MT provides for itself.
- xxii. MT to produce an annual compliance statement to be signed by appropriate dual signatories within MT. The content of this statement will be further specified by the Commission and will have due regard to Key Performance Indicators that may be in effect.

***Obligation of transparency***

- xxiii. In accordance with Conditions 43.2.3, 43.2.4, 43.2.5 and 43.2.6 of its Licence, MT shall have an obligation of transparency.
- xxiv. Without prejudice to the generality of this obligation, in the **Wholesale Modern Interface Leased Lines market** MT is hereby directed to:
- publish a Reference Offer for each **Wholesale Modern Interface Leased Lines** product, including appropriate technical specifications, and including a mechanism explaining how changes to the Reference Offer will be made and notified. The Reference Offer should be kept up to date and should include a price list.
  - publish a standard SLA which would govern MT's relationship with the LO. This will include Key Performance Indicators.
  - publish prices and non-price terms and conditions for **Wholesale Modern Interface Leased Lines** products.
  - notify LOs and the Commission in advance of the launch of a new **Wholesale Modern Interface Leased Lines** product. MT must inform LOs at least 6 months before the product is launched. LOs should be made aware of product

specifications and should be provided with indicative pricing where possible. The final pricing should be provided to LOs at least 3 months in advance of product launch. This time period may be varied in agreement with the Commission.

- notify the Commission of the launch of a new **Wholesale Modern Interface Leased Lines** product one month before informing LOs (i.e. 7 months before product launch) of the product specifications and indicative pricing. For all new products, this time period may be varied in agreement with the Commission.
- inform LOs at least 3 months before a change to an existing product comes into effect. MT should notify the Commission one month before informing LOs (i.e. 4 months before changes come into effect). This time period may be varied in agreement with the Commission.
- to share an updated roadmap of likely network and service developments with LOs at each and every LO Forum (and not less frequently than every 6 months). The roadmap will be indicative and non-binding.

#### ***Obligation of accounting separation***

- xxv. In accordance with Condition 43.2.7 of its Licence, MT is hereby directed to produce separated accounts. The format and reporting requirements of these accounts will be subject to agreement with the Commission.

#### ***Obligations relating to price controls and cost accounting***

- xxvi. A price control obligation is proposed in accordance with Condition 44.2.1 such that MT is directed not to cause a margin/price squeeze a) between wholesale products in the **Wholesale Modern Interface Leased Lines** market and products in downstream wholesale markets; and b) between wholesale products in the **Wholesale Modern Interface Leased Lines** market and retail products.
- xxvii. This is a proportionate measure designed to address the objectives outlined in Condition 44.3. In accordance with Condition 44.2.2 of its Licence, MT is directed to comply with rules which the Commission may make in relation to the measures imposed under Condition 44.2.1, regarding the recovery of costs and cost orientation.
- xxviii. MT is directed that prices charged to any LO for access to or use of products, services and facilities in the **Wholesale Modern Interface Leased Lines** market shall be subject to a cost orientation obligation.

- xxix. In accordance with Condition 44.2.3 of its Licence, MT is hereby directed to maintain appropriate cost accounting systems in respect of the price controls imposed in accordance with Condition 44.2.1 regarding products, services or facilities in the **Wholesale Modern Interface Leased Lines** market. In accordance with Condition 44.2.3 (a) and (b), MT is required to make publicly available a description of the cost accounting system, including details of (i) the main categories under which costs are brought into account for the purposes of that system; and (ii) the rules applied for the purposes of that system with respect to the allocation of costs.

### Question

28. Wholesale Modern Interface Leased Lines – do you have any comments on this Decision Notice?
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## Annex 7 Draft Decision Notice Retail Fixed Access

### Notification of Proposed Market Power Determination: Retail Fixed Access

#### Proposed Decision Notice 2019/xx

##### Statutory powers

- i. This Notification of Market Power Determination is issued in accordance with Part 6 “Additional Obligations on Operators with Significant Market Power” of the Licence granted to Manx Telecom Limited (MT) under Part 5 of the Telecommunications Act 1984 (of Tynwald).
- ii. This Decision Notice comes into effect on [X date] and applies to MT. With reference to Condition 42.7 of MT’s Licence, this Decision identifies relevant markets, and makes a market power determination. The Commission has presented its preliminary review in the consultation set out above.
- iii. The provisions of the consultation document shall, where appropriate, be construed with this Decision. The analysis set out through the consultation process explains the reasoning behind the proposals, and indicates the effects the proposals are expected to have and gives reasons for making the proposal.
- iv. In line with Condition 42.9 of the MT Licence, representations may be made to the Commission on this proposed Decision within a period of six weeks from the date of its publication. The Commission will consider all representations received within that period before reaching a final Decision.

##### Retail Fixed Access markets

##### Market definition

- v. Condition 42 of MT’s Licence requires that, before making a market power determination, the Commission must identify relevant markets, and in accordance with Condition 42.5 assess whether a Communications Provider has Significant Market Power (SMP). The method to be followed is set out in Condition 42 of MT’s licence.
- vi. The **Retail Fixed Access market** is a market for the provision of a physical connection from a fixed location to the public telephone network. This market is separate from the services carried over the physical connection. It includes access from homes and offices.



- vii. In the **Retail Fixed Access market**, the geographic scope of the market is the Isle of Man.

### **SMP designation**

- viii. The assessment of market power was carried out in accordance with generally accepted principles, and took into account relevant factors as provided for in Conditions 42.5 and 42.6 of MT's Licence. Having determined that the **Retail Fixed Access** market is not effectively competitive, MT is designated as having SMP on the Market for:

### **Retail Fixed Access SMP obligations in relation to retail fixed markets**

- ix. The Commission reserves the right to give further guidance on the implementation of any proposed measures.
- x. According to Condition 42.14 of MT's Licence, where the Commission has determined that a Communications Provider has SMP in a market, the Commission may consider proportionate and objectively-justified SMP obligations, taking into account such of the following objectives as appear to the Commission to be appropriate:
- ensuring that there are provided throughout the Island, except where impracticable or not reasonably practicable, such Electronic Communications Services as satisfy all reasonable demands for them;
  - ensuring that users derive maximum benefit in terms of choice, price and quality;
  - ensuring efficient investment in infrastructure and promoting innovation;
  - encouraging the efficient use and effective management of radio frequencies and numbering resources; and
  - ensuring efficient and sustainable competition.
- xi. Condition 43 of MT's licence provides that MT shall comply with such Conditions as the Commission may specify by direction in accordance with Condition 42 and paragraphs 43.2, 43.3 and 43.4.
- xii. Condition 44.2.1 of MT's licence provides for the Commission to direct price controls, as long as this is done in a way consistent with the provision in Condition 44.3, such that it appears to the Commission, from the market analysis carried out for the purpose of setting that condition, that there is a risk that the Communications Provider might

sustain prices at an excessively high level or apply a price squeeze to the detriment of End Users; and it appears to the Commission that any such conditions are proportionate and appropriate for the purposes of: (i) promoting efficiency; (ii) promoting sustainable competition; and (iii) conferring the greatest possible benefits on the End-Users having taken account of the extent of the investment by the Communications Provider in the matters to which the condition relates.

- xiii. Condition 46 of MT's licence provides specifically that where the Commission has made a determination that the Communications Provider has Significant Market Power in a market for a Relevant Retail Service identified in accordance with Condition 42, the Communications Provider shall comply with such conditions as the Commission may from time to time specify by direction in accordance with Condition 42 and paragraphs 46.2 and 46.3 in respect of a Relevant Retail Service. Paragraph 46.2 states that any conditions imposed under Condition 46 must be proportionate and appropriate, and could not be met under Conditions 43, 44 or 45.
- xiv. Having considered those objectives, the Commission specifies by direction that the following licence conditions be imposed in the **Retail Fixed Access** market where MT has been designated with SMP pursuant to the Conditions of the MT licence:

***Obligation of non-discrimination***

- xv. In accordance with Condition 43.2.2 of its Licence, MT is hereby directed not to unduly discriminate between its retail customers.

***Obligation of transparency***

- xvi. In accordance with Condition 43.2.3 of its Licence, MT shall have an obligation of transparency.
- xvii. Without prejudice to the generality of this obligation, MT is directed to make publicly available, and keep updated, information as described in Conditions 8 and 9 of its Licence.
- xviii. Any proposed changes to price and non-price terms and conditions shall be published 30 days in advance of their coming into effect.

### ***Obligation of accounting separation***

- xix. In accordance with Condition 43.2.7 of its licence, MT is directed to produce separated accounts. The format and reporting requirements of these accounts will be subject to agreement with the Commission.

### ***Obligations relating to price controls and cost accounting***

- xx. In accordance with Condition 44 of its Licence MT is directed to comply with the following price controls:
- xxi. MT is directed not to unreasonably bundle. This is a proportionate measure designed to address the circumstances outlined in Condition 44.3, and therefore justifies the obligation imposed under Condition 44.2.1.
- xxii. In accordance with Condition 44.2.3 of its Licence, MT is hereby directed to maintain appropriate cost accounting systems in respect of the price controls imposed in accordance with Condition 44.2.1 regarding products, services or facilities in the retail fixed markets. In accordance with Condition 44.2.3 (a) and (b), MT is required to make publicly available a description of the cost accounting system, including details of (i) the main categories under which costs are brought into account for the purposes of that system; and (ii) the rules applied for the purposes of that system with respect to the allocation of costs.

### **Question**

29. Retail Fixed Access – do you have any comments on this Decision Notice?
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## **Annex 8 Draft Decision Notice Retail Traditional Interface Leased Lines**

### **Notification of Proposed Market Power Determination: Retail Traditional Interface Leased Lines**

#### **Draft Decision Notice 2019/xx**

##### **Statutory powers**

- i. This Notification of Market Power Determinations is issued in accordance with Part 6 “Additional Obligations on Operators with Significant Market Power” of the Licence granted to Manx Telecom Limited (MT) under Part 5 of the Telecommunications Act 1984 (of Tynwald).
- ii. This Decision Notice comes into effect on [X date] and applies to MT. With reference to Condition 42.7 of MT’s Licence, this Decision identifies a relevant market, and makes a market power determination. The Commission has presented its preliminary review in the consultation set out above.
- iii. The provisions of the consultation document shall, where appropriate, be construed with this Decision. The analysis set out through the consultation process explains the reasoning behind the proposals, and indicates the effects the proposals are expected to have and gives reasons for making the proposal.
- iv. In line with Condition 42.9 of the MT Licence, representations may be made to the Commission on this proposed Decision within a period of six weeks from the date of its publication. The Commission will consider all representations received within that period before reaching a final Decision.

##### **Retail Traditional Interface Leased Lines**

##### **Market definition**

- v. Condition 42 of MT’s Licence requires that, before making a market power determination, the Commission must identify relevant markets, and in accordance with Condition 42.5 assess whether a Communications Provider has Significant Market Power (SMP). The method to be followed is set out in Condition 42 of MT’s licence.
- vi. There is a market for **Retail Traditional Interface Leased Lines**.

- vii. In the **Retail Traditional Interface Leased Lines** market, the geographic scope of the market is the Isle of Man.

### **SMP designation**

- viii. The assessment of market power was carried out in accordance with generally accepted principles, and took into account relevant factors as provided for in Conditions 42.5 and 42.6 of MT's Licence. Having determined that the **Retail Traditional Interface Leased Lines** market is not effectively competitive, MT is designated as having SMP in this market.

### **SMP obligations in relation to the Retail Traditional Interface Leased Lines market**

- ix. The Commission reserves the right to give further guidance on the implementation of any proposed measures.
- x. According to Condition 42.14 of MT's Licence, where the Commission has determined that a Communications Provider has SMP in a market, the Commission may consider proportionate and objectively-justified SMP obligations, taking into account such of the following objectives as appear to the Commission to be appropriate:
- ensuring that there are provided throughout the Island, except where impracticable or not reasonably practicable, such Electronic Communications Services as satisfy all reasonable demands for them;
  - ensuring that users derive maximum benefit in terms of choice, price and quality;
  - ensuring efficient investment in infrastructure and promoting innovation;
  - encouraging the efficient use and effective management of radio frequencies and numbering resources; and
  - ensuring efficient and sustainable competition.
- xi. Condition 43 of MT's licence provides that MT shall comply with such Conditions as the Commission may specify by direction in accordance with Condition 42 and paragraphs 43.2, 43.3 and 43.4.
- xii. Condition 44.2.1 of MT's licence provides for the Commission to direct price controls, as long as this is done in a way consistent with the provision in Condition 44.3, such that it

appears to the Commission, from the market analysis carried out for the purpose of setting that condition, that there is a risk that the Communications Provider might sustain prices at an excessively high level or apply a price squeeze to the detriment of End Users; and it appears to the Commission that any such conditions are proportionate and appropriate for the purposes of: (i) promoting efficiency; (ii) promoting sustainable competition; and (iii) conferring the greatest possible benefits on the End-Users having taken account of the extent of the investment by the Communications Provider in the matters to which the condition relates.

- xiii. Condition 46 of MT's licence provides specifically that where the Commission has made a determination that the Communications Provider has SMP in a market for a Relevant Retail Service identified in accordance with Condition 42, the Communications Provider shall comply with such conditions as the Commission may from time to time specify by direction in accordance with Condition 42 and paragraphs 46.2 and 46.3 in respect of a Relevant Retail Service. Paragraph 46.2 states that any conditions imposed under Condition 46 must be proportionate and appropriate, and could not be met under Conditions 43, 44 or 45.
- xiv. Condition 47 of MT's licence provides that the Commission may specify by direction conditions in respect of Relevant Leased Lines.
- xv. Having considered those objectives, the Commission specifies by direction that the following licence conditions be imposed in the **Retail Traditional Interface Leased Lines** market where MT has been designated with SMP pursuant to the Conditions of the MT licence:

***Obligation of transparency***

- xvi. In accordance with Condition 43.2.3 of its Licence, MT shall have an obligation of transparency.
- xvii. Without prejudice to the generality of this obligation, MT is directed to make publicly available, and keep updated, information as described in Conditions 8 and 9 of its Licence.
- xviii. Any increase in price of a **Retail Traditional Interface Leased Line** shall be notified to the Commission at least 30 days in advance.

### ***Obligation of accounting separation***

- xix. In accordance with Condition 43.2.7 of its licence, MT is directed to produce separated accounts. The format and reporting requirements of these accounts will be subject to agreement with the Commission.

### ***Obligations relating to price controls and cost accounting***

- xx. In accordance with Condition 44 of its Licence MT is directed to comply with the following price controls:
- xxi. MT is directed not to unreasonably bundle. This is a proportionate measure designed to address the circumstances outlined in Condition 44.3, and therefore justifies the obligation imposed under Condition 44.2.1.
- xxii. In accordance with Condition 44.2.3 of its Licence, MT is hereby directed to maintain appropriate cost accounting systems in respect of the price controls imposed in accordance with Condition 44.2.1 regarding products, services or facilities in the retail fixed markets. In accordance with Condition 44.2.3 (a) and (b), MT is required to make publicly available a description of the cost accounting system, including details of (i) the main categories under which costs are brought into account for the purposes of that system; and (ii) the rules applied for the purposes of that system with respect to the allocation of costs.

### **Question**

30. Retail Traditional Interface Leased Lines – do you have any comments on this Decision Notice?
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## **Annex 9 Glossary**

### **ADSL – Asymmetric Digital Subscriber Line**

ADSL is a DSL technology for transmitting digital information at a high bandwidth on existing phone lines to homes and businesses. Unlike regular dialup phone service, ADSL provides continuously-available, "always on" connection. ADSL is asymmetric in that it uses most of the channel to transmit downstream to the user and only a small part to receive information from the user. ADSL simultaneously accommodates analogue (voice) information on the same line.

### **BEREC**

The Body of European Regulators for Electronic Communications (BEREC) was established by [Regulation \(EU\) 2018/1971](#) of the European Parliament and of the Council of 11 December 2018. It replaced the European Regulators Group for electronic communications networks and services which was established as an advisory group to the Commission in 2002. BEREC tasks include issuing guidelines on several topics, reporting on technical matters, keeping registers, lists or databases and delivering opinions on internal market procedures for draft national measures on market regulation.

### **Bitstream**

Bitstream access refers to the situation where the incumbent installs a high speed access link to the customer premises and then makes this access link available to third parties, to enable them to provide high speed broadband services to their customers. The Bitstream service may be defined as the provision of transmission capacity (upward/downward channels may be asymmetric) between an end-user connected to a telephone connection and the point of interconnection available to the new entrant. Bitstream depends in part on the PSTN and may include other networks such as the ATM network. Bitstream access is a wholesale product that consists of the provision of transmission capacity in such a way as to allow new entrants to offer their own, value-added services to their clients. Bitstream access is thus defined as the corresponding wholesale product for DSL services (high speed services).

### **CPS – Carrier Pre Select**

The facility offered to customers which allows them to opt for certain defined classes of call to be carried by an operator selected in advance (and having a contract with the customer),



without having to dial a routing prefix or follow any other different procedure to invoke such routing.

### **Dark Fibre**

Data is transported over optical fibre networks by passing light through the cables. If there is no data being transported, there is no light – this means that the fibre is 'dark'. Dark Fibre is essentially optical fibre infrastructure that is not in use.

### **DSL – Digital Subscriber Line**

DSL is a generic term used to describe a range of high-speed (broadband) communications services offered over the Public Switched Telephone Network (PSTN). The PSTN uses a pair of copper wires to connect a subscriber's telephone service to the national telephony network. DSL technology enables high-speed communications over these same copper lines by making use of the frequencies not used by voice communications.

### **Ethernet**

Ethernet typically describes technologies that fall within the IEEE 802.X family of standards.

### **Naked DSL**

Naked DSL is a digital subscriber line (DSL) without a PSTN (analogue telephony) service or the associated dial tone. This means that only a standalone DSL Internet service is provided.

### **Focal Product**

A focal product is the product under investigation.

### **FTTP – Fibre to the Premise**

Fibre to the Premise, also called Fibre to the Home (FTTH) is a pure fibre-optic cable connection running from an Internet Service Provider (ISP) directly to the user's home or business. Fibre optic cables are made of one or more optical fibres, which are designed to carry light.

### **FWA – Fixed Wireless Access**

FWA is a method of connecting a subscriber to an electronic communications network (e.g. for broadband internet access or telephone services) using a wireless alternative to

traditional copper cables. FWA is mainly used to connect small and medium enterprises as well as consumers to the internet.

### **Incumbent**

An incumbent company is a former monopoly that still has a dominant market presence.

### **IP – Internet Protocol**

IP is the method or protocol by which data is sent from one computer to another on the Internet.

### **ISDN – Integrated Services Digital Network**

ISDN is a digital telephone connection that provides two digital phone lines capable of carrying voice, data, or a combination of the two. Each digital channel can support 64kbps (56kbps on some systems) of bi-directional data and the two channels of an ISDN Basic Rate line can be combined together to produce speeds of up to 128kbps.

### **LLU – Local Loop Unbundling**

Local loop unbundling is the regulatory process of allowing multiple telecommunications operators to use connections from the telephone exchange to the customer's premises. The physical wire connection between the local exchange and the customer is known as a "local loop", and is owned by the incumbent local exchange carrier (also referred to as the "local exchange"). To increase competition, other providers are granted unbundled access.

### **LTE – Long-Term Evolution**

In telecommunications, Long-Term Evolution (LTE) is a 3GPP standard for wireless broadband communication on mobile device and data terminals; it is generally referred to as 4G.

### **Margin Squeeze**

A margin or price squeeze occurs when the difference between the wholesale price of an input supplied by a dominant entity and the downstream price does not give an efficient downstream firm a reasonable profit margin.

A margin squeeze occurs when an undertaking that is active in vertically related markets that is dominant in the upstream market sets the margin between the prices of the upstream and downstream products at a level, which does not allow an equally efficient competitor in the downstream market to trade profitably on a lasting basis. A vertically integrated undertaking with a dominant position in the upstream market may cause a price squeeze by increasing the price for the upstream product, by decreasing the price for downstream products, or by doing both concurrently. In this respect, a dominant undertaking may restrict the competition in the relevant market via transferring its market power over the upstream products to the downstream market.

### **Modern Interface (Leased Lines)**

Modern interface Leased Lines are digital, using a modern interface that is generally more suitable for the transmission of IP data, and more cost-effective for delivering high bandwidth services than legacy circuits. Ethernet is the most common technology.

### **NRA's – National Regulatory Authorities**

National regulatory agencies are responsible for ensuring that products released for public distribution are evaluated properly and meet required standards of quality and safety. They are governmental agencies that regulate businesses in the public interest.

### **Network Termination Equipment**

Network termination equipment is a device that links the customer-premises equipment to the public switched telephone network (PSTN). The device serves as the last point of connection between the two. Typically, the service provider is the owner of the Network Termination Equipment, which usually supports various communication standards, including protocols and voltages, to allow different device types to communicate with the PSTN.

### **OTT – Over the Top (Services)**

OTT stands for over-the-top and refers to the service you use over the network services of your service provider, those services where the Service Provider itself does not provide the access paths to its customers and does not have a switching platform and interconnection path(s). Customers can access voice and messaging services via the public internet or over other applications using their mobile broadband/data connection. Skype and WhatsApp are examples of such services.

## **P2P – Point to Point**

In telecommunications, a point-to-point connection refers to a communications connection between two communication endpoints or nodes. An example is a telephone call, in which one telephone is connected with one other, and what is said by one caller can only be heard by the other. A point to point circuit offers you the highest level of security, with a dedicated fibre optic cable carrying only your data.

## **PDH – Plesiochronous Digital Hierarchy**

PDH is a technology used in telecommunications networks to transport large quantities of data over digital transport equipment such as fibre optic and microwave radio systems.

## **POTS – Plain Old Telephone Service**

Short for Plain Old Telephone Service, which refers to the standard analogue telephone service, implemented over copper twisted wires that, most homes use. It is a voice grade telephone service that connects homes and businesses to central offices.

## **PSTN – Public Switched Telephone Network**

PSTN is the aggregate of the circuit-switched telephone networks that are operated by national, regional, or local telephony operators, providing infrastructure and services for public telecommunication.

## **SDH – Synchronous Digital Hierarchy**

SDH is a standard technology for synchronous data transmission on optical media, it provides a faster and less expensive network interconnection than traditional PDH.

## **SIP – Session Initiation Protocol**

SIP is an application-layer control protocol that can establish, maintain, and terminate real time multimedia sessions (conferences). A session is considered as an exchange of data, voice or video between participants, such as internet telephony calls.

## **SMP – Significant Market Power**

SMP merely identifies that the provider has and will have sufficient market power (and therefore the ability) to behave to an appreciable extent, independently of its competitors, its customers and ultimately consumers.

### **SMS – Short Message Service**

A system which allows mobile phone users to send and receive text messages.

### **Spectrum**

Spectrum relates to the radio frequencies allocated to the mobile industry and other sectors for communication over the airwaves.

### **SSNIP – Small but Significant Non-transitory Increase in Price test**

In competition law, before deciding whether companies have significant market power which would justify government intervention, the test of small but significant and non-transitory (long term or permanent) increase in price (SSNIP) is used to define the relevant market in a consistent way.

### **TDM – Time-Division Multiplexing**

TDM is a communications process that transmits and receives independent signals over a common signal path by means of synchronized switches at each end of the transmission line so that each signal appears on the line only a fraction of time in an alternating pattern.

### **Traditional Interface (Leased Lines)**

Traditional interface Leased Lines are legacy Leased Lines with analogue or digital interfaces; megaline is an example. Analogue Leased Lines would commonly be used for voice transmission, with some low-bandwidth data transmission.

### **VDSL – Very-high-bit-rate Digital Subscriber Line**

VDSL is a technology which utilises fibre to the cabinet and copper for the remaining section to the home. VDSL uses seven different frequency bands for the transmission of data enabling customisation of each frequency band use for download or upload.

### **VoIP – Voice over Internet Protocol**

A technology that allows telephone calls to be made over computer networks such as the internet.

### **VPN – Virtual Private Network**

VPN uses internet routers to forward any data. VPN extends a private network across a public network, and enables users to send and receive data across shared or public networks as if their computing devices were directly connected to the private network. Applications running across a VPN may therefore benefit from the functionality, security, and management of the private network.

### **VULA – Virtual Unbundled Local Access**

Unbundled access is where new entrants of the market (challengers) are offered access to facilities of the incumbent, that are hard to duplicate (e.g. for technical or business case reasons). Its applications are mostly found in network-oriented industries, like telecommunication and often concerns the last mile.

Unbundled access is similar to Bitstream access, where the incumbent provider gives competitive access not to the actual copper wire of the local loop, but to a high-speed ADSL data connection. Both setups ensure competition for the backhaul but leave "last mile" infrastructure the responsibility of the incumbent carrier.

### **WLR – Wholesale Line Rental**

WLR is a wholesale product that enables Licensed Operators (LOs) to offer narrowband access to both line rental and calls to customers over the incumbent's local network. The LO pays the incumbent the line rental for the customer's line and in turn invoices the customer for this service so that the customer no longer has a contractual relationship with the incumbent. WLR customers receive a single bill for both calls and line rental from their operator of choice.

### **xDSL – all types of Digital Subscriber Lines**

xDSL is a technology which enables ordinary voice-grade copper telephone wires to also carry high-speed data traffic at the same time.

## Annex 10 Consultation Questions

1. Do you agree with the Commission's preliminary views on the definition of the product and geographic market for Retail Fixed Access?
2. Do you agree that this market is susceptible to ex-ante regulation?
3. Do you agree with the Commission's preliminary views on the definition of the product and geographic market for Retail Fixed Calls?
4. Do you agree that this market is susceptible to ex-ante regulation?
5. Do you agree with the Commission's preliminary views on the definition of the product and geographic market for retail Traditional Interface Leased Lines and for retail Modern Interface Leased Lines?
6. Do you agree that these markets are susceptible to ex-ante regulation?
7. Do you agree with the Commission's preliminary views on the definition of the product and geographic market for Retail Broadband?
8. Do you agree that this market is not susceptible to ex-ante regulation?
9. Do you agree with the Commission's preliminary views on the definition of the product and geographic market for Wholesale Local Access?
10. Do you agree that this market is susceptible to ex-ante regulation?
11. Do you agree with the Commission's preliminary views on the definition of the product and geographic market for wholesale voice call termination?
12. Do you agree that this market is susceptible to ex-ante regulation?
13. Do you agree with the Commission's preliminary views on the definition of the product and geographic market for wholesale voice call origination?
14. Do you agree that this market is not susceptible to ex-ante regulation?
15. Do you agree with the Commission's preliminary views on the definition of the product and geographic market for wholesale transit?
16. Do you agree that this market is not susceptible to ex-ante regulation?

17. Do you agree with the Commission's preliminary views on the definition of the product and geographic market for Wholesale Broadband Access?
18. Do you agree that this market is susceptible to ex-ante regulation?
19. Do you agree with the Commission's preliminary views on the definition of the product and geographic market for wholesale Traditional Interface Leased Lines?
20. Do you agree with the Commission's preliminary views on the definition of the product and geographic market for wholesale Modern Interface Leased Lines?
21. Do you agree that these markets are susceptible to ex-ante regulation?
22. Do you agree with the Commission's preliminary views on the SMP determinations in the Wholesale Markets?
23. Do you agree with the Commission's preliminary views on the SMP determinations in the Retail Markets?
24. Wholesale Local Access - Do you have any comments on this Decision Notice?
25. Wholesale Broadband Access - Do you have any comments on this Decision Notice?
26. Wholesale Fixed Voice Call Termination – Do you have any comments on this Decision Notice?
27. Wholesale Traditional Interface Leased Lines – do you have any comments on this Decision Notice?
28. Wholesale Modern Interface Leased Lines – do you have any comments on this Decision Notice?
29. Retail Fixed Access – do you have any comments on this Decision Notice?
30. Retail Traditional Interface Leased Lines – do you have any comments on this Decision Notice?