

Broadband as a Universal Service

Ensuring the availability of an adequate broadband internet access service, including the underlying connection, at a fixed location

Consultation Document

Document reference	MCA/C/20-3948
Date of publication	28 th August 2020

Malta Communications Authority Valletta Waterfront, Pinto Wharf, Floriana FRN 1913 Tel: (356) 21 336 840. Fax: (356) 21 336 846 Website: www.mca.org.mt

E-mail: info@mca.org.mt



Contents

Exe	cutive Summary	2
1.	Introduction	3
1.1	1 Scope of this Consultation Paper	4
1.2	2 Applicable Law	5
1.3	3 Rest of the document	7
2.	An Adequate Broadband Internet Access Service	8
2.1	Defining an adequate broadband internet access service	8
2.2	2 Functional characteristics of an adequate broadband internet access service	11
3.	The Availability of an Adequate Broadband Internet Access Service	13
3.1	1 Delivering the Universal Service Obligation	13
3.2	2 Designating an operator to deliver the Universal Service Obligation	14
3.3	3 Performance monitoring and reporting	15
4.	Submission of Comments	16
Арр	pendix 01 - MCA 2011 Decision Notice on Functional Internet Access	17
Арр	pendix 02 - Key Legal Provisions	19
Apn	pendix 03 - Costing and Financing the USO	21



Executive Summary

The availability of an adequate and reliable broadband internet access service is today a crucial enabler for participation in the digital economy and society. The coronavirus pandemic is a clear reminder on how dependent we are on the internet and, by implication, on the underlying high-speed broadband infrastructure. It is essential that citizens and businesses are able to access an adequate broadband internet access service, regardless of where they live or work.

Whilst under the current EU regulatory framework broadband as a universal service refers only to a fixed connection permitting functional internet access at an established minimum data rate, the new regulatory framework, referred to as the European Electronic Communications Code (EECC), now includes access to an available adequate broadband internet access service, including the underlying connection, at a fixed location within the scope of the universal service.

This consultation document proposes the minimum functional characteristics of an adequate broadband internet access service for Malta. It also depicts the procedure to be used by the Malta Communications Authority (MCA) in safeguarding the availability of an adequate broadband internet access service as a universal service. Measures to ensure the affordability of an adequate broadband internet access service for consumers with low income or special social needs go beyond the scope of this consultation document and will be addressed in a separate exercise.

This consultation exercise will lead to the revision of the MCA's 2011 Decision Notice relating to the provision of a fixed connection capable of supporting functional internet access at a minimum data rate of 4 Mbps as a universal service. The minimum data rate of 4 Mbps no longer ensures the bandwidth necessary for social and economic participation in society. Neither does it provide the bandwidth necessary for supporting the services used by the majority of end-users in Malta.

The MCA is proposing the following minimum functional characteristics of an adequate broadband internet access service for Malta, namely: a download speed of at least 30 Mbps; an upload speed of at least 1.5 Mbps; latency that is capable of allowing the end-user to make and receive voice and video calls effectively; and an unlimited data usage cap. A broadband internet access service, including the underlying connection, at a fixed location that, as a minimum, meets these functional characteristics must be available to the premises of every end-user following a reasonable request.

The MCA is seeking the views and comments of all interested parties on the proposals put forward in this consultation document so that all opinions may be considered in the process of deciding on the specific requirements.

This consultation will run from the **28**th **August 2020** to the **8**th **October 2020**. Please refer to Section 4 for further details about the submission of comments.



1. Introduction

According to data from the National Statistics Office (NSO), the internet is accessed every day, or almost every day, by 96% of adults. The latest MCA survey on fixed broadband shows that just 2% of local households do not have a fixed broadband connection at their place of residence. For many, across all ages, full participation in society is impossible without access to the internet. It is essential that people and businesses are able to access an adequate and reliable broadband internet access service, regardless of where they live or work.

The concept of the universal service is used in electronic communications and other utilities regulation. The universal service acts as a 'safety net' to ensure that defined basic services are available to all end-users on request and at an affordable price to consumers, where a risk of social exclusion, arising from the lack of such access, prevents citizens from full social and economic participation in society.

The current EU regulatory framework¹ includes functional internet access within the scope of the universal service. Each Member State may set the data rates for a fixed connection considered sufficient for access to online services provided by the internet.² In June 2011, in line the Electronic Communications Networks and Services (General) Regulations (S.L 399.28), the MCA published a decision on the requirements to be complied with by the designated Universal Service Provider (USP) in relation to functional internet access³. The MCA's 2011 Decision set out the requirements to be complied with by GO, as the designated USP, for access at a fixed location in relation to the provision of a connection capable of supporting functional internet access at a minimum data rate of 4 Mbps. GO is required to satisfy reasonable requests from end-users, subject to certain conditions, where market failure occurs - i.e. where no operator is in a position to provide a fixed connection providing functional internet access at a minimum data rate of 4 Mbps to the premises of an end-user (refer to Appendix 01).

Due to the growing importance of broadband internet access for all European citizens, the EU Directive 2018/1972 establishing the EECC⁴ now includes the provision of an adequate broadband internet access service, including the underlying connection, at a fixed location within the scope of the universal service. An 'internet access service' is defined as a publicly available electronic

¹ In 2002 the EU agreed to a comprehensive electronic communications regulatory framework which was subsequently revised in 2009. The EU regulatory framework was transposed under Maltese law in 2004 and substantially amended in 2011 to reflect the changes introduced by the EU in 2009.

² The EU Directive 2002/22/EC (on universal service and users' rights relating to electronic communications networks and services) amended by Directive 2009/136/EC. Directive 2002/22/EC was limited to narrowband (56 kbit/s). The EU Directive 2009/136/EC amended Article 4 to allow data rates sufficient for access to online services such as those provided via the internet.

³ Refer to MCA 2011 <u>Decision Notice</u> entitled 'Provision of access at a fixed location - Requirements to be complied with by the USP in relation to Functional Internet Access'.

⁴ The revised EU electronic communications framework, reflected in the <u>EECC</u>, came into force in December 2018 and is in the process of being transposed into national legislation.



communications service that provides access to the internet, and thereby connectivity to virtually all end points of the internet, irrespective of the network technology and terminal equipment used.⁵

Upon transposition of the EECC, each Member State is required to define what constitutes an adequate broadband internet access service for its jurisdiction, in light of national conditions and the minimum bandwidth enjoyed by the majority of consumers, with a view to ensuring the bandwidth necessary for social and economic participation in society. Each Member State is required to ensure access to an available adequate broadband internet access service, including the underlying connection, at a fixed location as a universal service.

The EECC recognises two types of market failures that may lead to the lack of access to an adequate broadband internet access service:

- Affordability: Consumers with low income (such as low income families with school-age children⁶) or special social needs (including older people, end-users with disabilities, and those living in geographically isolated areas⁷) who cannot afford an adequate broadband internet access service, even if there exists the availability of fixed broadband internet access networks.⁸
- Availability: Geographical areas where the deployment of fixed broadband internet access
 networks (including both network infrastructure and end-user connection phase) could be
 perceived as being uneconomic by operators. End-users residing in these areas would have no
 access to an adequate broadband internet access service, not necessarily because they cannot
 afford the service, but because it may be economically inefficient for an operator to deploy its
 network in those areas.

1.1 Scope of this Consultation Paper

This consultation document is in relation to the definition of an adequate broadband internet access service for Malta. It also proposes the procedure to be used by the MCA for ensuring that, based on a reasonable request, all end-users across Malta have universal access to an adequate broadband internet access service, regardless of where they live or work.

This consultation document does not deal with measures to ensure affordability for socially disadvantaged citizens (i.e. consumers with low-income or special social needs) who are prevented from accessing an adequate broadband internet access service. In this regard, the EECC puts forward

⁵ An "internet access service" is defined in Article 2 of Regulation (EU) 2015/2120 laying down measures concerning open internet access.

⁶ In April 2020 two hundred and fifty households benefited from free internet access during the Covid-19 outbreak.

⁷ Recital (219) of the EECC.

⁸ A study carried out by the National Statistics Office (NSO) in 2018 on <u>Living Conditions in Malta</u> showed that 1.7% of the respondents claimed that, despite widespread availability and take-up of broadband internet access services in Malta, they could not afford an internet connection for personal use at home.



a number of options in order to ensure the affordability of an adequate broadband internet access services for such consumers:

- direct support for communication purposes, which could be part of social allowances or vouchers for, or direct payments;
- alternatively, or in addition, an obligation for broadband internet access service providers to
 offer basic tariff options or packages (different from those provided under normal commercial
 conditions) to such consumers⁹;
- in exceptional circumstances the obligation to offer specific tariff options or packages may be imposed on a designated operator(s).

Any measures, and eligibility criteria, relating to support provided to such consumers, and/or the requirement for undertakings to offer such consumers tariff options or packages different from those provided under national commercial conditions will need to be determined together with Government and will be subject to a separate consultation exercise.

1.2 Applicable Law

In line with the current EU regulatory framework, the Electronic Communications Networks and Services (General) Regulations allows the MCA to establish the requirements to be complied with by a designated USP in relation to the provision, upon a reasonable request, of a fixed connection permitting functional internet access at an established minimum broadband data speed.¹⁰

The EECC, which replaces the current EU regulatory framework, now refers to the provision of an adequate broadband internet access service, including the underlying connection, at a fixed location within the scope of the universal service. The EECC is in the process of being transposed into national legislation. It is envisaged that the MCA will, amongst other things, be responsible for:

- defining an adequate broadband internet access service for Malta with a view to ensuring the bandwidth necessary for social and economic participation in society; and
- ensuring that all end-users across Malta have access to an adequate broadband internet access service following a reasonable request.

An adequate broadband internet access service

In line with the EECC, on transposition, each Member State is required, in light of national conditions and the minimum bandwidth enjoyed by the majority of consumers within the territory of the

⁹ Currently, Government provides a telephone rent rebate to persons over 60 years of age who are in possession of Free Medical Aid (Pink Form).

¹⁰ Regulation 23 (Provision of access at a fixed location and provision of telephone services) of the Regulations.

¹¹ Article 14(1) of the EECC.



Member State, also taking into account the BEREC report on best practice¹², to define the adequate broadband internet access service (including the quality of the service) for their territories with a view to ensuring the bandwidth necessary for social and economic participation in society. The adequate broadband internet access service must be capable of delivering the bandwidth necessary for supporting at least the minimum set of services set out in Annex V of the EECC¹³, namely:

- E-mail
- Search engines enabling search and finding of all types of information
- Basic training and education online tools
- Online newspapers or news
- Buying or ordering goods or services online
- Job searching and job searching tools
- Professional networking
- Internet banking
- eGovernment service use
- Social media and instant messaging
- Calls and video calls (standard quality)

The Availability of an adequate broadband internet access service

In line with the provisions of the EECC, where it is established that the availability of an adequate broadband internet access service cannot be ensured under normal commercial circumstances, or through other potential public policy tools, in its national territory or different parts thereof, a Member State may impose an appropriate Universal Service Obligation (USO)¹⁴. The USO is intended as a 'safety net' to deliver broadband to those end-users who do not have access to an available adequate fixed broadband internet access service, including the underlying connection, at a fixed location.

Member States are required to determine the most efficient and appropriate approach for ensuring the availability of an adequate broadband internet access service, whilst respecting the principles of objectivity, transparency, non-discrimination and proportionality. Member States must seek to minimise market distortions, in particular the provision of services at prices or subject to other terms

¹² In line with the EECC [Article 84(3)] in June 2020 BEREC published a report on Member States' best practices to support the defining of adequate broadband internet access service. The report will be updated regularly to reflect technological advances and changes in consumer usage patterns.

¹³ EECC, Article 84(3).

¹⁴ Ibid., Article 86(1).



and conditions which depart from normal commercial conditions, whilst safeguarding the public interest.

Where Member States decide to impose a USO to ensure the availability at a fixed location of an adequate broadband internet access service, they may designate one or more undertakings to guarantee such availability throughout the national territory. Member States may designate different undertakings or sets of undertakings to provide an adequate broadband internet access service, including the underlying connection, at a fixed location or to cover different parts of the national territory.

When Member States designate undertakings to provide the USO in part, or all, of the national territory they must use an efficient, objective, transparent and non-discriminatory designation mechanism, whereby no undertaking is *a priori* excluded from being designated. Such designation methods shall ensure that an adequate broadband internet access service at a fixed location is provided in a cost-effective manner.

Appendix 02 outlines the key provisions of the EECC relating to access to available adequate broadband internet access service as a universal service.

1.3 Rest of the document

The rest of this document is structured as follows:

Section 2: defines the minimum functional characteristics for an adequate broadband internet access service capable of delivering the bandwidth necessary for social and economic participation in Malta.

Section 3: sets out the approach for ensuring that an adequate broadband internet access service is available to an end-user on request.

Section 4: sets out the process for the submission of views and comments.



2. An Adequate Broadband Internet Access Service

The EECC includes the availability of an adequate broadband internet access service, including the underlying connection, at a fixed location within the scope of the universal service. On transposition of the EECC, each Member State is required, in light of national conditions and the minimum bandwidth enjoyed by the majority of consumers within the territory of that Member State, and taking into account the BEREC report on best practices, ¹⁵ to define the adequate broadband internet access service with a view to ensuring the bandwidth necessary for social and economic participation is society.

2.1 Defining an adequate broadband internet access service

The BEREC report, entitled 'Member States best practices to support the defining of adequate broadband internet access service', identifies a set of common principles in defining an adequate broadband internet access service in line with the provisions of the EECC.¹⁶ As such, BEREC's report examines how Member States have introduced a broadband universal service under the current EU regulatory framework. The report offers an insight into the practices of the nine¹⁷ Member States, including Malta, which have to date (albeit under the current EU legislative framework) introduced broadband functional internet access as a universal service. The report aims to contribute towards the consistent application of the EECC by Member States in the introduction of an adequate broadband internet access service as a universal service.

BEREC's report refers to the 2011 COCOM report (COCOM10-31 Final) entitled 'Implementation of the revised Universal Service Directive: Internet related aspects of Article 4'18. The COCOM report provided clarification of the Universal Service Directive (Directive 2009/136/EC) in relation to internet related aspects. Although based on the current EU regulatory framework, the COCOM report serves to inform the definition of an adequate broadband internet access service under the EECC. The COCOM report established that the assessment of a decent data rate for functional internet access can be based on whether the data rate is used at national level by:

- (i) at least 50% of all households; and
- (ii) at least 80% of all households with a broadband connection.

In setting a data rate for functional internet access under the current EU regulatory framework, four countries including Malta (the other countries being Belgium, Croatia, and Slovenia) based their

¹⁵ The <u>BEREC report</u>, published on the 11 June 2020, provides an insight into the practices of Member States which have to date introduced broadband under a Universal Service Obligation (USO). It is noted that all the Member States did so under the current legislative framework and not under the EECC.

¹⁶ Recital (215) of the EECC.

¹⁷ Belgium, Croatia, Finland, Latvia, Malta, Slovenia, Spain, Sweden and the United Kingdom.

¹⁸ European Commission Information Society and Media Directorate General, Communications Committee Working Document "Implementation of the revised Universal Service Directive: internet related aspects of Article 4", COCOM10-31 Final, Brussels, 10 January 2011.



assessment on the above-mentioned criteria. Other criteria considered by Member States that have implemented broadband as a universal service, shown in order of prevalence, include: the expected availability of broadband without public intervention; the estimated cost of implementing broadband as a universal service; market distortions i.e. the costs of extending the broadband universal service speed up to a higher speed (possibly enjoyed by a greater number of households with a broadband connection) would significantly alter market conditions; estimation of the potential demand for broadband as a universal service; comparison with other EU countries; and benefits of public intervention and effects on competition. These criteria used in setting the data rate for functional internet access reflect many of the criteria outlined in the COCOM report.

The MCA has taken note of the BEREC's report on Member States' best practices to support the defining of an adequate broadband internet access service. In defining an adequate broadband internet access service for Malta, the MCA will base its assessment on the coverage of fixed broadband internet access networks and the various technologies used across Malta, the prevailing bandwidth used by the majority of broadband end-users, and the entry-level fixed broadband packages available on the market.

At the time of publication of the MCA's 2011 Decision Notice, functional internet access with a minimum data speed rate of 4 Mbps as a universal service was technologically and economically feasible. Back in 2011 approximately 75% of all households and businesses in Malta were subscribed to a fixed broadband internet access service, with over 97% of subscribers using a broadband at data rates equal to or above a download speed of 4 Mbps (refer to Table 1). Fixed (both DSL and Cable) broadband networks offering basic broadband internet access services existed virtually throughout the country. GO offered an entry-level broadband package over its telephone lines (DSL) with a speed of up to 4 Mbps. Similar broadband services were also provided over Melita's cable network.

Table 1: Share of Fixed Broadband Subscriptions by download speed ¹⁹										
	% End 2011	Subscriptions End 2011	% End 2015	Subscriptions End 2015	% End 2019	Subscriptions End 2019				
< 5Mbps	74.57%	95,956	1.49%	2,435	0.16%	325				
>= 5Mbps but < 10Mbps	0.69%	883	0.18%	296	0.04%	84				
>= 10Mbps but < 20Mbps	15.30%	19,693	35.48%	57,902	3.95%	7,994				
>= 20Mbps but < 30Mbps	8.20%	10,548	1.63%	2,665	0.53%	1,068				
>= 30Mbps but < 50Mbps	0%	2	54.67%	89,230	11.80%	23,899				
>= 50Mbps but < 100Mbps	0.75%	964	5.15%	8,407 38.00	38.00%	76,960				
> 100Mbps	0.49%	632	1.39%	% 2,270 45.52%		92,183				
Total	100%	128,678	100%	163,205	100%	202,513				

Source: MCA²⁰

 $^{^{19}}$ Includes fixed broadband subscriptions to the premises of all end-users (households and businesses).

²⁰ Refer to MCA's report '<u>Key Market Indicators for Electronic Communications and Post</u>'.



The latest MCA survey on fixed broadband carried out in 2019 shows that just 2% of local households do not have a fixed broadband internet access connection at their place of residence²¹ with around 95% of all subscribers opting for a broadband package of more than or equal to 30 Mbps (refer to Table 1 above). The entry level-fixed broadband packages offered on the market start with a download speed of greater than, or equal to, 30 Mbps and an upload speed of 1.5 Mbps. The different technologies provided by the main providers are capable of providing fixed broadband services with a minimum download speed of 30 Mbps up to 1 Gbps throughout the national territory.

Table 2 below depicts the coverage of the different fixed broadband technologies available in Malta.

Table 2: Total coverage by fixed broadband technology (% of premises)								
	2016	2017	2018	2019	Subscriptions (End 2019)			
DSL	100%	100%	100%	100%	- 64,384			
VDSL	72%	72%	72%	72%				
Cable DOCSIS 3.0	100%	100%	100%	100%	00.020			
Cable DOCSIS 3.1	-	-	-	100%	- 98,838			
FTTH	23%	32%	39%	43%	27,684			
Fixed Wireless Access (FWA)	100%	100%	100%	100%	11,607			

Source: MCA, Malta Telecoms Chapter of the Digital Economy and Society Index (DESI)²²

GO has a nationwide copper-based DSL broadband network infrastructure which provides connections supporting download speeds of up to 75 Mbps. GO also provides a combined fixed line and fixed wireless internet product which increases the download speed, in areas where the DSL speed attainability is of 50 Mbps or less, to a maximum of 75Mbps. Over the years, GO has upgraded all its street cabinets to fibre-to-the-cabinet (FTTC²³) and is also rolling out its fibre-to-the-home (FTTH²⁴) network, which allows for download speeds of up to 1 Gbps. At the end of 2019 GO's FTTH network coverage reached approximately 43% of premises in Malta. The deployment of FTTH is expected to reach a nationwide coverage by 2025. Vodafone offers broadband internet access services that are offered via regulated access to GO's FTTH network infrastructure.

Melita's fixed broadband network is based on the DOCSIS 3.1 standard. Melita has, over the past years, upgraded its broadband network with fibre up to street cabinets and created many additional optical nodes. Melita claims nationwide coverage with download speeds of up to 1 Gbps. The operators using

²¹ Refer to: Consumer perception survey: <u>fixed broadband</u> published in November 2019.

²² https://ec.europa.eu/newsroom/dae/document.cfm?doc_id=67243

²³ FTTC is part-fibre, part copper technology: fibre optic cables run from the local exchange to a street cabinet, and existing copper lines connect the cabinet to the premises. The connection speed received decreases the further the premises is away from the cabinet.

²⁴ In the case of full-fibre (FTTH) fibre optic cables connect to the exchange directly to the premises. Full-fibre connection can deliver speeds greater than 1 gigabit per second (Gbps) and are much less affected by signal loss over distance.



these fixed line broadband technologies do not impose data usage caps, however traffic management policies apply.

GO and Vodafone also provide fixed wireless broadband access services over their 4G platforms. Vanilla Telecoms provides fixed wireless broadband access services via its wireless network infrastructure which uses the unlicensed radio spectrum band. The availability and speed of the connection of these fixed wireless broadband services depends on various factors including the location of the premises relative to the transmission base station, the radio spectrum used, and the number of users served by the network in the area. Fixed wireless broadband access services are normally subject to data usage caps due to the inherent nature of the wireless access channel (i.e. limited spectrum bandwidth).

2.2 Functional characteristics of an adequate broadband internet access service

Advances in technology, and people's response to these, mean that the way we use the internet has changed considerably over the past years. Internet usage today relies largely on downloading content from the internet, for example web-browsing, email, video streaming, video calling and conferencing. In addition to an adequate download speed,²⁵ common applications used today, such as video conferencing and sharing large images and video files, also require an appropriate upload speed²⁶. As consumers take up faster broadband more data is being consumed (for example downloading of streamed music, films, computer software, video games and e-books) thus requiring adequate data usage allowances.

With increased internet usage, the service characteristics for broadband such as upload speeds, unlimited data usage and factors such as latency²⁷ (which can affect the performance of live applications, such as video calling and conferencing) have become more important. In addition, households are increasingly using multiple internet devices at the same time. These trends show that both the download and upload speed required by the average household to access more data heavy services or more devices, is increasing.

Taking into account Malta's fixed broadband access network coverage, the prevailing bandwidth used by the majority of broadband end-users and the entry level fixed broadband packages available on the market, it is reasonable to consider that the adequate broadband internet access service, including the underlying connection, at a fixed location should consist of the following minimum functional characteristics:

²⁵ Download speed is the rate of transmission from a network operator's access node to an end-user.

²⁶ Upload speed is the rate of transmission from an end-user's connection to a network operator's access node.

²⁷ Latency is the delay for the connection, it is particularly important for live applications such as live video streaming and video calls. The figure is most commonly measured in milliseconds, and a connection with low latency will feel more responsive for simple tasks like web-browsing.



- a download sync speed of at least 30 Mbps (i.e. modem sync speed is the maximum speed available between an end-user's premises and their internet service provider's network);
- an upload sync speed of at least 1.5 Mbps;
- latency that is capable of allowing the end-user to make and receive voice and video calls effectively; and
- an unlimited data usage cap.

The MCA is of the opinion that these minimum functional characteristics allow for an adequate broadband internet access service that enables full and effective participation in the digital society and supports at least the minimum set of services set out in Annex V of the EECC. The minimum functional characteristics are deemed sufficient to meet the digital needs of a typical household and the needs of small-sized enterprises.

The current mix of fixed broadband technologies are deemed capable of providing broadband internet access services, with the proposed minimum functional characteristics, across Malta. Depending on the technology used to deliver the broadband internet access service, end-users may have access to a higher quality service than the minimum functional characteristics.

A minimum download speed of 30 Mbps reflects the EU's Digital Agenda broadband 2020 target of 100% of Europeans having access to at least 30 Mbps download speed. The European Commission also sets a goal of providing speeds of at least 100 Mbps to all European citizens, upgradable to 1 Gbps, by 2025 (Commission communications on a Gigabit Society and 5G Action Plan on 1 June 2017²⁸).

The MCA's view is that the bar set for the minimum functional characteristics of an adequate broadband internet access service for Malta is the ideal one under present circumstances. Over time the functional characteristics will need to be increased as more users take up higher speeds and the needs of end-users change. A decision on when to review the minimum functional characteristics and raise the threshold will be taken in light of market developments, technological changes and evolving needs of end-users.

The definition on the minimum functional characteristics of an adequate broadband internet access service, including the underlying connection, at a fixed location as a universal service is envisaged to be adopted on the transposition of the EECC. The MCA is consulting early on this matter in order to hear and consider the views of all interested parties, and to provide advance notice to the market.

²⁸ Refer to https://www.europarl.europa.eu/doceo/document/TA-8-2017-0234 EN.html



3. The Availability of an Adequate Broadband Internet Access Service

The MCA, on an ongoing basis, monitors the deployment, coverage and quality²⁹ of high-speed fixed broadband networks across Malta. The MCA also monitors complaints relating to any lack of access to a fixed broadband internet access service. With the availability of fast and superfast fixed broadband technologies across Malta by more than one operator, all premises should be in a position to receive an adequate broadband internet access service with at least the minimum functional characteristics as defined in Section 2.

The MCA believes that, in general, the availability of an adequate broadband internet access service, including the underlying connection, at a fixed location as a universal service can be ensured by market forces. There may however be exceptional cases when the market may not be in a position to provide an end-user with an adequate broadband internet service. It is however anticipated that there would only be very few cases when an end-user will not be able to subscribe to an adequate broadband internet access service at a fixed location, under normal commercial conditions, due to availability issues.

To cater for such exceptional cases, the MCA may need to designate an operator to deliver the USO to eligible end-users in order to ensure the availability at a fixed location of an adequate broadband internet access service. The USO will provide an eligible end-user with a right to request and subscribe to an adequate broadband internet access service that meets, as a minimum, the functional characteristics set out in Section 2, in those cases when no existing operator is in a position to provide such a service to its premises.

3.1 Delivering the Universal Service Obligation

An end-user will be considered eligible for an adequate broadband internet access service at a fixed location under a USO if the following conditions are met:

- the broadband connection is to a fixed location consisting of a place of residence, of a business premises, or of a premises used by a non-profit organisation³⁰;
- the end-user requests that a broadband internet access service is provided to that location; and
- a broadband internet access service on an existing network that meets or exceeds the minimum functional characteristics defined in Section 2 is not available to that location.

In delivering the USO an operator (refer to Section 3.2 below) would be required to supply the broadband internet access service, including the underlying connection, to the end-user's premises as

²⁹ Refer to MCA 2016 <u>Decision</u> Notice entitled 'Broadband QoS Framework - Extended'.

³⁰ Only premises which are permanent legal residential (home), or business (including not-for-profit organisations) premises will be considered eligible for an adequate broadband internet access service under a USO. The MCA will, amongst others, use the postcode postal address database to establish whether the address of that location meets the definition of being a fixed location.



quickly as possible and within a maximum period of 30 days after the eligible end-user has placed his/her order for an adequate broadband internet access service, unless there are exceptional circumstances that make it more difficult.

There will be no constraints on the technical means by which an adequate fixed broadband internet access service, including the underlying connection, at a fixed location is provided by an operator. In practice the use of wired based broadband technologies is likely to be an efficient technology choice for delivering an adequate broadband internet access service to the premises of an end-user. There may however be circumstances where fixed wireless broadband technologies may be more appropriate, as long as they are capable of delivering the established minimum functional characteristics set out in Section 2.

In delivering the USO an operator would be required to provide the broadband internet access service, including the underlying connection, to the premises of an end-user at the same price and quality of service levels (i.e. concerning faults, compensation schemes, etc.) as equivalent services offered to its non-USO customers.

An end-user would be required to subscribe to, and pay, for a broadband internet access service package. An end-user should not be required to pay more than for equivalent broadband internet access services provided in other parts of Malta. Once an end-user enters into a contract with the designated operator for the provision of an adequate broadband internet access service, their relationship will be one of a normal customer's relationship with the retail provider.

3.2 Designating an operator to deliver the Universal Service Obligation

The MCA is proposing to put in place an efficient, objective, transparent and non-discriminatory designation mechanism, whereby no operator is *a priori* excluded from being designated to deliver the USO (refer to Section 3.1 above). The designation mechanism will ensure that an adequate broadband internet access service, including the underlying connection, at a fixed location is provided to an eligible end-user following a reasonable request.

In those exceptional cases when an end-user notifies the MCA of his/her inability to secure an adequate broadband internet access service at a fixed location with one of the existing operators, the MCA will need to first confirm whether the end-user is eligible for the service under a USO.

In case an end-user is eligible for an adequate broadband internet access service under a USO the MCA proposes that, before designating an operator to deliver the USO, it will first issue a request for interest to assess whether an operator is willing to provide the end-user with an adequate broadband internet access service, that meets or exceeds the minimum functional characteristics defined in Section 2, under normal commercial conditions. In expressing interest an operator would provide information on the type of fixed broadband technology and on the main steps and timeframes to provide an adequate broadband internet access service to the premises of an eligible end-user.



The MCA needs to take into consideration the possibility that no operator would declare itself willing to provide an eligible end-user with an adequate broadband internet access service. To this effect, in default of an expression of interest, the MCA deems that a practical and effective solution would be to directly designate an operator having the closest available fixed broadband network to the end-user's premises to deliver the USO. The MCA would base its decision on information available from the operators having fixed broadband networks deployed in the relevant area. As already mentioned any fixed broadband technology could be considered to deliver the USO to an eligible end-user as long as it is capable of delivering the established minimum functional characteristics set out in Section 2.

In the future, geographical mapping of network deployments³¹ will provide the MCA with information on the reach of fixed broadband networks and the available technology and services (including upload and download speeds) available in a particular area. This will allow the MCA to be in a better position to monitor coverage of broadband internet access services and, when required, identify an operator having the closest available broadband network to an end-user's premises.

When the MCA considers that the provision of the USO may represent an unfair burden on a designated operator that requests compensation, the MCA will need to calculate the net cost of such provision. The procedure for determining the net cost, if any, of delivering the USO and the source of funding any unfair burden incurred by a designated operator is reflected in Appendix 03. The MCA intends to consult separately on the source of funding.

3.3 Performance monitoring and reporting

A designated operator will be required to report on its performance in the delivery of an adequate broadband internet access service under a USO. A designated operator will be required to report annually on the:

- type of technology used to provide the broadband internet access service to an end-user;
- functional characteristics of the broadband internet access service provided to an end-user;
- the supply time for the initial connection to an end-user's premises; and
- type of premises (residential, business or not-for-profit organisation) connected and their location.

³¹ Article 22 of the EECC on geographical surveys of network deployments. National regulatory and/or other competent authorities are required to conduct a geographical survey of the reach of electronic communications networks capable of delivering broadband ('broadband networks) by 21 December 2023.



4. Submission of Comments

The consultation period will run from the **28**th **August 2020** to the **8**th **October 2020**, during which the MCA welcomes written comments from all interested parties on any issues raised in the consultation document.

Having analysed and considered the views and comments received, the MCA will, following the transposition of the EECC, publish its decision on the:

- minimum functional characteristics of an adequate broadband internet access service; and
- the procedure for ensuring the availability of an adequate broadband internet access service, including the underlying connection, at a fixed location for all end-users.

Receipts of comments will be acknowledged. Comments will be made publicly available by the MCA and on the MCA's website unless declared confidential.³² Respondents are therefore asked to separate out any confidential material into a clearly marked annex.

All responses to this consultation should be clearly marked "Ensuring the availability of an adequate broadband internet access service" and sent by post or e-mail to:

Chief of Policy and Planning
Malta Communications Authority
Valletta Waterfront
Floriana FRN1913, Malta

Tel: +356 21 336840

Email: policy.mca@mca.org.mt

³² In accordance with the MCA's <u>confidentiality guidelines and procedures</u>.



Appendix 01 - MCA 2011 Decision Notice on Functional Internet Access

The designated USP is required under **Decision 1** of the USO Decision³³ to provide upon request a connection at a fixed location to the public telephone network at an affordable price in the case when there are no other public communications networks in a position to provide such a connection. Such a connection must be capable of allowing end-users to make and receive local and international calls, facsimile communications and data communications, at data rates that are sufficient to permit functional Internet access.

Requirements in relation to requests for a connection to the public telephone network at a fixed location at data rates that are sufficient to permit functional Internet access:

At the choice of the end-user, the designated USP is required to provide the above connection at a guaranteed access line speed of 4 Mbps. If the connection does not permit the provision of such broadband Internet access for technical or economical reasons, and no alternative offering is readily available on the market under comparable conditions to the end-user requesting the connection, the USP is allowed to provide the connection at a speed that is lower than the access line speed specified above. In these exceptional cases, the access line speed must not be lower than 2 Mbps.

The USP is required to take the utmost account of the set minimum requirements in relation to functional Internet access when planning network build, providing individual connections to the network and when responding to requests to address service quality.

Minimum requirements to be complied with by the USP in relation to functional Internet access:

The USP must have regard to the overall target of 97% for the total number of installed telephone lines capable of meeting or exceeding the established reasonable minimum data rate of 4 Mbps. The USP must provide a written statement stating the data carrying capability of a telephone line in response to any end-user who has serious doubts as to the line capability.

Where it is not possible on any given line for the USP to achieve the established minimum data rate of 4 Mbps, the USP must tangibly demonstrate that it is in the process of making, or planning to make, improvements to its network (whether equipment, lines or other part) not capable of supporting 4 Mbps.

The USP must establish appropriate management and business processes to:

measure individual telephone lines and to provide information to end-users by no later than 4
weeks after the effective date of the decision;

³³ MCA 2015 Decision entitled 'Universal Service Obligations on Electronic Communications Services': https://www.mca.org.mt/sites/default/files/USO%20Decision%202015 0.pdf



- monitor the level of complaints from end-users on connection speeds for functional Internet access and assess the underlying causes;
- identify whether the cause of the speed related problem is within the USP's control and, where it is not, to explain clearly to the end-user the possible causes of the lower speeds and how such problems could be eased;
- monitor the problem through to resolution or until reasonable remedial actions are exhausted or the customer is satisfied with the outcome, where the cause of the problem is within the USP's control;
- provide the MCA with the following reports on a quarterly basis and forwarded to the MCA by not later than twenty (20) working days following the end of each quarter:
 - on its performance in relation to the above-mentioned target and shall publish such details in a format to be agreed with the MCA;
 - concerning the above-mentioned issues, including details of any work programmes regarding improvements to its network to deliver functional Internet access on those lines which are not capable of supporting the established minimum data rate of 4 Mbps; and
 - on the individual location and the number of telephone lines therein which are not capable of supporting the established minimum data rate of 4 Mbps.

Over time, the established minimum data rate for functional Internet access may be revised by the MCA to reflect advances in networks and equipment, prevailing bandwidth used by the majority of subscribers, and changing social and economic conditions.

The MCA will monitor the USP's compliance with the established minimum requirements in relation to functional Internet access, and reserves the right to take regulatory action in accordance with its powers at law.

The MCA will monitor the robustness of this decision and reserves the right to make periodic adjustments as necessary including modifications to the minimum requirements in consultation with the USP or any other third parties.



Appendix 02 - Key Legal Provisions

This Appendix outlines relevant articles of the EECC related to broadband as a universal service.

Article 84 of the EECC - Affordable universal service - lays down an obligation for Member States to ensure that all consumers³⁴ have access to an affordable adequate broadband internet access and to voice communications services at the quality specified, including the underlying connection, at a fixed location. Member States are required to define the adequate broadband internet access service which shall be capable of delivering the bandwidth necessary for supporting at least the minimum set of services used by the majority of end-users. The adequate broadband internet access service shall be capable of delivering the bandwidth necessary for supporting at least the minimum set of services set out in Annex V.³⁵ Member States may extend the scope of application of this Article to end-users³⁶ that are microenterprises and small and medium-sized enterprises and not-for-profit organisation.

Article 85 of the EECC - Provision of affordable universal service: provides that, where a Member State establishes that retail prices for broadband internet access service and voice communication services are not affordable to consumers with low- income or special social needs, Member States must take necessary measures to ensure affordability for such services at least at a fixed location. To this end, Member States may ensure that support is provided to such consumers for communication purposes or require undertakings to provide affordable tariff options or packages different from those provided under normal commercial conditions, or both. Where a Member State demonstrates an excessive administrative or financial burden for providers or for the Member State in question, it may exceptionally decide to impose the obligation to offer specific tariff options or packages only on designated operators. Article 86 (Availability of universal service) of the EECC shall apply to such designations mutatis mutandis. Affordability for individual consumers should be founded upon the right to contract with a provider, availability of a number, continued connection of service and their ability to monitor and control their expenditure.³⁷

Article 86 of the EECC - Availability of universal service: focuses on ensuring the availability of broadband internet access and voice communications services at a fixed location. If it is shown that neither the market nor public intervention mechanisms are likely to provide end-users in certain areas with a connection capable of delivering adequate broadband internet access service as defined by the Member State (and voice communications services) at a fixed location, the Member State should be able to exceptionally designate different providers or sets of providers of those services in the different relevant parts of the national territory. There should be no constraints on the technical

³⁴ "Consumer" means any natural person who uses or requests a publicly available electronic communications service for purposes which are outside his or her trade, business, craft or profession.

³⁵ With regards to the services listed in Annex V, Article 116 of the EECC states that "The Commission is empowered to adopt delegated acts in accordance with Article 117 amending Annexes V, VI, IX, X and XI in order to take account of technological and social developments or changes in market demand.

³⁶ "End-user" means a user (a natural or legal person using or requesting a publicly available electronic communication service) not providing public electronic communications networks or publicly available electronic communications services.

³⁷ Recital (222) of the EECC.



means by which the adequate broadband internet access services at a fixed location is provided, allowing for wired or wireless technologies, nor any constraints on which undertakings provide part or all of USOs.³⁸

Article 89 of the EECC - Cost of the Universal Service Obligations: establishes that where the provision of adequate broadband internet access and voice communications services result in an unfair burden on a provider, taking due account of the costs and revenues as well as the intangible benefits resulting from the provision of the services concerned, that unfair burden can be included in any net cost calculation of the USO. When an USO represents an unfair burden on a provider, it is appropriate to allow Member States to establish mechanisms for efficiently recovering net costs.

Article 90 of the EECC - Financing the Universal Service Obligations: establishes the mechanisms that may be used for financing the USOs. Recovery via public funds constitutes one method of recovering the net costs of USOs. Sharing the net costs of USOs between providers of electronic communications networks and services is another method. Member States are able to finance the net costs of different elements of universal service through different mechanisms, or to finance the net costs of some or all elements from either of the mechanisms or a combination of both.

³⁸ Recital 230 of the EECC.



Appendix 03 - Costing and Financing the USO

The framework applicable to funding the USO operates on the principle that the USO should be cost neutral for a designated operator, i.e. the universal service provider should not have a cost advantage or disadvantage from delivering the USO. Only the net cost of providing the USO (i.e. net of any direct and indirect benefits) that the MCA decides is an unfair burden on the provider can be compensated.

An undertaking designated to provide the USO may seek to recover the net cost representing an unfair burden due to the USO.³⁹ A designated undertaking may submit to the MCA a written request for funding with detailed information supporting its claim. This claim would need to be presented in a way that will enable the MCA to determine whether the provision of the USO has actually resulted in an unfair burden on the undertaking. The undertaking will be expected to show that the costs incurred are efficient.

03.1 Time Period for Requesting Funds

By not later than eleven months following the end of the financial year a designated undertaking may submit a written request to the MCA requesting financing for the net cost it incurred in providing the USO. Any requests for funding shall only cover the previous financial year and may not include any prior periods.

03.2 Provision of Information in the Funding Request

An undertaking wishing to submit a request for funding shall provide the MCA with sufficient and detailed evidence to substantiate its claim that the provision of the USO has resulted in the calculated financial unfair burden. When claiming for the net cost arising from the USO, any market benefits accrued by the undertaking shall also be taken into account.

The requirements as set in ANNEX VII of the EECC (currently reflected under the Sixth Schedule of the Regulations⁴⁰) are to be followed. The MCA reserves the right to reject any claim for funding which is inadequately substantiated, and to request any other information, or more detail than that submitted in the application by the undertaking, if it deems it necessary to be in a position to reach its decision.

03.3 Funding Request Evaluation

Once a claim for USO funding with all the supporting evidence is received within the established timeframe, the MCA, or an appointed independent body, shall initiate an evaluation process to assess and determine whether the amount claimed is justified and was suffered in order to provide universal services outside normal commercial conditions.

³⁹ Article 89 (Cost of the universal service obligation) of the EECC.

⁴⁰ Electronic Communications Networks and Services (General) Regulations, S.L 399.28 (Calculating the net cost, if any, of universal service obligations and establishing any recovery or sharing mechanism in accordance with Articles 12 and 13 of the Universal Service Directive).



Any market benefits accrued by the designated undertaking shall also be included in the application, as specified in more detail in Part A (Calculation of net cost) of Annex VII of the EECC. The results of the cost calculation and the conclusions of the audit shall be made publicly available. The evaluation process shall consist of two phases namely:

Reasonability phase - The objective of this phase is to analyse the validity of the reasoning that the designated undertaking has used to support its claim, and assesses the following elements:

- the grounds on which the claim/s for funding are based;
- whether the claim/s is coherent with regulatory principles;
- the extent to which the claimed funding is attributed to the USO; and
- the approach used to quantify the intangible benefit aspect.

Calculation Phase - This phase only applies if, and to the extent that, the outcome of the Reasonability Phase deems the reasons behind the funding claim as valid. The Calculation Phase shall include an auditing and a verification exercise on the various calculations used in the claim submitted by the designated undertaking. This would include a calculation exercise in order to establish that the inputs and workings used to quantify the net costs to provide the USO is accurate. The net cost is calculated as the difference between the net cost a designated undertaking incurred to provide a service with the USO, as opposed to operating the service without the USO. Any intangible benefits enjoyed by the designated undertaking shall also be taken into account.

03.4 Financing of the Universal Service Obligation

If, following the evaluation process, a designated undertaking is found to have suffered an unfair burden,⁴¹ the source of funding to compensate for the net costs, shall be one, or a combination, of the following options:

- (a) from public funds with the approval of the government; and/or
- (b) by means of a sharing mechanism between providers of electronic communications networks and services.

A mechanism under bullet (a) may only be established with the approval of the Minister granted with the concurrence of the Minister responsible for finance. A sharing mechanism, if required, would be set up on the basis of transparency, least market distortion, non-discrimination and proportionality, and be subject to the principles of Part B (Compensation of net costs of universal service obligations) of ANNEX VII of the EECC.

⁴¹ Refer to Article 90 (Financing of universal service obligations) of the EECC.