Ensuring Universal Access to a Broadband Connection

A review of the definition of functional Internet access, within the context of the Universal Service requirement

Consultation Paper

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Foreword

The Ministry for Infrastructure, Transport and Communications (MITC) has made the availability of a broadband connection to every citizen a national priority. This is in line with Malta's National ICT Strategy[1] and the Europe 2020 Strategy.[2]

Malta's National ICT Strategy highlights the importance of wiping out the digital divide and making sure that everyone in Malta has broadband connectivity at an affordable price coupled with the development and uptake of next-generation high-speed broadband infrastructures.[3]

The Digital Agenda for Europe (one of the seven flagship initiatives of the Europe 2020 Strategy)[4] underlines the importance of broadband deployment to promote social inclusion and competitiveness. The strategy aims to overcome the digital divide and achieve 100% broadband coverage for all European citizens by 2013. It also encompasses adopting high-speed communications by 2020 and the rolling out of efficient, new-generation networks.[5]

The Malta Communications Authority (MCA) is aware of the importance of ensuring universal access to a broadband connection throughout the country. Whereas the availability of access to broadband in Malta can be deemed as superior to the European average, it can still be subject to commercial expediency. A number of users may therefore be unable to access what has now become a universally-accepted essential component of everyday life, because of an inadequate network connection.

Within the current scope of the Universal Service, the realignment of the definition of 'functional Internet access' - currently limited to the availability of a connection that is capable of sustaining a dial-up modem – to include a broadband connection, is seen as a necessary first step towards the ubiquitous provision of broadband of an appreciable level of speed, quality and availability in all areas, especially those that may not be

[1] Refer to Malta's Smart Island Vision (National ICT Strategy for Malta) 2008 – 2010: https://mitc.gov.mt/page.aspx?pageid=263&lid=1.

[2] Refer to Europe 2020 Strategy for smart, sustainable and inclusive growth - http://ec.europa.eu/eu2020/index_en.htm.

[3] Refer to Stream 2 of the Malta's Smart Island National ICT Strategy - A connected society – bridging the last and the new miles. The strategy states that "Everyone should be able to afford a computer with a broadband connection at home." In line with the strategy Malta is well on track to meeting the target of having 80% of our households connected to broadband by the end of 2010.

[4] Refer to the Digital Agenda for Europe 2010 – 2020 - http://ec.europa.eu/information_society/digital-agenda/index_en.htm. The Digital Agenda for Europe is one of the seven flagship initiatives of the Europe 2020 Strategy, set out to define the key enabling role that the use of Information and Communication Technologies (ICT) will have to play if Europe wants to succeed in its ambitions for 2020.

[5] The EU Digital Strategy focuses on two parallel goals: on the one hand, to guarantee universal broadband coverage (combining fixed and wireless) with internet speeds gradually increasing up to 30 Mbps and above and over time to foster the deployment and take-up of next generation access networks (NGA) in a large part of the EU territory, allowing ultra fast internet connections above 100 Mbps. The strategy restates the objective to bring basic broadband to all Europeans by 2013 and seeks to ensure that, by 2020, (i) all Europeans have access to much higher internet speeds of above 30 Mbps and (ii) 50% or more of European households subscribe to internet connections above 100 Mbps.

currently well served by an operator. Moreover, this requirement would be in line with realities on the ground.

It will provide all permanent residences and business offices with the opportunity to experience the benefits of an established minimum threshold as far as a broadband Internet connection is concerned thereby maximising consumer welfare and digital inclusion.

The purpose of this consultation paper is to outline the MCA's proposed approach to the setting of requirements to be complied with by the designated universal service provider (USP) for the provision access at a fixed location - currently GO Plc - in relation to the provision of a connection capable of supporting functional Internet access at a specified minimum broadband data rate (i.e. the access line speed).

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 **14th September 2010** to the **1st November 2010**. Please refer to **Section 3** for further details about the submission of comments.

1. Background

A competitive market in which all the key players have a purely commercial remit will serve the needs of most consumers, but there is a danger that some may be left behind. Access to electronic communication networks and services is now such an essential part of life that, without it, citizens would be unable to participate in a host of activities, thereby running the risk of social exclusion.

Universal services are generally defined as a minimum set of electronic communication services essential for the general public to participate in society, and those which are already available to the great majority of citizens. These services should be made available at just, reasonable and affordable rates ensuring that persons on low income, those residing in rural, insular, or high installation cost areas, persons with disabilities, and other vulnerable groups, have access to these services at reasonable prices.

The European regulatory framework recognises the importance of ensuring that a basic service – 'the Universal Service' - is provided to all end-users at an affordable price. The universal service, as currently defined, consists of access to the publicly available telephone network at a fixed location, capable of supporting voice, facsimile and data communications at data rates that are sufficient to permit functional Internet access; payphones; services for users with disabilities; and affordability.

The universal service regime in Malta is based on the decision notice entitled 'Universal Service Obligations on Electronic Communication Services' published by the Malta Communications Authority (MCA) on the 15th April 2010.[6] In line with this decision, GO Plc is the designated operator obliged to provide, amongst others, the universal service for the provision of access at a fixed location.[7]

1.1 Provision of Access at a Fixed Location

A fundamental requirement of the universal service obligation is that all reasonable requests for connection to the public telephone network at a fixed location are met by at least one operator. GO Plc, as the currently designated Universal Service Provider (USP), is required to satisfy any reasonable requests to provide a connection to the public telephone network at any fixed location in the Maltese Islands. 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.

[6] Refer to http://www.mca.org.mt/newsroom/openarticle.asp?id=858.

[7] In line with **Decision 11** of the MCA's Decision Notice, the MCA intends to review the designations contained in this decision within two years from the date the designated undertakings provide the universal service. It reserves the right to review these designations outside this timeframe as it deems appropriate according to its powers at law.

In line with the above-mentioned decision notice all requests for a connection at a fixed location made by a person in the Maltese Islands should be considered reasonable. The MCA decided not to include the application of a standard connection charge in all circumstances as there could be some exceptional occasions where, due to the geographic features of a location, the universal service obligation could be made available to applicants at a cost above the standard connection charge.[8]

In the above-mentioned decision notice (refer to **Decision 1**) the MCA noted that the dependency on the Internet has grown significantly and the current needs of the majority of subscribers cannot be met by conventional dial-up modems due to broader bandwidth requirements. As noted in the decision, GO Plc as the designated USP responsible for the provision of access at a fixed location is currently replacing all dial-up modems with broadband connections at a more favourable price nationwide to its subscribers on its own accord.[9]

1.2 Functional Internet Access - Broadband Connection

In view of Government's policy direction in ensuring the availability of a broadband connection to every citizen, there is the need to review the level of functional Internet access – currently limited to the availability of a connection that is capable of sustaining a dial-up modem - and specify the requirements to be complied with by the USP having regard for the prevailing bandwidth used by the majority of subscribers and technology feasibility.

The MCA notes that a universal service requirement that sets the minimum access capability is seen as a 'floor' that in no way hampers the provision of higher – or even lower – bandwidth broadband services by a fixed wired-line or wireless connection. What is essential is that all Maltese citizens and businesses can have the ability to access what is considered as a minimum acceptable broadband connection.

1.3 Legal Basis

The universal service obligation as defined under the Electronic Communications (Regulations) Act, Cap. 399 of the laws of Malta (the "Act")[10] and the Electronic Communications Networks and Services (General) Regulations, SL399.29 of the Laws of Malta (the "Regulations")[11] indicate the minimum supply of electronic communication services that all users have the right to benefit from (Refer to **Appendix 01**).

[8] The standard connection fee refers to a fee reasonable for the average user but does not mean that the fee must be the same irrespective of geographical location or the cost of the connection. The MCA expects that excess fees charged by GO Plc to residential or business customers would be very rare and must be justified.

[9] The number of active dial-up subscriptions as at the end of June 2010 amounted to 169 (down from 1,260 as at the end of June 2009) – National Statistics Office. GO Plc offers an entry-level broadband package over its telephone line (DSL) capable of access line speeds of up to 4 Mbps download and 512 kbps upload.

[10] Refer to http://docs.justice.gov.mt/lom/legislation/english/leg/vol_12/chapt399.pdf.

[11] Refer to http://docs.justice.gov.mt/lom/Legislation/English/SubLeg/399/28.pdf.

This means that reasonable requirements, for instance for telephony and functional Internet access, have to be met. The manner in which this is achieved is not prescribed and the principle of technology neutrality allows the USP to choose the optimum method for providing access and service (in the case of telephony). Transmission need not take place via a fixed line but can just as well take place wirelessly. The services have to be provided to the user at just, reasonable and affordable prices in line with the Act.

In line with the European electronic communications regulatory framework[12] and the Regulations, the MCA is allowed to expand the scope of the universal service obligations to the provision of access to a broadband connection[13] that allows 'data rates that are sufficient to permit functional Internet access, taking into account prevailing technologies and bandwidth use by the majority of subscribers and technology feasibility.[14]

It is noted that the regulatory framework does not extend the minimum set of universal services to the provision of an 'Internet service' but to a 'data connection permitting functional Internet access'.[15] This differs from the approach taken with regard to the telephone service, in which case subscribers have a right both to a connection that, can among others, sustain telephony, as well as to the telephony service itself.

Accordingly, this consultation refers only to the requirements to be complied with by the USP in relation to a data connection permitting functional Internet access at an established minimum broadband speed and not to the provision of the service itself.

The MCA notes that the European Commission is nonetheless looking into the implications of extending the minimum set of universal services to include a broadband access service of specified quality which is to be made available to all users regardless of their geographical location and, in the light of specific national conditions, at an affordable price. The MCA will carefully consider and apply both national policy, as articulated by the MITC with respect to broadband availability, and further developments from the European Commission regarding universal service, in adopting a position on this issue.

[12] A new European electronic communications framework was adopted by the European Parliament and Council on the 25th November 2009.

[13] Before the adoption of the new regulatory framework the requirement to provide connection capable of allowing data communications at data rates sufficient to permit functional Internet access was limited to a single narrowband network connection (refer to recital 8 of the Universal Service Directive). This speed is no longer sufficient for using information society services. This is demonstrated by the fact that the vast majority of internet access today is made available at substantially faster broadband connections.

[14] Recital (5) of Directive 2009/136/EC states that 'flexibility is required to allow Member States to take measures, where necessary, to ensure that a data connection is capable of supporting satisfactory data rates which are sufficient to permit functional Internet access, as defined by the Member States, taking due account of specific circumstances in national markets, for instance the prevailing bandwidth used by the majority of subscribers in that Member State, and technological feasibility, provided that these measures seek to minimise market distortion'.

[15] When proposing amendments to the regulatory framework for electronic communications networks and services in November 2007, the Commission took the view that any adjustment to the fundamental principles in the Universal Service Directive should be contemplated as part of a separate exercise.

2. Functional Internet Access

The Government has made the wider availability of broadband a national priority. The MCA has already taken a number of initiatives to facilitate Internet access, particularly through the introduction of wireless broadband technologies. Furthermore, in line with Malta's Smart Island Strategy, various government initiatives, such as Blue Skies in 2007,[16] coupled with the ongoing investment in human capital through education and training has continued to be reflected in a rise in broadband penetration.

As mentioned above the Regulations permit the MCA to modify the definition of functional Internet access (i.e. the speed at which data may be transmitted over a connection to the public telephone network) to reflect prevailing technologies and bandwidth used by the majority of subscribers and technological feasibility.

The MCA therefore proposes to upgrade the minimum data rate which the USP would be required to provide to all its end-users who request that their connection is capable of such speeds. The MCA intends to regularly review and upgrade the minimum data rate required for functional Internet access in line with advances in the information society.

2.1 Factors Affecting Data Speeds

The data rate for functional Internet access refers only to those aspects of an Internet connection, that is, the quality of the physical connection, or line,[17] and the rate at which signals can be transmitted over the line. The connection speed (or access line speed)[18] is different from the speed at which information is downloaded from a website.

The MCA recognises that unlike the physical connection line speed, the actual speeds of broadband connections[19] vary to a certain degree e.g. at different times of day depending on network load.[20] Likewise, the properties of the terminal equipment devices as well as user location, environment and mobility also impact the data transfer

[16] The Project BlueSkies was intended to provide a broadband connection to households with no Internet or those still using dial-up connections. This together with price decreases, increased Internet speeds and various offers launched by broadband providers have contributed to a significant leap in broadband penetration.

[17] The physical access line speed is stable with respect to transmission characteristics – its characteristics are defined by interface specification of the respective network and are not influenced by traffic variations. In other words, the maximum achievable transmission quality is determined / limited by the capabilities of the physical access.

[18] The access line speed refers to the maximum speed of the data connection between the broadband modem and the local exchange or cable head end. This constitutes the maximum speed a consumer will be able to experience on his/her individual line.

[19] The actual throughput (or download) speed is the actual speed that a consumer experiences at a particular time when they are connected to the Internet. This figure is often dependent on factors such as the Provider's network, its traffic shaping and management policy, the number of subscribers sharing the network and the number of people accessing a particular website at a particular time.

[20] The capacity taken up by an individual user of the internet depends materially on the type of internet used. The majority of internet usage comprises browsing, using email to watching videos, which only take up capacity momentarily, whereas problems arise from P2P heavy users sharing music and films over the internet.

rate received by the user. It should also be noted that the characteristics of networks located outside Malta cannot be measured.

The MCA recognises that apart from the quality of the physical connection line speed (i.e. the access line speed), the speed and quality of end-to-end broadband services has become an important factor for consumers. In some cases, the actual performance of broadband services experienced by consumers does not match up with the speed or quality of broadband that consumers are expecting (based on the level of performance advertised by the broadband provider).[21]

As a separate initiative the MCA is undertaking an exercise of broadband quality of service (QoS). This will include, amongst others, the measurement and publication of the QoS parameters for Internet access offered by the respective broadband providers in Malta and the laying down of provisions for the day's average connection data rate that would be considered acceptable.[22] These measures are intended to prevent significant disparities between end-users' expectations of broadband performance and their actual experience.

The MCA also intends to make available information on how end-users can make informed choices about the type of service they are likely to receive upon entering into a contract with a broadband electronic communication service provider (e.g. information on broadband speeds taking into consideration different technologies, information that should be made available to end-users at point of sale,[23] and information to be provided on the providers' website[24]). The availability of comparisons of broadband connection speeds and service prices of all broadband electronic communication service providers is another initiative the MCA intends to carry out. These initiatives will help ensure that end-users choose the package that is the most appropriate for them in light of their individual circumstances and needs.

The MCA notes that the revised Regulations as proposed by the MITC in its consultation document published on the 23rd June 2010[25] require all undertakings providing a connection to a public communications network and, or publicly available electronic

[21] The headline (or advertised speed) is the speed that the service providers use to describe the packages that they offer to the consumers. They are often described as 'up to' speeds but these are often only a guide as to the speed a service provider can provide and at what price. It is noted that some technologies used in supplying fixed line access broadband services, for example on cable networks, the access line speed is expected to be consistent with the headlines speed. Nevertheless, the actual throughput (or download) speeds are likely to be lower than the headline speeds, regardless of the technology used.

[22] This refers to the average throughput (or download) speed. This is an average of actual throughput speed for each different broadband package offered by the provider.

[23] For example information to consumers on the speeds they could expect to obtain from their broadband service, such as, access line speeds. Information on access line speeds benefits consumers because it provides consumers with an expectation on their specific line. End-users also benefit from having information about actual throughput speeds (the download speed which they obtain in practice whilst using the internet) and policies related to fair usage (traffic management and traffic shaping).

[24] For example information on how end-users can check access line speed and actual throughput speed they are receiving in practice and steps that can be taken to ensure they receive the highest possible access line speeds and actual throughput (or download) speeds.

[25] Refer to the Consultation Document published by the MITC on the revision to the EU framework for electronic communications - https://mitc.gov.mt/page.aspx?pageid=794.

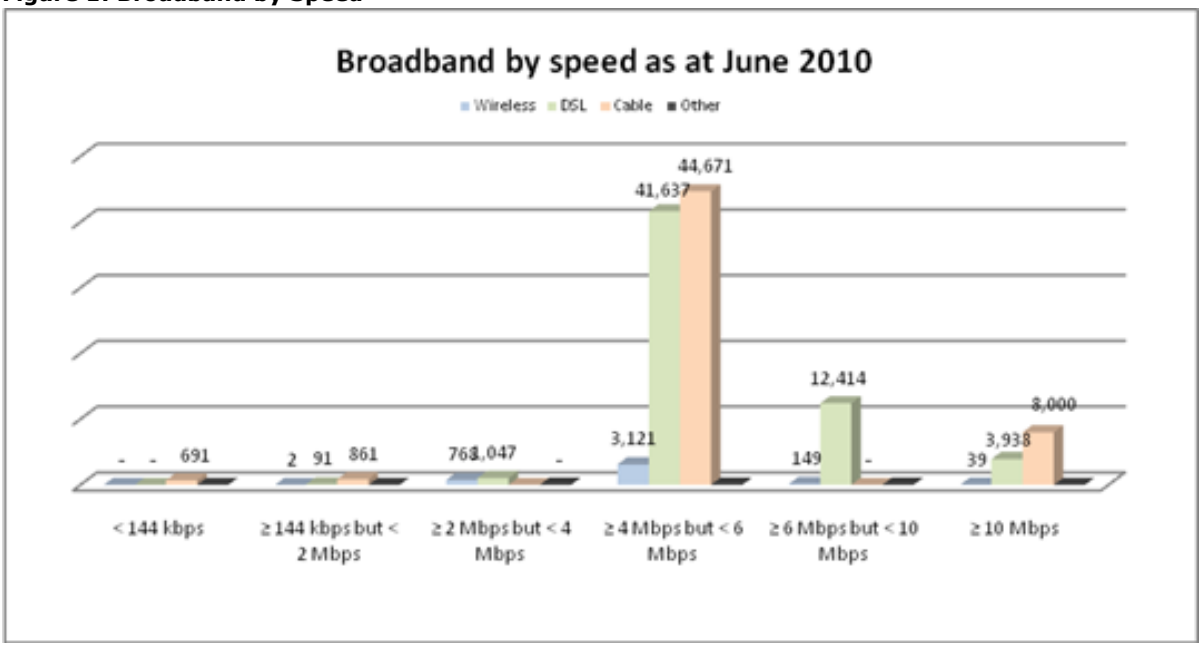
communications services to provide its subscribers with a contract that shall specify in a clear and comprehensive manner, amongst others, the QoS levels offered, including, the minimum access line speeds in case of Internet service, ensuring that this does not differ significantly from the marketed upper levels (i.e. the headline or advertised speed).[26]

2.2 Proposed Data Rate

Malta has specific geographic conditions. As a country that is small in area and densely populated it is difficult to draw distinctions between urban and rural areas. In fact one can say that fixed wired (both DSL and cable) and fixed wireless (WiMax) broadband networks exist virtually throughout the country.[27]

Malta's fixed broadband penetration rate per population currently stands at 28.4%[28] with the vast majority of subscribers (around 76%) enjoying speeds more than or equal to 4 Mbps but less than 6 Mbps (refer to **Figure 1** below).[29]

Figure 1: Broadband by Speed[30]



[26] Advertised speeds are rarely achievable in practice by the majority of consumers that buy them. This is due to a number of factors, including the nature of the customer's line, the number of subscribers sharing the network, and the number of people accessing a particular website at a particular time. The disparity between actual throughput (or download) speeds and headline or advertised speeds often leads to consumers feeling confused and frustrated. With consumers' interests in higher broadband speeds likely to rise, it is important to remedy this mismatch in their expectations to avoid such confusion and frustration.

[27] In addition to fixed broadband services, mobile 3G/UMTS broadband services are available throughout the Islands of Malta.

[28] This figure does not necessarily correspond to the number of Internet users. An Internet connection is most of the time accessed, possibly simultaneously, by several users.

[29] As at the end of June 2010 a total of 117,500 broadband Internet subscriptions were registered with local service providers – National Statistics Office (NSO).

[30] This chart refers to the breakdown of fixed broadband subscriptions by speed and platform as at end of June 2010 (MCA – provisional and subject to revision).

GO Plc offers an entry-level broadband package over its telephone lines (DSL)[31] with an advertised speed of up to 4 Mbps download and 512 kbps upload. This broadband package is available to all permanent residences and business offices having a telephone subscription (i.e. access to the publicly available telephone service) with GO Plc.[32]

Taking into account Malta's current broadband penetration rate, the prevailing bandwidth used by the majority of broadband users and GO Plc's entry level broadband package, consisting of a connection of up to 4 Mbps to all fixed line subscribers, the MCA is of the opinion that defining functional Internet access with a minimum data rate of 4 Mbps as a universal service is deemed to be technologically and economically feasible.[33]

The MCA is therefore proposing that the USP, in meeting its requirements under the universal service obligation, is required upon request to provide a fixed connection capable of 4 Mbps as the reasonable minimum data rate for functional Internet access[34] subject to the provisions below.

As already mentioned above higher connection data rates will be required in the future as the scope and number of information society services available online increases. A dynamic definition of functional Internet access is therefore appropriate, allowing the related data rate to be increased in line with advances in information society. However any increases in rates must be feasible in terms of technology as well as economy.

Q1. What are your views on requiring a fixed connection to be capable of a minimum data rate of 4 Mbps?

2.3 Network Coverage

The MCA is of the opinion that it is appropriate to establish an overall timeframe by which the USP must be in a position to provide every permanent residence and permanent office of business, having an existing connection to the public telephone network, access to a broadband connection capable of functional Internet access at the established minimum data rate. The timeframe by which all installed lines must be capable of achieving the established minimum data rate will be established following the

[31] DSL (or Digital Subscriber Line) means a family of technologies generically capable of transforming ordinary phone lines (also known as twisted copper pairs) into high speed digital lines.

[32] Refer to http://www.go.com.mt/Default.aspx?ID=1756 for GO Plc's 4 Mbps Service Description for Businesses and http://www.go.com.mt/Default.aspx?ID=1265 for GO Plc's 4 Mbps Service Description for Residential customers.

[33] As at December 2008 74.1 percent of all broadband subscriptions had a connection speed of 2Mbps or more but less than 4Mbps. However, during 2009, most service providers upgraded their broadband speeds, generally at no extra cost. In fact, as at the end of June 2010 only 1.4 percent of all broadband subscriptions fell under the above-mentioned category. As at June 2010 88.4 per cent of broadband subscribers had a connection speed of more than or equal to 2 Mbps, but less than 10 Mbps – National Statistics Office.

[34] This means the provision of a fixed connection to any end-user permitting functional internet access at a data rate of 4Mbps (access line speed).

consultation process and based on material provided by the USP with regard to the state of play of the network in this regard.

The MCA recognises that in the case of new requests for a connection to the public telephone network there may be instances where, despite the USP making all reasonable endeavours, it will not be possible to achieve the established minimum data rate within the short term. In such exceptional cases the data transmission rate may be reduced in the short-term when an alternative comparable connection is readily available to the end-user via another operator. However the USP should be able to demonstrate that it is in the process of making, or planning to make, improvements to its network (whether equipment, lines or other part) where this is not capable of supporting the established minimum data rate, together with the related implementation timeframe.

The MCA believes that the USP should publicly report on the individual locations and the number of lines therein which do not support the established minimum data rate. Such an approach should be an effective yardstick against which performance in upgrading the network can be assessed by the MCA and end users alike.[35]

The MCA will review the material provided by the USP. In line with the Regulations the MCA may arrange or require the USP to enter into a contract with a competent, experienced and reputable independent organisation having no links with the USP to carry out an independent audit and/or review of the material supplied to ensure the accuracy and compatibility of the information provided.

Q2. What are your views regarding the establishment of a performance timeframe by which every permanent residence and permanent office of business having an existing connection to the public telephone network must be in a position to access a broadband connection capable of functional Internet access at the established minimum data rate?

Q3. What are your views regarding the proposal that in the case of new requests for a connection to the public telephone network at a fixed location there may be exceptional cases where the data transmission rate may be reduced in the short-term when an alternative comparable connection is readily available to the consumer via another operator?

2.4 Minimum Requirements

To enhance the rights of end-users who require a connection capable of functional Internet access, the MCA is proposing minimum requirements that the USP should take account of and against which the MCA will examine complaints where an end-user

[35] Information on access line speeds will benefit the consumers because it will give them a better idea about the maximum speed possible on their specific line, since access line speeds depend closely on the particular technical characteristics of the line.

alleges that his/her line is not capable of functional Internet access at the established minimum data rate.

As discussed in **Section 2.1** above, the MCA recognises that the data speed experienced by the end-user can be influenced by a number of factors outside the USP's control. Therefore, a standard 'self-test' conducted by an end-user cannot give a reliable measurement as to the actual capability of the connection. However, such a test, if conducted over a reasonable period of time may give a general indication, which should trigger the USP to measure the line capability (i.e. the access line speed).

The MCA is of the opinion that any end-user who has serious doubts as to the line capability should be able to obtain a statement from the USP setting out the capability of their individual line. The USP should establish procedures to measure individual lines and provide such information to the customers on request. The MCA considers it reasonable to expect such procedures to be in place by no later than the **31st December 2010**.

Where the capability of the line at the network connection point is found to be below the established minimum functional Internet access data rate, the MCA considers that it is reasonable to expect the USP to use all reasonable endeavours to remedy the situation. The MCA would expect that such a scenario would arise in only a small number of cases as requests in respect of lines which do not meet the established minimum data rate would be low.

Q4. What are your views on the minimum requirements to apply in connection with functional Internet access?

2.5 Text of Draft Minimum Requirements

Based on the proposals outlined in this paper, the MCA is proposing the following minimum requirements that will apply to the USP. The requirements also set out the circumstances in which the MCA would expect the designated USP to take remedial action. The requirements may be revised from to time to time to reflect changes in prevailing conditions. The requirements will assist the MCA in monitoring the obligation and will benefit users without creating a disproportionate burden upon the USP.

Functional Internet Access – Minimum Requirements[36]

The requirement to provide a connection which permits functional Internet access

1. The designated universal service provider providing access at a fixed location ('the Provider') is required under the specific universal service conditions to provide any end-user with a fixed connection to the public telephone network at data rates that are sufficient to permit functional Internet access.

2. This obligation relates to:

   - a single broadband connection at the minimum data rate established by the MCA;

   - the connection itself,[37] not to other matters that may be outside the control of the Provider, such as an end-user's computer.

3. These minimum requirements clarify the circumstances in which the MCA is likely to consider that the Provider is offering functional Internet access.

4. The MCA will consider that the Provider is providing functional Internet access at the established data rate where it is able to demonstrate that it is making every reasonable effort to ensure that lines achieve optimum performance.

5. In forming a view on whether the Provider is making every such reasonable effort, the MCA will look at the:

   - network coverage obligation;

   - data rate achieved by the connection;

   - measures taken by the provider in response to complaints about unsatisfactory Internet access; and

   - the Provider's general management and business processes.

Network Coverage Obligation

7. The Provider shall have regard to the overall timeframe by which the Provider must be in a position to provide every end-user, having an existing connection to the public telephone network at a fixed location, access to a broadband connection capable of functional Internet access at the established minimum

[36] Refer to Regulations 26(4) whereby the MCA may specify requirements to be complied with by a designated undertaking in relation to functional Internet access.

[37] That is, the quality of the physical connection or access line, and the rate at which signals can be transmitted over that line. As mentioned above the access line speed is different from the speed at which information is downloaded from a website.

data rate.[38]

8. In the case of new requests for a connection to the public telephone network there may be instances where, despite the USP making all reasonable endeavours, it will not be possible to achieve the established minimum data rate within the short term. In such exceptional cases the data transmission rate may be reduced in the short-term when an alternative comparable connection is readily available to the consumer via another operator. However the USP should be able to demonstrate that it is in the process of making, or planning to make, improvements to its network (whether equipment, lines or other part) where this is not capable of supporting the established minimum data rate, together with the related implementation timeframe.

Data rate to be achieved by the connection

9. End-users should be able to expect that the connections will support data transmission at the minimum data rate established by the MCA.

10. Over time, the established minimum data rate 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.

Measures taken by the provider in response to complaints about unsatisfactory Internet access

11. Where the Provider receives a complaint from an end-user about unsatisfactory connection speed, the Provider should take the end-user through a series of self-tests, such as checking the data speed displayed on the end-user's computer, and removing all other terminal equipment e.g. fax machines, from the connection.

12. Further investigation, such as the Provider conducting a site visit to test the connection itself, is required only where it is established that the end-user is experiencing connection speeds which are persistently lower than the established data rate. The Provider is not required to investigate further where the problem clearly falls outside its control, e.g. there is a problem with the end-user's computer.

13. Unsatisfactory Internet access may be caused by a minor problem, e.g. interference, a problem with the final link (underground or overhead) from the distribution point to the end-user's premises, or some other easily repairable fault.

14. Where the Provider establishes that there is a minor problem, it should take action at the earliest opportunity to ensure that the end-user's connection provides functional Internet access, in particular that it is capable of achieving the established data speed.

[38] The USP will be required to provide the MCA with regular reports on its performance in relation to the established target (refer to Section 17 of the proposed minimum requirements below).

15. The MCA recognizes that there may be circumstances where there is a significant problem with the network and it is not reasonable and/or proportionate to expect the Provider to take action on the basis of a single complaint about unsatisfactory Internet access.

16. In the case of a significant problem with the network (e.g. due to links with a particular distribution point or at a particular cabinet) the Provider should log the problem and take action at the earliest reasonable opportunity to ensure that functional Internet access at the established minimum connection data rate is provided to the affected end-users.

General management and business processes

17. The Provider should establish appropriate management and business processes to:

- measure individual lines and to provide information to subscribers no later than the **31st December 2010**;
- have a robust process for identifying whether the cause of the speed related problem is within the Provider's control and, where it is not, to explain clearly to the customer the possible causes of the lower speeds and how such problems could be eased;
- monitor the level of complaints from end-users on connection speeds for Internet access and assess the underlying causes;
- 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 Provider's control;
- provide the MCA with regular reports concerning the above issues, including details of any work programmes regarding improvements to its network to deliver functional Internet access at the established data rate;
- provide the MCA with regular reports on it performance in relation to the established coverage obligations and publish such details in a format to be specified by the MCA; and
- publicly report on the individual location and the number of lines therein which do not support the established minimum data rate.

Q5. What are your views on the text of the draft minimum requirements? Are there any other issues which should be specifically addressed or issues which should be expanded upon?

3. Submission of Comments

The consultation period will run from the **14th September 2010** to the **1st November 2010**, during which the MCA welcomes written comments from the USP and other interested parties on any of the issues raised in this consultation document.

Having analysed and considered the views and comments received, the MCA will publish its decision that will, *inter alia*, summarise the responses to the consultation.

Receipt of comments will be acknowledged. Comments will be made publicly available by the MCA and on the MCA's website unless declared confidential.[39] Respondents are therefore asked to separate out any confidential material into a clearly marked annex.

Respondents are also kindly requested to preferably refer their comments to the numbered consultative questions. Respondents may also make comments on any aspect of the consultation by referring to the specific sections of this document when making their submissions.

All responses to this consultation should be clearly marked "Ensuring Universal Access to a Broadband Connection" and sent by post, facsimile or e-mail to:

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

Tel: +356 21 336840
Fax: +356 21 336846
Email: info@mca.org.mt

[39] In accordance with the MCA"s confidentiality guidelines and procedures – (refer to www.mca.org.mt).

Appendix 01 – Legislation

Extracts from the Subsidiary Legislation 399.28 Electronic Communications Networks and Services (General) Regulations relevant to the above.[40]

Availability of Universal Services

25. (1) The Authority shall ensure that the services set out in this Part are made available at the quality specified to all end-users in Malta, independently of geographical location, and, in the light of specific national conditions, at an affordable price.

Provision of access at a fixed location

26. (1) A designated undertaking shall satisfy any reasonable requests to provide at a fixed location –

(a) connections to the public telephone network, and

(b) access to publicly available telephone services.

(2) Any connection provided by a designated undertaking shall be capable of allowing end-users to make and receive –

(a) local and international calls,

(b) facsimile communications, and

(c) data communications, at data rates that are sufficient to permit functional Internet access, taking into account prevailing technologies used by the majority of subscribers, and technological feasibility.

(3) Where a designated undertaking denies any reasonable request made under sub regulation (1), it shall inform the person making the request of his right to pursue the dispute resolution procedures in accordance with article 25 of the Act.

(4) The Authority may for the purposes of the services referred to in this regulation, specify requirements to be complied with by a designated undertaking in relation to –

(a) functional Internet access, having regard to prevailing technologies used by the majority of subscribers and to technological feasibility,

[40] Provisions reproduced above do not necessarily contain the full regulations but only those parts deemed to be necessary.

(b) the reasonableness of requests for connection at a fixed location to the public telephone network and for access to publicly available telephone services at a fixed location pursuant to sub-regulation (1),

(c) the provision of operator assistance for the purpose of handling calls to the emergency services using the single European emergency call number "112" or any national emergency call number that may be specified by the Authority, and

(d) the terms and conditions upon which connection and access referred to in sub-regulation (1) shall be provided.

Quality of service of designated undertakings

33. (3) The Authority may, in addition, specify the regularity, content, form and manner of information to be published pursuant to this regulation for the purpose of ensuring that end-users and consumers have access to comprehensive and, comparable user friendly information.

(4) The Authority may set performance targets for those undertakings with universal service obligations. In so doing it shall have regard to any views expressed by interested parties in particular pursuant to the public consultation as set out in regulation 52.

(5) The Authority may arrange, or require an undertaking to which this regulation refers to arrange, an independent audit or review paid for by the undertaking concerned, of the performance data supplied by that undertaking to ensure the accuracy and compatibility of that data with universal service obligations.

(6) In case of failure by the undertaking to meet the performance targets as may be established under this regulation, the Authority may issue directives to the undertaking for the purpose of ensuring compliance by the undertaking with the performance targets concerned.

The MCA notes that on 23rd June 2010 the MITC published a consultation on the proposed changes to the Electronic Communications Networks and Services (General) Regulations. These may be viewed via the following website – https://mitc.gov.mt/page.aspx?pageid=794.

Appendix 02 – Consultation Questions

Q1. **What are your views on requiring a fixed connection to be capable of a minimum data rate of 4 Mbps?**

Q2. **What are your views regarding the establishment of a performance timeframe by which every permanent residence and permanent office of business having an existing connection to the public telephone network must be in a position to access a broadband connection capable of functional Internet access at the established minimum data rate?**

Q3. **What are your views regarding the proposal that in the case of new requests for a connection to the public telephone network at a fixed location there may be exceptional cases where the data transmission rate may be reduced in the short-term when an alternative comparable connection is readily available to the consumer via another operator?**

Q4. **What are your views on the minimum requirements to apply in connection with functional Interne access?**

Q5. **What are your views on the text of the draft minimum requirements? Are there any other issues which should be specifically addressed or issues which should be expanded upon?**