

BoR (15) 201

## Update of the report on equivalent access and choice for disabled end-users

December 2015

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#### **1. EXECUTIVE SUMMARY**

One of BEREC's strategic priorities set out in its 2015 Work Programme is 'Empowering and Protecting End-Users'.<sup>1</sup> Under this principle, BEREC recognises the need to take account of the interests of vulnerable consumers, including those with disabilities.

The Work Programme also provided for specific activities aimed at sharing experience about ways to achieve equivalent access and choice for end-users with disabilities of electronic communications services. These included holding a public workshop that took place in March 2015 and producing an updated report on equivalent access and choice for disabled end-users (following the report on this subject that was published in February 2011<sup>2</sup>).

This document reviews the approaches currently taken to promote equivalent access and choice for disabled end-users of communications services.

Section 2 of this document provides and introduction to BEREC's work on this subject, before a summary of the legal background in Section 3.

In Section 4 we review the laws, regulations and other measures that are used to promote accessibility and choice for disabled end-users.

Sections 5 and 6 present the views of NRAs about the factors that they consider to be particularly important to promote, respectively, equivalent access and equivalent choice.

In Section 7 we discuss further ways to promote equivalent access and choice, for instance covering the following subjects:

- Extensions of obligations currently in place under Universal Service Obligations (USOs) for Universal Service Providers (USPs) to other service providers;
- 2. How extended obligations could be financed;
- 3. The potential role of regulators in encouraging the availability of terminal equipment for accessible services;
- 4. Subsidies for electronic communications services, features or terminal equipment suitable for disabled end-users;

<sup>&</sup>lt;sup>1</sup> BoR (14) 185 Work Programme 2015, 4 December 2014. http://berec.europa.eu/eng/document\_register/subject\_matter/berec/annual\_work\_programmes/4779work-programme-2015-berec-board-of-regulators.

<sup>&</sup>lt;sup>2</sup> BoR (10) 47 Rev 1, Electronic communications services: Ensuring equivalence in access and choice for disabled end-users, February 2011, <a href="http://berec.europa.eu/doc/berec/bor\_10\_47Rev1.pdf">http://berec.europa.eu/doc/berec/bor\_10\_47Rev1.pdf</a>

- 5. Special retail packages available for electronic communications services, features or terminal equipment suitable for disabled end-users;
- 6. Text and video relay services;
- 7. Accessibility of information regarding products;
- 8. The way in which information is made available by service providers to inform end-users with disabilities about products and services;
- 9. The ways in which regulators gain input from disabled end-users or representative groups;
- 10. The potential adoption of standards for presenting information in an accessible form.

Finally, we present some more detailed case studies about the ways in which accessibility is promoted in Finland, Italy and the UK.

This document was submitted for public consultation between 2 October and 30 October. stakeholders were asked to comment on the report, as well as to contribute with information on initiatives they considered to be best practices in promoting equivalent access and choice for disabled end-users of electronic communication services and to suggest actions or measures to be considered by NRAs, governments, public bodies, consumer associations, disability associations, equipment manufacturers, network operators, electronic communications service providers and the European Commission to improve equivalence of access and choice, namely under the provisions of the Universal Service Directive.

BEREC received a total of five responses, from the European Disability Forum (EDF), the European Emergency Number Association, DIGITALEUROPE, the Mobile Manufacturers Forum (MMF) and Omnitor AB (Omnitor). In general, respondents were supportive of the document. The report on the public consultation will be published alongside this one and summarises the responses received, presenting also BEREC's position with regard to the suggestions and proposals put forward by the respondents.

BEREC welcomes the contributions received and will take them into account in future projects regarding equivalence of access and choice for disabled end-users of electronic communication services.

#### 2. INTRODUCTION

One of BEREC's strategic priorities set out in its 2015 Work Programme is 'Empowering and Protecting End-Users'.<sup>3</sup> Under this principle, BEREC recognises the need to take account of the interests of vulnerable consumers, including those with disabilities.

In this context, BEREC envisages to provide a fresh look at the provision of electronic communications services for disabled end-users across Europe, in particular focusing on the promotion of equivalent access and choice.

This document (which follows a previous report published on this subject in February 2011, as well as two public workshops – one in October 2013 and one more recently in March 2015) will reflect on the discussions that took place at both of these workshops and will take into account the views expressed by stakeholders. It is also structured around a questionnaire (in annex) that BEREC conducted among National Regulatory Authorities (NRAs) to assess how the issues of access and choice for disabled end-users are dealt with across Europe.

The aim of this work is to promote the continued sharing of experiences regarding measures for end-users with disabilities, as well as considering recent technological and market developments in the sector. Through this process, BEREC expects to get a better understanding of the needs of disabled end-users of electronic communications services, assess the current state of provision of electronic communications services with regard to this particular segment of end-users and identify useful case studies in different European countries

The current report is organised into the following sections

- The legal background this section covers the Directive 2002/22/EC (Universal Service Directive – USD) as amended by Directive 2009/136/EC (Citizens Rights Directive)<sup>4</sup> and other relevant regulations;
- The equivalence concept focusing on the most important issues for ensuring equivalent access;

<sup>&</sup>lt;sup>3</sup> BoR (14) 185 Work Programme 2015, 4 December 2014. <u>http://berec.europa.eu/eng/document\_register/subject\_matter/berec/annual\_work\_programmes/4779-work-programme-2015-berec-board-of-regulators.</u>

<sup>&</sup>lt;sup>4</sup> Directive 2009/136/EC of the European Parliament and of the Council of 25 November 2009 amending Directive 2002/22/EC on universal service and users' rights relating to electronic communications networks and services, Directive 2002/58/EC concerning the processing of personal data and the protection of privacy in the electronic communications sector and Regulation (EC) No 2006/2004 on cooperation between national authorities responsible for the enforcement of consumer protection laws.

- Assessing equivalent choice which discusses the ways in which disabled end-users can be given an opportunity to choose effectively between service providers;
- 4. Encouraging equivalent access and choice which deals with the policies that can help to promote the goals of equivalent access and choice;
- 5. Case studies this section includes more detailed information from certain countries about how they address the issues of access and choice for disabled end-users.

This document was submitted for public consultation between 2 October and 30 October. On that opportunity, stakeholders were asked to comment on the report, as well as to contribute with information on initiatives they considered to be best practices in promoting equivalent access and choice for disabled end-users of electronic communication services and to suggest actions or measures to be considered by NRAs, governments, public bodies, consumer associations, disability associations, equipment manufacturers, network operators, electronic communications service providers and the European Commission to improve equivalence of access and choice, namely under the provisions of the Universal Service Directive.

BEREC received responses from the European Disability Forum (EDF), the European Emergency Number Association, DIGITALEUROPE, the Mobile Manufacturers Forum (MMF) and Omnitor AB (Omnitor), which are summarised in the report on the public consultation that will be published alongside this one.

BEREC welcomes the contributions received and will take them into account in its future regarding equivalence of access and choice for disabled end-users of electronic communication services.

#### 3. THE LEGAL BACKGROUND

The EU regulatory framework for electronic communications, in particular through the USD as amended by the Citizens Rights Directive contains specific requirements regarding end-users with disabilities.

Directive 2002/21/EC (Framework Directive) establishes in Article 8 on policy objectives and regulatory principles, paragraph 2, that "*The national regulatory authorities shall promote competition in the provision of electronic communications networks, electronic communications services and associated facilities and services by inter alia: (a) ensuring that users, including disabled users, elderly users, and users with special social needs derive maximum benefit in terms of choice, price, and quality [...]".* 

Article 7, paragraph 1 of the USD, focusing on measures for disabled end-users provides that "Unless requirements have been specified under Chapter IV which achieve the equivalent effect, Member States shall take specific measures to ensure that access to, and affordability of, the services identified in Article 4(3) and Article 5 for disabled end-users is equivalent to the level enjoyed by other end-users. Member States may oblige national regulatory authorities to assess the general need and the specific requirements, including the extent and concrete form of such specific measures for disabled end-users".

Article 7(2) of the above mentioned Directive refers that "Member States may take specific measures, in the light of national conditions, to ensure that disabled end-users can also take advantage of the choice of undertakings and service providers available to the majority of end-users".

In addition, Article 7(3) of the USD mentions that "*In taking the measures referred to in paragraphs 1 and 2, Member States shall encourage compliance with the relevant standards or specifications published in accordance with Articles 17 and 18 of Directive 2002/21/EC (Framework Directive)*".

The provisions for end-users with disabilities established by Article 7 of the USD are part of the universal service obligations as developed in Chapter II of that Directive. At the implementation level they are focused primarily on publicly available telephone services (PATS) provided by the Universal Service Providers (USPs) and are designed to ensure access to Universal Services for end-users with disabilities.

The amendments introduced in 2009 to the USD brought also the possibility for additional measures for end-users with disabilities to be implemented, particularly with respect to equivalent access and choice.

In particular, Article 23a(1) of the USD, on *Ensuring equivalence in access and choice for disabled end-users,* provides that Member States shall enable relevant national authorities to specify, where appropriate, the requirements to be met by undertakings providing publicly available electronic communications services (PECS) to ensure that disabled end-users: (a) have access to electronic communications services equivalent to that enjoyed by the majority of end-users; and (b) benefit from the choice of undertakings and services available to the majority of end-users.

Article 23a(2) of the USD provides that "(...) Member States shall encourage the availability of terminal equipment offering the necessary services and functions".

Furthermore, Article 21(3)(f) of the USD provides, as part of the measures concerning transparency and publication of information, that Member States shall ensure that national regulatory authorities are able to oblige undertakings to regularly inform disabled subscribers of details of products and services designed for them.

The above mentioned amendments are further supported by the USD provisions established in its Article 7, concerning services provided under the universal service obligations, to ensure equivalence of access and affordability, and specifying that national regulatory authorities may be obliged by Member States to assess the general need and specific requirements of measures in relation to US for end-users with disabilities.

Recital 12 of Directive 2009/136/EC provides that "*Equivalence in disabled end-users' access* to services should be guaranteed to the level available to other end-users. To this end, access should be functionally equivalent, such that disabled end-users benefit from the same usability of services as other end-users, but by different means".

Directive 2002/20/EC on the authorisation of electronic communications networks and services (Authorisation Directive), as amended by Directive 2009/140/EC, in its Annex A, provides as one of the conditions which may be attached to a general authorisation that "8. Consumer protection rules specific to the electronic communications sector, including conditions in conformity with Directive 2002/22/EC (Universal Service Directive), and conditions on accessibility for users with disabilities in accordance with Article 7 of that Directive".

Furthermore, Directive 2002/22/EC provides in Article 33 on consultation with interested parties, paragraph 1, that "*Member States shall ensure as far as appropriate that national regulatory authorities take account of the views of end-users, consumers (including, in particular, disabled consumers)* [...]".

Finally, it should also be noted that the Roaming Regulation (Regulation (EC) No. 544/2009) mandates home providers to provide blind or partially-sighted customers with basic personalised pricing information automatically, by voice call, free of charge, if they so request [Article 6(1)(b)].

#### 4. IMPLEMENTATION OF THE USD AND OTHER REGULATIONS

#### 4.1 Transposition in the Member States of the provisions of the European regulatory framework relevant to end-users with disabilities

Regarding the implementation of the USD provisions, all respondents consider them to be duly transposed to their national framework, with national legislation/regulations including, in most cases, very similar or practically identical provisions<sup>5</sup>.

Considering the information provided by the respondent NRAs, nine countries (CY, CZ, DK, FI, FR, HU, LV, PT and SK) have transposed the accessibility provisions from the USD through legislative action, while four countries (IE, MT, SI and UK) have done so through a regulatory decision. Notwithstanding, most NRAs transposed the USD provisions through both legislative action and regulatory decisions (regulations, decisions, by-laws, administrative orders, resolutions and ordinances), in most cases with the regulatory measures detailing the legal provisions.

Fourteen out of 28 respondents (BG, CY, DK, FI, HU, LV, ME, MT, NL, NO, PT, RS, SI and SK), mentioned that the existing rules safeguarding users with disabilities are limited to the USO. A further 13 respondent NRAs (AT, BE, CZ, DE, EL, FR, HR, IE, IT, PL, RO, TR and

<sup>&</sup>lt;sup>5</sup> It shall be noted that the level of detail provided by the NRAs regarding this matter varied significantly – while some NRAs provided a detailed description of all the measures in place in their countries, others provided a more general overview. In this context, the figures provided in this section shall be considered non-exhaustive and merely illustrative, and are not directly comparable to other sections of the report.

UK) indicated that special measures apply to other service providers/services (though not necessarily extended Universal Service Obligations). In Sweden, the legal provisions regarding consumer protection are general and apply to all end-users. On the other hand, the government provides funding which can be used to procure electronic services for disabled end-users and end-users living in remote areas.

With respect to the measures in place for disabled end-users, the most commonly identified were the following:

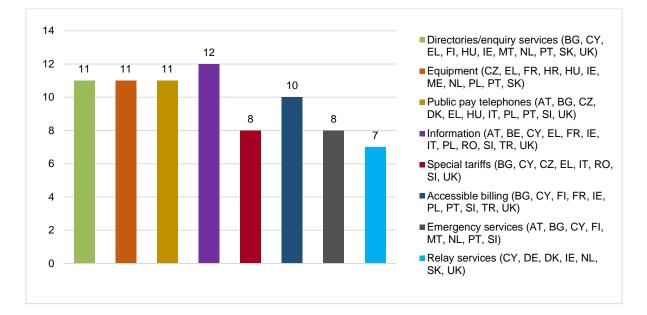
- Directory enquiry services and directories, e.g. free directory enquiry service for users with visual impairments (SK) or the possibility of making a certain number of free calls to directory enquiry services, particularly for blind and visually impaired users (EL, PT and UK); telephone directory enquiry service in a form appropriate to meet the needs of disabled end-users free of charge (CY); a call based enquiry service to end-users with visual impairments at a discounted price (0.67 €/call when the average price for calls is around 4–5 €/call) (FI); free directory enquiry service once certification of disability is provided by a registered medical practitioner or an agent (IE); directory enquiry service at the tariff for dialling a geographical number for visually impaired people (NL);
- 2. Equipment, e.g. amplifier phones which allow users to increase the volume of incoming speech (IE, PL and PT); call indicator light (IE and PT); special terminal equipment at cost oriented prices to people with hearing and vision difficulties (EL); textphones at a cost equivalent to standard prices (CY); obligation to lease or sell, if requested by a disabled end-user, specially equipped telecommunications terminal equipment for the price of standard telecommunications terminal equipment (SK); textphones for users with hearing impairments (SK); telephones with voice output and an application software that enables users with visual impairments to use telephony services (PL and SK); telephones with an enlarged keypad and special symbols (PL and SK); push button telephone sets with speed and automatic redial buttons allowing pre-programmed telephone numbers (typically the most called numbers) or last called telephone numbers to be dialled without having to reenter the telephone number (IE); hands free/loudspeaker phones (IE); inductive couplers which allow users with a hearing aid set to connect the set to their telephone in order to allow them to hear incoming speech clearly (IE); telephones which can help people with restricted vision to find other numbers more easily (IE); accessible devices, when the service provider usually provides devices (including devices for fixed Internet access service) (FR); special equipment available and paid for through the health care system (NL);

- Public pay telephones, e.g. appropriate number of public pay telephones accessible to disabled end-users (EL, HU, IT, PL, PT, SI and UK), specifically payphones adapted for wheelchair users (EL, PL, PT and UK) and accessible to blind people or people who have severe hearing impairment – public textphones upon request (EL);
- 4. Information, e.g. the obligation to make available free of charge, to any residential customer who is blind or whose vision is impaired, upon request, any contract in print large enough for such customer to read, Braille or electronic format appropriate to the reasonable needs of the customer (CY, PL and UK) or in a format that they can utilize (TR); the obligation to publish comparable, adequate and up-to-date information about the measures taken to ensure equivalence in access to publicly available telecommunications services for users with disabilities (AT and PL); accessibility of contracts and other documentation on products and services and development of a specific system of signs to identify answers for each disability (FR); the possibility for visual disabled end-users to interrogate the cost control service by means of an audio message, and the obligation for operators to provide to them, upon request and free of charge, the contracts, bills and promotional materials via email in a format compatible with most of the document reading programs (RO); obligation that the information regarding products and services is accessible for disabled end-users and includes information on the website, contractual information and information in respect of the complaints handling procedures and Code of Practice (IE); obligation to publish information on products and services for disabled users via a dedicated web page and brochure (BE).
- 5. **Special tariffs**, e.g. exemptions from paying monthly fees in fixed connections (IT); minimum of 50 free text messages per day (IT); 90 hours per month of free internet usage (if the offer is based on consumption), or with a 50% discount on the price of the offer (if it is a flat offer), regardless of the connection speed chosen by the customer (IT); price reduction for using basic telephone services (31,98 euros per month for calls) (EL); 50% discount on the monthly subscription for publicly available telephone services at a fixed location (SI); specific tariffs recommended by the NRA (RO); special tariff for text relay calls to reflect the extra time taken by these calls (UK); single discount for the installation (50% of the standard price) and monthly discounts on the subscription fee (fixed, mobile, Internet or bundle 40% with a maximum of  $\in$  8.4) and on communications (fixed, mobile or bundle  $\in 3.1$ ) (BE).
- 6. Accessible billing, e.g. Braille bills (CY, PL, PT, TR and UK) or bills in electronic format appropriate to the reasonable needs of the customer (CY, FI, FR, PL, SI and UK); the

obligation to provide bills free of charge in a medium properly accessible to disabled customers including Braille if requested (IE);

- 7. Emergency services, e.g. emergency calls using sign language (SI);
- 8. **Relay services**, e.g. text relay service (IE, SK and UK) or text and video relay (DE and NL).

### Figure 1 – Special measures for users with disabilities in relation to electronic communications



Some NRAs also mentioned other measures in place for improving disabled users' access to electronic communication services, such as:

- 1. Priority fault repair scheme (CY, RO and UK);
- Fixed destination line, enabling customers to make calls automatically to a specific destination he has defined (PT);
- A provision to prevent the loss of fixed telephone connection, for example as a result of unpaid bills (EL and UK);
- 4. Appointment of a nominee on behalf of the disabled end user (CY and UK);
- 5. Operator assistance and a telephone directory enquiry service using short code numbers, as well as call progress voice announcements in a form suitable for textphone users (CY);

- 6. Customer service in an accessible way for people with visual impairments (FI and RO);
- 7. The right to a broadband connection that enables video calls for people with a disability related to hearing or speaking (FI);
- 8. The right to a subscription that enables sending SMS for persons with disabilities related to hearing or speaking (FI);
- 9. Accessible complaint procedures (IE, RO and UK);
- 10. Accessible top-ups for pre-paid mobile telephone users (IE);
- 11. Accessible facility to test terminal equipment or appropriate returns policy (IE and RO);
- 12. Facility to register requirements (IE);
- 13. A rebate scheme whereby, as a result of the time taken to make a text telephone call, equality of payment for deaf text telephone users can be assured (IE and UK);
- 14. To maintain, operate, monitor and ensure its own compliance with a Code of Practice concerning the provision of services for people with disabilities and to periodically review it and, where appropriate, amend the Code of Practice in consultation with the National Disability Authority (NDA) and other representative bodies (IE).

## 4.2 Additional measures implemented with respect to end-users with disabilities regarding electronic communications

Of the 28 respondents, 10 (NRAs from BE, CY, DK, EL, FR, LV, NL, PT, RS and SI) informed that additional measures had not been implemented, meaning that in the remaining 18 countries (AT, BG, CZ, DE, FI, HR, HU, IE, IT, ME, MT, NO, PL, RO, SE, SK, TR and UK), various additional measures have been implemented to ensure equivalence of access and choice in respect to end-users with disabilities regarding electronic communications (See Figure 2).

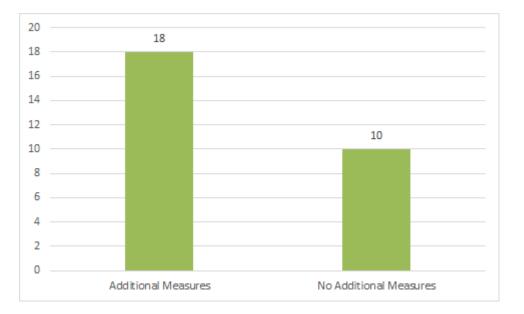


Figure 2 – Member States' additional measures for end users with disabilities

Member states who have chosen to implement additional measures to ensure equivalence of access and choice with respect to end-users with disabilities regarding electronic communications, have done so in various ways, as can be seen in Table 1.

Member State	Additional Measures - Responsibilities and Competencies
Austria (RTR)	Social tariffs are subsidised by the Austrian Ministry for Transport, Innovation and Technology.
Bulgaria (CRC)	<ul> <li>USPs must provide:</li> <li>Free advice on the technical characteristics of electronic communications terminal equipment and the availability of this equipment on the market;</li> <li>Embossed "PIP" sign of the "5" key on the public phones, location of the chip or indicating a sign of recognition for setting the direction of each phone card or other electronic payment card;</li> <li>Special phones and/or telephones, installed in the appropriate places in hospitals, sanatoriums, offices of the consumer organizations of people with disabilities etc., including accessibility of the devices by users in wheelchairs.</li> </ul>

 Table 1 – Additional measures taken by Member States

	CRC Regulates the following
	<ul> <li>CRC Regulates the following</li> <li>adopts normative administrative acts, by which sets the procedure of providing access to electronic communication services through the terrestrial digital radio broadcasting networks and for provision of electronic communication services, intended for persons with hearing and seeing difficulties;</li> <li>determines additional standards for service quality, for which have been developed parameters for assessment of the performance of the undertakings for provision of services to end consumers with disabilities;</li> <li>obliges undertakings providing public electronic communications networks and/or services to publish on their internet sites and to notify in an appropriate way their subscribers of products and services designed for disabled subscribers publish transparent, comparable, adequate and upto-date information on the quality of their services and on measures taken to ensure equivalence in access for disabled end-users;</li> <li>imposes on the undertakings, providing universal service, to offer to disabled users price packages, different from those, offered under normal commercial conditions;</li> <li>includes as a criterion at declaring a procedure for selecting an undertaking to provide the universal service the proposed provision and price for the electronic communication devices for people with hearing, vision and speech impairments.</li> </ul>
Croatia (HAKOM)	Hrvatski Telekom d.d. is obliged to provide the special retail package for socially vulnerable group of end users, which are often end-users disabilities.
Czech Republic (CTU)	CTU issued Measure of General Nature (No OOP/14/04.2012-5), laying down the service quality parameters to be measured and the content, form and manner of publishing information on the current prices, quality and conditions of the provision of publicly available electronic communications services and the measures to ensure equitable access for disabled users, and the quality assessment procedures.
Finland	Remote interpretation:

(FICORA)	A person with disabilities related to hearing or speaking has a right to minimum 180 hours of interpretation services (sign language, text interpretation, speech interpretation, and other forms of communication) yearly, free of charge. The interpretation can also be carried out through remote interpretation, in which case the user of the service contacts an interpreter in a call centre through a computer program. The third party can then be contacted by the interpreter through a phone call or he/she can be physically with the user and follow the interpretation from the screen. The authority responsible for organizing interpretation services is Kela, the Social Insurance Institution of Finland. If a customer wishes to utilize remote interpretation, Kela supplies them with the necessary terminal equipment, software and internet connection. Ficora has no competence regarding remote interpretation, apart from the possibility to assist Kela in getting a functioning internet connection to the customer's home through USO. The right to interpretation services is defined in the law on interpretation services for persons with disabilities (133/2010).
Germany (BNETZA)	In the German Telecommunications Act there is a differentiation between disabled end-users and not disabled end-users in section 45 paragraphs 1 to 2 and between hearing impaired and not hearing impaired persons in section 45 paragraph 3 TKG. The basic function of the relay service of section 45 paragraph 3 of the German Telecommunications Act enables hearing-impaired persons to make and to receive phone calls in fixed or mobile communication networks from hearing or hearing impaired persons. With the relay service operator ("Tess Relaydienste für hörgeschädigte Menschen GmbH") deaf and hearing-impaired persons have the opportunity to make emergency calls in the time from 8:00 to 23:00 o´clock from Monday to Sunday nationwide and without costs
Hungary (NMHH)	Article 39 of the Act CLXXXV of 2010 on Media Services and Mass Communication states that providers of audio-visual media services shall make efforts to gradually make their programmes accessible for people with hearing impairment. Besides, public and linear media service providers with SMP power are obliged to provide

	subtitling or sign interpreting for all public service announcement, political advertisements, news programmes, political programmes, programmes about disability issues and equal opportunities, cinematographic works, games, and programmes serving public service objectives (defined by Article 83 of the same Act).
Ireland (COMREG)	ComReg has issued a Decision Instrument that specifically directs Undertakings to implement disability awareness training to ensure that staff handling complaints are aware of the requirements of disabled end-users and have the skills to deal with the requirements.
Italy (AGCOM)	AGCOM has issued two regulations including specific obligations pertaining to customer service, service charters and quality. Resolution n. 79/09/CSP on customer call centre quality has among its aims that of ensuring telephone contact services accessibility to deaf users. Resolution no. 179/03/CSP on service charters and quality states that, apart from universal service obligations, operators shall inform users on any measure put in place to promote equality of access and of use of telecommunications services for disabled users, as well as to promote the overcoming of communication barriers.
Malta (MCA)	<ul> <li>Under MCA's decision "USO on Electronic Communications Services" the following are in place;</li> <li>Free directory enquiry services for visually impaired persons;</li> <li>'Telecare' type of service allowing easy access to emergency services This universal service includes the provision of a service referred to as 'Telecare' which is provided by means of a specialized device which allows easy access to emergency and other support services.</li> </ul>
	<ul> <li>MCA's decision on "Itemised Billing" requires that:</li> <li>1) All undertakings provide disabled subscribers to any post-paid telephony service/s with a detailed itemised bill in a medium (including media other than electronic and standard hard copy formats) the end-user can access.</li> </ul>

Montenegro (EKIP)	All operators offer special packages with lower process to end-users with disabilities. This is regulated with secondary law, and Agency monitors its implementation.
Norway (NKOM)	There are two other pieces of legislation concerning electronic communication for people with disabilities:
	<ul> <li>The Antidiscrimination and Accessibility Act of 2009 state that all services and goods rendered to the public must be universally designed. The act also specifies that concrete regulations should be developed in regard to each sector. Possible regulations of this type with regard to electronic communication are currently under consideration and if deemed necessary would be developed, implemented and monitored by Nkom.</li> <li>The National Insurance Act (§ 10-7) and the adhering regulations give provisions for interpretations services for the deaf and hard of hearing, including video interpreting services as well as video relay of telephone conversations.</li> </ul>
Poland (UKE)	From 10 of April 2015, new obligations that require more complex activities from providers aiming at effective and independent communication for deaf and hearing impaired end-users with staff in customer service.
	In April of 2016 the obligation of adaptation of Internet websites by service providers according to WCAG 2.0. standard shall enter into force.
Romania (ANCOM)	ANCOM established a set of measures meant to ensure the equivalent access of disabled end-user to (ANCOM president's Decision no. 160/2015). ANCOM established some general facilities for all disabled end-users as following:
	<ul> <li>The right to test the terminal equipment before buying or to return it after buying;</li> <li>Access to information regarding the contractual conditions and products via a dedicated section on the web page of the operators;</li> </ul>

	<ul> <li>The right of the end-users to complain to the operator by themselves or by a designated third party;</li> <li>Priority access to fault repair services.</li> </ul> For the speech and/or hearing impaired users, operators should provide access to customer relation services in tailored manners, including via SMS. In the case of visual disabled end-users, they should have the possibility to interrogate the cost control service by means of an audio message, and the operators should provide to them, upon request and free of charge, the contracts, bills and promotional materials via email in a format compatible with most of the document reading programs.
	Also, ANCOM established a set of packages of electronic communication services (fixed, mobile telephony and Internet access) especially designed for the use of disabled end-users in order to ensure the access in equivalent conditions with those enjoyed by the majority of end-users. The packages contain a minimum of traffic or minutes included and specially designed to respond to disabled end-users' needs. The prices for these packages are recommended by ANCOM.
Slovak Republic (RU)	<ul> <li>In the General Authorization No. 1/2014 to provide electronic communications networks or electronic communications services the undertaking providing a public network or public service is obliged to publish: <ul> <li>Information for end-users on the quality of services and measures taken to ensure equal access to services for end-users with disabilities; this information is required to be provided by the undertaking to RU at the RU's request before their publication.</li> <li>Standard prices with information on the services provided and all service price items, including all kinds of user fees for services and service fees, details of standard discounts applied, special and targeted tariff schemes, which are the tariffs intended for disabled users or users with special social needs, fees or costs of a subscriber associated with the terminal equipment, direct fees associated with transferring of numbers or other identifiers.</li> </ul> </li> </ul>

	Free of charge information on cost control for provided public service for disabled users via SMS and voice message, or by electronic mail in case
	of the Internet access service.
Sweden	Sweden has ambitious national strategies and public funding of certain electronic
(PTS)	services for disabled people. ICT-services are defined as crucial to create inclusion in society for disabled users. Crucial services within areas like telephony, the internet and the postal sector should be available to everyone.
	1. PTS procures communication services for disabled people – all free of charge for the end-user:
	<ul> <li>Relay service for video telephony – Bildtelfoni.net (on-line video interpretation);</li> </ul>
	Free directory enquiries 118400;
	Relay service for text telephony – Texttelefoni.se;      Teletel on interpretation convice for people with vision one only only on the service of the s
	<ul> <li>Teletal – an interpretation service for people with voice- speech- and language difficulties, people with visual or cognitive impairment or mobility impaired;</li> </ul>
	(Free dispatch of literature and papers in Braille);
	• (Postal services for elderly and disabled people in rural areas).
	2. PTS finance Development projects - Competition for innovative solutions (for disabled people):
	PTS started the competition 'Innovation for all' in 2010;
	The competition is held twice a year;
	• Through the competition, universities, higher learning institutes, research
	institutes and companies have a chance to apply for financing of service
	and product development as well as studies in the field of electronic communication;
	• The projects should aim to increase digital participation for persons with some form of disability:
	<ul> <li>Each winner is awarded a maximum of 200 000 euro during a period of 18 months;</li> </ul>

	<ul> <li>PTS is looking for proposals for smart communication solutions for people with disabilities;</li> </ul>
	• 'Design for All'- PTS is also looking in particular for proposals for communications solutions that can be used by as many people as possible regardless of disability.
Turkey (BTK)	<ul> <li>According to Board Decision -No: 2012/DK-14/206- mobile operators shall provide disabled end users the following rights upon request:</li> <li>Providing subscription contracts and bills in Braille or as voiced announcement to visually impaired end users;</li> <li>Providing voicemail to visually impaired end users in the event of notifying consumers with SMS regarding any change in the terms of tariffs and service provision;</li> <li>-Providing voicemail regarding invoice and quota information;</li> <li>-Sending voicemail regarding free of charge if "the person you have called is hearing-impaired";</li> <li>-Providing SMS-only package services.</li> </ul>
	<ul> <li>Two Board Decisions (Dec. No: 2014/DK-THD/25, dated 06.01.2014 and Dec. No: 2014/DK-THD/372, dated 21.07.2014) have been issued in 2014 regarding disabled users and several obligations have been imposed on the operators through those decisions. According to mentioned Board Decisions GSM/IMT-2000/UMTS operators, fixed telephony operators, Internet service providers and satellite platform service providers are obliged to:</li> <li>Provide tariff offerings which include economic advantages for disabled consumers;</li> <li>Make their web sites accessible for persons with disabilities (applicable to all mobile operators and fixed telephony operators, internet service providers and satellite platform service providers service providers by creating a specialized section in their web sites which includes all services designed specifically for disabled consumers;</li> </ul>

• - Send an informative SMS to all subscribers which includes the link of the
specialized section of their web sites (applicable to all mobile operators and
fixed telephony operators, internet service providers and satellite platform
service providers which have more than 200.000 subscribers), Additionally
GSM/IMT-2000/UMTS operators are obliged to;
Provide location information for disabled consumers free of charge;
• Make the disabled consumers' location information available free of charge
for at least one additional number if requested by the disabled person;
Provide data-only plans/packages/tariffs for disabled subscribers.
Since 2014, text relay users have been able to access the service via an app (application) for PC, tablet or smartphone. This service now allows for parallel speech, hearing and text, with the ability to interject for the first time, and without the need to say or type 'go ahead' after each part of a conversation. The conversation flows much more quickly and naturally as a result.
It is no longer necessary to have a textphone to use the relay service. 'Next generation' text relay enables easier access to the service on the move on devices such as smartphones, tablet computers and laptops. (The service can still be used from textphones, although to gain access to all the enhanced features, it is necessary to use the app.)
Since 2011, Ofcom has required the provision of emergency SMS, allowing people with hearing or speech impairments to contact the emergency services, and to receive replies, via SMS.
General disability law (the Equality Act) applies to communications providers. Ofcom does not enforce the Equality Act, and cases are heard in the county courts. There are no telecoms licences in the UK, as we have an authorisation regime. Ofcom has a general duty under the Communications Act to take account of the needs of disabled people when making and implementing policy. We also have duties arising out of the Directive on Universal Service and Users' Rights.

#### 5. THE EQUIVALENCE CONCEPT

NRAs were asked to select up to five factors that they considered the most important for equivalent access from the following list:

- 1. Availability of accessible terminal equipment;
- 2. Price;
- 3. Additional set-up requirements;
- 4. Availability of accessible software applications;
- 5. Accessibility of customer support services;
- 6. Accessible complaint methods;
- 7. Quality and functionality of the service;
- 8. Accessible commercial and billing information;
- 9. Other.

The figure below illustrates how many NRAs selected each of these factors as one of the most important for assessing equivalent access.

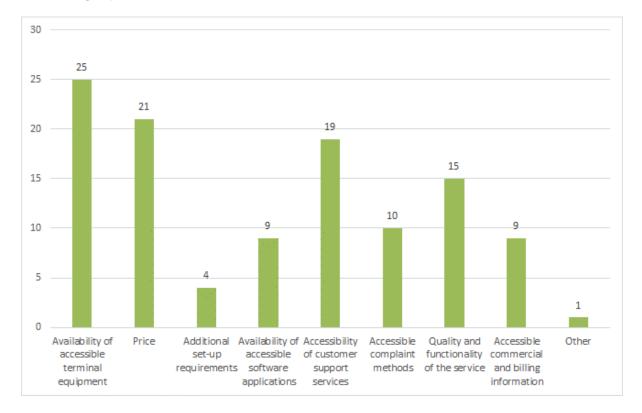


Figure 3 – Number of NRAs that selected each factor as one of the most important for assessing equivalent access

The most commonly selected factor was the 'Availability of accessible terminal equipment', which was chosen by 25 of the 27 respondents that answered to this issue (AT, BE, BG, CZ, CY, DE, EL, IE, FI, FR, HR, IT, HU, ME, MT, NL, NO, PL, PT, RO, SI, SK, SE, TR and UK). A majority of the NRAs in the sample also selected 'Price' and 'Accessibility of customer support services' (21<sup>6</sup> and 19<sup>7</sup> of the 27 respondents respectively). There appeared to be less consensus about the importance of the other factors (highlighted by circa 4-15 NRAs)<sup>8</sup>.

BIPT (BE) highlighted the importance of clear communication to end-users with disabilities about the ways in which they could obtain equivalent access, since end-users and their organisations may not otherwise be aware about the existing opportunities available to them.

One NRA (ComReg) also suggested 'Other' factors that they considered important and provided additional comments, suggesting that it was important to have the ability to test terminal equipment or return it if a customer discovered that it was not suitable. ComReg also

<sup>&</sup>lt;sup>6</sup> BE, BG, CZ, DK, EL, FR, HR, IT, CY, LV, HU, ME, MT, NL, PT, RO, SI, SK, SE, TR and UK.

<sup>&</sup>lt;sup>7</sup> AT, CY, DE, DK, IE, FI, FR, IT, HU, ME, NL, NO, PL, PT, RO, SI, SK, SE and TR.

<sup>&</sup>lt;sup>8</sup> Additional set-up requirements, Availability of accessibile sofware applications, Accessible complaint methods, Quality and functionality of the service, Accessible commercial and billing information.

suggested that, when using a pre-pay service, it could be important for a user to have an accessible way to top-up their credit. ComReg also pointed out that 'Accessible complaint methods' could be seen as a subset of 'Accessibility of customer support services'.<sup>9</sup>

These results may give us some indication of the issues that are particularly important for equivalent access for disabled end-users – for instance, accessible terminal equipment, price and accessible customer service. However, the results do not necessarily indicate the degree to which any one factor could be more important than another. Hence, all of the listed factors could contribute to ensuring equivalent access.

<sup>&</sup>lt;sup>9</sup> All but one NRA that selected 'Accessible complaint methods' also selected 'Accessibility of customer support services' as one of the most important factors. Therefore this interpretation may not have significantly affected the number of NRAs that selected 'Accessibility of customer support services', but it may have had an impact on the way that NRAs' five selections were distributed across the other factors.

#### 6. ASSESSING EQUIVALENT CHOICE

NRAs were asked to select up to three factors that they considered most important for equivalent choice from the following list:

- 1. Availability of electronic communications service providers with accessible services;
- 2. Availability of multiple accessible services/bundles;
- 3. Availability of information about accessible services;
- 4. Affordability;
- 5. Contract terms that allow a reasonable choice;
- 6. Accessible switching procedures;
- 7. Other.

As illustrated in the figure below, the most commonly selected factors were 'Availability of electronic communications service providers with accessible services', 'Availability of information about accessible services' and 'Affordability' – these were selected by 20<sup>10</sup>, 21<sup>11</sup> and 17<sup>12</sup> of the 27 respondents respectively. The remaining factors listed in the question were selected by fewer of the respondents (3-8 NRAs).

None of the respondents suggested 'Other' factors that could be important for assessing equivalent choice, although ComReg (IE) pointed out that accessible switching could be seen as a subset of both accessible information and accessible customer services.

<sup>&</sup>lt;sup>10</sup> AT, BG, CZ, DE, DK, EL, IE, FR, HR, HU, IT, ME, NL, PL, PT, RO, SI, SK, TR and UK.

 $<sup>^{\</sup>rm 11}$  BE, BG, CY, CZ, DE, DK, FI, FR, HR, HU, IE, IT, LV, NL, NO, PL, PT, SE, SK, TR and UK.

<sup>&</sup>lt;sup>12</sup> BE, BG, CY, CZ, DK, EL, HU, LV, ME, MT, NO, PT, RO, SE, SI, SK and TR.

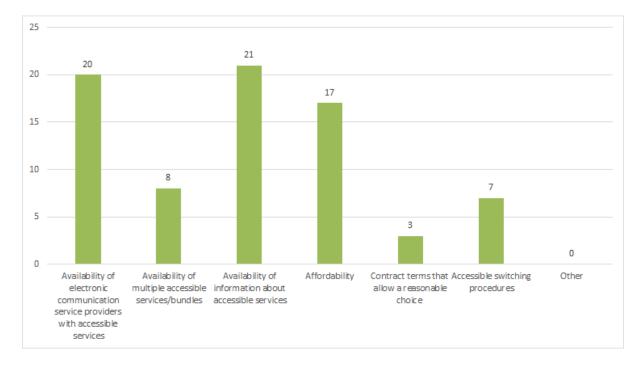


Figure 4 – Number of NRAs that selected each factor as one of the most important for assessing equivalent choice

The results indicate that NRAs consider that in order to achieve equivalent choice for disabled end-users, it is particularly important that they are able to choose between multiple service providers offering accessible services, that information about such services is made available to them and that the services are affordable.

#### 7. ENCOURAGING EQUIVALENT ACCESS AND CHOICE

## 7.1 Possible extension of obligations currently in place under USO for end-user with disabilities to all service providers

Concerning the obligations for end-users with disabilities currently in place under USOs or those could be imposed on providers under US mechanisms, seven out of 24 respondents (RO, FR, BE, DE, IE, UK<sup>13</sup>, and SE<sup>14</sup>) underlined that such obligations are already partially imposed to all service providers. Eight NRAs (IT, SI, CZ<sup>15</sup>, ME, FI, HR, PL and HU) have fully extended the obligations or think that they should be extended to all service providers, while three NRAs seem to consider that it may depend of national context (MT, NO<sup>16</sup> and CY). Finally, six NRAs (NL, PT, DK, EL, AT<sup>17</sup> and LV<sup>18</sup>) consider that there is no need to extend such obligations to all service providers (see Figure 5).

<sup>&</sup>lt;sup>13</sup> In the UK, the obligations deriving from Article 7 have already been extended to all PATS providers and the costs of the services lie where they fall, i.e. each provider pays the cost of its own customers' use of services for disabled people.

<sup>&</sup>lt;sup>14</sup> PTS is now investigating what this provision means and has formed a working group consisting of the disability organizations for consultation.

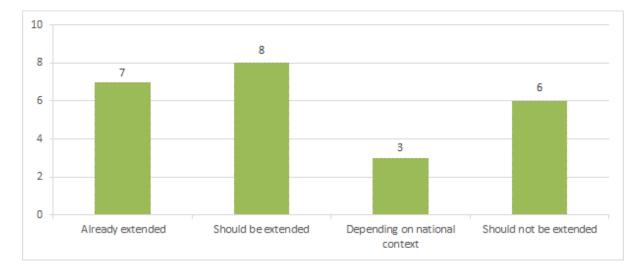
<sup>&</sup>lt;sup>15</sup> CTU underlined that it is only concerning the availability of accessible terminal equipment.

<sup>&</sup>lt;sup>16</sup> Norway is currently reviewing the entire USO regime. All these aspects are addressed in this review.

<sup>&</sup>lt;sup>17</sup> RTR underlined that in Austria operators offer equivalence on a commercial basis, as an important part of their CSR strategy.

<sup>&</sup>lt;sup>18</sup> SPRK considers that this services should be provided in a free market environment or as a part of USO but not as the result of an extended obligation.

Figure 5 – Possible extension of obligations for end-user with disabilities to all service providers



#### 7.2 Financing of extended obligations

Regarding financial compensation of the obligation, seven out of eight respondents who answered to this issue of the question consider that there should not be or that there isn't any specific funding to accompany extended obligations (IT, FR, DE, BG, DK, EL and FI) while one NRA mentioned different funding possibilities (NO<sup>19</sup>) (see Figure 6).

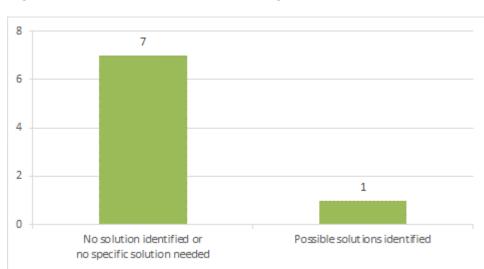


Figure 6 – How could an extended obligation be financed?

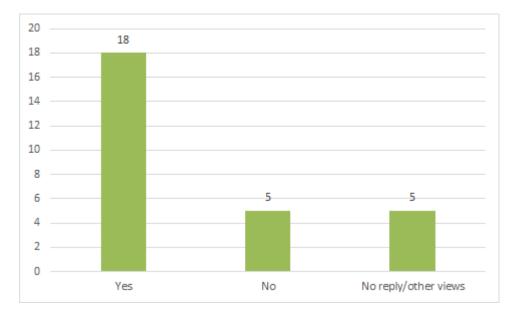
<sup>&</sup>lt;sup>19</sup> In its review of USO, Norway considers that current regulation allow for various funding mechanisms.

#### 7.3 Role of NRAs in encouraging the availability of terminal

#### equipment

**Eighteen out of 28 respondents do consider it appropriate that NRAs have a role** (NRAs from AT, BE, CY, CZ, FI, FR, EL, HU, IE, ME, NL, NO, UK, PL, PT, RO, RS and SE) (see Figure 7).

Figure 7 – Do you consider it appropriate that NRAs have a role in encouraging the availability of terminal equipment, in accordance with art. 23a(2)?



In CY, the regulator may, on request, consider extending the obligation to provide available terminal equipment to other providers than the USP.

In CTU's view, the Czech Republic NRA is one of the relevant authorities of a Member State, and therefore should participate in encouraging the availability of terminal equipment. CTU has issued a decision that states an obligation to lease or sell specially adapted telecommunication terminal equipment at the price of standard telecommunication equipment to persons with disabilities. For the future, CTU considers that the availability of specially modified terminal equipment should be ensured on a commercial basis, without the enforcement of a universal service obligation.

In EL, the USP is obliged to offer terminal equipment at cost-oriented prices. Other operators do not have the same obligation as of today.

In FI, terminal equipment, like mobile phones and computers, are sold to a large extent by other companies than providers of communication services. The possibility to set binding obligations on all vendors would there, in Ficora's opinion, be implausible. Ficora further notes

that means to encourage availability may include informing end-users and vendors about accessibility issues and by facilitating cooperation between vendors and misc. pressure groups.

ARCEP notes that the role of the NRA differs, depending on the way operators are implicated in the design and the production of terminal equipment. The NRA are for instance generally not involved in the conception of devices regarding mobile phones and smartphones. On the other hand, the NRA are generally involved regarding terminals for fixed internet access services.

NMHH has, and will continue to organise workshops to bridge the information gaps between disabled end-users and service providers, to ensure necessary knowledge, training and the material possibilities that modern technology have to offer. NMHH further notes that common standard practices should be preferred ahead of top-down regulation, if possible.

In IE, ComReg envisages a limited role, such as making information about accessible equipment available to end-users. The regulator has ensured that members of ComReg's Disability forum are aware of GARI<sup>20</sup>.

In BE, PT and RO the NRAs also provide a link on their websites to GARI (see footnote 20)

In NO, people with disabilities receive help from the National Welfare and Labour Administration to choose terminal equipment in other to meet their needs and requirements. Nkom is also considering launching a Norwegian version of GARI.

ME has adopted secondary legislation under which operators are obliged to provide terminal equipment.

ACM considers it appropriate to have a role if the market does not make the necessary terminal equipment (or software) available, preferably together with the Ministry of Health.

Of com noted that its role does not provide it with any powers in this regard, but sets the scope for it to work in this area (e.g. to undertake research, hold seminars and publish information).

In PL, the obligation of offering terminal equipment is imposed. UKE monitors compliance.

ANCOM notes that the current provisions of article 23a may impose transparency obligations on the providers in order to offer necessary services and functions for disabled end-users.

In RS, RATEL finds it appropriate to have a role, but has not developed any actions to this effect thus far.

<sup>&</sup>lt;sup>20</sup> GARI provides useful information about accessible equipment – <u>www.gari.info</u>

In PT, the USP is – in accordance with the implementation of article 23a – obliged to provide, free-of-charge, terminal equipment to disabled end-users.

In SE, PTS participates in both the national and standardization work for the benefit of persons with disabilities. PTS has, for instance participated in the Swedish coordination of mandate 376. Mandate 376 aims to create a European standard that will harmonize and facilitate the procurement of information and communication accessible to people with disabilities. PTS focuses on standards and guidelines for ICT, including broad functionality regarding accessibility and usability.

**Of the 28 respondents, 5 do not consider it appropriate that NRAs have a role (**BG, HR, LV, SI and TR). The respondents did not provide an explanation for or comment on their position.

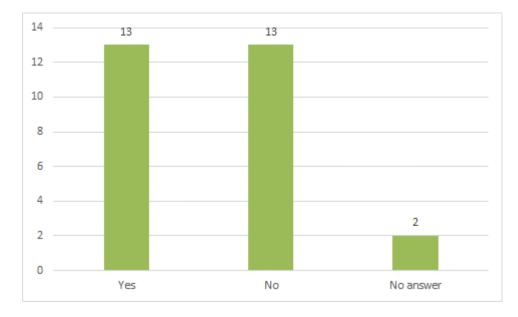
Also, 5 out of 28 respondents answered neither "yes" nor "no" with regard to the appropriateness of the NRA role with regard to encouraging the availability of terminal equipment (DK, GR, IT, MT and SK). Some viewpoints include the following:

- a) BNETZA reports that there are no special provisions regarding terminal equipment, and that it is unable to mandate undertakings to provide relevant terminal equipment as part of the standard services.
- b) AGCOM notes that article 23a doesn't clarify NRAs role, because it refers to Member States. AGCOM reports that a possible role for NRAs might be that of boosting the diffusion and the circulation of information on accessible equipment. It is not clear as to whether or not NRAs have a role in its implementation.
- c) MCA responded that article 23a of the USD refers to the Member States, not to NRAs. Therefore, in MCA's view, the role of encouraging availability of terminal equipment is left up to the discretion of each Member State.

### 7.4 Subsidies for electronic communications services, features or terminal equipment suitable for disabled end-users

Thirteen out of 28 respondents do have subsidies for electronic communications services, features or terminal equipment available for disabled end-users in their country (AT, BE, BG, CY, CZ, FI, DE, IT, MT, NO, NL, SE and the UK) (see Figure 8).

Figure 8 – Are there any subsidies available in your country for electronic communications services, features or terminal equipment suitable for disabled end-users?



In AT there are social tariffs specifically directed at subsidies for people in need, offered by all relevant providers (both fixed and mobile). There is a contract between the Ministry and each of the providers regarding an hour of voice telephony or Internet usage, free-of-charge to the person in need, along with other tariffs, given that certain criteria are met.

In BE, the social tariff is funded by a sectorial fund (in case of unfair burden). Disabled endusers may apply for subsidies defined for each individual region.

In BG, disabled citizens receive monthly additions for social integration, according to their individual needs. In terms of supply, there is no mechanism for funding of terminal equipment suitable for disabled users.

In CY, public funds are available through social services.

In CZ, entitled persons are provided with benefits to special aid, that being persons with severe locomotive system impairments or severe visual impairment or severe hearing impairment. National law also defines financial conditions regarding the amount of benefits.

In DE, the undertakings are charged a defined fee in case they're unable to offer working places for disabled people (€150-260 per month/place). The fee is then earmarked to promote the participation of disabled people in working life (e.g. terminal equipment, software, etc.).

In FI, software and terminal equipment as well as a suitable internet connection necessary for remote interpretation are publicly funded and free-of-charge for those disabled end-users who

are entitled to interpretation services and have chosen to use remote interpretation. Local municipalities are obliged to provide necessary aid and equipment to persons with disabilities.

IT has a number of publically funded subsidies, e.g. reduced VAT rate, reduced tax, and freeof-charge telecom devices for the deaf.

In MT, the USP is required to provide reduced fixed telephony tariff options, in order to render an affordable universal service to users with low incomes and/or special social needs.

In NO, the USP provides a discount scheme for text telephony users.

In NL, the Dutch health insurance scheme covers medical devices for disabled people. E.g. the costs of total conversation software.

In the UK, equipment, such as textphones, has historically been funded by social services. However, it is now possible to use the relay service on mainstream equipment, reducing the need for public subsidy. In the workplace, the 'Access to Work' scheme can help to fund the cost of equipment or alterations to existing equipment needed in the workplace, for example, accessible phones. At home, disabled people are entitled to a community care assessment from their social services department, and social services can provide equipment such as accessible mobile phones - increasingly, social services are providing direct payments so that people can buy equipment of their choosing. Government guidance says that local authorities should try to complete assessments within 28 days. The law sets out in general what social services departments must provide, but local policies and resources will influence the services that are available locally. Local authorities cannot refuse to assess the needs of individuals if they are disabled and, if they are assessed as needing a service. Disabled people buying specialist equipment (e.g. an amplified phone) for their own use can have the VAT (sales tax) rebated.

In SE, PTS procures (through public funding) communication services for disabled users, all free of charge. According to special terminal equipment for disabled people, PTS note that there are other institutions handling these issues, e.g. the Country Councils and the National Employment Agency.

**13 out of 28 respondents** do not have subsidies available for disabled end-users (EL, FR, HR, HU, IE, LV, ME, PL, PT<sup>21</sup>, RO, RS, SI and TR).

<sup>&</sup>lt;sup>21</sup> PT (ANACOM) did check the "no" box on this question. They did however add: "Although there are not subsidies per se, in the scope of the universal service end-users with disabilities are entitled to free-of-charge specific terminal equipment. The universal service provider is compensated for the provision of the USO. The

**2 out of 28 respondents** have answered neither "yes" nor "no" (DK and SK). In Denmark, such subsidies are dealt with by the Social Security Administration.

# 7.5 Special retail packages available for electronic communications services, features or terminal equipment suitable for disabled end-users

Regarding the special retail packages for electronic communications services available for disabled end-users, in 20 of the respondent countries (AT, BG, CY, DK, EL, FI, FR, HR, HU, IE, IT, LV, ME, MT, PL, RO, RS, SI, TR and UK) there are some specific facilities available in the market whether as a part of the USO, or resulting from obligations outside the universal service or as commercial offers. In seven other respondent countries (BE, CZ, DE, NL, NO, PT and SE) these kind of facilities are not offered at all, whilst SK did not provide any answer regarding this issue (see Figure 9).



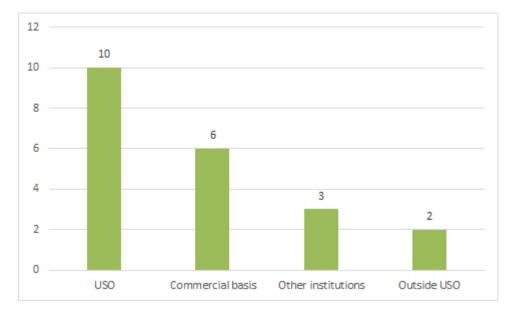


Among the countries where there are special retail packages for disabled end-users, three countries (IT, RO and UK) imposed obligations on the providers outside the USO (in the case of IT and RO, imposing these obligations before art. 23a of the USD entered into force and in the case of the UK, imposing the obligations on all telecoms providers through General Conditions), 10 countries (AT, BG, CY, DK, EL, HR, IT, LV, ME and RS) imposed obligations

universal service provider of directory enquiry services also has the obligation to make available an offer to blind and visually impaired end-users that consists in allowing them to make 20 calls per month free of charge to the enquiry service number. Currently this offer is supplied by way of offering a virtual calling card to those users."

under the Universal Service provisions. In six countries (FR, HU, IT, PL, SI, TR) some special packages for disabled end-users are made available as commercial offers, whilst in three countries (FI, IE and MT) other institutions have been involved in negotiations resulting in special packages being made available from electronic communication providers (see Figure 10).

Figure 10 – Distribution of countries which have available for disabled end-users specific retail packages for services taking into account the source of implementation of these facilities



Regarding the special terminal equipment made available to disabled end-users by providers, no NRA has reported measures regarding obligations imposed on providers related to this issue as a USO nor as a general obligation.

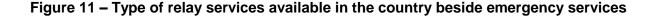
## 7.6 Text and video relay services

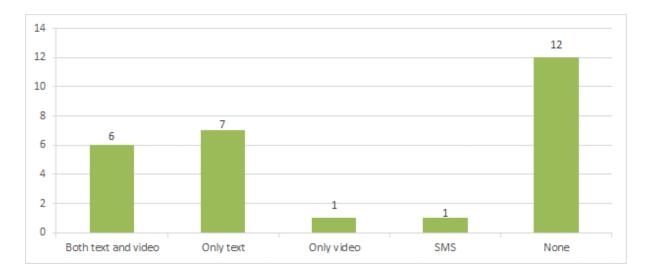
Relay services can be provided to hearing impaired people in order to help them to have a real time conversation via their telephony services. Regarding the implementation of such services, six out of 25 respondents to this question (NL, DE, HR, UK, NO and SE<sup>22</sup>) identified that both video and text relay services were available, seven NRAs identified that only text relay services were available (IT<sup>23</sup>, BE, IE, CY, CZ, DK and FI), One NRA identified that a

<sup>&</sup>lt;sup>22</sup> PTS also identified an interpretation service for people with voice- speech- and language difficulties, people with visual or cognitive impairment or mobility impairment.

<sup>&</sup>lt;sup>23</sup> Depending on the region as it is provided on a local basis by ENS (*Ente Nazionale Sordi*, a National association representing deaf people).

video relay service was available (PL<sup>24</sup>), one NRA identified a SMS relay service (SI). Finally 12 NRAs determined that besides emergency calls no relay service solution was actually in place (AT, RO, FR<sup>25</sup>, TR, BG, EL, ME, MT, HU, RS, SK and LV) (see Figure 11).





Among the 15 NRAs which identified relay services, five (CY,NL, IE, DK and HR) indicated that the provision of relay service was through the USO, one (BE) indicated that it was provided under governmental policy, two (NO<sup>26</sup> and SE<sup>27</sup>) specified that it was a mixed solution, another three (DE, UK and PL) indicated that it was provided on the basis of a symmetric obligation applying across telecoms service providers, and four NRAs (IT, SI, CZ and FI) underlined that it was provided on a voluntary basis (see Figure 12)

<sup>&</sup>lt;sup>24</sup> UKE indicated that this service is only available for customer services.

<sup>&</sup>lt;sup>25</sup> ARCEP indicated that an experimentation took place in 2014-2015 on both text and video relay services, a generalized solution should be implemented soon.

<sup>&</sup>lt;sup>26</sup> NKOM indicated that text relay service is provided under USO while video relay service is provided by the government.

<sup>&</sup>lt;sup>27</sup> PTS indicated that text relay is provided by a private actor, while video relay service is provided by Örebro County Council.

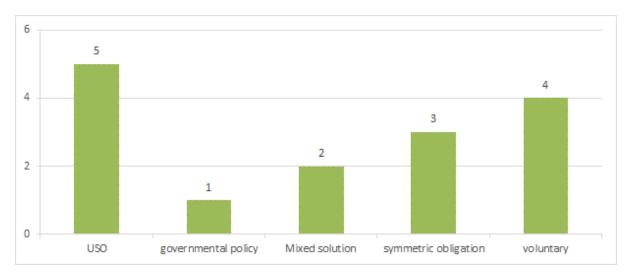


Figure 12 – Basis on which relay service is provided

# 7.7 Accessibility of information regarding products

In many countries, there are no formally established guidelines regarding the form according to which information (especially concerning pricing and contracts) made available by service providers to inform end-users with disabilities of details of products should be provided (14 out of 27 respondents who answered to this issue) (see Figure 13)

A number of NRAs that mention having guidelines refer to existing regulatory decisions on this matter.

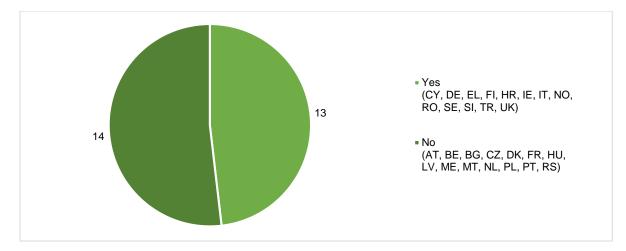


Figure 13 – Guidelines regarding information about product details

## Country cases

## Finland

"Ficora has issued a recommendation in 2014 that service providers should take into account the W3C Web Content Accessibility Guidelines (WCAG 2.0) on their websites and via their electronic customer service. According to the recommendation, websites should fill the criteria at an AA-level. This includes information concerning pricing and contracts made available on websites.

The recommendation is part of the Explanations and applications of Regulation M 58 on the quality and universal service of communications networks and services. Due to it being a recommendation, it is not legally binding."

### Italy

"AGCOM has included some provisions pertaining to accessibility of information in:

- Resolution no. 514/07/CONS, which provides that operators, with the cooperation of at least one association representing people with disabilities, shall give wide publicity to specific measures and offers for disabled end-users, using forms of communications appropriate in order to make users fully informed;

- Resolution n. 79/09/CSP, on customer call centre quality, which has among its aims that of ensuring telephone contact services accessibility to deaf users. Article 7 of this resolution states that operators shall ensure that inbound telephone contact services are accessible to deaf people, using assistive technology and/or special configurations. Moreover, operators shall ensure free access to services through the following systems:

- Chat and text message, with a response time that is equivalent to that provided for telephone calls;

- Fax and e-mail, with an immediate response or, if deferred, within a maximum time of 2 hours.

- Resolution no. 179/03/CSP, on service charters and quality, which provides that, apart from universal service obligations, operators shall inform users on any measure put in place in order to promote equality of access and of use of telecommunication services for users with disabilities, as well as to promote the overcoming of communication barriers".

## Turkey

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"According to Board Decision Dec. No: 2014/DK-THD/25, dated 06.01.2014- operators, fixed telephony operators, internet service providers and satellite platform service providers are obliged to make their web sites accessible for persons with disabilities (applicable to all mobile operators and fixed telephony operators, internet service providers and satellite platform service providers which have more than 200.000 subscribers) and facilitate to access information for disabled consumers by creating a specialized section in their web sites which includes all services designed specifically for disabled consumers."

## Slovenia

*"With Regulation. Terms and conditions must be accessible in voice and video record; bills for end-users with visual disability must be available in voice record."* 

### Romania

"(...) ANCOM established a set of measures meant to ensure the equivalent access of disabled people to telephony and internet access services resulting in the ANCOM president's Decision no. 160/2015. According to this decision, ANCOM established some general facilities for all disabled end-users as following: (...)

-access to information regarding the contractual conditions and products via a dedicated section on the web page of the operators; (...)

For the speech and/or hearing impaired users, operators should provide access to customer relation services in tailored manners, including via SMS.

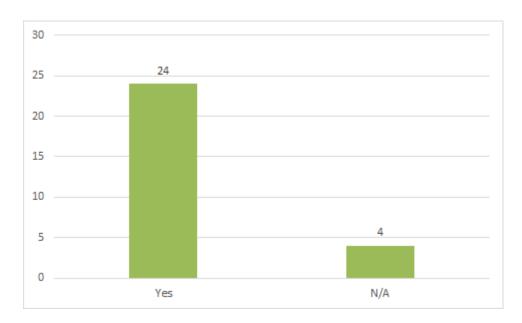
In the case of visual disabled end-users, they should have the possibility to interrogate the cost control service by means of an audio message, and the operators should provide to them, upon request and free of charge, the contracts, bills and promotional materials via email in a format compatible with most of the document reading programs. (...)"

#### UK

There are regulatory requirements on all communications providers to provide bills and contractual information for publicly available telephone services. Examples of acceptable formats include large print, braille or electronic format appropriate to the reasonable needs of the Subscriber.

# 7.8 Consultation procedures in the framework of disability issues

Of the 28 respondents, 24 indicated how they gain input from disabled end-users or groups (NRAs from AT, BE, BG, CY, CZ, DE, EL, FI, FR, HR, HU, IE, IT, ME, MT, NL, NO, PL, PT, RO, RS, SE, TR and UK) (see Figure 14).





These 24 NRAs stated they interact with their stakeholders in a variety of ways in order to gain input from disabled end-users including individuals when trying to ensure equivalence of access and choice respect to end-users with disabilities (See Figure 5 and Table 2).

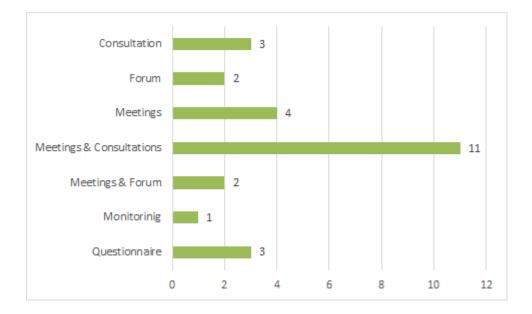


Figure 15 – Methods used for consulting disability groups

Country	How	Responses to Question 11
Austria (RTR)	Meetings & Consultations	RTR has no setting where disabled end-users are consulted. However, the Ministry responsible for telecom and USO as well as operators e.g. A1 Telekom consult with disabled end-user organisations regularly.
Belgium (BIPT)	Questionnaire	No, fora or discussion groups but a questionnaire has been send out to organized pressure groups by the NRA.
Bulgaria (CRC)	Meetings & Consultations	CRC, including to people with disabilities and their organizations: carries out public discussions, consultations and inquiries in cases and following the procedures, provided in ECA; gives mandatory instructions to the undertakings providing electronic communication services about meeting the requirements for clear, comprehensive and easily accessible form of the General Conditions of contract with end-users
Cyrpus (OCECPR)	Meetings & Consultations	In Public Consultations, relevant to the obligations of the USP, the associations representing disabled users are invited to participate.
Czech Republic (CTU)	Meetings & Consultations	Under conditions of the public consultation, CTU consults the interested parties including not only disabled people associations but also individuals about its intention to impose or lift the relevant individual obligation. The notification about the public consultation contains information about services to be subject to the universal service obligation, justification of the intention to impose the universal service obligation and the conditions CTU intends to set out under the universal service obligation.
Croatia (HAKOM)	Meetings & Consultations	We consult with association for persons with disabilities.

# Table 2 – Summary of responses to Question 11

Finland (FICORA)	Meetings & Consultations	FICORA initiated a cooperation network with organizations that represent end-users with disabilities related to hearing or speaking in the beginning of 2014. Ficora has organized meetings and consulted the organizations through e-mail correspondence. The topics discussed are mainly related to the forms of universal service allocated to persons with disabilities, especially how to inform end- users about these rights.
France (ARCEP)	Meetings	ARCEP is meeting representative organizations during meetings organised within specific projects, like the experimentation of a relay service or a yearly work done by the French telecom federation.
Germany (BNETZA)	Consultation	Regularly the BNetzA consults the service provider and disabled end user organisations which needs they have and to what extend the relay service has to be offered.
Greece (EETT)	Meetings & Consultations	Meetings are organised with representatives of certain associations of people with disabilities in order to consult with them. Furthermore, through public consultations, EETT receives the view of associations of people with disabilities and individuals on relevant matters. The consumer department of EETT also receives requests/ complaints/ comments from people with disabilities.
Hungary (NMHH)	Questionnaire	The Hungarian authority conducted two representative surveys among disabled people in 2013 and 2014. These surveys are not nationally representative but representative in the sense that they cover sufficient number of disabled people with different backgrounds (age, gender, type of settlement, type of disability) to ensure that the most possible subgroups of disabled people are asked and have their voice and opinions heard. Respondents of these surveys were blind, partially sighted people, deaf, and people with serious auditory difficulties, people with physical disabilities, and people with mild or moderate cognitive disabilities. Besides these, the Hungarian Authority has organised (and plans to organise more) stakeholder workshops on accessibility of communication services

		in order to deepen our knowledge of the needs of consumers and to bridge the gap of information or common understanding between consumers and service providers.
Ireland (COMREG)	Forum	ComReg holds Disability Forums on a regular basis, the forum is comprised of members representing the Disability sector in Ireland and Electronic Communications Service providers.
Italy (AGCOM)	Meetings	AGCOM consults with and gets input from disabled end-users in three main ways: - Stakeholders (i.e. associations representing people with disabilities, consumer associations or individuals) can contact AGCOM reporting problems or formulating proposals; - AGCOM can convene public hearings with the participation of stakeholders. For instance, on 22 April 2013, planning to reform resolution no. 514/07/CONS, AGCOM has held a hearing with associations representing deaf and blind end-users; - Public consultations.
Montenegro (EKIP)	Monitoring	In order to get inputs from disabled end-users, operators cooperate with organizations of persons with disabilities and the Agency for Electronic Communications and Postal Services. Agency monitors the degree of implementation of benefits.
Malta (MCA)	Meetings	Liaised with Foundation for Information Technology Accessibility ("FITA").
Netherlands (ACM)	Meetings & Consultations	Input comes from direct contact with interest groups and indirectly from contacts with the Ministry of Health.
Norway (NKOM)	Forum	NKOM established in 2013 a discussion forum assembling disabled end-users groups, the USP, and the Norwegian Welfare Organisation (which is responsible for specialised accessible equipment and runs the video relay service). Thus far only one meeting has been conducted due to the lack of resources.

Poland (UKE)	Meetings	UKE participates in workshops and meetings organized by the Ministry of Administration and Digitization and associations of the disabled.
Portugal (ANACOM)	Consultation	Within the consultation procedures for decision-making the NRA publishes the draft decision and gives all interested parties, including users with disabilities, the opportunity to comment on it within a period set for that purpose.
Romania (ANCOM)	Consultation	ANCOM actively consulted users with disabilities and associations representing their interests, analysing their requests related to ensuring equivalence of access to publicly electronic communications services.
Serbia (RATEL)	Meetings & Consultations	Public consultations if necessary
Sweden (PTS)	Meetings & Consultations	Yes. PTS is consulting with disability organizations at least two times a year. PTS invites people with disabilities or their representatives as experts in the evaluation process of the Innovation competitions. PTS also gets input from the innovation projects through the tests with users with disabilities.
Turkey (BTK)	Meetings & Forum	Before ICTA make a regulation a public consultation mechanism needs to be run. In this scope disabled users can share their opinions and considerations with ICTA on the subject. Additionally, a working group on Unimpeded Access was established within ICTA in November, 2011. The group meets associations of disabled persons and relevant NGOs on regular basis to take their ideas and priorities into consideration during regulation process in ICTA.
UK (Ofcom)	Meetings, Consultations, Forums	Ofcom has a regular programme of bilateral meetings with organisations representing the issues of disabled end-users. The UK NRA hosts a quarterly forum for consumer organisations at which

disabled people are well-represented. In addition, Ofcom ensures
that its consultation processes are accessible to disabled end-users,
for example translating relevant documents into British Sign
Language and also welcoming responses in this format.

## 7.9 Standards for accessible information

Concerning the accessibility of information the respondents were invited to share their national experience regarding some requirements/actual voluntary practices addressed/implemented to/by service providers to adopt a particular standard for this, namely the compliance of web sites with accessibility standards (e.g. W3C). Four NRAs (from FI, IE, PL and PT) reported the availability of a type of implementation of a quality standard. Other seven countries (DE, EL, IT, HU, NO, MT and TR) mentioned the possibility to adopt in the future a measure in this respect. Sixteen NRAs (AT, BE, BG, CY, CZ, DK, FR, HR, LV, ME, NL, RO, RS, SE, SI and UK) which answered that there is no standard applied for accessibility of information. SK did not provide any answer regarding this issue (see Figure 15)

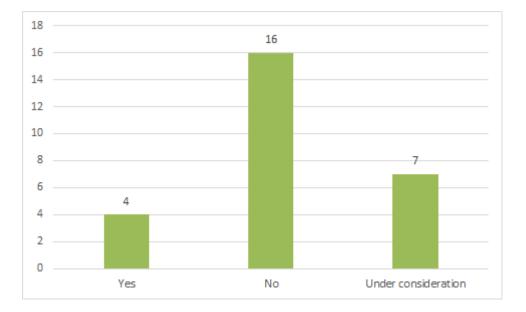


Figure 15 – Availability of quality standards for accessibility of information

# 8. CASE STUDIES

# 8.1 Finland

According to Finnish legislation, there are three different forms of universal service available specifically for persons with disabilities, involving the right to:

a) A broadband connection that enables video calls for persons with disabilities related to hearing or speaking

b) A subscription that enables sending SMS for persons with disabilities related to hearing or speaking

c) Get customer service and billing in an accessible way for persons with visual impairments

Ficora has designated USPs in the geographical areas where the supply of these services is insufficient. The most recent decisions were given in 2013. Altogether there are ten USPs with the obligation to provide the broadband that enables video calls and three USPs with the obligation to provide the SMS service.

There has not been a need to designate a service provider for offering customer service and billing in an accessible way for persons with visual impairments. Ficora's analysis in 2013 found that customer service in shops and through telephone service were considered accessible forms of customer service for persons with visual impairments, whereas an online or electronic customer service would not necessarily fulfil the requirements for accessibility. For accessible billing, one possible solution for the service provider was to offer electronic billing in text form, so that it would be readable with assistive programs or devices. Some service providers also offered personal assistance through customer service in matters related to billing.

The legal basis for the right to a universal service is established in the Finnish Information Society Code (917/2014). According to section 86 of the code, the right to a universal service includes a subscriber connection which shall allow all users, including those with disabilities, to use emergency services, make and receive national and international calls and use other ordinary telephone services.

Further provisions on the special needs of persons with disabilities shall be issued by Government Decree. Prior to this, Ficora shall produce a clarification on those needs. A report, compiled in cooperation with representatives of disability organisations and service providers, was published in 2011. The key issues recognized were the availability of broadband connections that would enable the use of video calls and remote interpretation, the availability of mobile subscriptions that enable the use of SMS for emergency notifications and the availability of accessible customer service and billing.

According to section 86 of the Information Society Code, Ficora may issue further regulations on how the connection is to be implemented technically or on what technical features the connection shall have in order to allow use by persons with disabilities. According to Ficora's regulation, the delay of the universal service broadband connection for persons with disabilities related to hearing or speaking cannot be longer than 150 milliseconds to ensure the quality of the video call.

The decree (currently 1247/2014) defines that end-users with disabilities related to hearing or speaking have a right to a universal service broadband subscription that enables video calls and the use of translation services for sign language through video calls. The minimum speed of this subscription is defined in the decree to be 512 for both upload and download. It is stipulated that the speed of data transfer can go below 512 kbps only temporarily and even then it cannot be less than 384kbps. According to the decree, end-users with disabilities related to hearing or speaking also have the right to universal service subscription that enables them to send SMS so that they can contact the authorities in case of an emergency. The decree also states that end-users with visual impairments have a right to get customer service and billing in an accessible way.

The fourth universal service relevant to accessibility is concerned with directory enquiry services. As of 1 May 2015, persons with visual impairments are offered access to directory enquiry services at a discounted price. According to the sections 85 and 89 of the Information Society Code, the right to universal service includes the right to publicly available, comprehensive and reasonably priced directory enquiry services or telephone directory services. Directory enquiry services must be accessible also to end-users with disabilities. Ficora is currently in the process of analysing the directory enquiry services available in Finland and the need to designate USPs. As part of this process, Ficora has facilitated voluntary negotiations between the Finnish Federation of the Visually Impaired (FFVI) and companies that provide directory enquiry services. As a result of this process the providers of these services have pledged to provide a call based inquiry service to end-users with visual impairments at a discounted price (0.67 €/call when the average price for calls is around 4–5

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euros/call). The service has been available since May 1 2015. Feedback about special pricing from end-users and FFVI has been very positive.

All the universal service provisions described above are based on article 7 of the Universal service directive (USD). Greater emphasis is placed on guaranteeing access to the services than on aspects related to broadening the choice. Ficora has put forward to the Ministry of Transport and Communications a proposal to extend Ficora's competence so that it would be possible to set requirements related to accessibility to all service providers instead of just USPs. In Ficora's opinion, this is necessary to achieve the purpose of article 23 a of the USD.

# Recommendation concerning accessibility of service providers' websites and electronic customer service

Ficora has issued a recommendation in 2014 according to which service providers should take into account the W3C Web Content Accessibility Guidelines (WCAG 2.0) on their websites and electronic customer service. According to the recommendation, websites should fill the criteria at the AA-level. This includes information concerning pricing and contract terms made available on websites.

The recommendation is part of the Explanations and applications of Regulation M 58 on the quality and universal service of communications networks and services. Due to it being a recommendation, it is not legally binding.

## Cooperation with representatives of end-users with disabilities

Ficora initiated a cooperation network with organizations that represent end-users with disabilities related to hearing or speaking in the beginning of 2014. FICORA has organised meetings and consulted the organisation through e-mail correspondence. The topics discussed are mainly related to the forms of universal service allocated to persons with disabilities. One of the focus points has been cooperation in informing end-users with disabilities about the rights guaranteed to them by the USO. In addition Ficora cooperates with the Finnish Federation of the Visually Impaired (FFVI).

# Other services to support and promote accessibility of electronic communication services

In addition to Ficora, there are also other authorities and organizations offering electronic communication services and support to end-users with disabilities. Kela, the Social Insurance Institution of Finland, offers the possibility to use remote interpretation services for persons with disabilities related to hearing or speaking. There is also a text relay service available to be used over the internet or with traditional text phones. This service is organized by

representative bodies for the deaf and hard of hearing and it is funded by the Finland Slot Machine Association (RAY).

## Remote interpretation:

A person with disabilities related to hearing or speaking has a right to minimum 180 hours of interpretation services (sign language, text interpretation, speech interpretation, and other forms of communication) yearly, free of charge. The interpretation can also be carried out through remote interpretation, in which case the user of the service contacts an interpreter in a call centre through a computer program. The third party can then be contacted by the interpreter through a phone call or he/she can be physically present with the customer and follow the interpretation from the screen.

The authority responsible for organizing interpretation services is Kela, the Social Insurance Institution of Finland. If a customer wishes to utilize remote interpretation, Kela supplies them with the necessary terminal equipment, software and internet connection. Ficora has no competence regarding remote interpretation, apart from the possibility to assist Kela in getting a functioning internet connection to the customer's home through the USO. The right to interpretation services is defined in the law on interpretation services for persons with disabilities (133/2010).

The software and terminal equipment as well as a suitable internet connection necessary for remote interpretation are publicly funded and free-of-charge for those disabled end-users who are entitled to interpretation services and have chosen to use remote interpretation. However, remote interpretation is only one option to fulfil the statutory right to interpretation services, and the connection, software and terminal equipment are provided only if the end-user wishes to use them for the purpose of remote interpretation.

## **Text relay service**

The text relay service available in Finland is organized by a coalition of organisations that represent persons with disabilities related to hearing (The Finnish Association of the Deaf, The Finnish Federation of Hard of Hearing and The Service Foundation for the Deaf) and funded by Finland's Slot Machine Association (RAY). The provider of the service is chosen based on a tendering procedure. For the years 2015–2017, the text relay service is provided by Vakka-Suomen Puhelin Oy (VSP).

The text relay service can be used by persons with various degrees of speech and hearing impediments over the internet for free. The user has to register on VSP's website and install an application on their computer or smartphone (at the moment only Android is supported).

The user can also register their personal number that can also be used for receiving phone calls through the text relay service. The service can also be used with a traditional text phone. In this case the price for the end-user is 0.2019 €/call + local network charge. The service is available 24 hours/day.

## Analysis of the current situation and outlook for the future

The policy paper of the Finnish government from 2011 states that all electronic services that are of social and commercial importance or important for the smooth running of everyday life must be made accessible, so that they are also available to people with disabilities and the elderly. The Ministry of Transport and Communications has drawn up an action programme for the promotion of accessibility in the information society, covering the years 2011-2015. The Ministry of Transport and Communications is currently preparing an update to the programme for the following years.

Accessibility questions have also gained more importance at Ficora recently and in the beginning of 2015 a small project was launched to plan and carry out measures that would increase the accessibility of communications services. One of the central goals for the project is to gather best practices from other European countries on how to promote equivalent access and choice.

## 8.2 Italy

AGCOM has enforced the legislative framework on the rights of end-users with disability through some regulations. Among them, some regulations are mainly addressed to other topics but include specific rules and obligations pertaining to end-users with disability, while others regulate exclusively disabled end-users' rights.

The first group includes some regulations dealing with topics related to universal service, as resolution no. 31/10/CONS on public pay telephones, which, in considering the opportunity to provide disabled end-users with an equivalent access, has stated that equivalence can be achieved by ensuring an appropriate number of public pay telephones accessible to disabled end users, which is identified in 75% of the total number of public pay telephones. Moreover, in the same group can be also comprised two regulations including specific obligations pertaining to customer service and to service charters and quality. The first is resolution n. 79/09/CSP on customer call centre quality, which has among its aims that of ensuring telephone contact services accessibility to deaf users; while the latter is resolution no. 179/03/CSP on service charters and quality, which states that, apart from universal service obligations, operators shall inform users on any measure put in place to promote equality of

access and of use of telecommunications services for disabled users, as well as to promote the overcoming of communication barriers.

For what pertains to specific regulations on the rights of disabled end-users, resolution no. 314/00/CONS exempted residential users using telecommunications devices for the deaf (TDD) from paying the monthly fee for fixed connection. However, in an equivalence of access and of choice perspective, the main regulation is resolution no. 514/07/CONS. In fact, this resolution pursues the goals of equivalence of access and choice through specific measures mandating relevant obligations on all providers, beyond the scope of universal service. This resolution has been adopted before the 2009 review of USD, and then before the introduction of art. 23a USD, which has been transposed in Italy in 2010, by art. 73 bis of the Electronic Communications Code. Pursuant to resolution no. 514/07/CONS, deaf residential subscribers are exempted from paying the standard fixed telephone service monthly fee. This facilitation is provided by the USP, and its net cost is ascribed to universal service. In addition, in an equivalence of access perspective, mobile service providers must provide for specific offers including a minimum of 50 free text messages per day, and in which the price of each other service provided does not exceed the best price applied to other users, considering promotion. Internet access providers at a fixed location shall provide blind users with at least 90 hours per month of free internet (if the offer is based on consumption), or with a 50% discount on the price of the offer (if it is a flat offer), regardless of the connection speed chosen by the customer. In the introduction of resolution no. 202/08/CONS, interpreting and explaining resolution no. 514/07/CONS, AGCOM has specified that, in an equivalence of access and choice perspective, and if interpreted in accordance with good faith, the abovementioned obligation implies that undertakings shall ensure that internet hours are supplied through the most advanced navigation technology offered to other users, which is broadband. The resolution no. 514/07/CONS provides also for specific obligations of publicity, which operators must fulfil together with associations representing people with disability. For what pertains to the funding issue, these measures are directly funded by operators. The aim of regulation was that of making all operators contribute to the provisioning of specific services for deaf and blind people, in order to enabling them not to be obliged to choose only among the services falling within the Universal Service and the USPs to obtain favourable economic conditions.

In order to ensure a higher level of equivalence of access and choice, AGCOM is planning to start the review of the regulatory framework on end-users with disability within the second half of 2015. In this perspective, at the end of April, AGCOM has held a hearing of associations representing people with disability, with the aim of better understand and then meet their needs.

# 8.3 United Kingdom

In the UK, there have been obligations on all PATS providers since 2003 to provide a suite of services to disabled end-users.

The most significant development in recent years has been the mandating of Next Generation Text Relay, which enables people with hearing or speech impairments to hold faster, more fluent telephone conversations.

In 2012, Ofcom decided that an improved text relay service must be made available to UK users, allowing them to have more natural conversations and easier access on a wider range of mainstream devices, such as PCs, laptops, tablet computers and smartphones. The new service is available to customers of all UK telecoms providers.

Research among users of the previous text relay service found that callers were frustrated by their inability to interrupt and hold 'real time' conversations. Users also reported that the speeds of conversations were generally slow, as callers had to take turns to speak or type.

Ofcom worked with disability stakeholders and industry to ensure that a 'next generation' text relay service delivers an improved experience to its users.

The main improvements are:

- Calls are faster and easier: the new service allows for parallel speech, hearing and text, with the ability to interject for the first time, and without the need to say or type 'go ahead' after each part of a conversation. Users can use their own voices if they wish, and users with some hearing can listen to the call and read the captions to support what they are hearing. The conversation flows much more quickly and naturally as a result.
- 2. Uses an app on a PC, smartphone or tablet: To access text relay previously, users needed a textphone costing around £300. Next generation text relay enables easier access to the service on the move on devices such as smartphones, tablet computers and laptops. (Textphones can still be used, although users will need an internet-connected device and a phone to fully benefit from all the improvements.)
- 3. Incoming calls no longer require a prefix. Text relay users can acquire a new, standard format 11-digit telephone number that will bring the relay service into the call automatically. This means that callers do not need to know about the relay service hearing people making calls do people calling hearing- and speech-impaired users

who use TextNumbers no longer have to dial the 18002 prefix before their number, nor do they need to know about the text relay service in advance.

# List of Acronyms

ACM	Authority for Consumers and Markets of the Netherlands, NRA of the Netherlands
AGCOM	Autorità per le Garanzie nelle Comunicazioni, NRA of Italy
AKOS	Agency for Communication Networks and Services of the Republic of Slovenia, NRA of Slovenia
ANACOM	Autoridade Nacional de Comunicações, NRA of Portugal
ANCOM	National Authority for Management and Regulation in Communications of Romania, NRA of Romania
ARCEP	Autorité de Régulation des Communications Electroniques et des Postes, NRA of France
AT	Austria
BE	Belgium
BEREC	Body of European Regulators for Electronic Communications
BG	Bulgaria
BIPT	Belgian Institute for Postal Services and Telecommunications, NRA of Belgium
BNETZA	Federal Network Agency, NRA of Germany
ВТК	Bilgi Teknolojileri ve İletişim Kurumu, NRA of Turkey (also referred as ICTA)
ComReg	Commission for Communications Regulation, NRA of Ireland
CRC	Communications Regulation Commission, NRA of Bulgaria
CSR	Customer Service Record
СТU	Czech Telecommunication Office, NRA of the Czech Republic
CY	Cyprus
CZ	Czech Republic

DBA	Danish Business Authority, NRA of Denmark	
DE	Germany	
DK	Denmark	
EETT	Hellenic Telecommunications and Post Commission, NRA of Greece	
EKIP	Electronic Communications and Postal Services of Montenegro, NRA of Montenegro	
EL	Greece	
ENS	Ente Nazionale Sordi, National Association representing death people, (Italy)	
FFVI	Finnish Federation of Visually Impaired	
FI	Finland	
FICORA	Finnish Communications Regulatory Authority, NRA of Finland	
FITA	Foundation for Information Technology Accessibility (Malta)	
FR	France	
GARI	Global Accessibility Reporting Initiative	
GSM/IMT200	Global System for Mobile Telecommunications that comply with the International Mobile Telecommunications-2000 (IMT-2000)	
НАКОМ	Croatian Regulatory Authority for Network Industries, NRA of Croatia	
HR	Croatia	
HU	Hungary	
ICTA	Bilgi Teknolojileri ve İletişim Kurumu, NRA of Turkey (also referred as BTK)	
ICT-services	Information and Communication Technology services	
IE	Ireland	
ІТ	Italy	
LV	Latvia	
MCA	Malta Communications Authority, NRA of Malta	
ME	Montenegro	

MT	Malta
NDA	National Disability Authority
NKOM	Norwegian Communications Authority, NRA of Norway
NL	the Netherlands
NMHH	National Media and Infocommunications Authority, NRA of Hungary
NO	Norway
NRA	National Regulatory Authority
OCECPR	Office of the Commissioner of Electronic Communications and Postal Regulation, NRA of Cyprus
OFCOM	Office of Communications, NRA of the UK and Northern Ireland
PATS	Publicly available telephone services
PECS	Publicly available electronic communications services
PIP	Picture in Picture
PL	Poland
PT	Portugal
PTS	Swedish Post and Telecom Authority, NRA of Sweden
RATEL	Regulatory Agency for Electronic Communicationsand Postal Services, NRA of Serbia
RAY	Finland Slot Machine Association
RO	Romania
RS	Serbia
RTR	Austrian Regulatory Authority for Broadcasting and Telecommunications, NRA of Austria
RU	Regulatory Authority for Electronic Communications and Postal Services, NRA of Slovakia
SE	Sweden
SI	Slovenia

SK	Slovakia
SMS	Short message service
SPRK	Public Utilities Commission, NRA of Latvia
TR	Turkey
UK	United Kingdom of Great Britain and Northern Ireland
UKE	Office of Electronic Communications, NRA of Poland
US	Universal service
USD	Universal Service Directive (Directive 2002/22/EC)
USO	Universal Service Obligation
USPs	Universal Service providers
VAT	Value Added Tax
VSP	Vakka-Suomen Puhelin Oy (Finland)
WCAG	Web Content Accessibility Guidelines