Office of Utilities Regulation

Ensuring Equivalence of Access and Choice for Persons with Disabilities in Telecommunication Markets

Consultation Document

OFFICE OF UTILITIES REGULATION

2021 March 12

Abstract

The rapid development and widespread adoption of Information and Communication Technology (ICT) have fundamentally changed almost every aspect of our lives. Governments and industry leaders have all acknowledged that ICTs have the capacity to increase the quality of people's lives by improving the effectiveness of teaching and learning, and the productivity of industry and governments. Given the increasingly central role of communications in people's lives, society and the economy and the fact that much of an individual's future success may rely on his/her ability to use ICT, access to ICT must be made as equitable as possible. People with disabilities (PWDs) are often unable to access telecommunications devices and services because these devices and services lack the necessary accessibility features. Countries therefore have to take steps to ensure that telecommunications services and associated services are accessible for PWDs.

This document discusses the equivalency issues in regard to the provision of telecommunications services to PWDs. The experiences of different jurisdictions in dealing with these issues form a part of the discussion. Measures are proposed to improve PWDs access to and choice of telecommunication services for which comments are invited from stakeholders.

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Consultation Process

Persons who wish to express opinions on this Consultation Document are invited to submit their comments in writing to the Office of Utilities Regulation ("OUR") by post, facsimile or email addressed to:

Office of Utilities Regulation
P.O Box 593
36 Trafalgar Road
Kingston 10

Attention: Evona Channer

Fax: (876) 929-3635
Email: EquivalenceConsultation@our.org.jm

Responses are requested by 2021 April 15

Any confidential information should be submitted separately and clearly identified as such. The submission of confidential information should be accompanied by a detailed justification in keeping with section 7(6) of the Telecommunications Act.

Responses that are not confidential, pursuant to sections 7(6) and 7A of the Telecommunications Act, will be posted to the OUR's website (http://www.our.org.jm/). Respondents are therefore requested, where possible, to supply their responses in electronic form to facilitate such postings.

Comments on Responses

There will therefore be a specific period for respondents to view other responses (non-confidential) and to make comments on them. The comments may take the form of either correcting a factual error or putting forward counterarguments and/or providing data relating to the project. As in the case of the responses, comments which are not confidential pursuant to the Telecommunications Act will be posted to the OUR's website.

Comments on responses are requested by 2021 April 29.

Consultative Timetable

The timetable for this consultation is summarized below:

Event	***Date***
Publish Consultation Document	2021 March 12
Receive Responses to Consultation	2021 April 15
Receive Comments on Responses	2021 April 29
Issue Determination Notice	By 2021 October 31

Glossary

In this document, unless the context otherwise requires, the following terms will have the meanings specified below:

1. The “Act” means the Telecommunications Act.
2. “Accessible formats" means information available in formats such as, but not limited to, Braille, text-to-speech, oral presentation, electronic files compatible with screen readers for persons with reading impairments, captioned or signed video for persons with hearing impairments or icons and animations for persons with cognitive disabilities.
3. "Assistive technology" means any information and communications technology, product, device, equipment and related service used to maintain, increase or improve the functional capabilities of individuals with special needs or disabilities.
4. "Device" means a handset, smartphone, tablet or any type of customer equipment connected to a telecommunications network.
5. “Licensee” has the same meaning as in the Act.
6. “OUR Act” means the Office of Utilities Regulation Act
7. “Relay services” means telephone services that enable people who are deaf or hard of hearing or who have a speech impairment, to communicate by phone through an interpreter in a manner that is functionally equivalent to the ability of an individual without a disability.
8. “Service Provider” has the same meaning as in the Act.
9. "Text/data only packages" means mobile packages which exclude voice services but include data services such as text messaging, instant messaging, picture messaging and web browsing.

Abbreviations

ACMA	Australia Communications and Media Authority
BEREC	Body of European Regulators for Electronic Communications
CRPD	The United Nations Convention on the Rights of Persons with Disabilities
CRTC	Canadian Radio-television and Telecommunications Commission
EU	European Union
FCC	United States of America's Federal Communications Commission
G3ict	Global Initiative for Inclusive ICTs
ICTs	Information Communication Technologies
ITU	International Telecommunications Union
MMS	Multimedia Messaging Service
NRA	National Regulatory Authorities
NRS	National Relay Service
OFCOM	United Kingdom's Office of Communications
OUR/Office	Office of Utilities Regulation
PWDs	Persons with disabilities
SAMOA Pathway	Small Island Developing States Accelerated Modalities of Action Pathway
SDGs	Sustainable Development Goals
SIDS	Small Island Developing States
SMS	Short Messaging Service
STATIN	Statistical Institute of Jamaica
TTYs	Teletypewriters
UNESCO	United Nations Educational Scientific and Cultural Organisation
WHO	World Health Organization

Chapter 1: Introduction

1.1 Background

1.1.1 Information Communication Technologies (ICTs) have become the leading medium for communicating, transacting, informing, educating and entertaining all over the world. In line with the 2030 Agenda for Sustainable Development and the Sustainable Development Goals (SDGs) established by the United Nations General Assembly, ICTs can promote inclusion and help realize the full and equal participation of persons with disabilities (PWDs) in society and shape the future of sustainable development for all. However, most of the world's population of PWDs have a type of disability that affects their access to ICTs. The rapid technological developments in that sector can exacerbate existing inequalities if countries do not adopt measures to ensure that all persons have access to them.

1.1.2 According to the World Health Organization (WHO), at least fifteen percent (15%) of the world's population is living with disabilities.[1] The United Nations Educational Scientific and Cultural Organisation (UNESCO) estimates that approximately seven percent (7%) of persons living in Latin America and the Caribbean are living with a disability, and approximately 1.3 million of those persons reside in the Caribbean. Jamaica's Disabilities Act (2014) defines a "person with a disability" as one who *"has a long-term physical, mental, intellectual or sensory impairment which may hinder his full and effective participation in society, on an equal basis with other persons*."[2] The 2011 census conducted by the Statistical Institute of Jamaica (STATIN), estimated that 5.21% of the population was disabled.[3] These are persons who either had much difficulty performing specific tasks or were unable to do the task at all. The questions asked by the Census pertained to difficulty relating to sight (24 %), hearing (8%), walking (21%), communicating (8%), lifting (18%), remembering (9%) and self-care (11%).

1.1.3 Over the years, there has been a transition from viewing disability as a condition that is inherent in the person to viewing it as a relational concept where persons are disabled by society instead of by their bodies. That is, a disability is a function of an individual's interaction with his physical and social environment and how that impacts the individual's participation in society.[4] Defining disability as an interaction means that addressing inaccessible environments can improve outcomes for PWDs.

[1] World Health Organization (2016), Disability and Health, factsheet, November 2016, Available at: http://www.who.int/mediacentre/factsheets/fs352/en /.
[2] The Disabilities Act (2014) Available at: http://admin.jcpdja.com/upload/339_TheDisabilitiesAct.pdf
[3] https://statinja.gov.jm/Census/PopCensus/Popcensus2011Index.aspx
[4] This view is reflected in the UN's Convention on the Rights of Persons with Disabilities which defines persons with disabilities (PWDs) as those who have "long-term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others."

Changes to inaccessible environments can be brought about by policy/legislative/regulatory changes, capacity building or technological developments.

1.2 PWDs and the Development Agenda

1.2.1 The inclusion of persons with disabilities in all aspects of society is a key challenge of the global development agenda. Statistics show that persons with disabilities are disproportionately poor; and poor people are disproportionately disabled and are thus extremely vulnerable to being marginalized in society.[5] For instance, UNESCO estimates show that of the one hundred and fifty (150) million children in the world that have a disability, approximately four-fifths reside in developing countries. Additionally, many of those children live with parents or relatives who also have a disability. Given the large number of PWDs globally, no society should ignore them or leave them to their own destiny.

1.2.2 The United Nations' Convention on the Rights of the Persons with Disabilities (CRPD) of 2006 made the socio-economic exclusion of PWDs a human rights issue. The 2030 Agenda for Sustainable Development and its 17 SDGs also provide a framework by which countries and international organizations can be guided in their quest toward disability-inclusive development. The SDGs explicitly refer to disability and PWDs eleven (11) times, however, the Agenda views disability as a cross-cutting issue which must be taken into account in the implementation of all the SDGs. The Small Island Developing States (SIDS) Accelerated Modalities of Action Pathway (SAMOA Pathway) which was adopted in 2014 also identifies priorities for SIDS, which include addressing the structural and socioeconomic inequalities and discrimination affecting persons with disabilities. With their adoption of the 2030 Agenda and the SAMOA Pathway, countries such as Jamaica have pledged to leave no one behind including PWDs.

1.2.3 Jamaica's National Development Plan, Vision 2030 speaks to disability-inclusive development. The first of the Plan's four goals seeks to empower Jamaicans to achieve their fullest potential. Under this goal is the national outcome of "Effective Social Protection" which seeks to "*make sure that persons with disabilities have equal access to goods and services enjoyed by others in the society*." In order to support the implementation of the Plan, the Planning Institute of Jamaica has identified thematic areas and has sought to develop sector plans under each area. This led to the

[5] UNESCO (2010) EFA Global Monitoring Report 2010. Reaching the Marginalized. Available at: https://unesdoc.unesco.org/ark:/48223/pf0000186606

development of the Persons with Disabilities Sector Plan.[6] The Sector Plan noted that there is a need to address those barriers in the Jamaican society that hinder persons with disabilities from achieving their full potential and outlined goals and outcomes for the sector. Goal two of the sector plan is the realization of a society that fosters inclusion of PWDs in all spheres of life. The associated outcomes are:

- High levels of participation of PWDs in social, cultural and governance activities;
- A society in which PWDs have access to services and goods; and

A key outcome indicator of Goal two is the increased access to information communications technologies and assistive devices.

1.3 PWDs and ICTs

1.3.1 The CRPD recognises that ensuring access to ICTs for persons with disabilities is an essential enabler of sustainable development, and that ICTs allow the removal of many of the remaining barriers to the full and effective participation of PWDs in society. It calls on signatories to:

"… enable persons with disabilities to live independently and participate fully in all aspects of life, States Parties shall take appropriate measures to ensure to persons with disabilities access, on an equal basis with others, to the physical environment, to transportation, to information and communications, including information and communications technologies and systems, and to other facilities and services open or provided to the public, both in urban and in rural areas. These measures, which shall include the identification and elimination of obstacles and barriers to accessibility, shall apply to, inter alia:

a) …

b) Information, communications and other services, including electronic services and emergency services."

1.3.2 Given the ubiquitous impact of ICTs across all sectors of activities in all countries, no one should be excluded from using ICTs. Being excluded from ICTs amounts to being shut out, not only from the information society, but also from accessing essential public services, and from the opportunity of living an independent life. The Global Initiative for Inclusive ICTs (G3ict) defines ICT accessibility as "*a measure of the extent to which a product or service can be used by a person with a disability as effectively as it can be used by a person without that disability for purposes of*

[6] http://www.vision2030.gov.jm/Portals/0/Sector_Plan/Microsoft%20Word%20-%20Persons%20with%20Disabilities%20pdf.pdf

accessing or using ICT related products, content or services."[7] Therefore, an accessible ICT product or service is one which can be used by all its intended users, taking into account their differing capabilities.

1.3.3 Accessible ICTs - whether assistive devices designed to meet the specific needs of individuals or accessible off-the-shelf devices – can make independent living attainable for many PWDs, both through their use of the devices or through the use of the devices by their caregivers. Indicators of independent living can include the ability to live either by oneself or in a group setting, make choices about one's health and welfare, obtain and retain work that aligns with one's education and interests, and socialize within one's community. Independent living can provide PWDs with increased self-determination, and an increased ability and willingness to become integrated into society, all of which can result in a richer and more fulfilling life.

1.4 Basis and Purpose of Consultation

1.4.1 As highlighted earlier, when accessible and available, ICTs can serve as critical enablers that allow PWDs to realise full and effective opportunities to participate, on the basis of equality, in all aspects of society and development. The recent Covid-19 pandemic has further underscored the essential nature of ICTs and the need for countries to ensure that all their citizens have access. Given the potential number of PWDs in Jamaica, there is a great need to improve their access to ICTs in general and telecommunications in particular. An improvement in the access and choice of telecommunications services will result in the increased participation of PWDs in Jamaica's economic development.

1.4.2 The role of an ICT/telecommunication regulator in the facilitation of ICT/telecommunication accessibility, involves implementing obligations through drafting and enforcing regulations, setting targets and licence conditions, monitoring and enforcing licence conditions and obligations, drafting or approving codes of practice and driving awareness campaigns and consultation. The OUR is of the view that its role in promoting the objects of the Telecommunications Act (the Act), in particular the objects to "*promote and protect the interest of the public…" and "promote universal access to telecommunications services for all persons...",* makes it an imperative that initiatives are developed and implemented that will ensure a minimum level of accessibility to telecommunication services for all persons residing in Jamaica. With this objective in mind, the OUR has held Stakeholder Engagement Sessions and a Focus Group for PWDs. During these sessions, the mission and relevant objectives of the OUR were highlighted as well as the potential contribution

[7] International Telecommunications Union. e-Accessibility Policy Toolkit for Persons with Disabilities. Available at: http://e-accessibilitytoolkit.org/toolkit/eaccessibility_basics/accessibility_and_the_purposes_of_icts

of increased ICT use to the lives of PWDs. Feedback was requested from the audience about the impact of disabilities on their usage of telecommunication services/devices and on interventions required to ensure equivalence of access to and choice of telecommunications services and devices. The feedback received has been taken into account in the development of this Consultation Document.

1.4.3 The OUR recognises, based on discussions with persons with disabilities, that it also needs to implement accessibility measures within the organization. Steps being taken to address this shortcoming include, disability awareness training for its staff, creation of an accessible website and implementation of accessibility features in its complaints handling procedures.

1.4.4 The purpose of this consultation is to:

- present the preliminary views of the OUR with respect to improving equivalent access and choice in telecommunication services; and
- seek the views of consumers, end-users with disabilities, representative organisations, service providers and other stakeholders on the proposed initiatives.

1.5 Structure of the Consultation Document

1.5.1 The rest of the Consultation Document is structured as follows:

- Chapter 2 outlines the Legal Framework that underscores the remit of the OUR in regard to consumer protection.
- Chapters 3 discusses the challenges faced by PWDs in accessing and using telecommunications services and the factors which impact equivalence of access to and choice of telecommunications services.
- Chapter 4 outlines the experience of other jurisdictions in ensuring equivalence of access to and choice of telecommunications services.
- Chapter 5 proposes obligations that the OUR would like to impose on licensees to address some of the factors that impact equivalence of access to and choice of telecommunications services.
- Chapter 6 makes recommendations regarding the role that non-Licensees can play in improving ICT accessibility in Jamaica.
- Appendix I provides a listing of accessibility features included in devices that can address the needs of different categories of PWDs.

Chapter 2: Legal Framework

2.1 General Provisions

2.1.1 The OUR was established pursuant to the Office of Utilities Regulation Act (OUR Act) with the power to regulate "prescribed utility services." Section 2 and the First Schedule of the OUR Act define "prescribed utility services" to include "*the provision of telecommunication services.*"

2.1.2 The power and authority of the OUR to regulate the telecommunications sector is governed by the provisions of both the OUR Act and the Telecommunications Act (the Act).

2.1.3 Section 4(1) of the OUR Act outlines the functions of the OUR. It states in part:

"4(1) Subject to the provisions of this Act, the functions of the Office shall be to-

(a) regulate the provision of prescribed utility services by licensees or specified organisations

...

(c) conduct such research as it thinks necessary or desirable for the purposes of the performance of its functions under this Act;

...

(e) subject to section 8A carry out, on its own initiative or at the request of any person, such investigations in relation to the provision of prescribed utility services as will enable it to determine whether the interests of consumers are adequately protected."

2.1.4 Section 4(3) of the OUR Act empowers the OUR to, in the performance of its functions under the OUR Act, undertake such measures as it considers necessary and desirable, to inter alia:

"(a) encourage competition in the provision of prescribed utility services;

(b) protect the interests of consumers in relation to the supply of a prescribed utility service;

...

(d) promote and encourage the development of modern and efficient utility services; ..."

2.1.5 The Act indicates that its objects include the promotion and protection of the interest of the public by a number of measures, such as promoting the interest of persons who are disabled. Section 3 of the Act states in part:

"*3. The objects of this Act are-*

(a) to promote and protect the interest of the public by-

(i) Promoting fair and open competition in the provision of specified services and telecommunications equipment;

(ii) Promoting access to specified services;

...

(iv) providing for the protection of customers;

(v) promoting the interests of customers, purchasers and other users (including, in particular, persons who are disabled or elderly) in respect of quality and variety of telecommunications services and equipment supplied;

(b) to promote universal access to telecommunications services for all persons in Jamaica, to the extent that it is reasonably practicable to provide such access.
...."

2.1.6 The Act also specifies the functions of the OUR as it relates to the regulation of the telecommunications sector. Section 4(1) of the Act states in part:

"*4(1) The Office shall regulate telecommunications in accordance with this Act and for*
that purpose the Office shall –

(a) regulate specified services and facilities;

...

(d) promote the interests of customers, while having due regard to the interests of carriers and service providers;

...

(f) make available to the public, information concerning matters relating to the telecommunications industry;

(g) promote competition among carriers and service providers;
..."

2.1.7 Section 4(3) of the Act further provides as follows:
(3) In exercise of its functions under this Act, the Office may have regard to the following matters—

(a) the needs of the customers of the specified services;

(b) whether the specified services are provided efficiently and in a manner designed to—

…

(i) afford economical and reliable service to its customers;

(c) whether the specified services are likely to promote or inhibit competition.

Chapter 3: Equivalence of Access and Choice for PWDs

3.1 Introduction

3.1.1 ICT policies, legislations and regulations generally support the principles of universal access to ICTs. This is usually done by focusing on providing an enabling framework for the deployment of ICT networks, the promotion of affordable services and products, the protection of consumers, and the provision of reliable emergency services. In practice however, while those issues are relevant to PWDs, their needs usually require a deliberate focus on accessibility by policy-makers and regulators. This Chapter looks at the challenges faced by PWDs in accessing and using telecommunications services, as well as the factors that impact equivalence of access and choice.

3.2 Types of Disabilities

3.2.1 The International Telecommunication Union (ITU) has identified certain challenges that are faced by PWDs while accessing telecommunications services and devices. These challenges can be placed in broad categories based on various types of disabilities. The categories are: hearing impairment, visual impairment, dexterity based disabilities and cognitive disabilities. Given the nature of the different limitations that are experienced for each disability, it is not especially useful to discuss the implications of ICT for persons with disabilities as a generic group. The specific barriers experienced and thus the potential ICT tools to overcome these barriers differ. These disabilities are discussed below.

Hearing Impairment

3.2.2 Hearing loss is a condition that affects one's capacity to interpret audible communication. Persons with hearing impairment are deprived of social interaction and are unable to communicate by voice telephony because they cannot hear the caller or automated electronic messages, such as those of a customer support offered by various service providers. Further, they do not have access to critical emergency services like requesting police, fire services or medical assistance. There are a variety of accessibility features and services which make it possible for the hearing impaired to communicate via a telephone. These features and services range from basic ones such as volume adjustment and text messaging, to more advanced services such as video relay services.

Visual Disabilities

3.2.3 There are a variety of visual disabilities, although the umbrella term visual impairment is frequently used to describe the consequence of an eye condition or

disorder. A visual disability is any visual condition that impacts an individual's ability to successfully complete the activities of everyday life. There are three major categories of visual disabilities: visual impairment, legally blind, and blind. Persons who have a visual disability may be unable to use some features of a telephone. They may have difficulty sending and receiving messages or accessing contact lists to call numbers stored in the address book. There are a number of ICT-based solutions that can be used to assist people who have visual disabilities. They include screen readers, audible and tactile feedback, audible cues and voice synthesizer feedback for touch screens. In particular, smartphones, and the applications that run on them, can make it easier for persons with visual disabilities to accomplish day-to-day tasks.

Mobility/Dexterity Impairments

3.2.4 Mobility/Dexterity Impairment is a broad term referring to any physical disability that limits the physical function of one or more limbs. The buttons on phones are not necessarily designed with persons who have difficulties in using their limbs, or flexing their arms/fingers in mind. Some phone buttons require significant pressure which is problematic for persons who have limited strength in their hands. Small phones are difficult to hold and the buttons are difficult to press. In an OFCOM survey of persons with dexterity impairment, respondents frequently mentioned the size of phones, size of buttons and spacing of buttons as being problematic.[8]

3.2.5 While touchscreen smartphones and tablets offer several advantages to PWDs there are some features that pose a challenge for persons with dexterity impairments. Touchscreens devices are generally very sensitive to touch and the screen will detect the slightest touch as user input. Given this high level of sensitivity, persons with limited hand dexterity will find it difficult to control these devices and there is an increased likelihood of inadvertent touching of the screen which leads to frequent mistakes. The additional set-up required for some telecommunications services, also poses a barrier for users with dexterity problems. Persons with dexterity issues also have problems using automated services with routing requirements as they found it difficult to press numbers on a telephone within a short space of time.

3.2.6 The ICT tools for persons with mobility/dexterity impairments are varied, and include hardware, such as adapted keyboards and mouses, microphones, web cameras, and other ergonomic accessories, as well as software, such as voice recognition and auto-text.

Cognitive Disabilities

3.2.7 Persons who fall into the category of having a cognitive disability include those with developmental disabilities, intellectual disabilities, neurodegenerative disease,

[8] OFCOM (2009). Experience of People with Upper-body Mobility and Dexterity Impairments in the Communications Market. Available at: https://www.ofcom.org.uk/__data/assets/pdf_file/0014/32072/gfknop.pdf

acquired brain injuries and learning disabilities. These persons may experience a range of functional challenges including: paying attention, remembering, information processing, problem-solving and decision-making. Persons with cognitive limitations are often the most excluded from ICTs. According to the Coleman Institute for Cognitive Disabilities, *"[t]he vast majority of people with cognitive disabilities have limited or no access to comprehensible information and usable communication technologies [ICT]"*.[9] Phones and computers with user interfaces (UI) which are complex in design and which contain inconsistent UI elements do not take such disabilities in account.

3.2.8 Since having a "cognitive disability" can result in many different types of functional limitations, there can be no one-size-fits-all solution to ensuring telecommunications access for all individuals who may fall within this population. However, in recent years, features included in mainstream devices such as universally available touch screens, screen readers, and voice recognition capabilities have made the devices more accessible for individuals with cognitive disabilities. Additionally, the movement towards devices that are customizable to the specific needs and abilities of each individual user has markedly improved the accessibility of telecommunications offerings.[10]

3.3 Equivalence of Access and Choice for PWDS

3.3.1 The term "equivalent access and choice" means that PWDs should be provided with telecommunications services in a manner that is equivalent to that enjoyed by persons without disabilities. The OUR is cognizant however, that for varying reasons, PWDs' access to and choice of telecommunications services may have to be achieved through different means. The OUR will therefore adopt the approach of functional equivalence, that is utilized by the European Union[11] and the United States[12]. The term functional equivalence means that PWDs should receive the same functions from a telecommunications service as persons without disabilities, even though the service might be provided by different means. It should be noted that it may not always be possible to achieve 100% equivalence due to technical and financial[13] constraints.

[9] Coleman Institute for Cognitive Disabilities. (n.d.) The Rights of People with Cognitive Disabilities to Technology and Information Access. Available at: http://www.colemaninstitute.org/declaration-text

[10] Having a clear and simple user interface (UI), and consistent UI elements for easy selection of options is important for persons with cognitive disabilities.

[11] European Union (2002) Universal Service Directive. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32002L0022&from=en

[12] Federal Communications Commission (updated 01/2021) Telecommunications Access for People with Disabilities. Available a: https://www.fcc.gov/consumers/guides/telecommunications-access-people-disabilities

[13] The cost of achieving 100% equivalence could be disproportionate to the benefits arising from providing it.

Equivalent Access

3.3.2 The ITU has identified several factors which can impact equivalence of access to telecommunications services.[14] They include: availability and price of accessible devices; price of telecommunications services; requirements for set-up of specialized equipment; and ability to access services associated with the use of telecommunications services.

Availability and price of accessible devices

3.3.3 The availability of appropriate devices for end-users with disabilities is a key factor which impacts equivalence of access, as without such equipment, the use of telecommunications services may not be possible. For example, to be able to use a telephone, a person with visual disabilities may require certain voice output features. Large button phones may assist an end-user with a visual impairment or reduced dexterity, while end-users with hearing loss may require phones with visual alerts for incoming calls or phones that are compatible with hearing aid units.

3.3.4 Equivalence of access is also impacted by the price of devices. Price is an important factor in particular where users require specialised devices, as it is necessary to ensure that PWDs are not adversely burdened with costs. While all persons will not be able to afford the particular device they would like, it is important that PWDs are able to access (with financial assistance if necessary) devices with the features that they require in order to access telecommunications services.

3.3.5 In recent years, more and more equipment manufacturers have been incorporating the principles of "universal design" in their design and production processes.[15] This is very evident in the case of mobile handsets, as features that are beneficial to PWDs and in some cases necessary for use of telecommunication services are available with mainstream handsets. As the inclusion of accessible features such as teletypewriters (TTY)[16] on mobile phones and "Dwell Control" on Apple computers become more prevalent, it is expected that the requirement for specialised handsets will decrease. This means that over time, the instances where PWDs have to pay additional costs, when compared with other end-users, to purchase accessible handsets will be minimised. Surveys have also found that PWDs prefer to utilize standard devices instead of specialized solutions, because there is less stigma attached, and they allow them to communicate with everyone. Some of the mainstream features which make

[14] International Telecommunications Union, (2014) Model ICT Accessibility Policy Report. Available at: http://www.itu.int/en/ITU-D/Digital-Inclusion/Persons-with-Disabilities/Documents/ICT%20Accessibility%20Policy%20Report.pdf

[15] Universal design is the process of creating products that are accessible to people with a wide range of abilities, disabilities, and other characteristics.

[16] Teletypewriters - an electronic device for text communication over a telephone, that is designed for use by persons with hearing or speech difficulties.

devices more accessible to the different categories of PWDs are mentioned in Appendix 1.

Price of the telecommunications service

3.3.6 Equivalence of access is also impacted by the cost of the relevant telecommunications service. PWDs should not have to pay additional charges to use the same telecommunications services as other end-users. However, one has to be cognizant that there may be a need to implement different services in order to achieve equivalent access for PWDs. For instance, the implementation of a text relay service will have a cost associated with it. There would need to be a discussion about who should bear the additional costs if PWDs are to receive the service at a price that is equivalent to those subscribers who use a comparable service.

3.3.7 All PWDs have preferred means of communications which are usually informed by their disability. For instance, a person with a hearing and/or speech disability would rather acquire a package that only contains services he can utilize (e.g. text and data) rather than one which also includes voice minutes. However, in many cases, the packages available in the marketplace do not adequately reflect these preferences. PWDs are forced to buy packages which include services which they cannot utilise. Such a scenario creates a detriment in terms of price for PWDs, when compared with similar scenarios for other end-users, and thus may be viewed as a barrier to equivalence.

3.3.8 Channel-specific deals/promotions can also place PWDs at a disadvantage. For instance, if a particular deal/promotion is only communicated via SMS, a visually impaired person may not be able to access that deal/promotion.

The number of suppliers and additional set up required

3.3.9 The number of different suppliers with whom PWDs need to interact in order to purchase and begin using their telecommunications service also impacts equivalence of access. Ideally, PWDs should be able to access the telecommunications service with similar ease as other end-users. However, in some cases an end-user with a disability may have to interact with more than one supplier. For example, an end-user may require specialized devices or assistive technologies in order to access and use telecommunications services. The features required by users with disabilities may not be standard features and therefore licensees may not have the expertise or knowledge to assist with the setup. In such cases, they would have to contact additional suppliers to acquire the device, and in some cases to configure the device in a particular way or to set up associated software.

3.3.10 There is therefore a need to monitor and assess the extent and impact of the additional effort required to access and use telecommunications services on PWDs. The factors which will have an impact include:

- How frequently PWDs will need specialized configuration or set-up in order to access and use telecommunications services; and
- The availability of suppliers with the required expertise.

Ability to access associated services

3.3.11 In addition to being able to access a particular telecommunications service, the ability to access and use services that are generally associated with the use of telecommunications services is of the utmost importance. PWDs should have a method of access to these services, which is appropriate to their disability. Some of the associated services which should be accessible are discussed below.

Billing

3.3.12 It is a basic right of telecommunications subscribers to be able to access their bill. However, modern day telecommunication markets are characterized by new and varied products and service offerings. As a result, telecommunication bills can be complex and difficult for all subscribers to understand. Many service providers have moved away from itemized paper bills as being standard and are providing customers with summary and/or electronic bills, which may not be suitable for every customer. In order for access to billing to be equivalent, PWDs should have the capability to access their telecommunications bills in a format that reasonably accommodates their particular disability. Additionally, alternative bill formats should not exclude PWDs from early payment discounts or any other benefit that is available to customers without disabilities.

Customer Support Services

3.3.13 The provision of customer support is incidental to the business of providing telecommunications services. From time to time telecommunication subscribers will need to contact the customer support facility of their service providers to acquire information or to seek resolution of a problem. However, research has found that some of the standard features of customer service systems can act as barriers to inclusion for PWDs.[17] These barriers include menus which require keypad responses or extensive options of call routing systems. Customer support staff may also lack the skills and sensitivity to interact with customers with disabilities.

[17] Research Institute for Consumer Affairs (2015) Inclusive Communications. Available at: https://www.communicationsconsumerpanel.org.uk/downloads/inclusive-communications-research---final.pdf

3.3.14 Equivalence of access to customer support services requires that service providers operate in a flexible manner that is accommodative of the needs of the customer. *As noted by BEREC, "It is crucial that end-users with disabilities have access to the same support and maintenance service offered, if any, to other end-users. The key consideration here is that end-users with disabilities have a method of communication available, which is appropriate to their disability. This may ultimately require that service providers offer, or on request, provide a range of communication methods with equivalent response and resolution times. It is also important that service providers make known what channels are available and how requests for other methods of communication can be made."*[18]

Directory Assistance

3.3.15 When dialling a number for the first time, persons tend to utilize some form of directory service. There are persons however, who because of their disabilities, find it difficult to access the directory options which service providers usually provide free of charge (e.g. printed and online directories). Directory assistance services can provide helpful dialling assistance for customers with significant visual and cognitive disabilities. There is usually a charge however, for these services. In assessing equivalent access, it is necessary to ascertain if PWDs have the ability to access directory services in a manner that is equal to that of non-disabled persons, i.e. free of charge. Those PWDs who are unable to access directory services in a manner equivalent to that enjoyed by other end-users, should be given access to a service provider's directory assistance service free of charge.

Equivalent Choice

3.3.16 It is also essential that PWDs benefit from equivalent choice in their use of telecommunications services. Having equivalent choice means that PWDs have an opportunity to choose effectively between service providers in a manner that is equivalent to that enjoyed by persons without disabilities. Equivalent choice will be impacted by whether PWDs have a range of service providers that provide accessible services from which to choose and whether they are able to exercise their choice.

The number of providers offering accessible services

3.3.17 The number of service providers providing accessible services is a primary indicator of whether PWDs have equivalence of choice in a telecommunications market.

18

BEREC (2011) Electronic Communications Services: Ensuring equivalence in Access and Choice for Disabled End-users. Available at: https://berec.europa.eu/eng/document_register/subject_matter/berec/download/0/202-electronic-communications-services-ensuring-equivalence-in-access-and-choice-for-disabled-end-users-berec-report_0.pdf.

Without a range of services which are accessible to PWDs, there is not equivalent choice. Ideally, in a competitive telecommunications sector, PWDs should have a choice of service providers, and the competition among service providers should be sufficient to ensure that PWDs receive high quality services. However, it may be the case that none or only a few of the service providers may be providing accessible services. In Jamaica, with there being only two players in both the fixed and mobile markets (i.e. Digicel and FLOW) the choice of providers even for non-accessible/standard offerings is limited. Notwithstanding the limited range of service providers, end-users with disabilities should have the ability to exercise their choice. If either Digicel or FLOW was the only entity that provided telecommunications services that can be accessed by PWDs, then this would not constitute the desired environment of equivalence for all users.

3.3.18 Additionally, where handsets are being offered as part of packages for subscribers without disabilities, there should be equivalent packages available with accessible handsets. The availability of such packages will allow PWDs to benefit from offers that are available to other end-users and which usually includes the subsidisation of handsets as part of the package price/subscription fee.

Accessible information about products and services

3.3.19 In the Determination Notice entitled "Improving Information Transparency in Telecommunications Markets – Determination Notice" (Document No: 2020/TEL/004/Det.001) (Transparency Determination), the OUR noted that one of the challenges that arise with technological advancements and innovations in the telecommunications sector is the lack of adequate information pertaining to the products and services that are made available by service providers.[19] It was also pointed out that consumers require public disclosure of accurate information regarding the increasing range of products and services in the sector to make informed choices pertaining to their use. However, many end-users find it hard to locate, understand and compare information with respect to the services provided by service providers. In the case of PWDs, the task is even more challenging, and without accessible information on products and services, they will not know which service providers are providing products and services that suit their needs.

3.3.20 PWDs should have the ability to exercise their choice in terms of comparing offers and switching service providers in an equivalent way to other end-users. In this respect, the OUR is of the view that having accessible information about prices and contract terms, and an accessible switching procedure, are important factors in ensuring that PWDs have equivalent choice of services. Service providers should also

[19] OUR (2020) Improving Information Transparency in Telecommunication Markets - Determination Notice Available at: https://www.our.org.jm/ourweb/sites/default/files/documents/sector_documents/determination_notice_-_improving_information_transparency_in_telecommunication_markets.pdf

be required to regularly inform PWDs, of details of products and services designed for them to ensure they are always aware of the choices available to them.

Chapter 4: Experience of Other Jurisdictions with Equivalence of Access and Choice

4.1 Introduction

4.1.1 One of the key steps to ensure PWDs' access to telecommunications, is to establish an enabling environment for ICT accessibility, just as countries decades ago created enabling environments for competition in the provision of ICT services. Around the world, countries have in some areas acknowledged and acted upon their obligation to provide equal access to ICTs, by implementing measures to ensure accessibility of telecommunications services for PWDs. Some countries have included clauses on accessibility in general telecommunications legislation, while others have created specific legislation to promote accessibility. This chapter gives an overview of how some jurisdictions have operationalised telecommunications accessibility.

4.2 United States of America

4.2.1 The United States' legislative framework includes several provisions that are aimed at ensuring accessibility of telecommunications services for PWDs. The Hearing Aid Compatibility Act as well as section 255 of the Communications Act mandate the Federal Communications Commission (FCC) to take steps to ensure that telecommunication service providers and equipment manufacturers make their equipment and services accessible to PWDs. The Hearing Aid Compatibility Act requires the FCC to ensure that all fixed line telephones manufactured or imported for use in the United States and all "essential" telephones, such as public phones, emergency phones and workplace phones, are hearing-aid compatible.

4.2.2 The FCC has promulgated rules which mandate telecommunication service providers and equipment manufacturers to make their services and products accessible to and usable by PWDs if such accessibility is "readily achievable".[20] Where accessibility is not readily achievable, the companies are required to ensure that their services and devices are compatible with specialized customer premises equipment that are generally used by PWDs, if such compatibility is "readily achievable". In determining what is readily achievable, the FCC weighs the costs and nature of the access required against the resources available to the particular company. The FCC rules also define the following terms:

"Accessible: A product or service is deemed accessible if it provides accessible input, control and mechanical functions, as well as accessible output, display and control functions. For example, a pager that has both audio and visual controls for inputting

[20] FCC (n.d) Telecommunications Access for People with Disabilities. https://www.fcc.gov/consumers/guides/telecommunications-access-people-disabilities

information, as well as both audio and visual methods for retrieving messages, would be accessible to a person who is blind or deaf.

Usable: For a product or service to be usable, people with disabilities must be able to learn about and operate the product's or service's features effectively. This requirement includes providing access to information and documentation for the product or service, including instructions and user guides. In addition, companies must provide functionally equivalent access to support services, such as technical support hotlines and databases, call centres, service centres, repair services and billing services."

4.2.3 The FCC rules are applicable to all hardware and software telecommunications equipment that are utilized in offices and at home. In regard to services, the rules cover basic and special telecommunications services including "*regular telephone calls, call waiting, speed dialling, call forwarding, computer-provided directory assistance, call monitoring, caller identification, call tracing and repeat dialling, as well as voice mail and interactive voice response systems that provide callers with menus of choices."*[21] Network architecture must also be designed in a way that does not hinder access by PWDs.[22] The provision of relay services is also mandated by the rules. Relay services are available in all 50 states, the District of Columbia, Puerto Rico and U.S. territories for local *and/or* long-distance calls. The service is provided free of cost to the users and the service providers are compensated from either a state or a federal fund. Several types of relay services are available depending on users' needs and the available equipment.[23]

4.3 Australia

4.3.1 There are several pieces of primary and secondary legislations that address the provision of accessible telecommunications equipment and services in Australia.[24] Together, they ensure that standard telephone services, payphones and prescribed carriage services are reasonably accessible to all persons in Australia on an equitable basis, wherever they reside or carry on business.

Telecommunications Disability Standard (2015)

4.3.2 The Australian Telecommunications Act (1997)[25] gives the Australian Communications and Media Authority (ACMA) the authority to establish disability

[21] Ibid
[22] Network architecture covers the public switched telephone network, and includes hardware or software databases associated with routing telecommunications services.
[23] Users can access the following services: Text-to-Voice TTY-based TRS; Speech-to-Speech Relay Service; and Captioned Telephone Service.
[24] Australian Government. Services for People with Disability
Available at: https://www.communications.gov.au/what-we-do/phone/services-people-disability
[25] Telecommunications Act (1997) https://www.legislation.gov.au/Details/C2019C00104

standards in relation to customer equipment used in connection with telecommunications services. The Disability Standard defines the technical requirements relating to the features of the equipment that are designed to cater for some of the special needs of persons with disabilities.[26] It prescribes requirements, and where appropriate recommends design features, which remove barriers to access for PWDs.

The Telecommunications (Consumer Protection and Service Standards) Act 1999 ("the TCPSS")

4.3.3 The TCPSS, ensures that PWDs are able to get access to equipment that enable them to enjoy reasonable access to the equivalent of a standard telephone service.[27] It also provides for the provision of a National Relay Service (NRS). With this service, PWDs can access telephone services on terms and conditions that that are similar to those by which non-disabled Australians access standard telephone services (inclusive of access to emergency services). Funding for the NRS is provided via a levy imposed on eligible telecommunications carriers.

Telecommunications (Equipment for the Disabled) Regulations, 1998

4.3.4 These regulations specify features and equipment that must form part of or be available with a standard telephone service. [28] Examples of the features which are required to be available are:

- an adapting device which allows access for persons with a cochlear implant;
- handsets with one-touch dial memory and built-in hearing aid coupler;
- handsets with hands-free capability telephone adaptor;
- volume control (to amplify either the incoming or outgoing caller's voice);
- alternative alerts to indicate that the telephone is ringing (either an additional device with adjustable volume tone and pitch or a visual alert); and
- the capability to connect a second piece of equipment in parallel with the existing telephone.

[26] ACMA (2015) Telecommunications Disability Standard (Requirements for Customer Equipment for use with the Standard Telephone Service – Features for Special Needs of Persons with Disabilities. Available At: https://www.legislation.gov.au/Details/F2015L00191

[27] Telecommunications (Consumer Protection and Service Standards) Act 1999. Available at: https://www.legislation.gov.au/Details/C2012C00089

[28] Available at: https://www.legislation.gov.au/Details/F1998B00123

4.3.5 The Regulations also set out the requirements for the provision of equipment to access NRS services, for example modems, TTY or Braille TTY machines.

4.4 European Union

4.4.1 The European Commission's 2002 Directive[29] (amended in 2009)[30] on universal service and users' rights relating to electronic communications networks and services (Universal Service Directive) requires Member States to ensure that all their citizens have access to a defined minimum set of services at an affordable price. Articles 7 (1) and (2) of the Directive outline a general obligation in relation to PWDs:

"1. 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.

2. 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. EU Member States are all required to transpose the requirements of the EU's Universal Service Directive into their domestic legislations."

4.4.2 Article 23a of the Universal Service Directive (USD) defines equivalence in access. The USD requires that 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. The USD was "refitted" by Directive (EU) 2018/1972 which came into effect in December 2018 and established the European Electronic Communications Code (EECC).[31] The EECC at Article 111 outlines the general obligation for Member States to specify measures that must be met by providers of publicly available electronic communications services to ensure that end-users with disabilities: (a) have access to electronic communications services, including the related contractual information, 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.

4.4.3 In addition to the general obligations, the USD and EECC also address the provision of the following accessible services: public pay phones; directory enquiry services;

[29] Supra 11

[30] European Union (2009) DIRECTIVE 2009/136/EC amending the Universal Service Directive. Available at https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32009L0136&from=GA

[31] European Union (2018) DIRECTIVE (EU) 2018/1972 establishing the European Electronic Communication Code Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018L1972&from=EN

and emergency services. They also include provisions concerning certain aspects of terminal equipment, intended to facilitate access for disabled end-users.

4.4.4 EU member states are required to transpose the obligations of the USD and EECC into their domestic legislations. The provision of accessible services and equipment in several EU member states are discussed below.

France

4.4.5 France has transposed the accessibility provisions of the USD into its domestic legislation. The recently passed Digital Republic Act also addresses the provision of digital technology to the disabled.[32] The regulator, Autorité de Régulation des Communications Électroniques et des Postes (ARCEP), operators and disability organizations have also signed a voluntary charter aimed at improving PWDs' access to mobile telephony.[33] These initiatives have led to the implementation of several accessibility measures in France such as:

i. Provision of accessible information: Service providers are required to provide bills, contracts and other documentation on products and services in an accessible format that suits the reasonable needs of the requesting PWDs.

ii. Accessible terminal equipment: In cases where the service provider usually provides devices, it is required to provide accessible options (including devices for fixed Internet access service). ARCEP has collaborated with operators in order to establish criteria for identifying accessible devices. Meetings are held with operators, representative organisations and institutions in order to find an agreement and a common understanding on what should be considered "accessible", based on the disability being considered. The agreed set of criteria has been shared with the mobile manufacturers' forum in order that the criteria can be integrated into GARI. Operators are required to report the number of accessible devices they provide to ARCEP each year.

iii. Accessible emergency services: Articles D. 98-8-1 to D. 98-8-6 of the French electronic communication code outline the requirements for the provision of an accessible emergency service. The articles describe the functioning of the service which is provided via a relay centre which then dispatches the calls to the relevant emergency service. The emergency service is available via a unique phone number (114), with no extra cost. A steering committee with

[32] Available at: https://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000033202746&categorieLien=id#JORFARTI000033203472

[33] ARCEP (2011) Charte d'engagements volontaires du secteur des télécommunications pour faciliter l'accès des personnes handicapées aux services de communication électronique. Available at: https://www.arcep.fr/fileadmin/reprise/communiques/communiques/2011/dossier-presse-charte-acces-handicap-090611.pdf

representatives from operators, public authorities and associations of disabled end-users, monitors the functioning of the emergency service.

iv. Access to text/video relay services: ARCEP sets quality of services standards for texts/video relay services provided.

v. Specialized packages: In keeping with the objectives of the voluntary Charter, signatories have developed specialized service offerings that have been adapted to the needs of PWDs (e.g. discounted videophones, SMS/MMS-only and data-only packages.

Italy

4.4.6 The Italian Electronic Communications Code defines the minimum set of services which must be made available to end-users, and provided by operators as a universal service obligation.[34] Articles 57 and 59.2 address the provision of services to disabled end-users. The regulator, Autorità per le Garanzie nelle Comunicazioni (AGCOM) has imposed several obligations relating to the provision of service to PWDs. They include[35]:

i. Provision of specialized service plans: AGCOM has mandated the following in relation to service offers for PWDs:

- Deaf and blind subscribers of fixed network services and residential subscribers whose family includes a deaf or blind person are entitled to a 50% reduction in the monthly fee for flat and semi-flat offers with Internet access or the use of at least 180 hours of free Internet access in the case of pay-as-you-go internet offers.

- Deaf and blind (including partially blind) mobile subscribers are entitled to an offer that is specifically tailored to their needs. The offer for deaf users should include 50 free SMS per day and a data allocation of at least 20 Gigabytes. In the case of blind subscribers, their offer shall include 2,000 free minutes of voice traffic and a data allocation of at least 10 Gigabytes. The cost of the package shall not exceed 50% of the lowest price charged by the particular operator for current similar offers with the same data traffic volume. Additionally, the price of each additional service (SMS, MMS) included in a dedicated package shall not exceed the lowest price charged for the same service.

ii. Provision of accessible information: Service providers are required to publish, in an accessible format, information about dedicated offers for fixed and mobile network and the related forms on their websites and in other service channels. In

[34] https://www.agcom.it/atti-e-provvedimenti

[35] https://www.agcom.it/documents/10179/10886381/Documento+generico+08-06-2018/9cd1e205-06f4-4122-b525-495adfc78938?version=1.1

the case of the website, the information should be provided with the appropriate graphics solutions, audio or sign language support.

iii. Provision of accessible public telephones: The phones must be compatible for consumers using hearing aids. Dome-type public phone booths are also required to be equipped with a metal bar at the base that allows for detection by persons with visual impairments who are using a white cane.

iv. Provision of accessible customer support: Italian service providers are mandated to provide deaf telecommunications subscribers with access to telephone contact services. They are also required to provide inbound telephone contact services that are accessible to deaf people who are using assistive technology and/or special configurations.

Poland

4.4.7 One of the purposes of the Polish Telecommunications Act, 2004 is to create conditions for "*ensuring that end users who are disabled persons have access to telecommunications services equivalent to the level of access offered to other end users*."[36] According to Article 81 Clause 3 of said Act, universal service means "*a set of telecommunications services, including facilities for the disabled, provided in any technology, preserving good quality and at a reasonable price …* ."[37] All providers of publicly available telephone services are required, where technically feasible, to ensure that its disabled end-users have access to telephone services of that provider equivalent to the access enjoyed by the majority of its end-users. The Act also provides for the Minister with responsibility for communications to specify detailed requirements related to the provision of facilities for the disabled.

4.4.8 Service providers are required to provide:

i. Terminal equipment adapted to meet the needs of persons with disabilities, including:

- amplifier phones which allow users to increase volume;
- telephones with voice output and an application software that enables users with visual impairments to use telephony services; and
- telephones with an enlarged keypad and special symbols.

ii. Accessible public pay telephones: Payphones are required to be adapted for wheelchair users as well as accessible to blind persons or persons who have severe hearing impairment.

iii. Accessible information: Upon request, service providers are required to provide, free of charge, to any residential customer who is blind or whose vision

[36] Available at: https://www.uke.gov.pl/gfx/uke/userfiles/m-pietrzykowski/telecommunications_act_en.pdf
[37] Ibid

is impaired, contracts in print large enough for such customer to read, Braille or electronic format appropriate to the reasonable needs of the customer. Service providers are also required 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. Service providers' websites are required to be adapted to the Web Accessibility Guidelines (WCAG)[38] 2.0. standard.

iv. Accessible customer support: The sales outlets of service providers must contain a designated area to support end-users with disabilities. The area should be equipped with a text message device to allow contact with persons with hearing or speech impairments. The outlets must also be accessible to people with physical disabilities.

Turkey

4.4.9 The Turkish Electronic Communications Law, 2009, requires entities involved in the provision of electronic communications services and the arrangements thereof to take into consideration "*the specific needs of disabled, elder and people in need of social protection*."[39] In keeping with that mandate, the Information Technology and Communication Authority **(**BTK**)** has imposed several obligations aimed at ensuring equivalent access and choice for PWDs.[40]

i. Mobile operators, fixed operators, Internet service providers and satellite platform service providers are obliged to provide:

- Subscription contracts and bills in Braille or as voiced announcement to end-users with visual disability upon request. Where applicable, voicemail regarding invoice and quota information should also be sent;
- Voicemail to end-users with visual disabilities where SMS notifications are being sent regarding changes in the terms of tariffs and service provision;
- Tariffs which include reasonable economic advantages for disabled consumers; and
- Accessible websites[41] that facilitate access to information for disabled consumers by creating a specialized section in their websites which includes all services designed specifically for disabled consumers. Operators with more than 200,000 subscribers are required to send an

[38] Web Accessibility Initiative. Web Content Accessibility Guidelines (WCAG). Available at: https://www.w3.org/WAI/standards-guidelines/wcag/

[39] Available at: https://tahseen.ae/media/3385/turkey_electronic-communications-law.pdf

[40] BEREC (2015) Update of the report on equivalent access and choice for disabled end-users Available at: https://berec.europa.eu/eng/document_register/subject_matter/berec/download/0/5418-update-of-the-report-on-equivalent-acces_0.pdf

[41] Applicable to all mobile operators and fixed telephony operators, internet service providers and satellite platform service providers which have more than 200,000 subscribers.

informative SMS which includes the link of the specialized section of their web sites to all subscribers.

ii. Additionally, mobile operators are obliged to provide:

- Location information for disabled consumers free of charge. Disabled consumers' location information should also be provided, free of charge, to at least one additional number if requested by the disabled person;
- SMS-only and data-only plans/packages/tariffs for disabled subscribers.

4.5 United Kingdom

4.5.1 The legal framework governing the provision of access to telecommunications services to PWDs includes the Communications Act, 2003[42] and the Equality Act, 2010[43]. The Communications Act imposes obligations on the Office of Communications (OFCOM) to consider the needs of PWDs, elderly and low-income groups while discharging its regulatory functions. Further, section 10 of this Act imposes a duty on OFCOM to encourage availability of easily available communication apparatus which can be used with ease by the widest possible set of people, including those with disabilities. Ofcom is also required to establish an advisory committee on elderly and disabled persons. In addition to its duties under the Communications Act, OFCOM, as a public authority, has general duties to promote equal opportunities under the Equality Act 2010.

4.5.2 In the UK, the General Conditions of Entitlement ("the GCs") are the regulatory conditions which apply to all providers of electronic communications networks and services that operate in the jurisdiction.[44] While service providers' obligations to PWDs can be found throughout the GCs, Condition C5 specifically outlines measures to ensure that providers give sufficient consideration to the needs of PWDs and other vulnerable persons. The Condition also seeks to ensure that PWDs have comparable access to electronic communications services as non-disabled persons. The accessibility measures which communication providers are required to provide include:

- Access to an approved text relay service - Such relay services must be capable of being accessed by end-users of the service from readily available compatible terminal equipment, including text-phones, braille readers, personal computers and mobile telephones. Providers are also required to ensure that the charges for the conveyance of messages through relay services are the same rate as would have been charged for a message conveyed without relay services. The

[42] Available at: http://www.legislation.gov.uk/ukpga/2003/21/pdfs/ukpga_20030021_en.pdf
[43] Available at: https://www.legislation.gov.uk/ukpga/2010/15/contents
[44] OFCOM. General Conditions of Entitlement. Available at: https://www.ofcom.org.uk/__data/assets/pdf_file/0021/112692/Consolidated-General-Conditions.pdf

communication providers must also design a special tariff scheme to compensate those subscribers who take more time to make calls using relay services.

- Accessible complaints handling process – The complaints handling procedures of providers are required to be sufficiently accessible such that it can receive and process complaints from PWDs or third parties acting on behalf of PWDs.
- Access to emergency SMS – Mobile service providers are required to provide end-users of their services who have a hearing or speech impairment, with SMS access to emergency organizations at no cost.
- Accessible directory information – Providers must ensure that persons who are unable to easily use printed directories due to their disabilities can access, free of charge, directory information as well as directory enquiry facilities in a form that meet the needs of the relevant PWD.
- Priority fault repair – Where the fixed line service of a PWD is in need of urgent repair, a provider must initiate a priority repair service. The charges for this service should not exceed those for the standard repair service offered by the provider.
- Bills and contracts in alternative formats – Upon the request of visually impaired subscribers, providers must provide bills and contracts, free of charge, in a format that is reasonably acceptable to the subscriber.

4.5.3 Service providers are also required to establish and publish policies and procedures for the fair and appropriate treatment of vulnerable consumers and to consult with the Consumer Panel established by OFCOM on the requirements and interest of PWDs.

4.6 Brazil

4.6.1 As part of its mandate the Brazilian telecommunications regulator, Agência Nacional de Telecomunicações (ANATEL), is required to encourage telecommunications equipment manufacturers and service providers to take into account all aspects of accessibility for PWDs in relation to the services and products which they offer. ANATEL has issued a series of rules aimed at achieving full accessibility for PWDs.[45] The rules impose several obligations on service providers including:

i. Provision of bills, contracts and general information on services in accessible format: Fixed, mobile, and fixed broadband service providers are required to provide visually impaired subscribers with, inter alia, contracts, details of service plans and bills in Braille or an accessible electronic format upon request. The accessible information should be available on their websites and all their service channels.

[45] ANATEL (updated 2020). Acessibilidade nas Telecomunicações. Available at: https://www.anatel.gov.br/consumidor/acessibilidade-nas-telecomunicacoes-direitos

ii. Provision of specialized service plans: Fixed, mobile, and fixed broadband service providers are required to offer reasonably priced service plans for hearing impaired and should ensure that each PWD is charged only for those services that are compatible with his type of impairment.

iii. Provision of accessible customer service: Fixed, mobile, and fixed broadband service providers are required to provide remote service channel interaction mechanisms, that are manned by qualified professionals, to serve people with disabilities. The mechanisms include: electronic messaging, web chat and video calling. The service providers are required to provide information on the availability of such mechanisms in an accessible format on their websites and in all their outlets.

iv. Priority service for installation of fixed services: Requests for installation of residential or commercial fixed line service made by PWDs must be met within the deadline set by ANATEL. Operators are however not required to provide the subscriber with an accessible device.

v. Provision of accessible public phones: In areas with more than 300 inhabitants, a set percentage of the public phones available should be adapted for each type of disability. PWDs can request the installation of adapted public phones. Where such a request has been made, the installation should be completed within seven days thereafter and the costs are covered by the particular fixed-line service provider.

4.7 South Africa

4.7.1 South Africa has promulgated regulations which prescribe a "Code for People with Disabilities"[46] with regard to the provision of services and products by all entities licensed under the Electronic Communications Act, 2005. Under the Code, licensees are required to ensure that their services are accessible and available to PWDs and must take steps to:

i. Ensure that the devices available for purchase are universally designed to cater to the needs of PWDs;

ii. Ensure that fixed line telephones are hearing aid compatible;

iii. Ensure that mobile devices available for purchase have functionalities that assist visually impaired and blind subscribers;

iv. Provide free directory services for consumers who are unable to use a printed directory because of a disability;

[46] Independent Communications Authority of South Africa. (2014) Code for People with Disabilities. Available at: https://www.icasa.org.za/legislation-and-regulations/code-for-people-with-disabilities

v. Provide special numbers by which PWDs can access fire, police, disaster management and ambulance emergency services;

vi. Prioritize fault repairs for disabled customers;

vii. Ensure that there are trained employees who can provide customer service and communicate with PWDs at their stores;

viii. Provide PWDs who visit their stores with an equipment demonstration, where reasonably necessary, before they purchase the equipment;

ix. Ensure that, where practicable, they provide upon request, printed material outlining accessible products for persons with disabilities in simple and reader friendly languages in their stores. Licensees should also provide brochures, videos and other information to organisations that work with deaf persons on a regular basis.

4.8 Canada

4.8.1 The Canadian Radio-television and Telecommunication Commission (CRTC) has addressed the issue of accessibility of telecommunications services through a series of decisions and regulatory policies starting from as early as 1998.[47] Through these instruments, the CRTC has placed the following obligations on carriers and service providers:

i. Provision in alternative format, upon request of subscribers who are blind,

   a. billing statements;

   b. bill inserts sent to subscribers about new services or changes in rates for existing services; and

   c. any bill inserts that are mandated from time to time by the Commission;

ii. Provision in alternative format, upon request of subscribers or potential subscribers who are blind, information setting out the rates, terms and conditions of the service[48];

iii. Exempt from retail directory assistance charges, registered customers who have disabilities;[49]

iv. Publication of information on all the disability-specific products and services offered (including the availability of in-store sign-language interpretation) on their websites;

[47] CRTC (1998) Telecom Order CRTC 98-626. Available at: https://crtc.gc.ca/eng/archive/1998/o98-626.htm
[48] CRTC (2001) Alternative Formats for a Person Who is Blind. Available at: https://crtc.gc.ca/eng/archive/2001/o2001-690.htm
[49] CRTC (2003) Telecom Decision CRTC 2003-61. Available at: https://crtc.gc.ca/eng/archive/2003/dt2003-61.htm

v. Consult with parties representing persons with disabilities on an ongoing basis to determine which handsets they will make available to address the needs of persons with disabilities. Also in consultation with these groups, the Commission requested that the service providers provide reasonable technical and lifecycle support of these handsets in order to address unique needs, such as those imposed by assistive technologies.

4.8.2 Wireless service providers are required to provide:

i. RTT-based NGN 911 Text Messaging services by 2020.[50]

ii. Copy of the contract, privacy policy, fair use policy, and Critical Information Summary in an alternative format, at no charge to a disabled customer upon request at any time during the period of contract.[51]

iii. A trial period of 30 days with one-month usage quota for PWDs.[52] This allows them to test the functionality of their device and the quality of service in respect of contracted plans.

4.8.3 The CRTC also encourages all service providers to offer in-store sign-language interpretation, upon request by the customer.

4.9 Trinidad and Tobago

4.9.1 In 2020 May, the Caribbean Telecommunications Union (CTU) along with sponsors including, the Telecommunications Authority of Trinidad and Tobago (TATT) VTCSecure, and Digicel (T&T) launched a pilot project for the Caribbean Video Assistance Service (CVAS). The service is available to deaf and blind users. In the case of deaf persons, it allows them to communicate with hearing parties via a video chat with a CVAS agent who interprets for the calling and called parties. If a deaf user is not available to take an incoming call, the CVAS agent will send a video mail to his or her email address. In the case of blind users, CVAS agents provide them with on-demand visual support through the cameras of their existing smart phones.

4.9.2 The pilot has now ended and the service which is completely free to use is available three days per week. CTU's goal is to launch the service in other Caribbean islands.

[50] CRTC (2017) Next-generation 9-1-1 – Modernizing 9-1-1 Networks to Meet the Public Safety Needs of Canadians. Available at: https://crtc.gc.ca/eng/archive/2017/2017-182.htm
[51] CRTC (2013). The Wireless Code. Available at: https://crtc.gc.ca/eng/archive/2013/2013-271.htm
[52] Ibid

Chapter 5: Measures to Improve Equivalence of Access and Choice

5.1 Introduction

5.1.1 As noted earlier in this document, it is recognised that with advances in technology and the accelerated development of new equipment, products and services, end-users with disabilities need equivalent access to services and choice of services and undertakings in order to participate fully in community life and feel the effects of social cohesion. Many persons with disabilities are active users of communications services, but may, because of their disabilities, face difficulties when using services which other people take for granted. Persons with disabilities may also be more reliant on certain telecommunications services. For instance, shopping, studying or banking online may be more accessible than having to visit the physical institutions. Additionally, PWDs may be reliant on a particular device that depends on having reliable telecommunications services. This Chapter outlines a number of measures which, if adopted by service providers, will improve equivalence of access to and choice of telecommunications services for PWDs.

5.1.2 The measures being proposed by OUR for licensees in respect of accessible services are considered appropriate and necessary to ensure that end-users with disabilities can enjoy access to telecommunications services. The focus is on those measures which fall within the mandate of the OUR. Some of these proposed measures may have been already addressed by one or more operators. Notwithstanding, the OUR thinks it is important that the issues be addressed across the industry in a consistent manner. This will enable implementation of consistent standards/requirements and thus ensure a coordinated approach. A lack of consistency in how measures are introduced may restrict both the equivalence of access to services for end-users with disabilities, and the extent to which they can benefit from the choice of providers available to the majority of end-users. Moreover, experience has shown that for developing countries, the voluntary measures implemented by the sector have not been particularly effective in promoting equitable access to ICT. We invite stakeholders' views, submissions and evidence about the proposals outlined below.

5.2 Special Plans for PWDs

5.2.1 The affordability of accessible telecommunications services can pose a key challenge for persons with disabilities. Their disabilities may require the use of specific services over others, however PWDs in many cases have to pay for a full suite of services which they may not be able to use. For example, mobile service providers may not offer text/data only packages that are suitable for deaf users who rely on data/text and

not voice. While prepaid mobile customers have some flexibility, the same is not true for post-paid customers. To ensure that PWDs have equivalent access and choice to the telecommunications services being provided in Jamaica, Licensees will need to take account of the differences in the manner that certain telecommunications services are used by persons with disabilities.

5.2.2 While retail tariffs are currently not regulated, the OUR is minded to implement measures to ensure that PWDs have access to telecommunications services offered by service providers that are equivalent to that enjoyed by end-users without disabilities. Operators should offer special plans, as appropriate, for users with disabilities. Persons with varying disabilities would then be able to access these specialised packages after certification of their disabilities by the designated entity(ies). It is expected that operators will notify the OUR of these rates and plans once established and of proposed changes thereafter. It is recommended that the JCPD and other organizations representing persons with disabilities be consulted on the design and development of these specialised packages.

Proposal I

1. Subject to subscribers receiving the required certification of disability by the designated entity(ies), service providers shall make available to subscribers with disabilities, service plans that are suited to their needs. The offers should be such that PWDs pay only for the services they are able to use.

2. Subject to 1 above, all service providers shall make available to PWDs post-paid and prepaid base plans. The composition of the base plans should be similar to that of a standard plan with the difference being that the services are accessible to persons with a particular disability(ies).

Question 1: Do you agree with the proposal? Please justify your position and provide supporting information and references.

5.3 Provision of Accessible Devices

5.3.1 The availability of accessible devices is a very important aspect to be considered when assessing equivalent access in the provision of telecommunications services. Without appropriate devices for end-users with disabilities, the use of a telecommunications service may not be possible. In the case of mobile handsets, the features that are beneficial to end-users with disabilities and necessary for use of the service are

available with some mainstream handsets.[53] Feedback received from PWDs indicates that in Jamaica, the prices for accessible devices and assistive technologies used with the fixed line service can be prohibitive. The markets for end-user telecommunications devices have been liberalized for over a decade and fixed service providers no longer offer subsidized customer premises equipment to their subscribers. Mobile service providers, however, still provide subsidized handsets to their subscribers and should therefore be required to provide handsets and mobile devices with embedded or preloaded accessibility features and applications.

5.3.2 It is also important that PWDs have a chance to test devices offered by service providers before purchasing. When compared with other end-users, PWDs are more likely to experience financial harm from purchasing telecommunication devices without testing. This is due to the following reasons:

- Prior to using the equipment, they will not know whether a particular handset is technically compatible with devices such as cochlear implants and hearing aids;
- Due to a lack of expertise and understanding, service providers' in-store staff may not be in a position to properly advise which device best suits a PWD's specific requirements;
- Depending on service providers' return policies, PWDs may not be able to return a purchased device once it has been used or tested by them off site.

5.3.3 Based on the foregoing, it is essential that PWDs have a chance to assure themselves that the device being purchased meets their needs.

Proposal II

1. Service providers shall ensure that their own or third party distribution channels, make available and promote to their customer base a selection of handsets and devices with embedded or preloaded accessibility features and applications which support users with various types of disability.
2. Mobile service providers shall make any applications they develop or preload on the devices they sell to customers accessible to PWDs and ensure that their own app store is accessible.
3. Service providers which sell telecommunications devices shall:
    a. Make available an in-store testing facility which allows PWDs to test devices in advance of purchase. Such a facility would allow end-users with disabilities to purchase devices with the knowledge and confidence that the equipment could be used by them before they make the purchase.

[53] The Global Accessibility Reporting Initiative (GARI) provides information about the accessibility features available on a wide range of mobile phones and other portable devices. https://www.gari.info/

b. Ensure that the testing facility is supported by on-site staff that are readily accessible and trained in the use of the devices. The staff should be adequately equipped to address any queries raised by PWDs in advance of purchase.

In the interim, while the testing facility and staff is being prepared, service providers should implement a returns policy which allows PWDs (once certification of disability is provided by the designated entity(ies) to return devices which have not been tested in advance of purchase if the devices do not meet their specific needs.

Question 2: Do you agree with the proposal? Please justify your position and provide supporting information and references.

5.4 Provision of Bills and Contracts in Accessible Format

5.4.1 The Telecommunications Act places a high degree of importance on end-user rights. An important aspect of this is the publication of transparent, comparable, adequate and up-to-date information regarding the provision of services such as applicable prices and other terms and conditions under which services will be provided. Clause 7 of the "General Consumer Code of Practice for the Telecommunications Industry" (Document No: 2016/TEL/008/RCM.002) ("the Telecommunications Customer Code")[54] recommends that operators notify their subscribers of any proposed modifications to contractual conditions and of their entitlement to withdraw from the contract without penalty if they do not accept the modification. The provision of contract terms that are unambiguous and clear allows subscribers to understand the scope of their obligations once they have entered into the contract as well as the nature of the service provider's responsibilities to the subscribers under the contract.

5.4.2 The OUR is of the view that in order to ensure equivalence for PWDs, service providers should be required to provide bills and contracts to PWDs in a format that is reasonably acceptable to the subscriber. For persons with low vision, telephone bills and contracts can be provided in large font size, while blind persons can opt to get theirs in a machine readable form where they can listen to the contents of the documents. The obligation to provide contracts and bills in an accessible format should extend beyond persons with visual disabilities to include other persons who, based on their disabilities (e.g. learning disabilities), may have difficulties understanding the contracts and bills in the format that they are now provided. An accessible format for such subscribers would include the provision of bills and contracts in "easy read" format. Easy Read is a format designed to make documents

[54] Available at: https://www.our.org.jm/ourweb/sites/default/files/documents/sector_documents/recommendations_-_general_consumer_code_of_practice_for_the_telecommunications_industry.pdf

more accessible to people with learning disabilities. It uses clear language and fewer difficult words to help simplify the text and help promote understanding.

5.4.3 The rationale for the provision of bills and contracts in these accessible formats is that it allows PWDs to read and understand bills and contracts without assistance from a third party. This promotes independence and privacy, ensuring equivalence with persons without disabilities who can read regular print contracts, bills and correspondence without assistance. It also allows them to read and understand the terms of their contract and therefore know what is required of them so that they can meet their obligations under the contract and know what providers are required to do under those contracts. The provision of such a service could be instrumental in expanding the customer base of service providers as PWDs would then be able to create and maintain their own accounts (personal or business) rather than relying on the help of non-disabled individuals who are already customers. This increased participation in the market benefits all stakeholders.

Proposal III

1. Service providers shall be required to provide bills and contracts to PWDs in a format that is reasonably acceptable to the subscriber. It is not sufficient for service providers to merely provide the service, they must also make consumers aware of this service and it must be readily accessible.
2. Service providers shall provide PWDs with the opportunity to register their alternative billing medium requirement with their service provider. This will ensure that service providers can meet the particular billing needs of their subscribers who have disabilities.

Question 3: Do you agree with the proposal? Please justify your position and provide supporting information and references.

5.5 Provision of General Information on Services in Accessible Format

5.5.1 The ability to access information about the products and services offered by Licensees is a fundamental part of acquiring and engaging with telecommunications services. Consumers, when contracting telecommunications services, rely on information provided by Licensees to make informed choices. According to Clause 4 of the Telecommunications Customer Code, Licensees should provide certain general information about a telecommunications service to consumers. The information to be provided should include:

- The contact information of the Licensee.
- The details of the procedures for handling complaints.
- The details and pricing plans for the service.
- The contract terms for the service.
- The details of the procedures for disconnecting customers.
- The privacy policies for the service.
- The acceptable use policies for the service.
- The emergency access conditions for the service.

5.5.2 The ability of PWDs to access information on services provided by service providers will impact their interaction with a particular service provider. In order to ensure equivalence of access and choice, service providers would need to make information regarding their products and services, including that which is available to the majority of end-users, accessible to users with disabilities. Service providers should make available such information, free of charge, and in an acceptable format. An acceptable format would include print that is large enough for the subscriber to read or an electronic format appropriate to the needs of the subscriber.

5.5.3 The requirement to provide accessible information would also be applicable to the online facilities provided by a particular service provider for end-users. Service providers should endeavour to make their websites accessible by removing the barriers PWDs face in using websites. For example, people who have visual disabilities require websites that are compatible with screen readers that read text aloud; provide text alternatives for images; allow for resizing of text, images and page layouts and provide alternative web navigation aids. People who are deaf or hard of hearing will require captions for any content that is spoken, including videos, media players and web applications. People with mobility disabilities may also require additional time to complete tasks on a website. The Web Accessibility Guidelines (WCAG) published by the Web Accessibility Initiative of the World Wide Web Consortium (W3C), aim at ensuring that online content is directly accessible by as many persons as possible and provide comprehensive and detailed instructions on how web content can be made more accessible to PWDs.[55]

Proposal IV

1. Service providers shall ensure that:
   a. Information regarding their products and services, including that which is available to the majority of end-users, is accessible to users with disabilities.

[55] Available at: https://www.w3.org/WAI/standards-guidelines/wcag/

The information shall be provided, free of charge, and in a format that is appropriate to the needs of the particular PWD.

b. Their online facilities including websites comply with the Web Content Accessibility Guidelines (WCAG) published by the World Wide Web Consortium (W3C) and at least conforms to WCAG 2.1 Level AA Standard.

c. Their websites have a Disability Section which is accessible by one-click access from the home page. This section of the websites shall contain:

- Comprehensive and up to date information about the products and services it provides which are of particular interest and relevance to people with disabilities;
- Terms and conditions governing provision of service, including notifications in respect to any modification to those conditions; and
- Information about their complaints handling procedures.

Question 4: Do you agree with the proposal? Please justify your position and provide supporting information and references.

5.6 Provision of Information to PWDs on the Products and Services Suitable for Them

5.6.1 Feedback from PWDs has revealed that they often have difficulty finding out which products and services are suitable for them. Being able to access the relevant information has the potential to prevent PWDs from experiencing financial harm, as it would help to ensure that they do not buy products and services that are not suitable for their needs. Providing details of the products and services that are suitable for PWDs should also facilitate the effective usage of telecommunications services by PWDs thus promoting digital and social inclusion. The OUR is of the view that if PWDs do not have appropriate information about the products and services which are designed for and/or suitable for their use, they will be denied means by which to secure equivalent access to telecommunications services. PWDs would, therefore, derive considerable benefit from knowing which telecommunications products and services are most suitable for them.

5.6.2 The OUR is proposing that service providers be required to regularly inform subscribers with disabilities of details of products and services designed for them, taking account of the need for accessible formats and appropriate channels of communication for PWDs. The information provided would be applicable to those

products and services that are designed specifically for persons with disabilities as well as any mainstream products and services offered by service providers that are accessible. In the case of devices, the information to be provided would be that which is readily available, as service providers would not be required to conduct compatibility tests.

Proposal V

1. Licensees shall make available to PWDs, information on the products and services that they provide which are suitable for the needs of different categories of PWDs. At a minimum, this would require the publication of information as well as the provision of accurate advice to customers over the telephone as well as in stores.

Question 5: Do you agree with the proposal? Please justify your position and provide supporting information and references.

5.7 Accessible Customer Support Services

5.7.1 In the "Notice of Proposed Rule Making for Quality of Service Standards and Consumer Protection Guidelines for the Telecommunications Sector" (Document No: 2014/TEL/005/NPR.002) ("the draft QoS Rules")[56] developed by the OUR, services providers are required to establish a complaints handling mechanism to deal with complaints from end-users. The OUR is aware that currently all service providers have some sort of facility to deal with subscribers' complaints. However, there are challenges for PWDs to contact these customer care/support centres. The OUR is concerned that detriment may be experienced by end-users with disabilities as compared with the majority of end-users in relation to:

- The ability of a services provider's customer support representatives to respond to PWDs specific requirements;
- PWDs' ability to access a service provider's customer support services in order to lodge complaints and/or to make enquiries;
- The fact that PWDs may need extra assistance when accessing a service provider's complaints handling or other support services and that they may frequently require more time to supply information (fill in forms, respond to telephone prompts, etc.);

[56] Available at: https://www.our.org.jm/ourweb/sites/default/files/documents/sector_documents/qos_responses_to_nprm.pdf

- The accessibility of a service provider's website to download information relating to the lodging of complaints and/or making enquiries.

5.7.2 Ensuring equivalence of access to customer support services for PWDs will require service providers to provide dedicated customer support services with trained personnel. Training of personnel, in particular those that deal with customers, is an important aspect of the delivery of accessible services. Some matters are complex and extra time may be needed for PWDs to understand the details, and be reassured, before they can make a decision. It is important that customer service representatives are willing to take the time necessary to explain the details of complex matters, such as switching providers. Service providers can use trained personnel to promote and support available accessibility options to persons with disabilities.

5.7.3 In some countries, service providers have set up their customer care centre to receive SMS or other types of messages. In a forum with PWDs it was pointed out to the OUR that services such as web chat are useful for lodging complaints in cases where verbal communication is a challenge for the end-user, and there is a preference for an immediate response. It was also suggested that it would be useful if service providers ensure that websites are compatible with assistive technology (text-to-speech software) as this provides end-users using assistive technology with independent access to support services. It was also highlighted that the recent changes to a particular service provider's customer care platform, which resulted in the platform being more automated, made it difficult for PWDs to access customer support services.

Proposal VI

1. Service providers shall:

   a. Provide end-users with disabilities with an accessible means to lodge complaints and/or to make enquiries. This would include having a dedicated customer support facility for PWDs at call centres and in stores.

   b. Ensure that staff dealing with PWDs are adequately trained to address their requirements and that they are able to assist PWDs in accessing the services and devices designed for them.

   c. Ensure that staff dealing with PWDs allow adequate time to address their requirements.

Question 6: Do you agree with the proposal? Please justify your position and provide supporting information and references.

5.8 Accessible Directory Assistance Services

5.8.1 Section 48 of the Act mandates all service providers to ensure that their subscribers can reasonably and reliably reach a directory assistance service. It also allows for a charge to be levied for the service. Currently, there are multiple ways of accessing directory information in Jamaica. There is a print version, online options and the choice to dial '1-1-4' to access the directory assistance service. The print and online options are available free of cost to the general public while the directory assistance[57] is a paid service. For many years in Jamaica, the rates charged for directory assistance service were heavily subsidized, however it is currently offered at a premium rate. Cable & Wireless Jamaica Limited (C&WJ) is the only entity that operates a directory assistance service which it also resells to other service providers.

5.8.2 There are some subscribers for whom the printed version is not an option because they have a visual impairment. Such subscribers are likely to experience detriment when compared to the majority of end-users in accessing (or attempting to access) the phone book. Additionally, many end-users with disabilities do not have access to the on-line telephone directory.

5.8.3 The OUR is of the view that to ensure equivalence with subscribers who are not disabled, every service provider should be required to provide access to a directory assistance service, free of charge, to those subscribers who cannot access the current freely offered services due to their particular disability. For example, subscribers who have a visual impairment and/or have difficulty reading the printed directory, should be permitted access free of charge to the directory assistance service once certification of disability is provided by the designated entity(ies). The OUR is also of the opinion that there should be no restrictions placed on the number of times a subscriber with a disability(ies) can access that service within a given period.

Proposal VII

1. Licensees shall provide subscribers that have a vision impairment and/or have difficulty reading the printed phone directory, with access to a free directory assistance service subject to subscribers meeting the required certification of disability by the designated entity(ies). There shall be no limit on the number of times that such subscribers can access the service.

Question 7: Do you agree with the proposal? Please justify your position and provide supporting information and references.

[57] Directory assistance is a phone service used to discover a specific telephone number and/or address.

5.9 Accessible Emergency Services

5.9.1 Telecommunication services play an essential role in connecting persons to emergency responders and resources, and people to people during emergencies, the aftermath and the recovery period. PWDs are especially vulnerable in the case of emergencies, and it is particularly difficult for them to get in touch with emergency services or their loved ones during such situations. In a report published in 2012, the ITU noted the specific challenges faced by PWDs in soliciting help in emergency situations.[58] The report noted that persons with a hearing and speech impairment may not be able to call for assistance. Those that are visually impaired, will find it very difficult to give information about their location which is a necessary detail for the provision of assistance. Additionally, when faced with a stressful situation, persons with a cognitive impairment will likely be unable to explain the emergency.

5.9.2 Article 9 of the UNCRPD specifically extends the obligation to provide accessible information and communication services to include emergency services. The Act requires all service providers to ensure that their subscribers can reasonably and reliably reach emergency services. The Act also requires that such access be provided at no cost to the subscriber. Emergency communication services therefore need to be tailored to suit the specific needs of PWDs, and they should be able to use their everyday ICT devices and services to contact emergency services. SMS based services, mobile applications and text relay are some of the means that jurisdictions have utilized to provide accessible ways in which emergency services are provided to PWDs.

5.9.3 The OUR is of the view that steps need to be taken to provide PWDs with options to access emergency services. In the OUR's 2018 Consultation Document entitled "*Development of Policy Recommendations for the Provision of Enhanced Emergency Service Access (Emergency Communications) in Jamaica*" (Document No: 2018/TEL/010/CON.001)[59] it was recommended that all wireless service providers of text messaging applications in Jamaica be required to deliver "emergency texts" to Primary Public Safety Answering Points. The ability to send emergency texts would also be beneficial for users without disabilities who may be in situations where it may not be prudent to place a voice call to emergency call centres.

5.9.4 The implementation of emergency texts is seen as a first step to ensure equivalence of access for PWDs in the provision of emergency services. As Jamaica's emergency

[58] ITU (2012). Making mobile phones and services accessible for persons with disabilities. http://staging.itu.int/en/ITU-D/Digital-Inclusion/Persons-withDisabilities/Documents/Making%20Mobile-English.pdf.

[59] Available at: https://www.our.org.jm/ourweb/sites/default/files/documents/sector_documents/development_of_eaesj_policy_recommendations_-_consultation_document.pdf

communications become more modernized, the OUR will consider broadening the means by which PWDs can access emergency services.

Proposal VIII

1. All service providers shall ensure that their subscribers are able to terminate SMS to the emergency call centres, unless it is technically infeasible. In keeping with section 48 of the Act the facility shall be provided at no cost to their subscribers.

Question 8: Do you agree with the proposal? Please justify your position and provide supporting information and references.

5.10 Third Party Bill Management & Fault Notification

5.10.1 There are some PWDs, who by virtue of their disabilities would benefit from the ability to nominate a third party to help manage their bills or make fault notifications. Such persons should be allowed to nominate a person to receive copies of bills and correspondence relating to bills. The third party would have to consent to this role and service providers should not require the nominee to accept liability for the disabled customer's bills. The benefit of this scheme is that the nominated third party can help to ensure that bills are paid on time, thus reducing the risk of disconnection for the disabled consumer. It also helps PWDs to avoid additional charges for late payment or reconnection or potential problems with creditworthiness. It also enables the third party to deal with the service provider in the event of a problem with the bill.

5.10.2 In the case of fault notifications, some persons, by virtue of their disabilities, may find it difficult to correspond and deal with organisations like service providers, and this may be a particular problem in difficult or stressful situations such as the loss of service. They may also have no, or limited, access to other telecommunications services at home, such as a mobile telephone (in the case of land-line faults). If such subscribers are unable to notify, or are inhibited from notifying, their providers of faults, this has clear potential to affect their access to a telecommunications service on a basis that is equivalent to others. It would be in the best interest of PWDs if they could nominate a third party, such as a trusted neighbour or relative, who would be able to contact the service provider should there be a fault with the customer's service. Enabling a third party to notify faults in relation to a disabled person's service could also result in more rapid fault notification as in some cases it may be not apparent to the customer that the service has a fault.

Proposal IX

1. Service providers shall allow PWDs to nominate a person to receive copies of bills and correspondence relating to bills, without the third party becoming liable to pay the bill. The third party would have to consent to this role.
2. Service providers shall allow PWDs to nominate a person to make fault notifications on their behalf.

Question 9: Do you agree with the proposal? Please justify your position and provide supporting information and references.

5.11 Facility for Subscribers with Disabilities to Register Requirements

5.11.1 Every service provider should establish and maintain a system or enhance and maintain their existing system to enable subscribers who are PWDs to register their disabilities and requirements (for billing, third party notification, etc.) once proof of certification of disability by the designated entity(ies) is provided. The system used for registration of PWDs must be able at a minimum to record, subject to the PWD's consent, the following information:

- Name, address, contact details (to include phone or email and/or third party nominated contact);
- Preferred means of communication;
- Preferences in respect to bundles (for example broadband or text only);
- Details of any special device required or assistive technologies; and
- Details of any alternative billing medium requirement.

5.11.2 Some persons may be of the view that the requirement to register in order to receive "functionally equivalent" services may not be in keeping with the principle of equal access. However, while it is not desirable to create or maintain barriers to the take up of such services, the need for registration is essential and beneficial for a number of reasons. One such reason is that without registration there is the risk that persons without disabilities would be able to access the services and this has cost implications. This was the case in the United States where the open structure of relay services led to fraudulent uses.[60] Following an investigation, the FCC began requiring users of IP relay services to register their screen names with a default relay provider.

[60] https://www.fcc.gov/consumers/guides/ip-relay-fraud

Proposal X

Every service provider shall establish and maintain a system or enhance and maintain their existing system to enable subscribers who are PWDs to register their requirements (for billing, third party notification, etc.). The system used for registration of PWDs must be able at a minimum to record, subject to the PWD subscriber's consent, the information listed at 5.11.1.

Question 10: Do you agree with the proposal? Please justify your position and provide supporting information and references.

5.12 Timeline for Implementation of Measures

5.12.1 The OUR is aware that the requirements proposed, will necessitate changes to several areas of licensees' operations and that some measures will require more time for implementation than others. The OUR therefore proposes to stagger the implementation of the measures as follows:

Table 1. Implementation Timeframe

Requirement	Implementation Date
Specialized Service Plans	Within 4 months
Accessible Devices	Within 6 months
Testing Facility	Within 9 months
Provision of Bills and Contract in Accessible Formats	Within 9 months
Provision of General Information on Services in Accessible Format	Within 9 months (Except for Website) Website – Within 12 months
Provision of information to PWDs on the products and services suitable for them	Within 6 months
Accessible Customer Service	Within 9 months

Requirement	Implementation Date
Accessible Directory Enquiries	Within 9 months
Accessible Emergency Service	As soon as is technically feasible
Third Party Bill Management and Fault notification	Within 4 months
Facility for Registration of PWDs	Within 4 months

Question 11: Do you agree with the proposed implementation timelines? Please justify your position and provide supporting information and references.

Chapter 6: ICT Accessibility Recommendations

6.1 Introduction

6.1.1 The previous Chapter focused on measures that can be implemented by service providers to ensure equivalence in access to and choice of telecommunications services for PWDs. However, it is pertinent that governments, development partners, civil society and disability sector experts also work towards promoting ICT accessibility for PWDs. This Chapter recommends measures that can be pursued by these entities to improve ICT accessibility in Jamaica.

6.2 Formalization of the Certification of Disability Process

6.2.1 Jamaica needs to have a means of identifying persons with disabilities. The majority of the proposals made in Chapter 5, will be applicable only to PWDs who have received certification of their disabilities and have registered their disabilities with service providers. Given the risk of fraudulent behaviour which could result in persons who truly require the services being unable to access them, the OUR is of the view that the requirement to prove eligibility for the purposes of the proposed measures is reasonable. Section 13 of the Disabilities Act, 2004 provides for the registration of PWDs by the Jamaica Council for Persons with Disabilities (JCPD). Upon registration, PWDs will be issued with a certificate of registration. The OUR has been advised that some operators currently accept certification from medical practitioners. In a focus group with PWDs, it was pointed out that medical professionals have differing opinions on what constitutes a disability. Some persons were of the view that only the JCPD or similar organisations should be empowered to issue proof of a disability in order for persons to benefit from accessible services. However, it was also pointed out that the JCPD does not have offices in all parishes and that this could place PWDs in some parishes at a disadvantage.

6.2.2 The decision of who should certify PWDs is outside the OUR's remit. However, OUR believes that the avenues for PWDs to attain certification of a disability should be readily available, in order to avoid detriment to them. Consideration should also be given to the creation of a national classification/definition scheme for the different types of disabilities. Such a scheme would allow for the proper determination of eligibility for programs created for PWDs.

Recommendation I

Facilities should be made available for the certification of disabilities. These certification facilities should be made available in major towns of each parish to ensure accessibility by persons with disabilities across Jamaica.

Recommendation II

A national classification/definition scheme should be created for the different types of disabilities.

Question 12: Do you agree with the recommendations? Please justify your position and provide supporting information and references.

6.3 Inclusive Public Procurement Policy

6.3.1 Historically, countries have used public procurement to achieve national development objectives as well as more equitable outcomes. Public procurement policy can have a significant impact on the provision of accessible ICTs. The CRPD states that signatories should ensure that "*their public procurement procedures incorporate accessibility requirements*". As noted by the European Committee for Electrotechnical Standardization, most modern ICTs can be made accessible or already contain accessibility features therefore "buying accessible" makes good business sense.[61] According to the ITU's Model Accessibility Policy Report, a public procurement policy that requires public sector agencies to procure accessible ICT equipment and services serve two key objectives:[62]

i. By procuring the most accessible ICT equipment, agencies can provide an accessible work environment for its employees and accessible public services for citizens;

ii. The public procurement of accessible ICTs creates a market for accessible ICTs thus incentivizing manufacturers and service providers to produce and stock accessible ICTs. As noted by the WTO, public sector procurement constitutes a significant market and accounts for 10-15 per cent of the GDP of a country's economy on average.[63] In 2002, the World Bank estimated that Jamaica's public procurement was approximately thirty (30) percent of its GDP.[64] The larger market and increased competition among supplying entities will likely lower costs

[61] Available at: https://www.cenelec.eu/aboutcenelec/whatwedo/technologysectors/Informationandcommunicationtechnology.html
[62] ITU (2014) Model ICT Accessibility Policy Report. Available at: https://www.itu.int/en/ITU-D/Digital-Inclusion/Persons-with-Disabilities/Documents/ICT%20Accessibility%20Policy%20Report.pdf
[63] Available at: https://www.wto.org/english/tratop_e/gproc_e/gproc_e.htm
[64] https://www.ncc.gov.jm/website_files/gpphandbook_ver4/procurement_policy-101230.pdf

and promote wider availability of accessible ICT products and services in the marketplace.

6.3.2 In order to achieve the above objectives, public procurement agencies will need to:

i. Include statements about user accessibility needs that are based on international standards in their tender calls. Section 508 of the United States 1973 Rehabilitation Act provide enforceable ICT accessibility standards that Federal agencies must incorporate as a mandatory set of requirements with which procured ICT products and services must conform.[65] The European Union has established similar standards.[66]

ii. Utilize commonly used conformance assessment procedures to confirm that the ICT goods and services being procured meet the required level of accessibility conformance.

6.3.3 The ITU has developed a model policy to guide all government bodies in the public procurement of accessible ICT equipment and services.[67] It also offers training in the subject area. By utilizing an accessible procurement policy, public sector procurers in Jamaica have the opportunity to increase the availability of accessible ICT products and services and also deliver good social outcomes. It will enable more citizens to use ICT goods and services as well as enable them to communicate with public entities through ICT channels, which are invariably more cost-efficient than other more traditional customer channels.

Recommendation III

It is recommended that Jamaica adopts an inclusive public procurement policy in order to promote equivalence within the ICT market for end-users with disabilities.

Question 13: Do you agree with the recommendation? Please justify your position and provide supporting information and references.

[65] Available at: https://www.doleta.gov/disability/laws-regulations/rehabilitation-act/
[66] European Telecommunications Standards Institute (2018) Accessibility Requirements for ICT Products and Services. Available at: https://www.etsi.org/deliver/etsi_en/301500_301599/301549/02.01.02_60/en_301549v020102p.pdf
[67] Available at: https://www.itu.int/en/ITU-T/Workshops-and-Seminars/20190325/Documents/Draft%20Standards%20in%20the%20Procurement%20of%20Accessible%20ICT%20Products%20and%20Services.pdf

6.4 Creation and Promotion of Public Accessible Telecommunication/ICT Policies and Facilities

6.4.1 In developing countries, many of their Internet users depend on publicly available Internet access. As commercial and public services are increasingly being accessed through the Internet, public access is of significant importance. Since its inception, the Universal Service Fund has established over 300 Community Access Points (CAPs) and has signalled their intent to establish additional sites.[68] The 2016 ICT Usage and Adoption Survey found that CAPs are utilized by persons of different age groups and for purposes such as, business, bill payments, social networking and educational purposes. In light of the role that public internet access plays in providing services to those who do not have individual access to ICT services, it is essential that the ICT equipment/devices and the facilities in which they are housed are accessible and available on an equivalent basis to PWDs.

6.4.2 The steps to achieve these objectives include:

i. Establishing general principles of accessibility to govern provision of public ICT facilities: Globally, entities such as the Kiosk Manufacturer Association (KMA) have established minimum standards for accessibility to information, products and services that are provided via ICT deployed in places of public accommodation.[69] KMA's objective is to ensure reasonable access to information, products and services for PWDs including those with sensory impairment(s), limited dexterity, restricted mobility or cognitive impairment.

ii. Promoting awareness of accessible public access facilities among PWDs: Such promotion would include the use of appropriate signage to advertise that these public access facilities are accessible.

iii. Training staff at public ICT facilities on how best to serve PWDs. The staff should be knowledgeable on all available accessible ICT features for people with different kinds of disabilities including the physical setup and use with assistive technologies; and

iv. Ensuring that emergency communications and exits provided in public access facilities are accessible for PWDs.

[68] Available at: https://jis.gov.jm/features/usf-to-establish-more-community-access-points/
[69] Available at: https://www.marketscreener.com/news/KMA-Call-for-Participation-Code-of-Practice-for-Accessibility-of-ICT-Terminals-Kiosks-for-Deplo--28865279/

Recommendation VI

Entities providing publicly available ICT equipment/devices should ensure that the ICT equipment/devices and the facilities in which they are housed are accessible and available on an equivalent basis to PWDs.

Question 14: Do you agree with the recommendation? Please justify your position and provide supporting information and references.

6.5 Creation of Public Awareness Programme

6.5.1 Awareness of accessibility policies and the availability of accessible ICT products and services for persons with disabilities is critical to promoting ICT accessibility. However, there tends to be an information gap between the providers of ICT products and services and PWDs, and often times PWDs are not fully aware of the accessible offerings in the marketplace and policies that could improve their access to ICTs. For instance, there are several free mobile and web-based applications through which PWDs can benefit from the use of digital devices. Dissemination of ICT accessibility information is critical, not only to PWDs, but also to all relevant stakeholders in order to create an ICT accessibility culture, raise awareness of the importance of implementing accessibility policies, and ensuring that PWDs can access the ICT products and services they provide in an equivalent manner.

Recommendation V

A national public outreach programme should be created to raise awareness of the benefits of ICTs for PWDs, existing ICT accessibility policies and accessible offerings that PWDs can access in an equivalent manner. The campaign should be developed by the Ministry with responsibility for ICTs in collaboration with the Ministry with responsibility for PWDs, ICT regulators, disability organizations and private sector stakeholders. The information that is made available to the public through these campaigns should be provided in accessible formats with the input and involvement of persons with disabilities and their organizational representatives.

Question 15: Do you agree with the recommendation? Please justify your position and provide supporting information and references.

6.6 Development of a Universal Service Disability Programme/Project

6.6.1 Universal Service Funds (USFs) are one mechanism that can be used to finance projects to ensure access to ICTs for persons with disabilities. The Act recognises that such funds should not only be used to provide ICT connectivity in unserved areas but that they must also be used to make ICTs accessible to PWDs and other vulnerable groups by providing necessary skills, equipment and support. The WHO Action 2.5 of the Plan calls on Member States to make available appropriate assistive technologies that are safe, of good quality and affordable through financing mechanisms and programmes, including systems where persons with disabilities can rent assistive technologies.[70] The provision of relay services in many jurisdictions are usually subsidized with universal service funds.

6.6.2 The OUR is aware of contributions made by the USF to the educational institutions for PWDs and organisations which support PWDs such as, JCPD, Jamaica Society for the Blind and Jamaica Association for the Deaf. However, this funding is ad hoc and usually based on specific requests. An official programme should be developed to address the ICT accessibility needs of PWDs on a wider scale. A gap analysis of ICT accessibility in Jamaica should be conducted to identify areas where intervention is necessary and there should be initiatives specifically tailored to address those areas. A USF Programme for Persons with Disabilities should be developed in collaboration with disability interest groups, representatives of the telecommunications industry as well as the OUR and other governmental bodies.

Recommendation VI

An ICT Accessibility Programme funded by the Universal Service Fund should be developed to address the ICT accessibility needs of PWDs.

Question 16: Do you agree with the recommendation? Please justify your position and provide supporting information and references.

[70] WHO (2015). WHO Global Disability Action Plan 2014-2021: Better Health for All People with Disability. Available at: https://www.who.int/disabilities/actionplan/en/

Appendix 1: Accessibility Features for Telecommunication Devices

Accessibility Features for the Hearing Impaired

- Visual or vibrating alerts: Mobile handsets can be set to vibrate or give visual alerts to inform the user about messages, calendar appointments, and wake up alarms, etc.
- Adjustable volume control: This feature on both mobile and fixed handsets is especially useful for those who are hearing impaired as well as for enhancing functionality of hearing aids.
- Messaging options: Mobile handsets provide an essential functionality for the hearing impaired and the deaf community as it offers an alternative to verbal communication by allowing the hearing impaired to contact people in the form of text messages, either SMS (short messaging service), email or MMS (multimedia messaging service).
- Text Teletypewriter (TTY): TTY is a dedicated device that transmits typed text conversation over telephone lines for those who cannot use spoken conversation. When TTY machines are used at both ends of a conversation, persons who are hard-of-hearing, deaf or speech-impaired can communicate by sending and receiving text messages in the same manner that regular phone calls are made and received.
- Video conferencing: This feature allows deaf persons to communicate instantly and more effectively using sign language instead of relying on texting. It is available on most smart phones and has significantly enhanced the means of communicating for the deaf and hard of hearing.

Accessibility Features for the Visually Impaired

- Voice feedback for touch screen phones: This feature allows persons using touch screen handsets to hear the description of the icon that is under their finger tip. Touch screens are usually frozen when they are in voice feedback mode which allows the user to explore the icons freely without being concerned about the icons being inadvertently activated.
- Audible cues: Sounds on fixed and mobile handsets can be used to indicate specific services, features or scenarios such as: caller waiting, disconnection of a call, the adjustment of the volume level, low battery, etc.
- Adjustable brightness/contrast controls/backlit display: These features allow the visually impaired user to customize the display to meet individual needs.
- Text-to-speech functionality: This feature can be useful for checking caller ID and reading text messages.

Accessibility Features for Persons with Dexterity Disabilities

- Voice recognition: Persons with limited dexterity rely heavily on voice commands for placing and answering calls, writing text messages, opening and closing applications, making calendar entries and setting reminders and surfing the web.
- Auto Text: Messaging for users with limited hand movement is possible by using AutoText that replaces particular text with preloaded texts to reduce the number of keystrokes needed to type the message.
- Speed dial: This feature is particularly useful for persons who find it difficult to key in numbers.
- Optional accessories: Add-ons such as a Bluetooth headset or keyboard can make texting and talking easier; wireless headsets aid call management without the need to press numerous buttons;
- Other features: ability to answer calls by pressing any key; ergonomic grips and skid-free casing for improved stability; enabling users to lock modifier keys on QWERTY keypad phones which allows them to perform with a single keystroke, actions that usually require multiple keystrokes.

Accessible Features for Persons with Cognitive Disabilities

- Alternative input functions: At the most basic level, a speed dial or voice dial function on a handset can enable a user with a cognitive disability who cannot easily input numbers to place a telephone call. Additionally, the device might offer users the option to use pictures or images to reach contacts.
- Alternatives to passwords: Some devices use biometric solutions, such as fingerprint or iris scans for optical recognition. This can assist individuals who have difficulty remembering passwords.
- Simplified device operation and navigation: On some devices, both the screen layouts and the commands and prompts can be customized to reduce the number of steps required to reach certain functions or to eliminate all but the most basic functions.
- Information Storing Features. Handsets with information storing features provide users who have frequent memory loss with a specified location for the retrieval of such information.
- Time Tolerance: Some individuals have challenges when processing information and therefore may find that the content on a screen disappears before they have had time to react or that a person finishes speaking before they have time to formulate a response. Some devices allow users to slow the speed of incoming speech or control how long content

remains on a device's screen thus providing users with the time they need to engage a feature or application.