
Qatar's eAccessibility Policy

The Supreme Council of Information & Communication Technology "ictQATAR"

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Definitions

eAccessibility	is 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 accessing or using ICT related products or services.
Assistive Technology (AT)	is any information and communications technology, products, devices, equipment and related services used to maintain, increase, or improve the functional capabilities of individuals with special needs or disabilities.
Automated Teller Machine (ATM)	is an interactive computerized public terminal that enables a user to conduct financial transactions such as cash withdrawals, deposits, transfers and account inquires.
Audio description	is a feature of a video programming (e.g. film, TV and multimedia) that inserts audio narrated descriptions of key visual elements at the natural pauses between the program's dialogues. This feature allows the video content to be accessible to those with visual disabilities.
Braille	is a series of raised dots that can be read with the fingers by people who are blind or whose eyesight is not sufficient for reading printed material.
Digital Accessible Information System (DAISY)	is a standard that defines the format and content of the electronic file set that comprises a digital talking book. Digital talking books in DAISY format are designed to make print material accessible and navigable for blind or otherwise print-disabled persons.
Closed captioning	is the means by which the audio dialogue and sound effects of a video program are made visible via on-screen text that is synchronized with the audio. Closed captions allow the content of video programming to be accessible to those who cannot hear the audio.
Disability	results from the interaction between persons with impairments, conditions or illnesses and the environmental and attitudinal barriers they face. Such impairments, conditions or illnesses may be permanent, temporary, intermittent or imputed, and include those that are physical, sensory, psychosocial, neurological, medical or intellectual. Elderly people with functional disabilities are also regarded as persons with disabilities in this document.
Elderly	is a person over 60 years of age according to Qatar's Social Security Law No

(38) of 1995.

Emergency services	is information about a current emergency intended to further the protection of life, health, safety, and property, i.e., critical details regarding the emergency and how to respond to the emergency.
Information and communication technology (ICT)	refers to equipment and services related to broadcasting, computing and telecommunications, all of which process, store and transmit information through computer and communications systems.
International Telecommunication Union (ITU)	is the leading United Nations specialized agency for information and communications technology issues. The ITU’s mission is to enable the growth and sustained development of telecommunications and information networks, and to facilitate universal access so that people everywhere can participate in, and benefit from, the emerging information society and global economy.
Qatar’s Assistive Technology Center (MADA)	is a Qatari non-profit organization that aims to empower and enable persons with disabilities and the elderly through Assistive Technology.
Open captioning	is text appearing on top of a video program in order to relay dialogue and sound effects (i.e. glass breaking) of a program for people who cannot hear.
Public access terminal	is an electronic terminal for public access. It includes information kiosks, ticket vending machines, interactive information displays and other information transaction machines.
Print disabled	is a person for whom a visual, cognitive or physical disability hinders his or her ability to read print. This includes all visual impairments, dyslexia, and any physical disability that prevents the use of a physical copy of a print publication.
Public sector	includes government ministries, agencies and public organizations in Qatar. See Appendix B for a list of these organizations.
Text Relay Service	is a text-to-speech and speech-to-text telecommunications service. A human text relay operator performs the translation between the caller and the recipient.
Video Relay Service	is a video-telecommunications service that allows deaf or hearing impaired and speech-impaired individuals to communicate over video telephones (and similar technologies) with hearing people in real-time via a sign language

	interpreter.
Instant Messaging (IM) - Relay Service	is a service similar to the Text Relay Service but utilizes instant messaging as a means of communications between the user and the service operator.
Service Provider	is a person who is licensed to provide one or more telecommunications services to the public or licensed to own, establish or operate a telecommunications network to provide telecommunications services to the public. This includes providers of information or content provided using a telecommunications network.
Total Conversation Service	is an audiovisual communication service providing bidirectional symmetric real-time transfer of motion video, text and voice between users in two or more locations.
Universal design	is design criteria aimed at ensuring that everyone can participate in the information society.
World Intellectual Property Organization (WIPO)	is the specialized agency of the United Nations that is dedicated to developing a balanced and accessible international intellectual property system.
Website	generally refers to the entire collection of electronic files that are accessible through a domain name.

1 ictQATAR's Legal Mandate

Article 3 of Decree Law No. 36 of 2004 establishing ictQATAR provides that the objective of the Supreme Council is to regulate the two sectors of Communication and Information Technology and to create an advanced Information Community by preparing a suitable environment of infrastructure and a community capable of using communication and information technologies.

Article 4 of Decree Law No. 36 of 2004 establishing ictQATAR acknowledges the Supreme Council of Information and Communication Technology, as the highest competent authority in the affairs of communications and information technology, has the authority and competence necessary for the discharge of such affairs and in particular the authority to regulate and to make policies for the two sectors of Communication and Information Technology in the state of Qatar.

ictQATAR's Strategy ICT2015 commits the nation to developing an ICT-skilled population whose members share equal access to technology and can succeed in a knowledge economy. This effort includes the prioritization of disadvantaged demographic groups, especially women, retirees and citizens with special needs.

2 Supporting National Mandates

The Qatar National Development Strategy 2011-2016 supports the use of ICT for improving learning environments for children with special needs, provides support to families facing special circumstances particularly those with elderly or disabled family members and supports initiatives that ensure social inclusion for persons with disabilities.¹

Qatar's General Family Strategy aims to improve the standards of living for families in different areas such as social, economic, health, education and technology. It emphasizes employing technology by the disabled and the elderly to conduct daily life activities. It also considers that the lack of Arabic content is one of the hurdles preventing people over the age of 60 to make use of technology.²

Qatar is a signatory to The United Nations Convention on the Rights of Persons with Disabilities, which went into force on 3 May 2008. This convention recognizes accessibility as a human right and requires signatories to adopt appropriate measures for access for persons with disabilities on an equal basis with others to information and communications technology, emergency services and Internet services.³

¹ Qatar National Development Strategy 2011-2016, Qatar General Secretariat for Development Planning, March 2011

² General Family Strategy in the State of Qatar, Supreme Council for Family Affairs, 2010, Section 9, 10

³ United Nations Convention on the Rights of Persons with Disabilities, United Nations, May 3, 2008, Article 9.

3 Introduction

eAccessibility is aimed at ensuring persons with disabilities can access information and communication technologies on an equal basis with others. This includes removing barriers to accessing and using ICT products, services and applications. ICTs such as computers, mobile phones, websites and public access terminals/kiosks can make day-to-day life easier, increase work productivity, improve learning, facilitate information exchange and enhance social life. However, if these ICTs are not fully accessible, they may actually become tools of exclusion for certain population groups by raising new barriers.

A World Bank report measuring disability prevalence in 2007 estimated that 10 to 12 percent of the world's population has a disability.⁴ If age related disabilities are included, the percentage of the world's population with disabilities grows to 18%, which is just over a billion people at 1,232,000,000. Although, available statistics indicate that Qatar's disability prevalence is lower than international levels, it is growing. For example, the Statistics Authority's Disability Survey of 2009 indicates that the number of persons with disabilities grew 23% from 2007 reaching 10,174 in 2009. These figures should be considered conservative as the survey only accounts for people registered with specialized hospitals and centers. Furthermore, the 2010 census indicates that people aged 65 and above has almost doubled from 8,659 in 2000 to 15,708 in 2010.

Qatar's citizens and residents are increasingly relying on ICTs for work, education and social activities. Twenty-four percent of residents, 41% of government workers and 42% of businesses reported that they used Hukoomi, Qatar's government online portal in 2010. The number of computers in schools, homes and offices reached 100%, 89% and 76% respectively in 2010. Internet penetration reached 98% for schools, 84% for households and 60% for businesses in 2010. Mobile telecommunications service providers indicate a saturated market with penetration at 166% in September 2010⁵.

Indicators provided by international bodies also confirm that the residents of Qatar rely heavily on ICT products and services. For example, the World Economic Forum's Networked Readiness Index ranks Qatar 30th out of 133 countries⁶. The ITU's ICT Development Index 2008 ranks Qatar 45th out of 159 countries⁷. However, ICT products and services are still largely inaccessible to persons with disabilities and the elderly. If these products and services remain inaccessible, persons with disabilities, including the elderly will be at risk of exclusion in an advanced knowledge-based society.

ictQATAR is committed to developing an ICT skilled population whose members share equal access to technology and services. It prioritizes disadvantaged demographic groups, especially women, retirees and persons with disabilities including the elderly as one of its goals. This is the rationale behind this

⁴ Daniel Mont, Measuring Disability Prevalence, the World Bank, March 2007, Section 3.6.

⁵ Qatar's ICT Landscape Report, ictQATAR, 2011

⁶ Soumitra Dutta, Irene Mia, Global Information Technology Report 2009-2010, World Economic Forum, 2010, page xvii.

⁷ Measuring the Information Society 2010, ITU, 2010, page 10.

eAccessibility policy.

4 Scope and Application

The goal of this policy is to lay the building blocks for an accessible ICT ecosystem in Qatar to enable persons with disabilities to take full advantage of ICTs as well as to provide benefits for the rest of society through improving the general usability of ICT products and services for everyone.

ictQATAR has adopted a pragmatic approach in the development of this initial eAccessibility policy. This approach identifies the leading barriers to a fully accessible ICT ecosystem in Qatar today and includes provisions to reduce these barriers over the next 5 years. These barriers are:

- Inaccessible websites and content. There are only a handful of public and private sector websites targeted at audiences in Qatar that include features for those with disabilities. Moreover, the content of these websites is generally not accessible by smart mobile phones and handsets – devices increasingly used by persons with disabilities to communicate.
- Inaccessible telecommunications services and supporting technologies. Specialized telecommunications services and supporting technologies for persons with disabilities are available but limited. Critical services still needed include emergency services, accessible public pay phones and relay services to enable persons with speech, hearing and mobility disabilities to communicate with the rest of society.
- Inaccessible public access terminals/kiosks and ATMs. ATMs and public access terminals/kiosks provide citizens and residents with a large number of critical and convenient government and banking services. However, these terminals/kiosks do not include features that would enable many persons with disabilities to use them. For example, the height of the display screen and input pads may be too high for someone in a wheelchair to reach. Braille keys and/or voice guidance may not be available to enable usage by the visually impaired. This means that persons with disabilities must physically travel to government agencies and banks for services or ask others to visit these agencies for them, which may delay, prevent and/or create misunderstandings in the acquisition of needed information.
- Limited usage and access to Assistive Technologies (AT). Persons with disabilities as well as their families, educators and employers are not fully aware of the wide range of ATs available and their advantages. If they are aware of ATs, they may not know how to get access to them or how to use them. Furthermore, procurement policies for both public and private sector organizations do not give priority or preference to accessible or universal design technologies.
- Dearth of accessible digital content, especially in Arabic. Accessible digital content is content such as music, text, audio, images and video that persons with disabilities can utilize. This type of content is scarce everywhere but even more so in countries like Qatar where the first language is not English. The limited availability of accessible digital content in the local

language has an adverse impact on the social, educational and employment opportunities for persons with disabilities and particularly for those who are deaf or hearing impaired, blind or suffer from vision impairments.

This policy includes provisions for telecommunications service providers, the public libraries such as the Central Library, Qatar's Assistive Technology Center (MADA), producers and distributors of digital content in Qatar and public sector organizations as listed in Appendix B.

ictQATAR shall closely monitor the progress of this policy. It maintain relationships with all of the parties responsible for implementing the policy's provisions and developing communications mechanisms as needed to ensure smooth coordination and implementation. ictQATAR may also review, update and/or widen the scope of this policy at a later stage to include other issues affecting the development of a fully accessible ICT ecosystem. At a minimum, this policy will be reviewed every five years and updated as needed.

5 Policy Provisions

5.1 Summary

The purpose of this policy is to address key barriers to using ICTs in Qatar to help ensure that users with disabilities can benefit from and participate in an advanced knowledge-based society. Keeping in the mind that less than 1% of Qatar's population includes persons with recorded disabilities, the provisions of this policy have been designed to be practical and achievable without placing an undue financial burden on implementing bodies. The specific policy provisions include:

- Requiring telecommunications service providers to provide accessible handsets, user interfaces, relay services, special rate plans, emergency services and accessible public payphones where appropriate.
- Enabling public sector organizations to develop websites and mobile content that can be accessed by persons with disabilities. For example, persons with disabilities should be able to access and provide information as needed to take advantage of online government services.
- Requiring all public sector organizations, including banking institutions, to implement service improvements that will ensure that public access terminals/kiosks and ATMs are available at strategic locations and usable by people with low vision blindness, deaf or hearing impairments, physical disabilities and reading problems, including the inability to read.
- Requiring Qatar's Assistive Technology Center (MADA) to establish a fund to improve access to assistive technologies and services, encouraging the wide spread procurement of ATs, spreading awareness of the available services and benefits of ATs and providing demonstrations, special training and evaluations.
- Calling to action all producers and distributors of digital media in Qatar to improve the accessibility of their content through accessible eBooks, online information and special captioning for video programming. This policy also calls upon producers and distributors of digital media to work with vendors and manufacturers to ensure that supporting technologies and software can accommodate accessible digital video programs and features.

5.2 Effective Date

The provisions of this policy become effective upon its date of issue, except where otherwise indicated.

5.3 Web Accessibility

Web accessibility enables persons with disabilities such as people with visual, auditory, mobility, speech, cognitive and neurological and ageing disabilities to access and make use of the web. It is achieved through the application of technical standards and tools in the development of web pages so that persons with disabilities can navigate, understand and interact with the web. For example, persons with the visual disabilities may not be able to see an image on a webpage but if a text description is provided along with the image, the meaning of the image can be understood by people using screen readers. Similarly, web users with hearing impairments may not be able to listen to a voice stream provided on a webpage but will be able to understand it if a text caption is provided.

Web accessibility can potentially benefit all Internet users as it improves the general usability of websites and their content, contributing to an increase in the usage and take up of services overall. For example, additional illustrations and captions, easy-to-use navigation systems, selectable font size and coherent organization of content improve accessibility for everyone. Mobile web accessibility enables people anytime, anywhere to access the web from mobile phones.

ictQATAR recognizes the pivotal role that web accessibility has in the development and sustainability of an accessible ICT ecosystem and so requires that public sector websites providing online services and information for the public meet international standards for web accessibility. These standards include those that may apply in the future for delivering web content to mobile devices.

5.3.1 International Accessibility Standards for Websites

5.3.1.1 The World Wide Web Consortium's (W3C) Web Accessibility Initiative (WAI) is the only internationally recognized standard for ensuring web accessibility. The second edition of the W3C Web Content Accessibility Guidelines (WCAG) 2.0 Level AA will be the referenced standard for website accessibility in Qatar until such a time that a new international standard is developed superseding this version. Conformance to Level AA of the WCAG 2.0 ensures that a website meets standards for removing absolute and substantial barriers to accessing content on a website by people with visual and hearing impairments. It also makes digital content more accessible to a wide range of people including the elderly.

5.3.2 The W3C WCAG 2.0 standard consists of the following web page design principles:

- 5.3.2.1 Providing text alternatives for any non-text content so that it can be changed into other forms people need, such as large print, Braille, speech or simpler language.
- 5.3.2.2 Providing alternatives for time-based media, such as augmenting a multimedia audio stream with captioning so that people who are deaf or hearing impaired have access to the audio content.

- 5.3.2.3 Creating content that can be presented in different ways without losing information or structure so that a user using a screen reader to listen to text content on a webpage can perceive the same information and structure as a user viewing the webpage.
- 5.3.2.4 Making it easier for users to see and hear content including separating foregrounds from backgrounds to aid people with limited color vision or cognitive disabilities.
- 5.3.2.5 Making all functionality available from a keyboard so that people who cannot use a mouse such as users lacking eye-hand coordination can navigate a web page using the keyboard.
- 5.3.2.6 Providing users enough time to read and use content so as to ensure that users with disabilities are given adequate time to interact with web content whenever possible.
- 5.3.2.7 Avoiding designing content in a way that is known to cause seizures such as anything that flashes more than three times in any one second period.
- 5.3.2.8 Providing various ways to help users navigate, find content and determine where they are. By providing an opportunity to navigate sites in more than one manner, users can find information faster depending upon their disability.
- 5.3.2.9 Making text content readable and understandable. This principle ensures that screen readers and assistive technologies can correctly present and pronounce content written in multiple human languages.
- 5.3.2.10 Making web pages appear and operate in predictable ways by structuring the web content systematically so as to enhance user interaction.
- 5.3.2.11 Helping users avoid and correct mistakes by providing error messages recognizable by assistive technologies so that people with visual, cognitive, language, or learning disabilities can perceive that an error has occurred.
- 5.3.2.12 Maximizing compatibility with current and future user agents, including assistive technologies so that that these user agents can accurately interpret, analyze and present the contents to users.

Additional details of these design principles together with implementation techniques and testable success criteria can be found at <http://www.w3.org/TR/WCAG20>.

5.3.3 International Accessibility Guidelines for Delivering Web Content to Mobile Devices

The W3C's Mobile Web Best Practices Guidelines for 1.0 is the referenced international

standard for delivering web content to mobile devices. Compliance with these guidelines improves user experience for persons with disabilities as well as the larger population. These guidelines can be found at <http://www.w3.org/TR/mobile-bp/>.

5.3.4 Application

- 5.3.4.1 All public sector organizations shall ensure that new websites developed to provide public information and services meet international standards for web accessibility as well as delivering web content to mobile devices beginning in 2013.
- 5.3.4.2 All public sector organizations shall ensure that any existing websites providing public information and services meet international standards for web accessibility and delivering mobile content beginning in 2015.
- 5.3.4.3 All other organizations and the private sector are strongly encouraged to design new and upgrade existing web sites in compliance with international standards to promote universal access to their information and services.

5.3.5 Implementation, Compliance and Monitoring

- 5.3.5.1 MADA shall develop implementation guidelines by the end of 2011 and provide technical assistance as needed to support public sector website owners in the development of new and modification of existing websites for compliance with section 5.3.4 above.
- 5.3.5.2 MADA shall maintain and publish a list of accessible websites developed for audiences in Qatar on an annual basis beginning in 2012.

5.4 Telecommunication Services

Persons with disabilities face particular difficulties in accessing and using telecommunication services. For example, people with visual impairments often cannot locate or identify controls on handset input slots or operate controls that require sight. Individuals with hearing impaired cannot locate or identify handset controls that require hearing. The radio signals from mobile phones can cause users of hearing aids to experience sharp and painful noises. Individuals who have physical impairments find it hard to hold and activate phones and handsets.

As access to telecommunications services is mandatory for inclusion and integration in the ordinary economic and social mainstream of society today, ictQATAR requires that telecommunications service providers in Qatar ensure accessibility to critical telecommunications services and technologies as described below.

5.4.1 Accessible Handsets and User Interfaces

- 5.4.1.1 Service providers shall ensure that accessible handsets are available for purchase or for rent as needed. Accessible handsets include for example features such as large font sizes, large numeric keypads, hands free speakerphones, audible, visual and vibrating alerts, visual voicemail and hearing aid compatibility.
- 5.4.1.2 Service providers shall provide accessible user interfaces as part of their fixed and mobile service offerings to increase the usability for customers who are blind or have low vision. These interfaces shall support the blind through mobile speech and mobile magnifiers.
- 5.4.1.3 Service providers shall provide information regarding the availability of accessible handsets, user interfaces and other accessibility features and services on their websites, at customer service centers and upon enquiry.

5.4.2 Accessible Public Payphone Service

- 5.4.2.1 Service providers who provide payphone services shall install accessible payphones at strategic locations in Qatar's new international airport terminals (circa 2013).
- 5.4.2.2 Accessible payphones shall include features such as hearing aid compatibility, volume control, wheelchair accessibility and tactile keys or Braille.
- 5.4.2.3 Service providers shall ensure that appropriate signage is provided in the immediate vicinity of installed payphones or payphone kiosks communicating that they are accessible.

5.4.3 Accessible Telecommunication Services

- 5.4.3.1 Service providers shall provide relay services to enable the deaf or hearing impaired and speech impaired users to communicate over telecommunications networks, including IP based networks starting from 2013. Examples of such services include Text-Relay, Instant Messaging Relay, Video-Relay and Total Conversation Services.
- 5.4.3.2 Service providers shall offer special rates and plans for users with disabilities as appropriate. For example, people who are deaf or hearing impaired or have a speech disability may benefit from text only plans offered at lower rates than standard service packages.
- 5.4.3.3 Service providers shall actively promote the availability of the accessible services on offer to their customers and provide updates regarding any service improvements and pricing packages.

5.4.4 Accessible Emergency Services

5.4.4.1 Service Providers shall work with the competent authorities to provide emergency calling services for users with disabilities in 2012.

5.4.4.2 Service providers may provide a service for example that allows deaf or hearing impaired individuals to text or send video emergency notifications to the responsible authority's emergency service hotline number. This service should be capable of receiving and sending real time video and/or text messages so as to respond to people who need help.

5.4.5 Compliance and Monitoring

5.4.5.1 MADA shall be responsible for ensuring and monitoring compliance with policy provisions 5.4.1, 5.4.2, 5.4.3 and 5.4.4.

5.5 ATMs and Public Access Terminals/Kiosks

The number of Automated Teller Machines (ATMs) and other types of Public Access Terminals/Kiosks are increasing in Qatar. These terminals/kiosks benefit both customers and the organizations providing them. Customers can now access services anytime and are not restricted to opening and closing hours. Customers may also save time by avoiding long lines more typical of face to face services. Organizations benefit as they are able to provide more services to their customers anytime and at lower costs. However, the community of persons with disabilities is unlikely to benefit from these ICTs unless they are accessible.

To ensure that everyone can benefit from the services provided via ATMs and Public Access Terminals/Kiosks in Qatar, ictQATAR requires that all public sector organizations, including banking institutions, work together with employees, customers and industry stakeholders to identify and implement service improvements that will ensure that these services are usable at strategic locations by customers with low vision blindness, deaf or hearing impairments, mobility disabilities and reading problems, including the inability to read.

5.5.1 ATM Requirements

5.5.1.1 In the purchasing of new or the upgrading of existing ATMs and Public Access Terminals/Kiosks, government agencies and banking institutions shall ensure the accessibility requirements described below at a minimum. These requirements are based on the American with Disabilities Act (ADA) Standards for Accessibility Design 2010.⁸

5.5.1.1.1 Voice guidance – speech enabled services in English and Arabic that assist customers with visual disabilities. Voice guidance should also include Braille instructions to assist blind customers.

5.5.1.1.2 Height and reach – to ensure that consumers can easily access input controls, maximum high reach should ideally be equal to 1220 mm (48 inches).

5.5.1.1.3 Input device – to ensure visually impaired customers can clearly see input device controls, key surfaces should be raised above surrounding surfaces.

5.5.1.1.4 Display screen – to ensure that the display screen is visible for people in wheelchairs; it should be ideally located 1015 mm (40 inches) above the center of the clear floor space in front of the machine.

5.5.1.1.5 Display screen text and characters – to ensure the visually impaired can read display screens, the font size needs to be large enough or users should be able to adjust the font size themselves. Text and characters should also contrast with their background with either light characters on a dark background or dark characters on a light background.

5.5.1.1.6 Clear floor or ground space – clear floor area and/or ground space should be planned to accommodate customers in wheelchairs.

5.5.1.1.7 The ATM or Public Access Terminal should be located in a place that provides privacy for using the voice guidance and there should be signage indicating that the machine is equipped with accessibility features.

5.5.2 Application

5.5.2.1 Government owned banks should provide at least one fully accessible and/or universally designed ATM at strategically located branches such as branches located in large shopping malls and at main offices by 2013.

⁸ The American with Disabilities Act (ADA) Standards for Accessibility Design 2010 was chosen because it is widely supported by vendors in and outside of the United States.

5.5.2.2 Government agencies providing online services to the public via Public Access Terminals/Kiosks should ensure that at least one Public Access Terminal/Kiosk deployed at strategic locations such as customer service centers and at geographic main offices is fully accessible and/or universally accessible by 2015.

5.5.3 Compliance

MADA will monitor the availability and location of accessible ATMs and Public Access Terminals/Kiosks provided by government owned banks and public sector organizations from time to time but no later than 2013. It will make this information available to the public.

5.6 Assistive Technologies

Assistive technology (AT) can enable persons with disabilities to accomplish daily life tasks, assisting them in communication, education, work or recreation activities. AT can also help improve physical or mental functioning, strengthen a physical or mental weakness and help improve a person's capacity to learn.

As ictQATAR understands the benefits of assistive technologies to society, it has founded, Qatar's Assistive Technology Center (MADA). MADA is a non-profit partnership among ictQATAR, QTel, Vodafone Qatar, QNB, Microsoft and the Shafallah Center. It provides professional services to connect persons with disabilities to information and communications technologies and services.

To ensure that persons with disabilities in Qatar benefit from the wide range of assistive technologies and services available in the marketplace, this policy tasks MADA with the initiatives described below. ictQATAR will work together with MADA to achieve the policy requirements found below. At a minimum, it will maintain links to MADA resources and materials on its website to ensure wide distribution and promote awareness of MADA activities.

5.6.1 Establishing a fund to improve access to assistive technologies and services

5.6.1.1 MADA shall establish a funding mechanism to provide financing for AT and related services as needed to support the development of an accessible ICT ecosystem in Qatar.

5.6.1.2 ATs that may be provided through a funding mechanism include but are not limited to ATs needed in the workplace, to complete educational programs as well as ATs needed for ordinary social and economic activities. This financial assistance may include providing ATs free of charge and/or subsidizing the cost of needed ATs required by persons and organizations.

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- 5.6.1.3 All citizens and any resident of Qatar who has a permanent disability registered with a recognized authority in Qatar such as the Qatar Society for Rehabilitation of Special Needs or who has a temporary or age related disability that prevents him or her from performing on the job, pursuing an education or participating in socio-economic activities may be eligible for financial assistance.
 - 5.6.2 Spreading awareness of the available services and benefits of AT for persons with disabilities and the rest of society
 - 5.6.2.1 MADA shall work with its stakeholders and their communities to promote public awareness of assistive technology at the national level, including providing information on the availability, benefits, latest research, technological innovations, cost of AT devices and services and related best practices.
 - 5.6.2.2 MADA shall promote public awareness in accessible formats through the use of television, radio, advertisement banners and information kiosks for example. It shall also issue briefs and informational articles from time to time regarding the importance of AT and its application.
 - 5.6.2.3 Target audiences for awareness shall include persons with disabilities and their families, specialized organizations supporting persons with disabilities, workforce development professionals, service providers and educators among others.
 - 5.6.3 Developing practical guidelines and providing technical assistance to facilitate the uptake and usage of ATs
 - 5.6.3.1 MADA shall provide technical assistance as needed to assist organizations in the uptake and usage of ATs.
 - 5.6.3.2 MADA shall develop practical guidelines to facilitate the uptake and usage of ATs including guidelines to:
 - a. Assist public sector organizations and others with the development of accessible websites according to international standards. These guidelines shall be developed no later than year end 2011.
 - b. Facilitate development of accessible digital content by 2012.
 - c. Facilitate the widespread procurement of ATs in Qatar by 2013.

5.6.4 Providing demonstration, training and evaluation

5.6.4.1 MADA shall establish and maintain a demonstration center for AT that is fully accessible to all, including the visually impaired, hearing impaired, learning disabled, intellectually challenged and people with physical disabilities.

5.6.4.2 MADA shall offer structured information technology training courses and certification to help solve challenges in employment, lifelong learning, productivity and independent living confronted by persons with disabilities.

5.6.4.3 MADA shall ensure that training courses are available to persons with disabilities as well as for associated families, educators and workforce development professionals.

5.6.4.4 MADA shall provide training regarding integrating assistive technology in educational environments to school educators as appropriate.

5.6.4.5 MADA shall carry out in-house assessments to help consumers choose suitable assistive technology devices and provide technical assistance to enhance AT knowledge, skills and competencies as appropriate.

5.6.4.6 MADA shall evaluate a wide variety of assistive technology on an ongoing basis and provide consumers with the information necessary to help them choose AT according to their needs.

5.6.5 Collaborating and coordination with stakeholders

5.6.5.1 MADA shall provide ongoing advice to national organizations on how to formulate and implement eAccessibility initiatives as appropriate.

5.6.5.2 MADA shall collaborate with persons with disabilities, service providers, manufacturers, advocates, government organizations and others at both the national and international level to increase the availability and utilization of AT devices and services as well as accessible mainstream technology available in Qatar.

5.6.5.3 MADA shall identify barriers and issues that affect the provision of and access to AT in Qatar and establish partnerships with rehabilitation organizations, service providers and advocacy groups to develop and promote successful strategies to get AT to people who need it most.

5.6.5.4 MADA shall collaborate with Qatar’s research centers to conduct research and development regarding the application of emerging technologies for persons with disabilities.

5.7 Accessible Digital Content – Call to Action

Accessible digital content is content such as music, text, audio, images and multimedia that persons with disabilities can utilize. This type of content is scarce everywhere but even more so in countries where the first language is not English. The limited availability of accessible digital content has an adverse impact on the social, educational and employment opportunities for persons with disabilities and particularly for those who have visual and hearing disabilities.

The expansion of broadband coverage combined with the growing affordability of personal computers, tablets, smart phones and TV entertainment is driving the growth of a tech savvy culture with increasing demand for digital content. Digital content also needs to be accessible to persons of disabilities.

Two key aspects of making digital content more accessible include:

- Accessible eBooks and accessible digital public services. Accessible formats such as Braille, audio, large print and electronic text can enable the print disabled to access digital media with the help of specialized screen readers or screen magnifiers. However, accessible eBooks and accessible digital public services are not widely available in Qatar.
- Accessible video programming. This type of programming benefits those with hearing and sight impairments. People with hearing impairments benefit through the use of captioning that displays text descriptions. The blind or visually impaired benefit through the use of captioning that provides an audio description of the key visual implements of video programming.

ictQATAR considers that increasing the availability of accessible digital content and video programming in Qatar will benefit the country as well as the whole of the Arabic speaking world. It therefore calls upon local publishers, media producers and distributors to make digital content and video programming more accessible, usable and available.

5.7.1 Accessible eBooks and Accessible Digital Public Services

5.7.1.1 All local producers of digital content in Qatar should strive to increase the amount of accessible content in both English and Arabic so that it represents 5% of their total digital content available. This includes increasing the amount of accessible eBooks, online news, electronic educational materials and government eServices.

5.7.1.2 All local producers should use internationally recognized standards, if available, in their production of accessible digital content to ensure wide distribution and usability, particularly for the rest of the GCC. For example, DAISY,⁹ is the internationally recognized standard for the development of eBooks.

5.7.1.3 Qatar's Central Library is encouraged to establish a program and budget to purchase accessible digital books such as eBooks, large prints, talking books, and books in format accessible by Braille devices.

5.7.2 Accessible Video Programming

5.7.2.1 All producers/distributors of digital video programming in Qatar should develop a plan that enables them to deliver digital video programming with either open or closed captioning. This plan should include provisions for the following:

- Open captioning of pre-recorded videos, including commercials, until closed captioning features are widely supported by video display equipment in Qatar.
- Providing at least 450 hours per year of captioned video programming in 2013 (equivalent to 0.5 hour per day per company)
- Providing at least 900 hours per year of captioned video programming in 2015 (equivalent to 1 hour per day per company).
- Providing captioning of digital video programming displayed in public areas such as the airports, public parks, shopping malls, exhibition centers, museums and sports stadiums by 2015.
- Providing captioning of any emergency messages broadcast to the public within 6 months of the effective date of this policy.
- Giving preference to digital video programming that includes either open or closed captioning as part of procurement processes.
- Collaborating with hardware and software vendors to ensure that set-top boxes, remote controls and the software on screen menu systems can accommodate accessible digital video programming features.

⁹ The DAISY Consortium develops, maintains and promotes international DAISY (Digital Accessible Information System) Standards.

6 Implementation

The implementation matrix in Appendix A summarizes the roles, responsibilities and authorities of various stakeholders identified in this policy. Stakeholders should work accordingly to achieve the targets stated in this policy. For a more detailed description of how this policy shall be implemented, refer to sections 5.3.4, 5.3.5, 5.4.5, 5.5.2 and 5.5.3.

Appendix A – Implementation Matrix

Policy Requirements	ictQATAR	Public Sector Organizations	Telecom Service Providers	Government owned Banks	MADA	Digital Content Producers Central Library	Digital Video Producers Distributors	Target Date
Monitor the overall implementation of the policy	✓							Annual reporting beginning 2012
Develop new public sector websites as per international accessibility standards		✓						Beginning in 2013
Upgrade existing public sector websites as per international accessibility standards		✓						Beginning in 2015
Develop accessible website development guidelines					✓			Dec. 2011
Maintain and publish a list of accessible websites					✓			Annually beginning in 2013
Provide accessible phone handsets, user interfaces and special rate plans for persons with disabilities			✓					2011
Provide accessible public payphone services and signage			✓					Within 6 months of policy effective date
Provide telecommunication relay services			✓					Beginning in 2013

Policy Requirements	ictQATAR	Public Sector Organizations	Telecom Service Providers	Government owned Banks	MADA	Digital Content Producers Central Library	Digital Video Producers Distributors	Target Date
Provide accessible emergency services			✓					2012
Provide information regarding the availability of accessible handsets, user interfaces and other accessible features and services on company websites at customer centers and upon enquiry			✓					
Provide accessible ATMs at strategic locations				✓				2013
Provide accessible terminals/kiosks at strategic locations and geographic main offices	✓							2015
Monitor the availability of accessible ATMs and terminals/kiosks and keep public informed					✓			Beginning in 2013
Establish an AT fund to improve access to ATs					✓			Within 6 months of policy effective date
Develop guidelines to facilitate development of accessible digital content					✓			2012
Develop guidelines to facilitate procurement of AT					✓			2013

Policy Requirements	ictQATAR	Public Sector Organizations	Telecom Service Providers	Government owned Banks	MADA	Digital Content Producers Central Library	Digital Video Producers Distributors	Target Date
Provide AT demonstration, training, evaluation					✓			From policy effective date
Increase the amount of accessible content to 5% of total digital content						✓		2015
Provide captioning to video programming							✓	Up to 450 hours per year in 2013 and 900 hours in 2015
Provide captioned digital video programming displayed in public areas such as the airports, public parks, shopping malls, etc.							✓	2015
Provide captioning of emergency public broadcast messages							✓	Within 6 months of policy effective date

Appendix B – List of Public Sector organizations in Qatar

Al Noor Institute for the Blind
Audit Bureau
Central Municipal Council
Civil Aviation Authority
Family Consulting Center
General Retirement and Social Insurance Authority
General Secretariat for Development Planning
Hamad Medical Corporation
Ministry of Business and Trade
Ministry of Culture, Arts and Heritage
Ministry of Defense
Ministry of Economy and Finance
Ministry of Endowment and Islamic Affairs
Ministry of Energy and Industry
Ministry of Environment
Ministry of Foreign Affairs
Ministry of Interior
Ministry of Justice
Ministry of Labor
Ministry of Municipality and Urban Planning
Ministry of Social Affairs
National Human Rights Committee
Public Prosecution
Public Works Authority
Qatar Central Bank
Qatar Chamber of Commerce and Industry
Qatar Development Bank
Qatar e-Government – Public Service website
Qatar Financial Markets Authority
Qatar Foundation
Qatar Foundation for Child and Women Protection
Qatar Foundation for Combating Human Trafficking
Qatar General Electricity and Water Corporation
Qatar Investment Authority
Qatar Marine Festival Organizing Committee
Qatar Media Corporation
Qatar Museums Authority

Qatar National Bank
Qatar National Cancer Society
Qatar News Agency
Qatar Olympic Committee
Qatar Orphan Foundation
Qatar Ports Management Company
Qatar Red Crescent
Qatar Social and Cultural Center for the Blind
Qatar Society for Rehabilitation of People with Special Needs
Qatar Tourism Authority
Qatar University
Q-Post – General Postal Corporation
Shafallah Center
State Audit Bureau
Statistics Authority
Supreme Council for Economic Affairs & Investment
Supreme Council for Family Affairs
Supreme Council of Health
Supreme Council of Information and Communication Technology
Supreme Education Council
Supreme Judiciary Council
The Qatari Center of Social Cultural for the Deaf