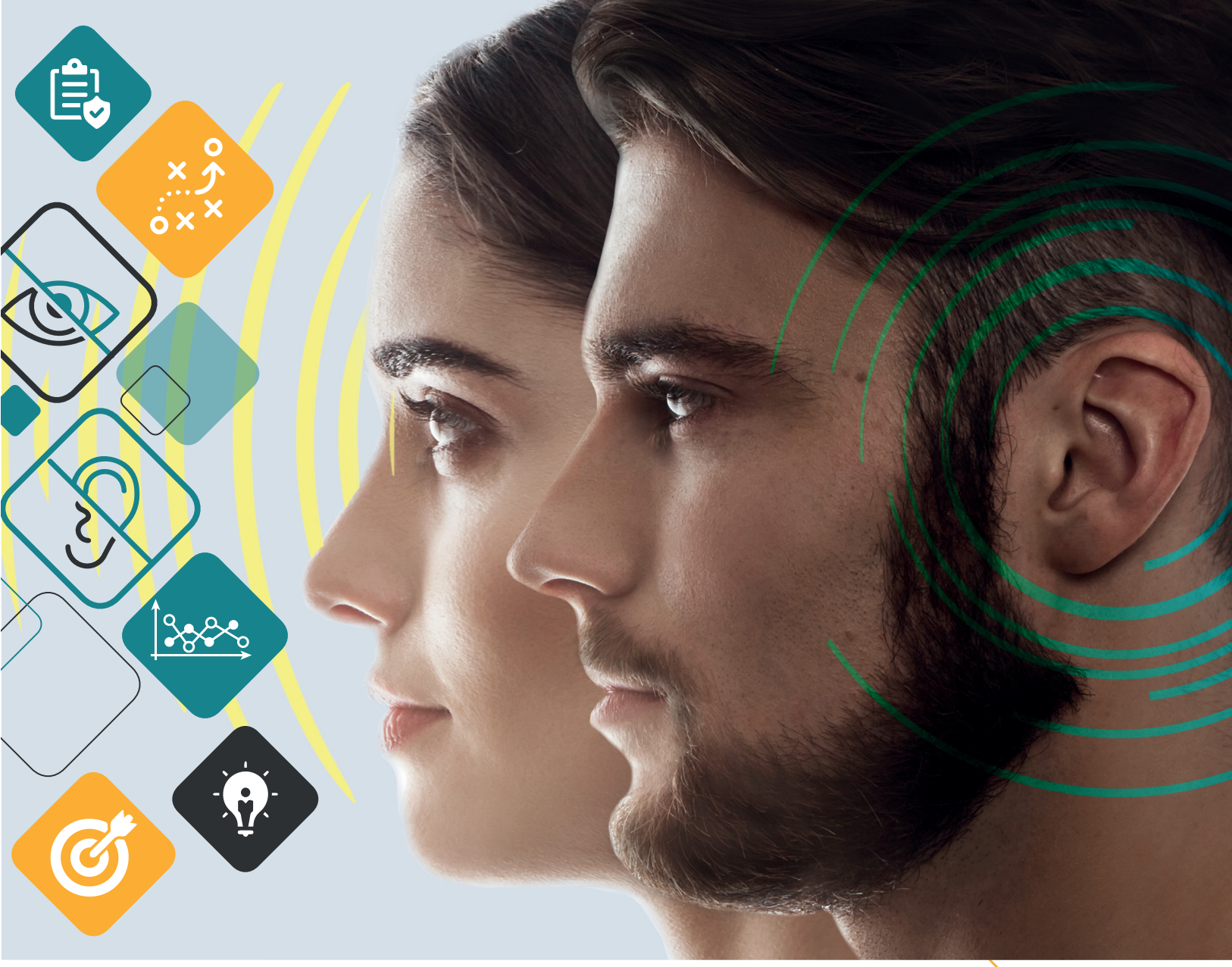

National e-Accessibility Policy
Template for the Arab Region

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VISION

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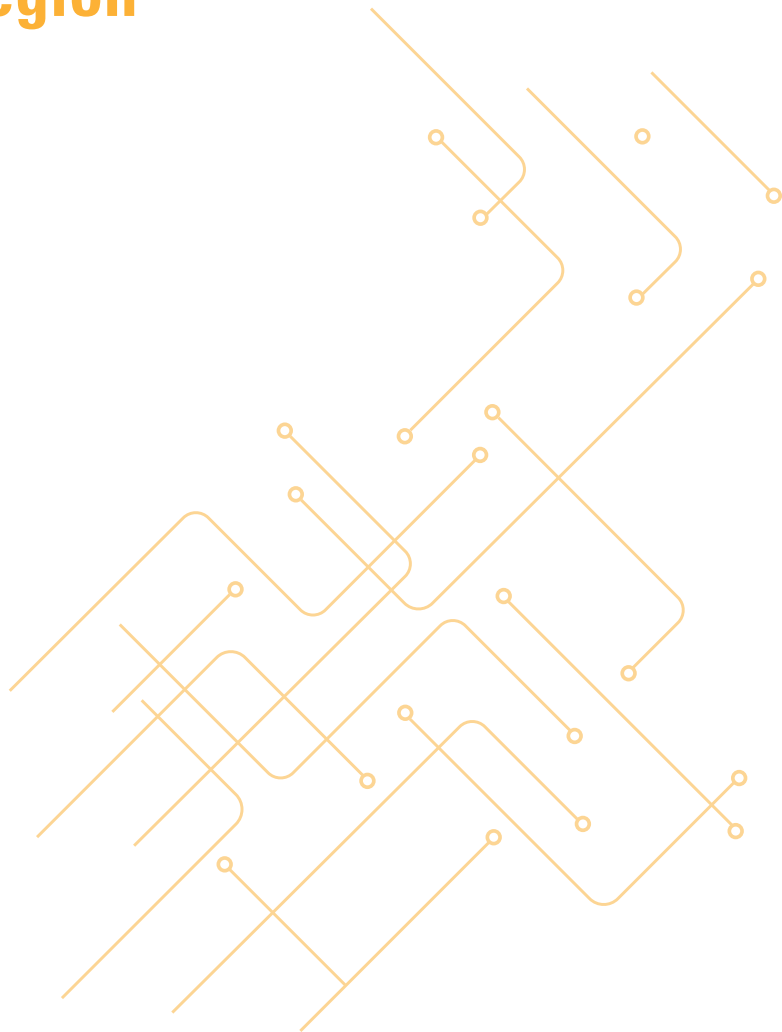
MISSION

Committed to the 2030 Agenda, ESCWA's passionate team produces innovative knowledge, fosters regional consensus and delivers transformational policy advice. Together, we work for a sustainable future for all.

E/ESCWA/CL4.SIT/2020/TP.13

National e-Accessibility Policy
Template for the Arab Region



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In 2020, the Economic and Social Commission for Western Asia (ESCWA) launched the Arab Digital Inclusion Platform (ADIP) to help policymakers in Arab States develop and/or update their national e-accessibility policies and technical guidelines in line with their nationally determined priorities, and to help bridge the digital divide and enable all members of society to access information and communications technologies (ICTs). The activities under this project form part of the work of the Cluster on Statistics, Information Society and Technology, directed by Mr. Juraj Riecan, and the Cluster on Population, Gender Equality and Inclusive Development, directed by Ms. Mehrinaz el-Awady.

As part of the ADIP project, development of the national e-accessibility policy template for the Arab Region was overseen by Ms. Mirna el-Hajj Barbar and Mr. Nawar al-Awa, who supervised the design of the template and coordinated activities and contributions from the project team, made revisions as necessary and invited comments from colleagues at ESCWA, namely Mr. Alaa' Sebeh, Ms. Sumaya Almajthoub and Ms. Zahr bou Ghanem.

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Key notes

1. Arab policymakers are encouraged to adopt ESCWA template on e-Accessibility national policy for the Arab region to allow all individuals to access ICT tools, services and applications efficiently.

2. A template including the general framework and the basic components necessary to build a national policy for digital accessibility, is suggested.

1.

Key concepts

1. Key concepts

A. Introduction

For the past few decades, the world has been undergoing a digital transformation driven by two key factors, namely, (1) the rapid rise of the Internet and proliferation of online content in all its forms; and (2) the evolution of communications systems, in particular portable devices such as smartphones, tablets and laptop computers. As governmental services worldwide have increasingly moved online, concepts such as "e-government" and "digital government" have become the norm, and have evolved according to competitive standards and indicators. In this field, governments have often been outpaced by private companies, which view online services as a lucrative part of the digital economy.

E-accessibility has become an essential requirement in many different types of service provision as a result of the expansion of digital government services, websites and mobile applications, and the entry of large and medium-sized enterprises into public service provision in areas such as finance, health, education, training, transport, and consumer services, including online shopping. As part of international efforts to foster development and leave no one behind, the United Nations swiftly adopted the concept of "e-accessibility" to help countries pursue an inclusive pathway to development.

Guaranteeing the right to e-accessibility requires an intersectional approach, which involves understanding and addressing the many different factors that can obstruct individuals' access to digital services and content. In addition to disabilities, these obstacles can be associated with gender inequality, economic and social status, ethnicity, nationality, citizenship, and residency status (for example, in the case of migrants).

B. The United Nations Convention on the Rights of Persons with Disabilities

The Convention on the Rights of Persons with Disabilities and its Optional Protocol (A/RES/61/106) were adopted by the international community on 13 December 2006 and opened for signature on 30 March 2007. The Convention entered into force on 3 May 2008, and by November 2020, it had been signed by 180 countries. As part of their pledge to promote

disability-inclusive policies and practices, signatories to the Convention are required to harmonize their national legislation, policies and programmes with the norms and standards set out in the Convention.[1]

C. E-accessibility in the Convention on the Rights of Persons with Disabilities

Article 9 of the Convention stipulates that, "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".

On the occasion of the International Day of Persons with Disabilities in 2019, United Nations Secretary-General António Guterres launched the United Nations Disability Inclusion Strategy.[2] In his opening statement, the Secretary-General called on all States to adopt disability-inclusive national policies: "I want the United Nations to lead by example and invite you to join me in moving decisively to achieve the goals of the United Nations Disability Inclusion Strategy".

In response to the request by the Secretary-General that United Nations institutions adopt the Strategy and address barriers to its implementation, particularly in terms of e-accessibility, the Economic and Social Commission for Western Asia (ESCWA) launched the Arab Digital Inclusion Platform (ADIP) in 2020 as part of a package of measures designed to help Arab policymakers develop national policy and guidance to enhance e-accessibility.

D. E-accessibility standards

Many States have paid attention to e-accessibility ever since public services began to move online. The United States of America was one of the first countries to apply e-accessibility policies, by means of a 1998 amendment to the Rehabilitation Act of 1973 which became known as Section 508. The U.S. Access Board[3] later strengthened Section 508 in 2018, by adopting the Web Content Accessibility Guidelines (WCAG) 2.0.[4] It is worth noting here that the right to e-accessibility is closely linked to constitutional and legal rights. Another of the first countries to develop e-accessibility policies was Canada, which created its own e-accessibility standards in 2000 and further developed them as time went on. In 2017, Canada adopted WCAG 2.0. This standard is also followed by the majority of Arab States that were early adopters of e-accessibility. The initial versions of the WCAG 2.0 standard, adopted by the World Wide Web Consortium (W3C), covers a wide range of recommendations for making web content more accessible.

E. The United Nations adopts the universal design

As part of the United Nations Disability Inclusion Strategy, the organization pledged to apply the concept and principles of "universal design", which refers to the design and composition of an environment so that it can be accessed, understood and used to the greatest extent possible by all

people regardless of their age, size, ability, or disability. According to the principles of universal design, an environment (or any building, product or service in that environment) should be designed to meet the needs of all people who wish to use it, not as a special requirement for the benefit of only a minority of the population, but as a fundamental condition of good design. If an environment is accessible, usable, convenient, and a pleasure to use, everyone benefits; by considering the diverse needs and abilities of all throughout the design process, universal design creates products, services and environments that meet peoples' needs, including persons with disabilities.[5]

F. E-accessibility in the Arab region

The United Nations Convention on the Rights of Persons with Disabilities (CRPD), which has been signed by certain Arab States and ratified by others, serves as a legal reference for those States alongside their own domestic legislation on disability rights. Many Arab States have passed specific legislation to guarantee the right to e-accessibility for persons with disabilities, and have adopted e-accessibility policies and regulations in sectors such as banking and employment. In addition, a number of Arab States has issued guidelines on designing government websites and mobile applications in line with e-accessibility standards, and some have devised an integrated national approach to e-accessibility.

As an example of Arab progress in this domain, Oman and Qatar have both ranked highly on the DARE Index[6] in recent years, with Oman ranking number one in 2018, ahead of advanced countries such as the United States and the United Kingdom, and Qatar taking the top spot in 2020.[7]

G. About the ESCWA national e-accessibility policy template

The main purpose of this document is to explain the ESCWA national policy template for e-accessibility in the Arab region. The template serves as a general framework for policies, measures and procedures that should be adopted to enable persons with disabilities to access information and communications technologies (ICTs) and related services, to create a more inclusive society.

2.

Approach for designing the ESCWA national e-accessibility policy template

2. Approach for designing the ESCWA national e-accessibility policy template

A. Literature review

Reviewing published literature on e-accessibility – such as policies, legislation, outputs, and programmes – helps build an analytical picture of the link between disabilities and e-accessibility and establish an overall baseline for e-accessibility policy and its impact.

The literature review also takes into account qualitative research, so as to build a knowledge base that can be used as a reference for policymakers.

B. Review of selected best practices

Best practices are identified by examining thorough experiments in e-accessibility that have delivered the desired outcomes. This involves observing which common processes, tools, procedures, and applications have been most successful based on precise measurements, and compiling them into a standard guide for policymakers in the region. As part of this process, in-depth studies are conducted to assess how inclusive these practices are and how easily they can be implemented in the Arab region.

C. Case studies and regional evaluation

The case study methodology can be divided into two main parts, namely, selection and evaluation. Countries are selected based on their position in global e-accessibility rankings and their similarities and differences with the Arab region.

Case studies offer valuable insight into what does and does not produce the desired results, using the comparative legal analysis and the literature review as a reference.

The case studies focus on the situation of e-accessibility in the region and the approaches adopted to address accessibility-related issues in the target societies. The regional evaluation is based on a quantitative analysis of data from reliable sources in the region. The report also examines the status of e-accessibility in the Arab region, with a focus on current laws and policies in the region that directly influence or address e-accessibility and documented improvements based on globally approved standards.

D. Adoption of key concepts and definitions

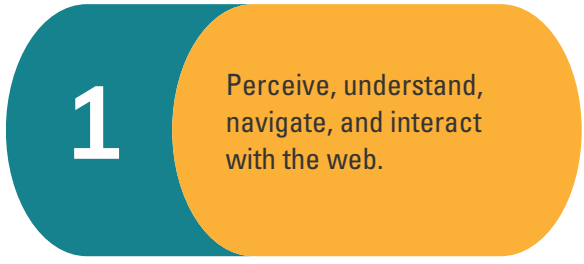
1. Disability

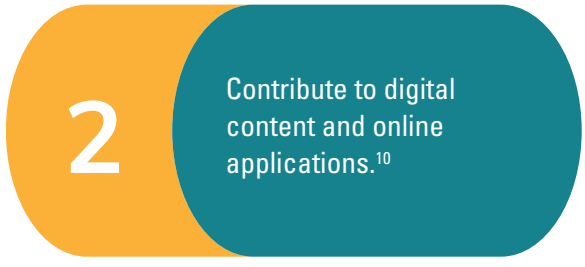
The United Nations defines persons with disabilities as those who have long-term physical, mental, intellectual, or sensory impairments which, in interaction with various barriers, may hinder their full and effective participation in society on an equal basis with others.[8]

2. E-accessibility

E-accessibility – also known as electronic accessibility, or digital accessibility – refers to the ease of use of ICTs, such as the Internet and online services, by persons with disabilities, and is based on the principle that websites should be developed so that all users can access the information.[9]

In order to promote e-accessibility, websites, tools, digital equipment, applications, web-based government services, and digital content must be designed and developed so that people with disabilities, of all ages, can use them. More specifically, individuals must be able to:





3. Inclusion

Inclusion refers to the process of giving special attention and treatment to issues that are not automatically covered in (meaning that they fall outside the scope of) standard social care, assistance and development programmes.

E. Proposed policy pillars

In order to achieve the desired outcomes, e-accessibility policy must cover the following five pillars:

1. Executive authority
2. Legislature
3. Civil society organizations representing persons with disabilities of all ages
4. Media
5. Private sector

The **executive authority** has the power to adopt policies to govern how public institutions operate. At the national level, policy adoption is one of the most effective ways of promoting e-accessibility, particularly given that – in contrast to legislation – policies adopted by the executive authority can be flexible and can impact the entire public sector and even the private sector when accompanied by appropriate government legislation. Of course, each government formulates and implements policies as it sees fit, by appointing a supervisory body (such as a telecom regulatory authority, ministry for information and communications technologies or ministry of social affairs) to implement the policy. Some governments take a "whole-of-government" approach to e-accessibility, whereby each public institution (ministry, agency or department) is responsible for implementing e-accessibility requirements within their own service area, and the implementation plan is overseen by a single senior authority.

As is well known, the executive authority does not pass laws and cannot impose criminal or quasi-criminal penalties as part of a national policy to guarantee its implementation; a policy can only be implemented if the executive authority has the relevant mandate. The executive authority, therefore, has limited ability to influence any party that is not directly under its authority, such as private companies or non-governmental organizations (NGOs), and can only enforce compliance in government sectors and in companies that are either mixed public-private entities or report to the public sector.

The executive authority should, therefore, design national e-accessibility policies based on related legislation to maximize its ability to enforce stakeholder compliance.

Legislature is responsible for passing laws, which can evidently cover a broad range of actors including the executive authority, NGOs and the private sector, and can include compliance mechanisms that the executive authority can use to enforce implementation of e-accessibility policies. However, laws need to be promulgated by legislative assemblies, which can take time, and can only be amended through specific procedures, making them less flexible than policies. Laws on e-accessibility should, therefore, have enough flexibility built in to allow national policymakers some leeway when setting, amending and enhancing national policies.

In addition, e-accessibility laws should take account of related domestic legislation and international agreements, and the executive authority should adopt both international and national e-accessibility standards.

Treating **civil society organizations** that represent persons with disabilities as key partners in national policymaking helps strengthen e-accessibility policy in various ways. Firstly, it ensures that the genuine needs of persons with disabilities are taken into account based on hands-on experience. Secondly, when e-accessibility policies are being implemented, NGOs provide community support and are able to integrate e-accessibility concepts and practices in the private sector in a more agile manner than through executive adoption of laws and mechanisms. Thirdly, NGOs are well placed to gather expertise on specific issues affecting local communities, which can then be used to support other population groups (such as women, children and individuals from disadvantaged backgrounds) and incorporated into e-accessibility objectives, based on the "leave no one behind" principle.

The ability of the **media** to convey messages to the general public sets them apart from other types of authority. Media outlets play a key role in achieving and documenting progress in the area of e-accessibility, helping to increase the number of users with disability and meet national policy objectives by improving accessibility outcomes. The media achieve this by transmitting information, collecting comments and opinions from users with disabilities and opening up communication channels to promote continuous improvement of the services.

The **private sector** has a vital role to play in national e-accessibility policy implementation. It should be noted, however, that in the majority of examples in our comparison, small businesses were exempt from the requirements because of potential financial constraints, whereas compliance was mandatory for large and medium enterprises, including, but not limited to, all entities, institutions and companies that provide financial services (such as banks), health services, education, qualifications and training (such as universities, schools and training centres), transport, or consumer services (such as online shopping). E-accessibility policies also apply to services supplied through public-private partnerships and by the private sector via the public sector or through public channels, whether in person or virtually.

The private sector should be given sufficient time to bring its services in line with national e-accessibility policies, so as to avoid a situation where accessibility requirements – which can be costly – are pitted against the private sector and viewed as a financial burden. Media support for national e-accessibility policy and the involvement of (locally-based) NGOs undoubtedly help accelerate the adoption of e-accessibility concepts by the private sector.

In general terms, and in the United States in particular, private-sector adoption of e-accessibility has tended to be a gradual process. In some cases, e-accessibility represents a promising market that allows companies to reach new client bases (such as persons with disabilities) that have sufficient critical mass to justify the additional cost of making websites and mobile services partially or fully compliant with e-accessibility standards. The introduction of e-accessibility standards also benefits elderly clients, a category of consumers that cannot be ignored in either economic or social terms.

The private sector undeniably plays a key role in incorporating e-accessibility policies into economic and educational life, as well as into content creation, given that most content (for both business and leisure) is produced by the private sector.

F. Design process of the national e-accessibility policy template

While the national e-accessibility policy template was formulated on the basis of best practices in the Arab region and worldwide, it also takes account of national characteristics that have contributed to the success of those practices, either because of a given country's particular current circumstances or as a result of its financial or human capacity. Policymakers should, therefore, keep those factors in mind when applying the template to their national contexts, each of which has its own specific circumstances and requirements.

The national e-accessibility policy template for the Arab region has been put together by examining components of Arab e-accessibility initiatives that best suit the characteristics of this region. Components from initiatives outside the region are not disregarded, but rather compared and contrasted to identify the most appropriate measures to include in national e-accessibility policies.

G. Intersectional obstacles to e-accessibility

Policymakers must pay due regard to the intersecting economic and social barriers that can prevent the most vulnerable individuals or groups in their regions or communities from accessing digital services. Intersectionality is about listening to the voices of those who suffer from various overlapping forms of persecution, in order to understand the drivers of – and the interplay between – different

types of inequality in a given context. These intersecting and simultaneous forms of oppression can be rooted in many factors, including gender, nationality, ethnicity, age, minority status (in the case of refugees, for example), or economic and social class.

An intersectional approach must be taken to ensure that national policy is comprehensive and guarantees e-accessibility for all inhabitants in a given country. There are many different barriers that can hamper access to digital services for persons with disabilities, thus compounding the obstacles that they already face as a direct result of their disability. It is important to identify and address the various intersecting factors that contribute to those barriers and find solutions to redress the balance for persons with disabilities and promote e-accessibility for the population groups targeted by the policy. For example, women with disabilities face more difficulty accessing digital services than other women, and if those women with disabilities also happen to be migrants, then the challenge becomes even greater. On that basis, an intersectional approach means understanding the whole range of factors that can influence people's ability to access the Internet and other digital services.

1. Women

It is no secret that women all over the world face unique challenges and the gender gap persists throughout every context in every country. As a result, women have fewer opportunities than men to access digital technologies and acquire the necessary skills to use them to their advantage. When designing e-accessibility policy, it is, therefore, necessary to take a gender-based approach that duly considers the challenges facing women in the Arab region, to ensure that the policy promotes digital inclusion rather than exacerbating the gender gap.

The statistics below, published by the International Telecommunication Union (ITU), show the difference in Internet use between the sexes in a number of Arab States. As shown in the table, certain Arab States have a higher proportion of male than female Internet users, whereas countries with high overall levels of Internet use – such as Bahrain, Kuwait, Qatar, and the United Arab Emirates – have similar numbers of male and female Internet users.

Percentage of individuals using the Internet, by gender, in selected Arab countries (most recent year for which data is available)

Country	Most recent year data available	All individuals	Gender	
			Male	Female
Algeria	2018	49.0	55.1	42.9
Bahrain	2018	98.6	98.7	98.5
Egypt	2018	46.9	52.4	41.3
Kuwait	2018	99.6	99.5	99.8
Morocco	2018	64.8	68.5	61.1
Oman	2019	92.4	90.6	96.8
State of Palestine	2018	64.4	68.5	60.2
Qatar	2019	99.7	100	99.3
Saudi Arabia	2018	93.3	94.6	91.4
Sudan	2016	14.1	16.9	11.0
United Arab Emirates	2018	98.5	98.3	98.8

Source: Statistics from the ITU: Statistics on gender and information and communication technology (2020). Available at https://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx.

Using an intersectional lens also means recognizing the historical context surrounding gender-related issues in any given country and cultural environment. Long histories of violence and systematic discrimination have created deep inequalities that continue to affect women to the present day, as the various layers of inequality intersect and interact with one another. For example, poverty, caste systems, racism, and sexism are all intersecting issues that deny people their rights and equal opportunities; the impact of this extends across many generations.[11]

2. Children

Children have the right to special care and assistance, as stipulated in the United Nations Declaration of the Rights of the Child, and families – the core component of society and the natural environment for raising children – must be afforded protection and assistance to allow them to fulfil their responsibilities in society. According to the Declaration, "the child, by reason of his/her physical and mental immaturity, needs special safeguards and care, including appropriate legal protection, before as well as after birth".

3. Minorities

In view of the deprivation faced by many communities as a result of their minority status, national e-accessibility policy must take account of the unique circumstances experienced by persons with disabilities from those communities, a factor which is often disregarded.

Denial of basic rights: Individuals in minority communities are sometimes unable to exercise their rights, either as a result of their irregular legal status or because of social discrimination. Therefore, e-accessibility policies must take account of all forms of marginalization and ensure that all citizens and residents have equal access to digital and online services, pursuant to human rights law.

Language barriers: Depending on which native language they speak, members of minorities can also face linguistic challenges that prevent them from accessing basic services. A successful e-accessibility policy must cater for the unique situation of each linguistic community and ensure that the linguistic and cultural diversity of the area in question is taken into account, so as to ensure that services meet the needs of as many people as possible, on the basis of "universal design".

4. Social and economic status

In any given environment, poverty creates a continuous state of deprivation that hinders individuals' access to digital services and exacerbates existing disability-related challenges. Persons with disabilities suffer disproportionately as a result of a range of factors linked to economic and social disadvantage, including inadequate education and lack of access to (or familiarity with) ICTs. For e-accessibility policies to be successful, they must identify and address these existing economic and social barriers.

H. Comparison of selected Arab and international policies and identification of best practices

Comparing and contrasting national e-accessibility policies is a useful way to identify the components that have the most impact. The implementing agency plays a key role in ensuring the success of any e-accessibility policy by monitoring its implementation, including through purpose-built templates. In some cases, national policy is implemented by a range of entities, each of which is responsible for directly implementing the policy or applying the relevant e-accessibility legislation. Usually, an implementing agency deals with a specific set of departments; for example, one department may be responsible for monitoring governmental institutions, while others cover banking, health, education, and services. This approach guarantees effective implementation across each different sector and ensures that each department is well aware of the requirements of the sector under their remit. The potential role of NGOs must also be taken into account. In certain countries, depending on their institutional structure, national

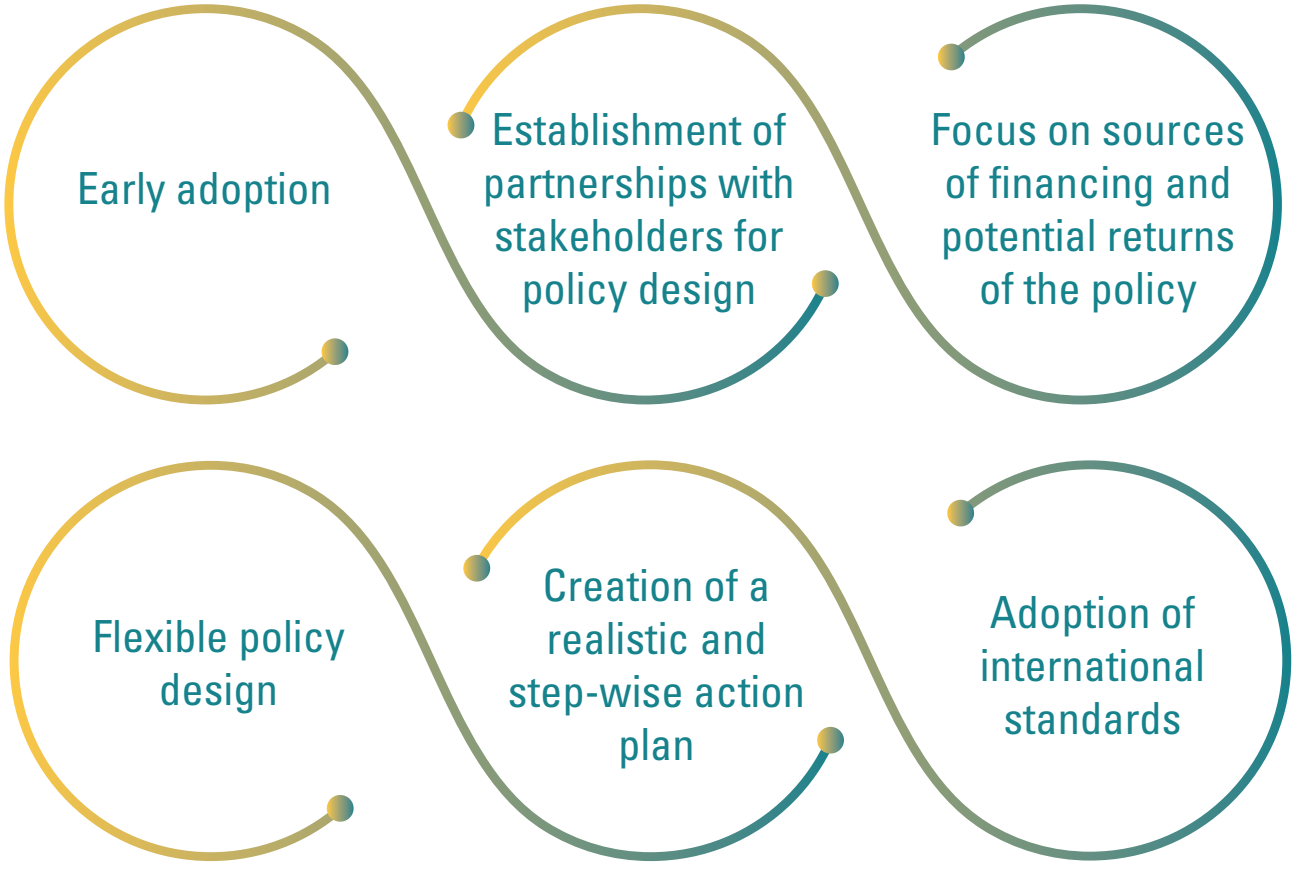
e-accessibility policy can be implemented by an independent or public specialized agency.

Monitoring the implementation of national e-accessibility policies is crucial, since the impact and success of a policy will depend on whether or not it contains mandatory requirements for the private sector.

Monitoring and evaluation also play an integral role in ensuring that e-accessibility policies benefit as many persons with disabilities and special needs as possible, for as long as possible. The agencies responsible for comprehensive monitoring and reporting must be provided with the necessary mechanisms and authority to allow them to interact with the service providers to which the e-accessibility standards apply. This will, of course, vary depending on whether the relevant standards apply only to governmental institutions, or also to NGOs and the private sector.

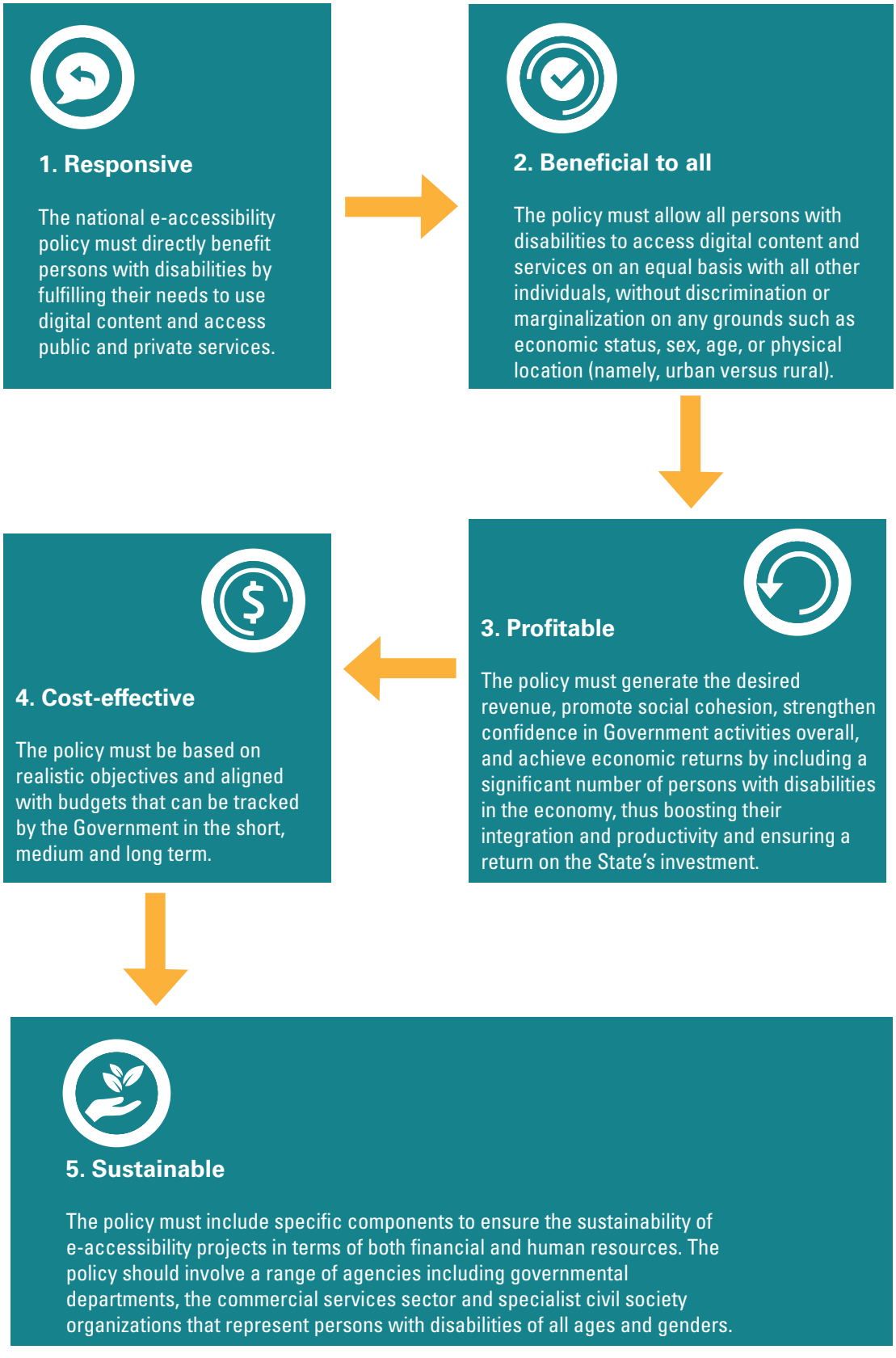
Based on an analysis of national e-accessibility policy implementation in the Arab region and worldwide, the main lessons learned are summarized below, including a range of possible components for inclusion in the ESCWA national e-accessibility policy template.

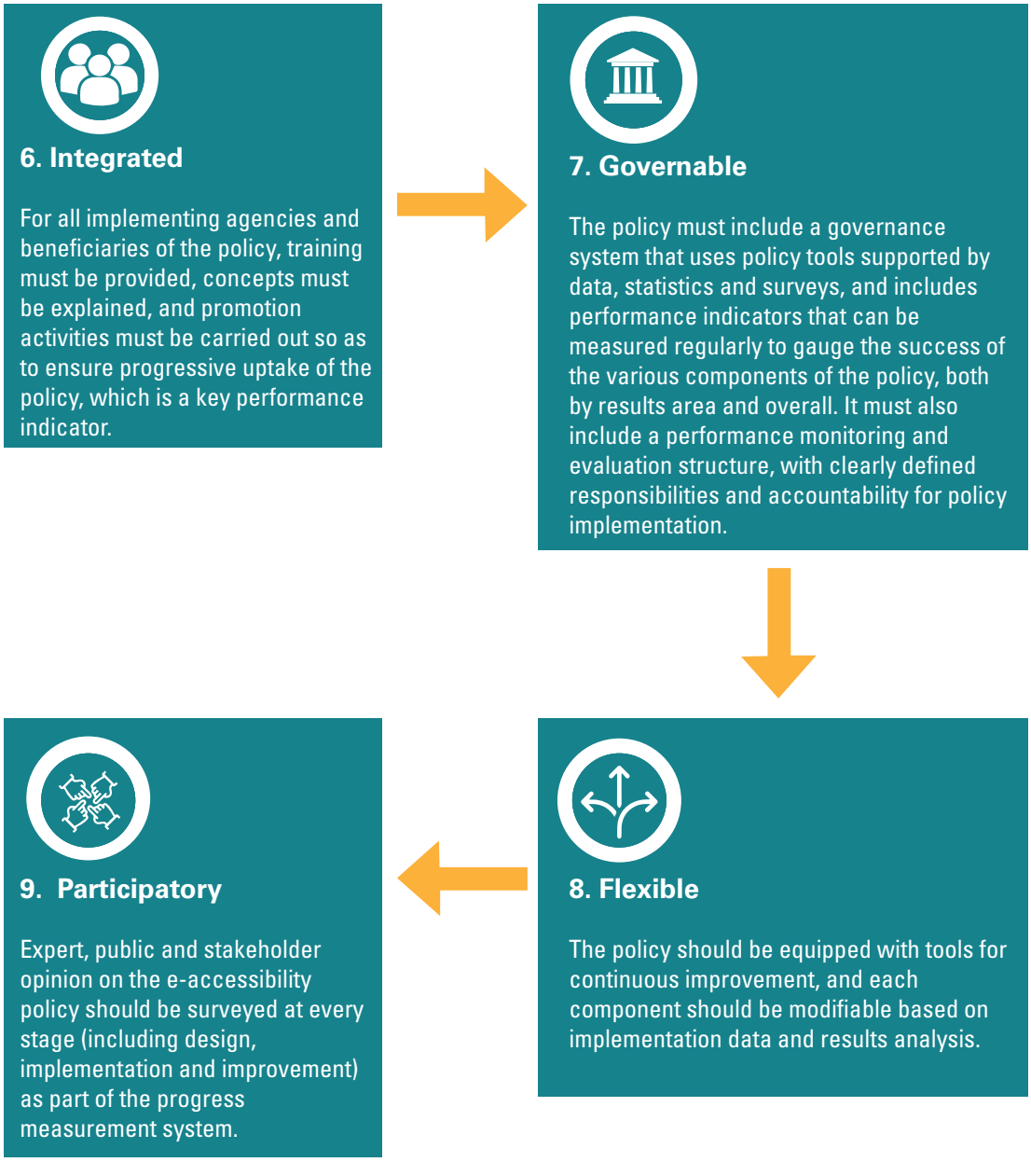
The conclusions of the comparative analysis of best practices in e-accessibility policy design and implementation are summarized as follows:



I. The nine characteristics of a national e-accessibility policy

Based on an analysis of best practices, national e-accessibility policy should be the following:


1. Responsive
The national e-accessibility policy must directly benefit persons with disabilities by fulfilling their needs to use digital content and access public and private services.
2. Beneficial to all
The policy must allow all persons with disabilities to access digital content and services on an equal basis with all other individuals, without discrimination or marginalization on any grounds such as economic status, sex, age, or physical location (namely, urban versus rural).
3. Profitable
The policy must generate the desired revenue, promote social cohesion, strengthen confidence in Government activities overall, and achieve economic returns by including a significant number of persons with disabilities in the economy, thus boosting their integration and productivity and ensuring a return on the State's investment.
4. Cost-effective
The policy must be based on realistic objectives and aligned with budgets that can be tracked by the Government in the short, medium and long term.
5. Sustainable
The policy must include specific components to ensure the sustainability of e-accessibility projects in terms of both financial and human resources. The policy should involve a range of agencies including governmental departments, the commercial services sector and specialist civil society organizations that represent persons with disabilities of all ages and genders.


6. Integrated
For all implementing agencies and beneficiaries of the policy, training must be provided, concepts must be explained, and promotion activities must be carried out so as to ensure progressive uptake of the policy, which is a key performance indicator.
7. Governable
The policy must include a governance system that uses policy tools supported by data, statistics and surveys, and includes performance indicators that can be measured regularly to gauge the success of the various components of the policy, both by results area and overall. It must also include a performance monitoring and evaluation structure, with clearly defined responsibilities and accountability for policy implementation.
8. Flexible
The policy should be equipped with tools for continuous improvement, and each component should be modifiable based on implementation data and results analysis.
9. Participatory
Expert, public and stakeholder opinion on the e-accessibility policy should be surveyed at every stage (including design, implementation and improvement) as part of the progress measurement system.

3.

Comparative analysis of e-accessibility policy implementation

3. Comparative analysis of e-accessibility policy implementation

To develop its national e-accessibility policy template, ESCWA first conducted a comparative analysis of policies in the European Union, Canada, the United States, and four Arab States that have achieved promising results and made significant progress in the implementation of national e-accessibility policy. On the basis of that analysis, ESCWA has developed a general framework to help States identify national priorities and core components to formulate their own national e-accessibility policy.

A. Comparative analysis of policies in the European Union, Canada and the United States

This section compares the implementation of national e-accessibility policy in the European Union, Canada and the United States. These examples were selected because they are each composed of distinct administrative units – countries of the European Union, governorates of Canada, and states of the United States – with their own specific legal characteristics, and each has laws in place to promote e-accessibility. Furthermore, in the European Union, Canada and the United States, persons with disabilities have a legal right to e-accessibility and can lodge a complaint against any public or private entity that does not comply with e-accessibility requirements.

1. Canada

Item	Details
Policy	(Mandatory policy) **1.** Policy on Communications and Federal Identity.[a] This policy requires all government departments dealing with e-accessibility to meet the requirements of the Standard on Web Accessibility so as to ensure that all web pages, publications and digital data are accessible to persons with disabilities on an equal basis with others. **2.** Guidance on Implementing Standard Web Accessibility (2011).[b] This guidance, alongside the Canada Human Rights Act[c] (c. H-6, section 24) and other related legislation on persons with disabilities, serves as the legal and policy reference for e-accessibility at the federal level in Canada.

Item	Details
Implementing agency	To promote accessibility and e-accessibility, the Government of Canada has taken a "whole-of-government" approach, according to which responsibility for oversight and implementation of e-accessibility policy is distributed among the following entities: 1. The Office of Public Service Accessibility,[d] a branch of the Treasury Board: the Governor General appoints a commissioner responsible for access to services, answerable to the Minister of Sport and Persons with Disabilities, who is responsible for compliance and enforcement, as well as dealing with complaints related to all other activities and sectors under federal jurisdiction. 2. The Canadian Radio-television and Telecommunications Commission (CRTC) is responsible for compliance and enforcement relating to broadcasting and communications, using its statutory powers. 3. The Canadian Transportation Agency is responsible for compliance and enforcement in the transport sector, by means of its enhanced powers.
Supporting legislation	Accessible Canada Act. Policy on inclusion of persons with disabilities in federal public service (known as the Accessibility Strategy for the Public Service of Canada). Canadian Charter of Rights and Freedoms. Employment Equity Act. Regional laws on accessibility, including the following: Act Respecting Equal Access to Employment in Public Bodies (Quebec). Accessibility for Ontarians with Disabilities Act (AODA). Accessibility for Manitobans Act (AMA). Nova Scotia Accessibility Act.
Policy scope	Develop e-accessibility standards and work with stakeholders and persons with disabilities in order to do the following: Set new accessibility standards applicable to sectors such as banking, communications and transport, as well as to the Government of Canada itself. Adopt compliance and enforcement measures and set up accessibility-related complaints mechanisms. Ensure coverage of all governmental bodies and public and private-sector entities.
Action areas	The Guidance on Implementing the Standard on Web Accessibility sets the following deadlines for the implementation of e-accessibility standards: **Phase I** (August 1, 2011 to February 29, 2012) applies to: • All Government home pages and pages referenced from Government websites (namely, third-party content) and smartphone applications (home page as a minimum). • All new web pages and smartphone applications published after 1 October 2011. • Significant number of web pages and smartphone applications that provide essential information and services to individuals and businesses, including on rights and benefits. • Significant number of the most frequently used web pages and smartphone applications.

Item	Details
Action areas	**Phase II** (March 1, 2012 to July 31, 2012) applies to: • Additional internal pages on Government websites, smartphone applications, services and web pages that are the most frequently used. **Phase III** (August 1, 2012 to July 31, 2013) applies to: • All remaining Government web pages and smartphone applications, and a significant proportion of the most frequently used private websites involved in public service provision. The above represents the minimum requirements, which departments are encouraged to surpass.[e]
Standards adopted	Adoption of WCAG 2.0, conformance level AA, and all related applicable standards.
Governance mechanisms	Under the Accessible Canada Act, two new positions were created, namely: **1.** Accessibility Commissioner. **2.** Chief Accessibility Officer. Both of those individuals have the authority to impose penalties on public and private institutions. The Office of the Commissioner can investigate complaints, assess penalties and issue compliance orders.[f]
Policy implementation mechanisms	To ensure that entities meet their obligations under the Accessible Canada Act, a range of proactive compliance measures are recommended, including inspections, compliance reviews, compliance orders, and notices of violation accompanied by warnings or administrative monetary penalties. Equally, the entities subject to the Act have the right to challenge decisions or request an administrative review.[g]

[a] Policy on Communications and Federal Identity: Deputy heads are responsible for the following:6.3.5 Meets the requirements of the Standard on Web Accessibility and provides published information on request that is substantially equal for people with disabilities. Available at https://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=30683.
[b] See https://www.canada.ca/en/treasury-board-secretariat/services/government-communications/guidance-implementing-standard-web-accessibility.html.
[c] Canadian Human Rights Act – R.S.C., 1985, c. H-6 (Section 24). Available at https://laws-lois.justice.gc.ca/eng/acts/h-6/.
[d] Government of Canada. Measuring progress: Accessibility Strategy for the Public Service of Canada. Available at https://www.canada.ca/en/government/publicservice/wellness-inclusion-diversity-public service/diversity-inclusion-public-service/accessibility-public-service/accessibility-strategy-public-service-toc/accessibility-strategy-public-service-measuring-progress.html.
[e] See https://www.canada.ca/en/treasury-board-secretariat/services/government-communications/guidance-implementing-standard-web-accessibility.html.
[f] Administrative monetary penalties: Depending on the nature and severity of non-compliance, an officer could require that the regulated entity pay a fine (up to $250,000). Available at https://www.canada.ca/en/employment-social-development/programs/accessible-people-disabilities/act-summary.html.
[g] Government of Canada – Proposed Accessible Canada Act – Summary of the bill. Available at https://www.canada.ca/en/employment-social-development/programs/accessible-people-disabilities/act-summary.html.

2. Conclusions from the experience of Canada

As an early adopter of e-accessibility standards, Canada launched its own "Common Look and Feel (CLF) 1.0 standards" back in 2000. The standards adopted by Canada were incorporated into the first version of the Web Content Accessibility Guidelines (WCAG 1.0), with which public-sector entities were required to comply by the end of 2002. Subsequently, Canada developed the "Common Look and Feel (CLF) 2.0 standards", with which public-sector entities were required to comply by the end of 2008, which was also the year when WCAG 2.0 was published.

At the end of 2008, Canada adopted WCAG 2.0 and requested its State institutions to implement the standard. Canada only launched its national

web accessibility policy in 2011, when the minister responsible for the Treasury Board announced that CLF 2.0 would be replaced by the following three new standards:

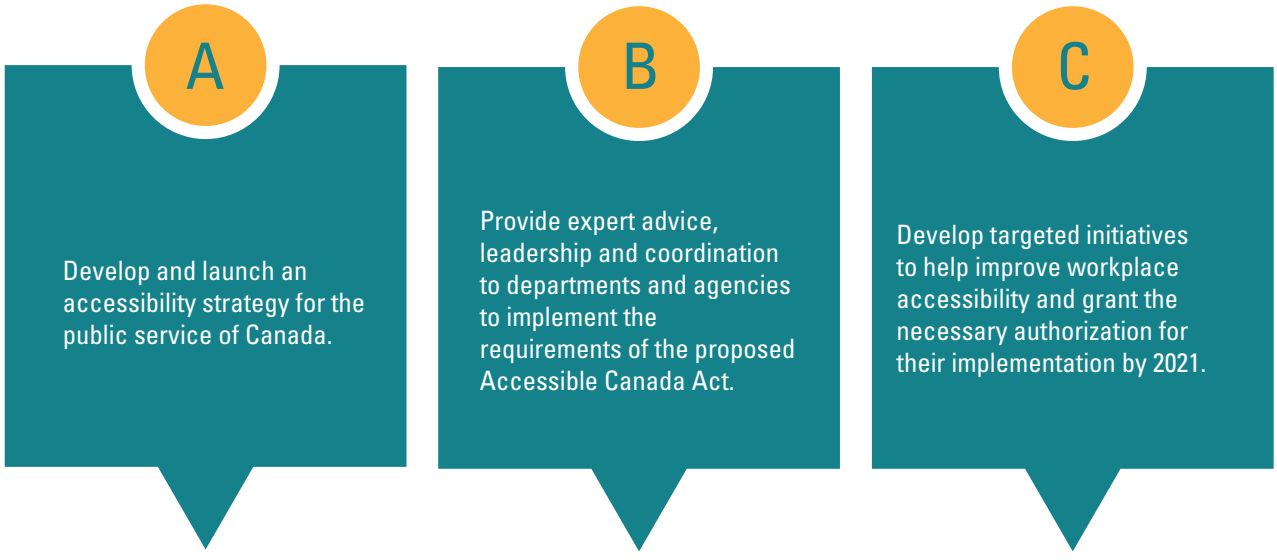
1. Standard on Web Accessibility
2. Standard on Web Usability
3. Standard on Web Interoperability

The announcement stated that Canada would adopt WCAG 2.0, which contained the most up-to-date internationally recognized guidance on web accessibility.[12]

At this point, it should be noted that the Canadian Government's highly flexible approach, which involves adopting standards as they evolve, demonstrates a great deal of legislative flexibility and shows the benefit of treating e-accessibility as a basic human right of persons with disabilities, whether they be citizens or residents. It is also worth noting that all constitutional content in Canada is subject to the principle of official bilingualism.[13] This example of applying e-accessibility principles to content in two languages is viewed as a best practice in the case of countries that have more than one official language.

Canada took a "whole-of-government" approach to implementing an e-accessibility policy, which has the advantage of covering all federal government departments involved in policy implementation. Each minister, their associates and the heads of specialized departments are directly responsible for drawing up e-accessibility action plans for governmental services and overseeing policy implementation by all web content providers, including third party content websites, any large or medium-sized private enterprise, and private institutions of public benefit.

As part of that approach, the minister responsible for the Treasury Board established the Office of Public Service Accessibility, whose mandate is set out in the Accessibility Strategy for the Public Service of Canada as follows:



Obligations of the private sector and civil society, and the situation following the enactment of the e-accessibility law (AODA)

The Accessibility for Ontarians with Disabilities Act (AODA), enacted in 2005, contains standards that must be respected by public, private and non-profit organizations. The objective of the Act was to make Ontario fully compliant with e-accessibility standards by 2025, giving it 20 years to reach full compliance in all sectors. Under the Act, all public-sector organizations and private or non-profit organizations employing over 50 employees were given a deadline of 1 January 2021 to bring their websites and online content into compliance with WCAG 2.0, conformance level AA. Any entity found in breach of those standards after that date faces a penalty of up to 100,000 Canadian dollars per day of non-compliance.

3. United States

Item	Details
Policy	(Mandatory policy) Section 508 of the Rehabilitation Act of 1973 – Special Policy.[a]
Implementing agency	The Federal Communications Commission has the exclusive authority to implement and enforce the Act under Section 255, and to issue implementation regulations and implement e-accessibility activities. On 18 January 2017, the United States Access Board issued a final rule updating both the e-accessibility policy under Section 508 and the guidance on telecommunications equipment under Section 255 of the Communications Act.[b] • The United States Access Board is responsible for developing e-accessibility standards to incorporate into regulations that govern federal procurement practices.[c]
Supporting legislation	• Section 255 of the Communications Act of 1934 mandates that telecommunications services and equipment must be accessible to persons with disabilities.[d] • Sections 501 and 505 of the Rehabilitation Act of 1973 prohibit federal employers from discriminating against individuals with disabilities.[e]

Item	Details
Supporting legislation	• Section 503 of the Rehabilitation Act of 1973 prohibits employment discrimination based on disability by federal contractors or subcontractors.[f] • Section 504 of the Rehabilitation Act of 1973 prohibits federal agencies, programmes or activities from discriminating against and requires reasonable accommodation to be made for persons with disabilities.[g] • The Americans with Disabilities Act of 1990[h] was the first legal framework to guarantee equal opportunities for persons with disabilities.
Policy scope	Applies to all federal agencies (Government institutions) when developing, procuring, maintaining, or using electronic and information technology. Under Section 508, federal agencies must give employees with disability and members of the public with disability access to information comparable to the access available to others. Private websites are not required to comply as long as they have not received funding from the federal Government or under a federal contract.
Action areas	In essence, any legally registered organization or institution that operates under permission of the United States Federal Government must comply with Section 508. Generally speaking, these regulations are not mandatory for the private sector.[i] All institutions that receive federal funding or do business with the United States Federal Government, and all institutions, programmes, non-profit organizations, and other entities connected with public education service provision must comply with Section 508[j] and ensure that any information they publish is accessible pursuant to the applicable standard. This includes mobile applications, websites, most digital media, self-service kiosks, and electronic payment devices. The United States has been making progress towards e-accessibility for more than two decades, but the past five years in particular have seen significant advances in both the public and private sector, largely because of an increasing focus on older adults who – with their strong purchasing power and their increasing use of digital devices, the Internet and online shopping – have become a key target market. Official e-accessibility policy focusses on the following areas: • Federal Government service provision. • Education. • Labour and employment.
Standards adopted	• WCAG 2.0, conformance level AA, is the main standard for e-accessibility. • The standards contained in the Americans with Disabilities Act of 1990. • The regulations contained in Section 503 of the Rehabilitation Act of 1973. Note: Application of these standards varies by state.[k]
Governance mechanisms	The head of each federal department or agency assesses the level of e-accessibility for persons with disabilities compared with other individuals and reports it to the Attorney-General. Implementation of national e-accessibility policy was only assigned to a centralized federal body in 2017, when the United States Access Board was established. The Board's functions include developing digital standards and incorporating them into the regulations governing federal procurement practices.
Policy implementation mechanisms	Entities (such as organizations and companies) that do not comply with Section 508 can be sued by individuals who are unable to access online information and resources.

Item	Details
Policy implementation mechanisms	Private enterprises that supply ICTs to federal agencies can lose their Government contracts if they fail to meet e-accessibility requirements. In reality, no mechanisms are currently in place to enforce compliance by the private sector.[l] However, given that most US global technology companies do business with and provide services to the rest of the world, they have been obliged to comply with the standards followed in Europe, Canada and other major markets. This means that large companies, including those that deal in telecommunications, software and mobile applications, work on the basis of US standards and WCAG 2.0. In practice, these companies have been obliged to comply with the e-accessibility standards of the countries to which they sell their services. One example of a large company whose websites and programmes comply with these standards is Microsoft.[m]

a Section 508 of the Rehabilitation Act of 1973. Available at https://section508.gov/manage/laws-and-policies#508-policy.
b Revised 508 standards and 255 guidelines. Available at https://www.access-board.gov/ict/.
c Ibid.
d See https://www.access-board.gov/about/.
e The Rehabilitation Act of 1973 – Sections 501 and 505, USA. Available at https://www.eeoc.gov/statutes/rehabilitation-act-1973.
f Section 503 of the Rehabilitation Act of 1973, as Amended, USA. Available at https://www.dol.gov/agencies/ofccp/section-503/law.
g Section 504 of the Rehabilitation Act of 1973, as Amended, USA. Available at https://www.govinfo.gov/content/pkg/USCODE-2018-title29/pdf/USCODE-2018-title29-chap16-subchapV-sec794.pdf.
h AMERICANS WITH DISABILITIES ACT OF 1990, AS AMENDED, USA. Available at https://www.ada.gov/pubs/adastatute08.htm.
i Questions & Answers about Section 508 of the Rehabilitation Act Amendments of 1998, Q&A: #4. Available at https://www.access-board.gov/ict/.
j 2.12.2016 EN Official Journal of the European Union L 327/1. (Legislative acts) – DIRECTIVE (EU) 2016/2102 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 26 October 2016 – on the accessibility of the websites and mobile applications of public sector bodies. Available at https://dynomapper.com/blog/27-accessibility-testing/552-what-is-section-508-and-who-needs-to-be-compliant.
k Oxford Academic, The Gerontologist – Web Accessibility for Older Adults: A Comparative Analysis of Disability Laws. Available at https://academic.oup.com/gerontologist/article/55/5/854/2605270.
l Website Accessibility & the Law: Why Your Website Must Be Compliant – Search Engine Journal – Kim Krause Berg – January 9, 2019. Available at https://www.searchenginejournal.com/website-accessibility-law/285199/#close.
m Microsoft – accessibility portal. Available at https://www.microsoft.com/en-us/accessibility.

4. Conclusions from the experience of the United States

Observations from the United States experience

Based on the experience of high-profile US tech giants, whose programmes and applications are unrivalled worldwide, these companies appear to gradually come into compliance with global e-accessibility standards over time, and to be influenced by market needs and global public opinion concerning their success or failure to support a certain user base – in this instance, persons with disabilities and other marginalized and vulnerable segments of society. Large US companies have the technical and financial capacity to adopt e-accessibility standards, and can gain a competitive commercial advantage by choosing to do so. Most of them will opt to use this advantage soon enough, not just to cater to persons with disabilities but also to the rising number of older persons who require assistive technologies (namely, e-accessibility) in their daily lives. Moreover, these companies have developed artificial intelligence processes and programmes that allow them to minimize the cost of transitioning to e-accessibility, while it remains a costly option for their global competitors.

While the American example has not been as Government-influenced as the Canadian example, in 2017 and 2018, the United States outranked Canada in the Digital Accessibility Rights Evaluation Index, compiled **by the Global Initiative for Inclusive ICTs (G3ict)**.[14] This is the result of early implementation of Section 508 at federal Government level; nonetheless, there remains a great deal of variation among states. Until 2017, national e-accessibility policy had not been assigned to any specific agency. This has affected coordination between the federal and state authorities; many states have their own specific e-accessibility regulations, and some large governmental institutions have even set their own e-accessibility policies to comply with Section 508 of the Rehabilitation Law of 1973, or based on a combination of Section 508 and WCAG 2.0.

As a result of this package of policies, a designated template has been introduced for implementation of these standards, called the Voluntary Product Accessibility Template, which has been issued in number of versions.[15]

5. European Union

Item	Details
Policy	Directive (EU) 2016/2102.[a] This guidance is designed to improve the compliance of public-sector websites and mobile applications with e-accessibility standards and minimize disparities among member States, by agreeing on a common set of e-accessibility standards and implementation mechanisms. Having a harmonized set of standards that applies to all public-sector websites and mobile applications helps boost the software and content creation market, including by reducing the cost of adopting e-accessibility standards, and makes it easier for member States of the European Union to exchange information on e-accessibility.[b] The Directive is considered as the minimum requirements, which European Union member States are encouraged to surpass.
Implementing agency	Each European Union member State designates its own implementing entity. As of 23 December 2023, every European Union member State will be required to submit a progress report to the European Commission every three years.[c] The Web Accessibility Directive Expert Group was created within the European Commission to provide the Commission with technical and governance advice.
Supporting legislation	• The European Accessibility Act[d] was formally adopted by the European Union on June 7, 2019 to create a common set of accessibility guidelines for European Union member States and remedy diverging accessibility standards. • Convention on the Rights of Persons with Disabilities.[e] • Domestic legislation in participating European countries.
Policy scope	• European Union member States. • Global software and public service providers in European Union member States.[f]
Action areas	• Development of e-accessibility legislation. • Digital content in all forms (including the Internet, applications, and audio and video content). • Computers and operating systems. • Automated teller machines (ATMs), ticketing and check-in machines. • Smartphones.

Item	Details
Action areas	• Television equipment related to digital television services. • Telephone services and related equipment. • Access to audio-visual media services such as television broadcast and related consumer equipment. • Services related to air, bus, rail, and waterborne passenger transport. • Banking services. • E-books. • Online shopping websites and mobile applications.
Standards adopted	WCAG 2.0, conformance level AA verbatim without modifications for web content, documents and programmes.[g] This standard requires member States to report on the accessibility of websites and mobile applications, describing the level of accessibility and indicating any inaccessible content.[h]
Governance mechanisms	Every European Union member State must establish governance mechanisms to ensure successful implementation of e-accessibility policies. Without prejudice to the above, specific rules have been set on the necessary features of national policies as follows: **1.** Accessibility statement. **2.** Feedback mechanisms to improve e-accessibility. **3.** Enforcement procedures and penalties for failure to meet e-accessibility requirements. **4.** Monitoring and reporting standards. **5.** Harmonized standards for e-accessibility of mobile applications. **6.** Deadlines for the implementation of certain requirements, including the following: • As of 23 September 2019, all new public-sector websites and applications must comply with the Directive. • As of 23 September 2020, all new and existing websites must comply with the Directive. • As of 23 September 2021, all new and existing mobile applications must comply with the Directive.
Policy implementation mechanisms	Under the Directive, the following implementation procedures apply: **Article 4:** Member States shall ensure that public-sector bodies provide and regularly update a detailed, comprehensive and clear accessibility statement on the compliance of their websites and mobile applications with this Directive. **Article 9:** Member States shall ensure the availability of an adequate and effective enforcement procedure to guarantee compliance with this Directive.[i] The same provisions are reaffirmed in articles 4.1 and 4.2.

a 2.12.2016 EN Official Journal of the European Union L 327/1. (Legislative acts) – DIRECTIVE (EU) 2016/2102 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 26 October 2016 on the accessibility of the websites and mobile applications of public sector bodies. Available at https://eur-lex.europa.eu/legal-content/EN/TXT PDF/?uri=CELEX:32016L2102&from=EN.

b Ibid.

c Accessibility of public sector websites and mobile apps – 2018. Available at https://eur-lex.europa.eu/legal-content/EN/LSU/?uri=CELEX:32016L2102.

d European Accessibility Act (EAA). Available at https://ec.europa.eu/social/main.jsp?catId=1202.

e Convention on the Rights of Persons with Disabilities (CRPD). Available at https://www.un.org/disabilities/documents/convention/convoptprot-a.pdf.

f EU Web Accessibility Compliance and Legislation – By Deque Systems – January 16, 2020. Available at https://www.deque.com/blog/eu-web-accessibility-compliance-and-legislation/.

g W3C – Web Accessibility Initiative – WAI – European Union – Last Updated: 9 February 2017. Available at https://www.w3.org/WAI/policies/european-union/.

h 2.12.2016 EN Official Journal of the European Union L 327/1.

i 2.12.2016 EN Official Journal of the European Union L 327/1.

6. Conclusions from the experience of the European Union

Best practices from the example of the European Union

The example of the European Union, which uses a set of guiding principles to apply common standards to a highly diverse range of member States, is perhaps the model that most closely resembles that required for Arab States.
The clear purpose of the Directive is to identify and utilize the economic drivers of e-accessibility in the European Union in order to create a profitable e-accessibility market, thus driving down the cost of accessible services and allowing member States to meet e-accessibility objectives more cheaply. This approach also means that companies working in e-accessibility accumulate a wealth of expertise, which is then fed back into the existing market, which helps promote sustainability while also reducing operating costs.

In 2019, the European Union made significant advances in the adoption of e-accessibility legislation; the European Accessibility Act and Directive for Member States had an immediate and lasting impact in subsequent years, particularly with the introduction of direct oversight by the European Union.[16]

At the domestic level, some countries have made greater progress on e-accessibility than others. In the 2017 and 2018 DARE index (an initiative adopted by G3ict),[17] France was the highest-ranking European country, followed by Italy in second place and the United Kingdom in third. In 2020, Italy was the top-ranking European country, while France came in second.

The European Union Directive on e-accessibility is a good example for policymakers to follow, since it is aimed specifically at national policymakers in European Union member States.

The Directive was introduced to help member States adopt common European Union standards, in order to prevent divergences which could otherwise lead to compatibility issues.

One of the explicit objectives of the Directive is to promote growth among private-sector companies specialized in e-accessibility, on the basis that harmonization of standards helps expand the e-accessibility market in the European Union, thus enabling companies' services to be used throughout every country in the European Union.

B. Comparative analysis of e-accessibility policy in four Arab States

This section of the document covers examples of e-accessibility initiatives and lessons learned in four Arab States, namely, Oman, Qatar, United Arab Emirates, and Egypt. It should be noted that two of these States ranked highly on the DARE index in 2017 and 2018, when Oman was ranked highest not only in the Arab region, but also worldwide, and in 2020, when the top spot was taken by Qatar.[18]

1. Oman

Item	Description
Policy	ITA E-accessibility Policy 5.1,[a] a national mandatory guiding policy issued in 2014.
Implementing agency	The agency responsible for implementing Oman's e-accessibility policy is the Information Technology Authority (ITA), established by Royal Decree No. 52/2006 of 31 May 2006. Answerable to the Minister of the Economy, the ITA is an independent body with legal personality and its own budget and administration. ITA is in charge of implementing the Omani Digital Society and e-Government Strategy (known as "e-Oman"). It carries out infrastructure projects and supervises all projects related to the Strategy.[b]
Supporting legislation	Oman has incorporated the fundamental principles of human rights, as stipulated in the Charter of the United Nations and the Universal Declaration of Human Rights, into its Constitution and laws. Oman signed the United Nations Convention on the Rights of Persons with Disabilities on March 30, 2008. The Convention was ratified under Royal Decree No. 121/2008 of November 5, 2008, and has been in force in Oman ever since. According to Article 35 of the Convention, Oman must submit a report to the Secretary-General of the United Nations for consideration by the Committee on the Rights of Persons with Disabilities on measures taken and progress made in implementing the Convention. Additional supporting legislation includes the Law on the Care and Rehabilitation of the Disabled (No. 63/2008).[c]
Policy scope	**1.** Government agencies and State-owned companies shall ensure that public information and online services are accessible to persons with disabilities and the elderly. **2.** Government agencies and State-owned companies shall ensure that ICT-based public facilities are fully accessible to persons with disabilities and the elderly. **3.** Government agencies and State-owned companies shall ensure that internal information and applications are made accessible to disabled and elderly employees. **4.** Government agencies shall lead efforts to explore how information technology can be used to fulfil the needs of persons with disabilities and the elderly in their fields of work. **5.** Government agencies that regulate areas such as banking, education, employment, communications, and transport shall ensure that Government bodies and private entities that fall within their regulatory remit comply with e-accessibility rules in Oman and any other related regulations.[d]
Areas of focus (lines of action)	The e-accessibility policy has the following two main areas of focus: **1.** Using ICTs such as computers or mobile phones. **2.** Access to digital data, information and services and mobile applications. The policy does not cover physical accessibility. For national security reasons, the e-accessibility policy does not apply to civil service positions linked to national defence or security. According to press reports, ITA adopted the e-accessibility policy in September 2012 in cooperation with 10 Government sectors (labour and employment, health, education, transport, communications, e-government, the media, banking, internal affairs, and the Ministry of Social Development).[e]

Item	Details
Standards adopted	Oman has adopted WCAG 2.0 (issued as part of the W3C Web Accessibility Initiative) without specifying the conformance level to be met (A, AA, or AAA).
Governance mechanisms	While Oman's e-accessibility policy does not specify any governance mechanisms to be used in its implementation, it does note the following best practices: 1. The needs of all groups of society must be taken into account when making information available to the general public, setting up online services and establishing ICT-based public agencies. 2. Persons with disabilities – in particular blind and deaf persons, and individuals with motor disabilities – must be involved in designing and testing websites, online services and ICT-based public agencies.[f]
Policy implementation mechanisms	All State institutions are responsible for enforcing and overseeing the policy, in collaboration with the Ministry of Transport, Communications and Information Technology. The Ministry is also responsible for providing oversight, facilitating cooperation among the various stakeholders and helping them to fulfil their e-accessibility-related functions. To implement the e-accessibility programme, ITA used the working methods and structure of the National Committee for the Welfare of Disabled Persons, which was created in accordance with the Law on the Care and Rehabilitation of the Disabled (Chapter Three: the National Committee for the Welfare of Disabled Persons, article 13). This Law provided for the establishment of a committee chaired by a minister and composed of representatives of relevant Government agencies, the private sector, rehabilitation centres, and persons with disabilities, with the exact composition of the Committee to be decided by the minister. The Committee was established under Ministerial Decree No. 1/2009, and later restructured pursuant to Ministerial Decree No. 179/2014. A representative of persons with disabilities was appointed to the Oman Human Rights Committee under Royal Decree No. 24/2016, and the Oman Human Rights Committee acceded to the National Committee for the Welfare of Disabled Persons in 2016. According to article 14 of the Law on the Care and Rehabilitation of the Disabled, the objectives of the National Committee for the Welfare of Disabled Persons are to examine and draw up a general plan for the care and rehabilitation of disabled persons; set up specialized programmes for the care, rehabilitation, development, and employment of disabled persons; and strengthen programmes for raising awareness about disability in all its forms and preventing discrimination. The Committee – which is chaired by the Minister for Social Development and includes representatives of all relevant ministries, the private sector, disability rehabilitation centres, and persons with disabilities – has begun working towards its above-mentioned objectives.

Item	Details
Policy implementation mechanisms	In addition, a technical commission was established by Ministerial Decree No. 193/2015 to follow the work of the Committee. This technical commission is chaired by the Director General of the Directorate General for Persons with Disabilities in the Ministry of Social Development. The technical commission is composed of officials representing the same stakeholder groups as those represented in the aforementioned National Committee for the Welfare of Disabled Persons.

a Oman's 2014 E-accessibility Policy. Available at https://www.mof.gov.om/Portals/0/documents/eAccessibility/eAccessibilityPolicy_Eng.pdf; and https://omanportal.gov.om/wps/wcm/connect/5a6ae2bb-f615-42fe-9c5d-121372dd6011/e-Accessibility+Policy%28Ver1.0%29.pdf?MOD=AJPERES.

b Royal Decree establishing the Information Technology Authority. Available at https://www.ita.gov.om/itaportal_ar/MediaCenter/Document_detail.aspx?NID=56.

c Sultani Decree No. 63/2008 Promulgating the Law on the Care and Rehabilitation of the Disabled.

d Oman's 2014 E-accessibility Policy.

e The Sultanate celebrates Global Accessibility Awareness Day, affirming the right to equality for all in electronic services, including the disabled and the elderly. ITA website, News, 2013. Available at https://www.ita.gov.om/ITAPortal/MediaCenter/NewsDetail.aspx?NID=514.

f Oman's 2014 E-accessibility Policy.

2. Conclusions from Oman's experience

Best practices in Oman

The following are the best practices in Oman:

Early adoption of e-accessibility policies.

Sufficient time devoted to drawing up a plan for e-accessibility training and promotion, and to integrate the concept of e-accessibility into the public and private sectors; the plan was completed well in advance of implementation.

Training public and private-sector task forces to use digital assistance software and hardware, website inspection software and services linked to digital preparedness.

Partnership with G3ict to build national e-accessibility policies based on global standards.

Appointing a specific agency to oversee digital transformation and e-government in Oman and lead the process of integrating and implementing e-accessibility; this helped harmonize the governance framework for policy implementation, reduce training and implementation costs, and shorten implementation time.

ITA launched its Government web portal in 2008. One year later, ITA set about raising awareness within Government agencies about the need to make their websites and services accessible to persons with disabilities, and informing governmental and private institutions of best practices and global standards in this domain. A number of training courses were held on using digital technology to assist persons with disabilities. In 2010, ITA launched the e-accessibility standards via its web portal, and was awarded the Sultan Qaboos Award for Excellence in e-Government as a result.

In 2012, Oman launched its national e-accessibility policy in collaboration with G3ict and initiated an e-accessibility awareness-raising campaign. E-accessibility was integrated into Oman's digital transformation plan in 2013, and tests were devised to assess the accessibility of public and private-sector websites and mobile applications.

Oman's e-accessibility policy is brief and focusses on the outcomes the State aims to achieve; it does not mention governance or implementation mechanisms, but designates who is involved in implementation and which global standards have been adopted to achieve the objectives of the policy.

The Ministry of Technology and Communications was established and fused with ITA under Royal Decree No. 63/2019. Subsequently, Royal Decree No. 90/2020 ordered the creation of the Ministry of Transport, Communications and Information Technology, which is responsible for all the country's digital projects. The Decree states that "the Ministry functions as a centre for best practices in e-governance by leveraging ICT to provide effective services, integrate all different sectors and enhance the delivery of online services". Since existing knowledge on best practices in governing digital projects was leveraged for the e-accessibility project,[19] there was no need to devise an entirely new governance system for e-accessibility. This can be considered an example of best practice, as it reduces overlaps in work by different authorities on projects with common goals, such as e-government, e-governance and e-accessibility.

The fact that specific governance mechanisms for e-accessibility are not mentioned in the e-accessibility policy does not mean that they have been neglected, but rather that Oman's general governance mechanisms for digital transformation projects have been applied to the ITA's new project. This is also reflected in Oman's high e-accessibility ranking.

3. Qatar

Item	Description
Policy	Qatar's eAccessibility Policy[a] was published in 2011. This mandatory national policy is part of ictQATAR's Strategy ICT2015,[b] a package of digital initiatives.
Implementing agency	• The Supreme Council of Information and Communication Technology[c] (now the Ministry of Transport and Communications). • Mada, Qatar's Assistive Technology Center.[d]
Supporting legislation	Law No. 2 of 2004 on Persons with Disabilities (2/2004). Qatar signed the United Nations Convention on the Rights of Persons with Disabilities on May 3, 2008. Qatar Central Bank (QCB) Decree No. 73 of 2009 on provision of banking services to persons with disabilities.

Item	Description
Supporting legislation	The founding document of Qatar's Assistive Technology Center, named Mada, a private institution for public benefit (Chapters 9 and 10 of Qatar's General Strategy for the Family, issued by the Supreme Council for the Family in 2010). In 2014, the Ministry of Transport and Communications unveiled its digital inclusion strategy. In 2017, the above-mentioned Ministry launched the Government website and online services framework to guide Government agencies in developing their websites. In the same year, the Ministry launched the operational framework for Government mobile services to help Government agencies design and deploy mobile phone services based on best practice and international standards. In 2019, Qatar's e-accessibility policy was updated to include reasonable efforts to accommodate the provisions of the United Nations Convention on the Rights of Persons with Disabilities.
Policy scope	The policy covers the whole ICT sector. Mada Center is responsible for overseeing e-accessibility activities. The Center also provides oversight and advisory support, and builds partnerships with the private and public sectors and not-for-profit civil society organizations with a view to achieving e-accessibility in Qatar.
Areas of focus (lines of action)	Ensuring that the provisions and requirements of the national e-accessibility policy are practical and achievable without entailing undue expenditure that would overburden the implementing agencies. The policy centred on the following actions: • Require communications providers to supply telephones enhanced with e-accessibility applications, as well as digitally accessible ways of contacting the emergency services via smartphones and, in some cases, public telephones. • Work with e-government to provide accessibility-enhanced online governmental services. • Oblige the public sector and banks to comply with the e-accessibility policy and improve the accessibility of their online services. This includes services provided via the Internet or through self-service kiosks and ATMs located in clearly advertised locations that are easily accessible for persons with disabilities. • Work with Mada Center to promote, integrate and provide training on e-accessibility software and implementation tools, and encourage the procurement of assistive technology to promote e-accessibility. • Call on the media and content creators in Qatar to make their web content more accessible.[e] • Focus in particular on Arabic language web content.
Standards adopted	• All public-service Government websites must comply with WCAG 2.0, conformance level AA. • All public-service Government websites must comply with W3C best practices and Mobile Web Best Practices 1.0.[f]
Governance mechanisms	The implementation matrix set out in Qatar's e-accessibility policy summarizes the roles, responsibilities and powers of its various stakeholders, who should work accordingly to reach the objectives stated in the policy.[g]

Item	Description
Policy implementation mechanisms	The provisions of the policy came into effect as soon as it was issued. The policy included the following implementation deadlines: • New websites were required to apply the standards as of 2013, and existing websites had to be brought in line with the standards by 2015. • The deadline for adapting online public-service platforms and self-service kiosks was 2015. • The policy earmarked funds for supporting assistive technology and services, and creating guidance manuals to that end. • All web content creators are required to endeavour to increase the proportion of accessible content in English and Arabic, to reach at least 5 per cent of the digital content on their sites. • All digital video programme distributors in Qatar must formulate a plan for providing programmes with open or closed captions. • All materials produced are published under a Creative Commons License.[h]

a Qatar's eAccessibility Policy. Available at https://www.motc.gov.qa/sites/default/files/documents/QATAR's%20eAccessibility%20Policy%20-%20Eng.pd.
b ictQATAR's Strategy ICT2015 requires Qatar to develop an ICT-skilled population with equal access to technology and able to succeed in the knowledge economy, prioritizing disadvantaged groups, in particular women, retirees and persons with disabilities.
c Article 4 of Decree Law No. 36 of 2004 establishing the Supreme Council of Information and Communication Technology recognizes the Council as the highest competent authority in communication and information technology affairs, with the authority and competence necessary for handling such matters, and in particular the power to regulate and make policy for the two sectors of communication and information technology in Qatar.
d The founding document of Qatar's Assistive Technology Center "Mada", a private institution for public benefit (2009). Available at https://www.almeezan.qa/LawView.aspx?opt&LawID=4381&language=en.
e See https://www.motc.gov.qa/sites/default/files/documents/QATAR's%20eAccessibility%20Policy%20-%20Eng.pdf.
f Ibid.
g Ibid.
h Creative Commons portal. Available at https://creativecommons.org/licenses/?lang=en.

4. Conclusions from Qatar's experience

Best practices in Qatar

Use of Mada Center as a reference institution for advice and research on e-accessibility.

Early adoption of an e-accessibility policy, in 2011, with clear implementation deadlines for different sectors and services, which helped measure progress and assess compliance.

Adherence to WCAG, indicating the level of conformance required (AA), as an additional compliance measure.

Creation of an implementation matrix, with completion deadlines and clear allocation of responsibilities.

Ranking first in the DARE Index in 2020.

In 2010, Qatar helped establish Mada Assistive Technology Center as part of its commitments on assistive IT. The Center formulated Qatar's national e-accessibility policy, which was officially issued in 2011.[20] The policy broadened Mada Center's strategic objectives (as per Innovative Practice 2014)[21] and assigned it the task of improving accessibility across all digital platforms and making digital content more accessible to all. The policy supports Qatar's wider agenda on the right to access information, and the Qatar National Vision 2030.[22]

The National Development Strategy 2011-2016 promotes the use of ICT to improve learning environments for children with disabilities, offers support to families facing special circumstances – especially those including elderly people or persons with disabilities – and supports initiatives that promote social integration for persons with disabilities.

Qatar's General Strategy for the Family aims to improve the living standards of families by addressing health, education, technology, and socioeconomic factors, emphasizing how technology can help elderly and individuals with disability go about daily life. The strategy also notes the scarcity of Arabic language content as a considerable obstacle that prevents those over the age of 60 from using technology.

Qatar has signed the United Nations Convention on the Rights of Persons with Disabilities, which came into effect on May 3, 2008. The Convention recognizes accessibility as a human right, and requires States parties to adopt appropriate measures to guarantee persons with disabilities equal access to ICT, the emergency services and the Internet.

5. United Arab Emirates

Item	Description
Policy	Accessibility is mentioned under pillar four of the National Policy to Empower People of Determination[a] (a term used in the United Arab Emirates to refer to persons with disabilities), with goal 4.2 stating that modern technology is to be used to facilitate access to information for persons with visual and auditory disabilities.
Implementing agency	The Higher Committee for Protection of the Rights of Persons with Disabilities. Article 6 of Law No. 2 of 2014 Concerning Protection of the Rights of Persons with Disabilities stipulates that: "A permanent committee named the 'Higher Committee for Protection of the Rights of Persons with Disabilities' shall be formed, pursuant to a resolution issued by the chair of the Executive Council, to ensure integration and coordination of work among the entities concerned with the affairs of persons with disabilities. The Committee shall be composed of representatives of the Government entities concerned with implementing the provisions of this Law. This resolution shall define the functions of the Committee, the duties of its chair, the procedure for convening its meetings and voting on its resolutions, and other related matters".
Supporting legislation	• Federal Law No. 29 of 2006 Concerning the Rights of Persons with Disabilities, and amendments thereto. • Law No. 2 of 2014 Concerning Protection of the Rights of Persons with Disabilities in the Emirate of Dubai. • Federal Decree No. 116 of 2009 on Ratifying the Comprehensive and Integral International Convention on Protection and Promotion of the Rights and Dignity of Persons with Disabilities.

Item	Description
Supporting legislation	• Cabinet Decision No. 7 of 2010 regulating non-governmental welfare and rehabilitation institutions for persons with disabilities. • Law No. 3 of 2003 establishing of the Executive Council of Dubai. • Law No. 12 of 2008 establishing the Community Development Authority in Dubai, and amendments thereto.
Policy scope	The policy applies to Government websites and public services in all of the emirates.
Areas of focus (lines of action)	Amending legislation and developing sectoral policies to empower persons with disabilities, with a focus on the following: **1.** Health and rehabilitation. **2.** Education. **3.** Vocational training and employment. **4.** Accessibility. **5.** Civil protection and empowering families. **6.** Public life, culture and sport. However, the policy does not explicitly mention e-accessibility.
Standards adopted	Government public service websites have committed to successive initiatives in support of persons with disabilities – the latest of which is called "My Community… A Place for Everyone"[b] – and to comply with conformance level AA of WCAG 2.0 and WCAG 2.1.[c] Some Government public-service websites comply with W3C Best Practices and Guidelines version 1.0.[d]
Governance mechanisms	According to Federal Law No. 29 Concerning the Rights of Persons with Disabilities (and amendments thereto), ministries including those of social affairs, employment, education, and health are to adopt the necessary decisions to implement the provisions of the Law using the relevant implementation mechanisms. All of the emirates (Abu Dhabi, Sharjah, Fujairah, Ras al Khaimah, Dubai, Ajman, and Umm al Quwain) have their own service centres and initiatives for persons with disabilities, as well as their own Government websites and e-government systems. As a result, it is difficult for the federal Government to establish a federal authority to coordinate implementation of the disability policy.
Policy implementation mechanisms	The Law makes no mention of penalties for governmental or private institutions for non-compliance with disability initiatives, including those related to e-accessibility.

a The United Arab Emirates National Policy to Empower People of Determination. Available at https://u.ae/ar-ae/about-the-uae/strategies-initiatives-and-awards/federal-governments-strategies-and-plans/the-national-policy-for-empowering-people-with-special-needs.

b His Highness Sheikh Hamdan bin Mohammed bin Rashid Al Maktoum, Crown Prince of Dubai and Chairman of the Executive Council, launched the "My Community… A Place for Everyone" initiative in 2013 aiming to make Dubai a disability-friendly city by 2020. This initiative contributed to developing a policy to protect persons with disabilities, brought into effect by Law No. 2 of 2014. The Law supports the goals of the initiative by filling legislative gaps, and enacting the provisions of Law No. 29 of 2006. It also provided for the establishment of the Higher Committee for Protection of the Rights of Persons with Disabilities, tasked with implementing a concrete action plan of tailor-made initiatives and programmes within a specific timeframe. The Higher Committee brings together all key actors in the implementation of the initiative, and is chaired by His Highness Sheikh Mansoor bin Mohammed bin Rashid al Maktoum.

c See https://dubailand.gov.ae/en/accessibility/#/; and https://www.emirates.com/ae/english/information/accessibility/.

d IBIMA Publishing – Journal of E-Government Studies and Best Practices. Available at https://ibimapublishing.com/articles/JEGSBP/2013/978647/978647.pdf; and Vol. 2013 (2013), Article ID 978647, 15 pages. DOI: 10.5171/2013. 978647. Accessibility Evaluation of Dubai e-Government Websites: Findings and Implications. Basel Al Mourad and Faouzi Kamoun. Zayed University. Box 19282. Dubai, United Arab Emirates. Available at http://www.ibimapublishing.com/journals/JEGSBP/jegsbp.html.

6. Conclusions from the experience of the United Arab Emirates

The United Arab Emirates sets an example of global excellence in providing quality services for persons with disabilities in governmental and private institutions. Specialized support centres for persons with disabilities have been set up within Government institutions, and specially-equipped mobile units have even been introduced to bring a range of Government services to persons with disabilities in their own homes. However, when it comes to e-accessibility, persons with disabilities are still unable to conduct their affairs as independently as others.

The "My Community… A Place for Everyone" initiative was launched in 2013 by His Highness Sheikh Hamdan bin Mohammed bin Rashid al Maktoum, Crown Prince of Dubai, Prime Minister, and Ruler of Dubai. The initiative aims to make Dubai a disability-friendly city by 2020, and also formed the basis of efforts to fill a gap in legislation with the enactment of Federal Law No. 29 of 2006.

The High Committee on Human Rights was also founded to implement tailor-made initiatives and programmes. In addition to planning activities, the Committee launched a package of initiatives including the following:

7. Egypt

Item	Description
Policy	Egypt has no binding policy on e-accessibility; however, e-accessibility is referenced in Prime Ministerial Decree No. 2733 of 2018 in Law 10 (issuing the Implementing Regulation of the Law of the Rights of Persons with Disabilities).[a] Under Article 4 of Law No. 10 of 2018, Egypt commits to protecting the legal rights of persons with disabilities. According to this Law, the State shall do the following: Guarantee the right to life and development of persons with disabilities to the greatest extent possible, by taking steps to guarantee respect for their human dignity by ensuring fulfilment of their basic needs such as food, housing, health care, mental health support, and social care (paragraph 1). Ensure that persons with disabilities are able to exercise the right to education, employment and recreation, the right to use public facilities and services, the right to obtain information, and the right to freedom of expression and opinion, among other fundamental rights and freedoms, both collective and individual (paragraph 10).

Item	Description
Policy	According to paragraph 12, the State shall: Take the necessary steps to enable persons with disabilities to access and use the built environment, public transport, information and ICT (paragraph 12). Ensure that ICT is accessible for persons with disabilities, and promote the provision and use of accessible technology (paragraph 12). • In addition, Implementation Regulation 2733/2018 on e-accessibility, issued under Prime Ministerial Decree No. 2733 of 2018 Concerning the Issuance of the Implementation Regulation of the Law of the Rights of Persons with Disabilities, sets out the responsibilities of Government agencies and ministries as follows: In accordance with article 2, all ministries and other parties involved in implementing the Law of the Rights of Persons with Disabilities (Law No. 10 of 2018) commit to issuing the regulatory decisions necessary for implementing the provisions of the Law. • In accordance with article 8, all governmental and non-governmental agencies commit to using assistive technology to provide information and services to persons with diabilities, and to take appropriate steps towards using assistive technology in education, training, professional development, and employment programmes. The above requirements apply to all relevant governmental and non-governmental agencies that provide any disability-related services to persons with disabilities.
Implementing agency	The National Council for Persons with Disabilities.
Supporting legislation	• Law No. 10 of 2018[b] Concerning the Rights of Persons with Disabilities. • Prime Ministerial Decree No. 2733 of 2018 Concerning the Issuance of the Implementation Regulation of the Law of the Rights of Persons with Disabilities. • Egypt signed the United Nations Convention on the Rights of Persons with Disabilities on April 4, 2007 and ratified it on April 14, 2008, but is not party to its Additional Protocol. The Government of Egypt expressed reservations on paragraph 2 of article 12, which stipulates equal recognition of persons with disabilities and other persons before the law; according to Egyptian law, persons with disabilities are able to acquire rights and bear legal responsibility, but do not have legal capacity.
Policy scope	Governmental and non-governmental agencies (in particular those specializing in education, vocational training and employment) and all providers of services for persons with disabilities.
Areas of focus (lines of action)	To promote e-accessibility, Prime Ministerial Decree No. 2733 of 2018 Concerning the Issuance of the Implementation Regulation of the Law of the Rights of Persons with Disabilities focusses on a number of different areas including the following: **1. Higher education and professional training** Ministries dealing with education, technical training, higher education, and scientific research, educational establishments within the Al-Azhar system, and all other relevant ministries and stakeholders commit to making education accessible to persons with disabilities by making the following arrangements: • Ensure adequate space in education institutions and enable persons with disabilities to learn using systems, software and languages that meet their needs. • Adapt the learning environment to enable persons with disabilities to learn and participate in the regular education system. • Provide a sufficient number of trained specialists to teach persons with disabilities in ways that suit their various needs. • Provide a sufficient number of sign language interpreters in all governmental and non-governmental education institutions to accompany deaf and hard-of-hearing people.

Item	Description
Areas of focus (lines of action)	• Use assistive technology, accessibility tools, resource rooms, appropriate educational content, syllabi, teaching methods, examinations, and schedules to best fulfil the varied needs of persons with disabilities. • Make the websites of governmental and non-governmental education institutions accessible to persons with disabilities. • Integrate the concepts of disability and awareness into all levels of curricula, adapting to the needs, rights and particular situations of persons with disabilities, and adopt varied and sophisticated ways of working with them. • Facilitate access for students with disabilities to various university services by establishing a disability services office within every university in collaboration with the Ministry of Social Solidarity. • Subject home-schooled students with disabilities to the same entrance examinations as students from mainstream schools, and guarantee them the right to be accompanied by an assistant during the examination. **2. Literacy** **Article 23** Relevant ministries and the General Authority for Literacy and Adult Education must tackle illiteracy amongst adults with disabilities who have missed out on schooling, by adapting learning programmes and using sophisticated methods and technology, and by advertising those programmes on a continual basis via their websites and all forms of audio, visual and print media. **3. Banking** **Article 77** Banks must establish appropriate systems to interact with persons with disabilities in compliance with the Law, its Implementing Regulation and global standards, and assist them in every way possible. To that end, banks shall do the following: • Further develop ATMs to meet the needs of persons with disabilities. • Research state-of-the-art banking applications for persons with disabilities worldwide, and investigate the possibility of using them in banks in Egypt. • Set up account creation and transaction procedures that can be adapted to facilitate banking services for persons with disabilities. • Facilitate access for persons with disabilities to loans and credit facilities. • Recognize sign language as an official language for deaf and hard-of-hearing people, and provide documents in Braille, as well as voice recognition as a signature replacement, for individuals with visual impairments. Where those facilities are not available, persons with disabilities may nominate someone to carry out certain tasks on their behalf; deaf individuals may be assisted by a sign-language interpreter as they deem appropriate. **4. Media and culture** **Article 78** All governmental and non-governmental media outlets must respect the following rules and procedures: • Produce communication media appropriate for persons with and without disabilities. • Use enhanced communication media and state-of-the-art technology to reach persons with disabilities. • Use language in all its forms, including ICT, spoken and signed language, Braille, written and audio text, simplified language and narration.

Item	Description
Areas of focus (lines of action)	• National and private media outlets must issue content in the languages necessary for persons with disabilities to understand it and facilitate their interaction with and active participation in media content. • Agencies responsible for monitoring the performance of media outlets and their efforts to address disability-related issues must establish accountability mechanisms and disciplinary procedures to deal with non-compliance with the professional standards set out in codes of ethics. • Public and private television channels must broadcast health information aimed at persons with disabilities in all relevant languages. • Ensure that issues relating to disability rights are addressed intelligently and as a matter of course in all media production and the day-to-day functioning of the media. • Provide sign language interpreting for television programmes. **Article 79** The Supreme Media Council, the National Media Authority and the National Press Authority monitor the progress of governmental and non-governmental media outlets in implementing the commitments set out in the Law and its Implementation Regulation. **5. Legal proceedings** **Article 80** The National Council for Persons with Disabilities is committed to working with investigative bodies to make all legal proceedings accessible to persons with disabilities by accommodating alternative forms of communication such as sign language interpretation and Braille. Such measures enable persons with disabilities to formulate a defence and testify at all stages of criminal proceedings including preliminary enquiry, investigation and trial.
Standards adopted	While Egypt has no law or prime ministerial decree on e-accessibility standards, they are mentioned on the e-government portal of the Egyptian Government. The accessibility statement mentions adherence with W3C standards but provides no further details.[c]
Governance mechanisms	In Prime Ministerial Decree No. 2733 of 2018 (issuing the Implementing Regulation of the Law of the Rights of Persons with Disabilities), a number of articles refer to the management of relations among agencies and ministries that provide cross-ministry services. For example, article 14 states that governmental and non-governmental agencies must notify the Ministry of Social Solidarity and the Ministry of Health of any changes to the social, health or employment situation of persons with disabilities. The majority of the articles in the implementation regulation (including articles 15, 17, 19, 22, 38, 39, 41 to 44, 48, and 53 to 65) relate to regulation of the work of each ministerial committee in the various specialist areas.
Policy implementation mechanisms	Prime Ministerial Decree No. 2733 of 2018 (issuing the Implementing Regulation of the Law of the Rights of Persons with Disabilities), and the Implementing Regulation itself, stipulate that each minister shall oversee the work of their ministry. In most cases, this is done through a committee chaired by the minister and comprised of representatives from all relevant departments. The regulation makes no mention of penalties for failure by governmental or private institutions to comply with disability-related initiatives in general, or e-accessibility requirements in particular.

a The Arab Republic of Egypt – Official Gazette No. 51 – 23 December 2018 – Prime Ministerial Decree No. 2733 of 2018 (issuing the Implementing Regulation of the Law of the Rights of Persons with Disabilities). Available at https://www.elwatannews.com/data/iframe/pdf/1562644881545637336.pdf.

b Law No. 10 of 2018. Available at https://drive.google.com/file/d/1SZkqhTR95H2pO0wJ44qlDLjqHAfzgUKT/view?fbclid=IwAR2rNewS2TrVLdDnytU94ekpMN16cGCDhGV_R2XcrKoqo9wusNTT7SaVqEA.

c Egypt's government gateway. Available at https://www.egypt.gov.eg/English/General/Accessibility.aspx#.

8. Conclusions from the experience of Egypt

Egypt sets an excellent standard when it comes to establishing legal and operational provisions for e-accessibility; however, those provisions are scattered throughout legislation on the other rights of persons with disabilities. Devising a specific Egyptian e-accessibility policy on the basis of the existing laws and regulations would strengthen such policy in Egypt, and could have positive impact on the operational requirements of Egyptian ministries and public and private agencies as described in Prime Ministerial Decree No. 2733 of 2018 Concerning the Issuance of the Implementation Regulation of the Law of the Rights of Persons with Disabilities. Egypt's large number of specialized committees working on each implementation area of the Regulation reflects common practice in many countries. However, the absence of an implementation time frame, accountability system, or approved global or domestic standards on e-accessibility could have a tangible impact on the e-accessibility implementation process.

9. Best practices for the successful design and implementation of a national e-accessibility policy

The following list of best practices was compiled by examining the practices of most of the high-ranking States on the DARE index, both in the Arab region and worldwide:

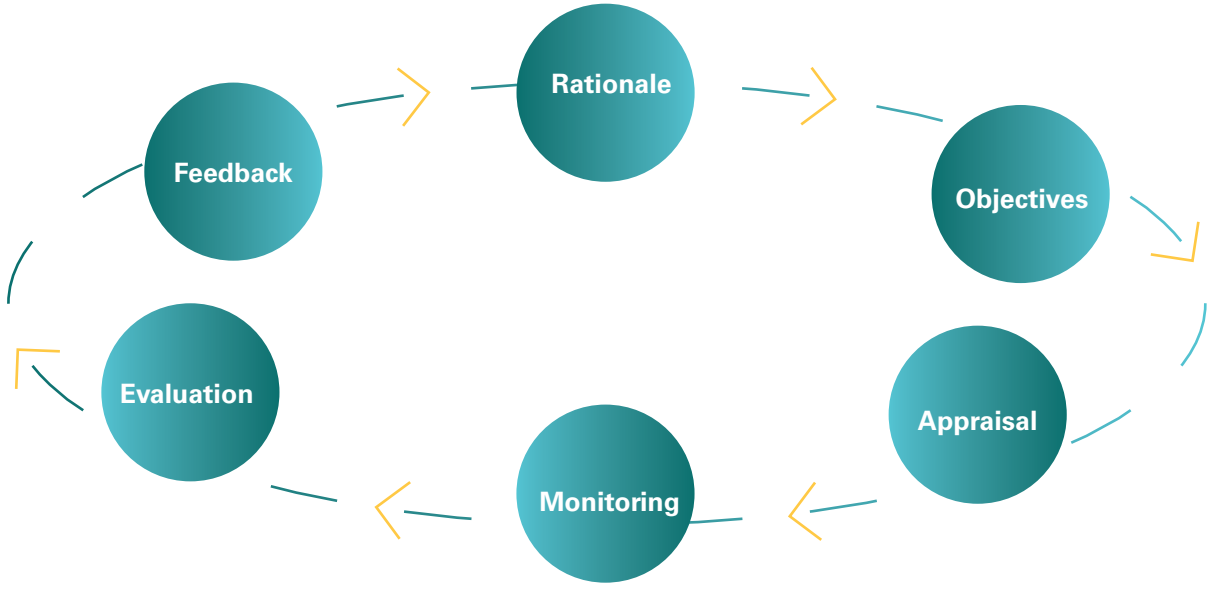
- Early adoption of specialized national policy, including a specific policy on e-accessibility.
- Adoption of clear legislation on disability rights that promotes e-accessibility and can be used as a reference for national e-accessibility policymakers.
- Enforcement and mandatory requirements for the implementation of national e-accessibility policy are key to its success. The level of obligation varies depending on the extent to which the fundamental rights of persons with disabilities are considered to be breached as a result of non-compliance with e-accessibility standards. For example, in the United States, persons with disabilities can file a legal complaint against public service websites (whether run by the Government or private entities) for failure to comply with e-accessibility standards. In other cases, such as in Canada and Qatar, the policy is mandatory and must be implemented by Government agencies within a specific time frame. Lastly, the clear directives for e-accessibility policymakers and implementing agencies in Canada and Europe have had a positive impact by setting clear minimum standards at the national and local levels, and by setting implementation targets that exceed the basic mandatory requirements.
- Clarity and simplicity: Oman sets an excellent example of how to draw up a clear, simple national e-accessibility policy. The experience of Oman has been a resounding success, both regionally and globally, as a result of its supporting legislation and its treatment of global standards as part and parcel of a national e-accessibility policy.
- In the majority of examples studied worldwide, precise schedules and deadlines were set for public online service providers to comply with e-accessibility standards and prohibit procurement departments from purchasing any new websites or online services that do not meet e-accessibility requirements.
- The United Arab Emirates is a global example of excellence in providing quality services for persons with disabilities in governmental and private institutions and establishing specialized support centres for persons with disabilities within Government institutions. In the United Arab Emirates, specially equipped mobile units have even been introduced to bring various Government services to persons with disabilities in their own homes.
- Participatory design of national policy, involving beneficiaries (persons with disabilities and their families), civil society organizations specializing in care and services for persons with disabilities, the private services sector, specialized scientific research centres, universities and experts.

4.

National e-accessibility policy template

4. National e-accessibility policy template

A. General framework for designing a national e-accessibility policy



The purpose of this document is to help e-accessibility policymakers in the Arab region strengthen national policies and legislations on persons with disabilities by developing dedicated policies on e-accessibility, to ensure that those individuals can access online governmental services and digital content via websites, mobile applications, self-service kiosks, and cash machines/ATMs.

An e-accessibility policy acts as a general framework to guide and support a gradual transition towards e-accessibility, in line with standards adopted at the domestic and international levels.

A national e-accessibility policy is designed according to the same process as other Government policies.

The recommended template for designing a national e-accessibility policy is based on the ROAMEF (rationale, objectives, appraisal, monitoring, evaluation, feedback) cycle, which was adopted by the British Government as a standard template for policy creation and continuous improvement, and as a tool to help policymakers assess whether changed programmes are achieving their objectives. The cycle acts as a bridge between public policy and private-sector delivery, and can be used to assess policies, programmes and projects.[23]

Other notable policymaking models may also be used, such as the rational model of policymaking.[24]

The "rational policy-making model", developed by the sociologist, psychologist and Nobel laureate Herbert Simon, somewhat resembles the "process-based" model, but includes additional steps that help achieve specific objectives within the constraints imposed by a given situation. According to this model, rational decision-making can be achieved by analysing a policy based on the following five steps:

While the rational model has often proved useful in decision-making, it does have a number of weaknesses; many of these are linked to the assumptions on which the model is based, not all of which are true. The model also neglects the role of civil society and the private sector in policy planning and implementation.

Designing policy based on the ROAMEF cycle is a useful way to link public policy with private-sector and civil society organizations, since they are the service providers that operate in the political, economic, societal, technological, legislative, and environmental domains affected by the policy, and that define the spaces where governmental activity is carried out in each country.

This policymaking model has been used and promoted by the United Kindgom Government as a way of ensuring that policymakers are equipped with performance indicators to verify whether a policy is achieving its objectives.

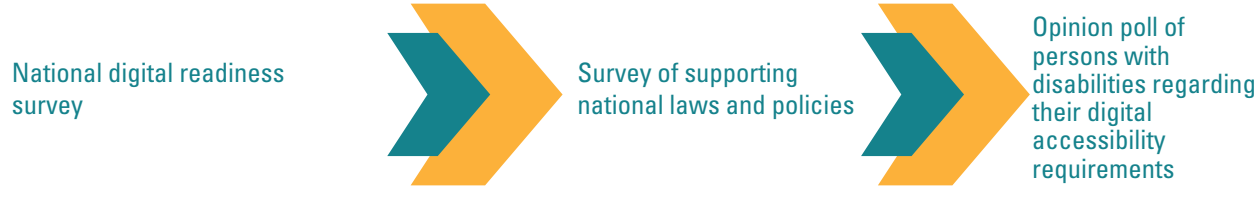
Most e-accessibility policy guides include an implementation section containing guidance for senior officials in Government departments involved in promoting e-accessibility (including ministers, their deputies working on e-accessibility, officials responsible for monitoring and oversight of policy implementation, senior staff in the IT department, heads of communication, and directors of departments that run public-service websites).

Observation 1	• National e-accessibility policy goals cannot be set without examining various alternative solutions for policy and implementation mechanisms and studying the potential impact, economic feasibility and cost of sustaining each option. • Each alternative will alter the hierarchy of goals, and tools such as the ROAMEF policymaking cycle, the PESTLE analysis framework, and SMART goal-setting are an effective way to improve policy design, since an e-accessibility policy is a cross-cutting issue that affects public, private and civil society institutions. • National e-accessibility policy design will inevitably benefit from using specific criteria to assess a range of alternative solutions and compare their outcomes, time frames and costs, based on a set framework that helps to choose the best option for the country in question.
Observation 2	Calculating the cost of each alternative solution in comparison with its short, medium and long-term social and economic returns is a key factor in the success or failure of a national e-accessibility policy. National policies that are overly ambitious compared with their annual budget allocation are bound to miss their implementation targets for lack of funding.
Observation 3	It is crucial to seek direct feedback and reactions, including from stakeholders (such as public service providers, specialized civil society organizations and final beneficiaries of national policy), in order to continually improve the policy and its outcomes based on real-world evidence.

B. Determining national priorities

The Convention on the Rights of Persons with Disabilities,[25] in particular article 9, sets out a global framework for digital accessibility. As the socioeconomic situation of each country is unique, the first step in developing an e-accessibility policy is to gather relevant data through national surveys to determine which areas should be prioritized in a successful e-accessibility policy.

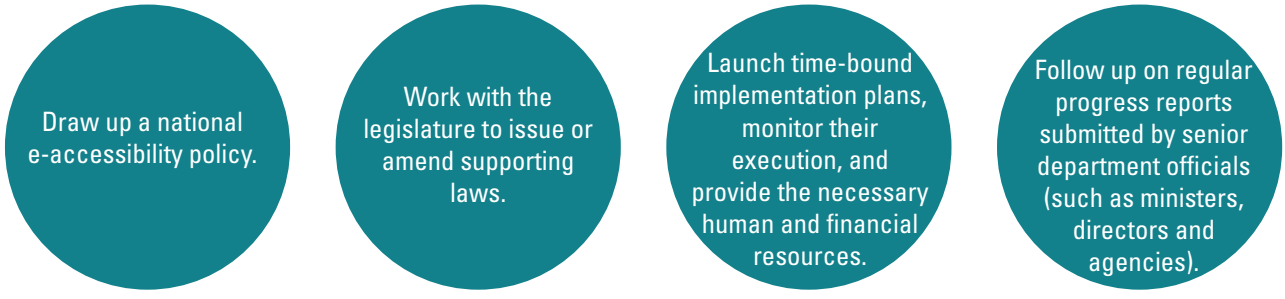
1. Basic steps in determining national priorities



2. Appoint an authority to draw up a national e-accessibility policy and oversee its implementation and evaluation

According to global experiences and best practices, including those applied in United Nations programmes relating to persons with disabilities,[26] the task of drawing up and implementing an e-accessibility plan is often assigned to the agency responsible for following up on the digital strategy in each country, such as the regulatory authority

for communications and information, a high-level body within the office of the prime minister, the ministry of communications or social affairs, or an agency responsible for e-government services. The main tasks assigned to this agency are the following:



C. Risk management template for determining priorities in action plans for the implementation of national e-accessibility policies

One of the most important ways of ensuring the success of e-accessibility projects is to define the implementation priorities of the national e-accessibility plan. Priorities should be set for each different sector, either during the policy design process or immediately after, according to the requirements of the policy.

A standardized scale to assess projects against the determined priorities must therefore be drawn up to help decision makers design and fund the e-accessibility action plan and reduce risks to a minimum.

A risk assessment table can be used to assign a score to each project. The lower the score, the lower the risk of the project and the cheaper, quicker and easier it is to carry out. A risk assessment table is therefore the perfect tool to support the implementation of the Government policy.

There are various standard templates for risk assessment tables that can be used at the national level. It is preferable for all institutions involved in implementing the national e-accessibility policy to use the same template when mapping out implementation priorities.

Example matrix for risk assessment and priority setting

Sector/type of challenge	Risk factors	Risk score*	Weighting**	Risk score after weighting	Total score
	Website				
	Scope of work				
Technological	Infrastructure in place/ required				
	Technical difficulty				
	Duration				
	Allocation of funds required				
Economic	Possibility of funding at level of the organization/ project/ governorate/ municipality				

Sector/type of challenge	Risk factors	Risk score*	Weighting**	Risk score after weighting	Total score
Economic	Reliance on immediate availability of liquidity				
	Distribution of allocated funds				
Commercial/ procurement	Cost of annual (operating) licence for e-accessibility software				
	Additional procurement requirements for enhanced e-accessibility processes				
Organizational	Cross-over between the ongoing activities of institutions and their role in attaining one or more of the goals of the national e-accessibility policy				
	Number of existing physical sites that need to be made more digitally accessible				
	Number of existing websites and digital services that need to be made more digitally accessible				
	Efficiency of the operating team				
Political	Existence of supporting legislation				
	Existence of supporting policies				
	Existence of a national e-accessibility policy				
	Support from all areas of government and their commitment to the plan				
	Contribution of the private sector				
	Level of media support				

* Risk-score range.
** In this template, decision makers can draw on their experience to apply an additional weighting to projects that may be particularly difficult to implement. Additional information not covered in the risk-score table can also be added. Decision makers should explain their reasons for adding any additional weighting.

Low	High
Policy implementation in urban areas	Policy implementation in rural areas
Outcomes for each sector are clearly described	Objectives for each sector are vague and non-specific
Institutions have prior experience of implementing e-accessibility in their services	Institutions have no prior experience of implementing e-accessibility in their services

Low	High
The policy is easy to implement in the target sector	The policy is difficult to implement in the target sector
The policy is realistic and can be implemented using available capacity	The policy is ambitious and does not align with available capacity
The action plan for the policy is realistic and geared towards the desired objectives	The objectives of the action plan must be achieved within a specific time frame
The financial resources required to carry out the action plan have been allocated	The financial resources required to carry out the action plan have not been (fully) allocated
The policy can be implemented using existing technical capabilities	Implementation of the policy depends on technical capabilities not currently in place
The policy can be implemented by a single implementing agency	The policy cannot be implemented by a single implementing agency; multiple implementing agencies must work together
The cost of implementing the policy is low	The cost of implementing the policy is high

(1) Very low risk – (5) Very high risk. Decision makers can decide what level of risk is acceptable based on their experience.

D. General guidance for national e-accessibility policymakers based on the ROAMEF cycle

Step number	Step description	Instructions for national e-accessibility policymakers	Questions that may be used to complete this step[a]
1	Identify the reasons for developing the policy	Drawing up a new Government policy is a delicate process that requires policymakers to have a keen sense of the reasons for developing or amending a policy, including the level of need. This sense should be based on an accurate understanding of the relevant data, requirements and pressures used to justify amending or drawing up the policy. Policymakers should consult stakeholders and experts and examine statistical analyses and academic studies. They should also seek technical opinions from specialist civil society organizations and private-sector companies to whom the policy or amendments would apply. The continuous improvement of public services is one of the main drivers that govern the development of national policies.	• Why is the State intervening to introduce this national policy? • What impact would delaying the policy have? • What issue/problem/opportunity is the State addressing through this policy? • What evidence-backed and statistical data are available on this issue/problem/opportunity? • What are the urgent priorities that must be addressed in this policy? • What governmental, private-sector and civil society organizations are concerned with the policy? How far do their responsibilities extend? • What obstacles are there to implementing the policy? • What types of surveys were carried out during the preparations for drawing up the policy?

Step number	Step description	Instructions for national e-accessibility policymakers	Questions that may be used to complete this step[a]
1	Identify the reasons for developing the policy	The reasons used by policymakers to justify their decisions are often tied to national, regional and global dynamics, known as PESTLE factors: • Political • Economic • Sociological • Technological • Legal • Environmental (or sometimes "ethical") Policymakers should use a PESTLE[b] analysis to structure the target policy. It is also an essential tool for identifying challenges and response mechanisms, as covered in the section on risk analysis.	• Have efforts been made during such surveys to gather the views of civil society organizations regarding their e-accessibility needs? • Have efforts been made during such surveys to gather the views of persons with disabilities and their carers regarding their e-accessibility needs? • Was the private sector surveyed regarding its needs and views on possible solutions for inclusion in the policy? • Were experts and specialist researchers involved in the preparations for drawing up the policy? • Was an analysis carried out of PESTLE factors that could affect or be affected by the solutions proposed in the policy?
2	Define the objectives	Policymakers often use SMART criteria to identify, evaluate and prioritize their objectives. SMART objectives are: • Specific • Measurable • Achievable • Relevant • Time-bound Objectives are defined based on their short, medium or long-term impact.	• What are the desired results of the policy? • What is the expected impact of Government intervention through the policy? • What are the performance indicators for the policy at the national level? • Which segments of society will benefit from the policy objectives, and how? • Do the objectives of the policy serve the needs and aspirations of its beneficiaries? • What tools, methods and units of measurement will be used to measure the success of the policy?
3	Define options and apply weighting	The various possible versions of the policy should be assessed over several steps, most importantly by defining the cost of implementation and the benefits offered by each option. Policymakers may decide to apply weighting, which involves giving extra weight to certain aspects deemed relevant at the national level, such as the distributive effects of the policy or the extent to which it supports equality.	• What are the possible options and solutions set forth in the policy? • What numerical data are there to indicate the likely success and return of each possible form of the policy? • What returns does each proposal offer compared with its outcomes? What weighting is applied to each option? • Have the entities that will be responsible for implementing the policy been defined?

Step number	Step description	Instructions for national e-accessibility policymakers	Questions that may be used to complete this step[a]
3	Define options and apply weighting	Some of the most important aspects to which weighting may be applied are the cost of implementation and the direct human and financial return in the medium and long term. The policy should be drawn up only after studying all the implementation risks and obstacles that could have an effect on the desired result.	• Have the responsibilities of each entity involved in implementing the policy been defined? • Do the approved options for the policy benefit all beneficiaries fairly, equally and without discrimination? • Has each entity responsible for implementing the policy produced a schedule and financial plan for achieving the policy objectives assigned to it? • Has each entity responsible for implementing the policy produced a plan to manage the risks that could hinder the achievement of the policy objectives assigned to it?
4	Monitor	Developing a system to monitor the implementation and practical impact of the policy is an important part of governance activities to guide the pace of implementation. So why not include an action plan within the policy and skip straight to the monitoring stage? Developing a new policy is a regulatory process; in national regulatory policies, the national regulator recognizes the role of the executive authorities and requests them to draw up action plans in accordance with the monitoring (governance) controls required by the regulatory policy. A baseline must be set for each action plan undertaken as part of the policy. A baseline also helps to identify and define the starting and target figures for each performance indicator.	The following questions should be asked regarding the process for collecting implementation data: • Has a start date for implementing the policy been set in line with the priorities in the action plan? • Has a baseline been set at the policy implementation start date, so that indicators can be measured from that point onwards? • Have the implementing agencies been trained on the types of consolidated periodic reports (monthly, quarterly, biannually, and annually) that they must submit to the regulatory authority? • Have employees of the regulatory authority been trained in how to use the tools to assess the reports submitted by implementing agencies? • Are the intended objectives achieved during implementation? • Are the key performance indicators for the policy objectives improving over time?
5	Conduct interim evaluation and overall evaluation Conduct design evaluation and implementation evaluation	When developing new policies, it is best to perform (distinct) formative evaluations of the policy, its objectives and its expected results.[c] This helps identify potential weaknesses in specific areas of the policy during the design process or early in its implementation. Amendments can then be made solely to the area of the policy	After research and analysis, the following questions can be answered: • Has the action plan been divided into phases and measurable components during the implementation period? • Have standard values been set for the key performance indicators for each component and objective of the action plan for each implementing agency and for the project as a whole?

Step number	Step description	Instructions for national e-accessibility policymakers	Questions that may be used to complete this step[a]
5	Conduct interim evaluation and overall evaluation Conduct design evaluation and implementation evaluation	in question, rather than the entire policy. Once the policy has been completed, a final comprehensive evaluation[d] can be carried out that combines separate formative evaluations with data-based evaluation using the performance indicators tracked during the implementation of the policy by the various implementing agencies. Through this approach, policymakers can evaluate the final outputs of the policy.	• Did Government interventions follow the policy as planned? Which of the data-based indicators set out the action plan to support this assessment? • In the overall evaluation, were standard values applied to measure policy impact, and if so, to whom? Do they present opportunities for improvement? • Were the impacts included in the anticipated economic feasibility?
6	Evaluate results, provide feedback and ensure continuous improvement	Government policies and action plans should not be wrapped up following feedback and final evaluations;[e] instead, they should be subject to a process of continuous improvement. Policymakers should design policies with a degree of flexibility that allows for amendments, developments and additions to be made in response to continuous improvement requirements. By designing flexible policies, continuous improvement can be incorporated within the annual policy review system.	• What was learned during policy implementation? • How can the lessons learned during policy implementation be used to ensure continuous improvement? • Was the policy designed with the flexibility to allow it or the priorities set out therein to be modified or changed during implementation or after the final comprehensive evaluation? As an example of flexibility in policy implementation, national e-accessibility policies can be applied to each sector at different stages, thereby minimizing the risks involved and the cost of overcoming any unforeseen obstacles. By engaging stakeholders in the assessment and amendment processes, such obstacles can be more easily overcome, and an improved version of the policy can be issued for each subsequent stage of implementation, with a view to producing a policy that covers as many sectors as possible and meets the needs of various groups of persons with disabilities while achieving the greatest economic impact and return on investment.[f]

a United Kingdom Government Magenta Book – HM Treasury March 2020. Available at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/879438/HMT_Magenta_Book.pdf.

b PESTLE Analysis. Available at https://www.cipd.co.uk/knowledge/strategy/organisational-development/pestle-analysis-factsheet.

c Evaluating Socio Economic Development, SOURCEBOOK 2: Methods & Techniques. Available at https://www.cdc.gov/std/Program/pupestd/Types%20of%20Evaluation.pdf (formative evaluation); and http://www.idemployee.id.tue.nl/g.w.m.rauterberg/lecturenotes/DGB01%20ADD/sb2_formative_evaluation.doc.

d Parsons, W. 1995, Public Policy: An introduction to the theory and practice of policy analysis, Edward Elgar, London, Section 4.5, 'Evaluation', pp. 543-68. Available at https://flo.flinders.edu.au/pluginfile.php/1243092/mod_resource/content/2/10%20%20Policy%20Evaluation.pdf.

e The Mohammed Bin Rashid School of Government – Policy Council Paper – Session No. 13 – September 2019 – AGILE GOVERNMENT. Available at https://www.mbrsg.ae/home/publications/policy-brief-policy-note/agile-government-agile-skills-report.

f World Economic Forum – Agile Governance – Reimagining Policy-making in the Fourth Industrial Revolution – January 2018. Available at http://www3.weforum.org/docs/WEF_Agile_Governance_Reimagining_Policy-making_4IR_report.pdf.

E. Sample design matrix for a national e-accessibility policy

Stage	Identify the reasons for developing the policy	Define the objectives	Define options and apply weighting	Monitor	Conduct evaluation	Evaluate results, provide feedback and ensure continuous improvement
Objectives						
Implementing agency						
Implementation governance mechanisms						
Budget for implementation						
Possible obstacles and solutions						
Type of support available from Government						
Type of support available from private sector						
Type of support available from civil society organizations						
Availability of policy implementation factors						
Support and obstacles resulting from national characteristics						
Performance indicators						
Expected time frame for achieving objectives						

F. Components of the national e-accessibility policy template

1. Preamble

Sample preamble

In accordance with the provisions of the relevant international instruments, the purpose of e-accessibility is to ensure that persons with disabilities have the same level of access to services and information made available through information and communication technology (ICT) platforms and equipment as all other persons. This includes removing barriers that obstruct access to and use of ICT products, services and applications. ICTs, such as computers, mobile telephones, web pages, and self-service kiosks, can make life easier for individuals and can increase productivity. They can also support learning, information exchange and socializing. If ICTs are not fully accessible, however, they can instead create barriers that further isolate certain groups.

2. Definitions

A sample of definitions adapted from the experience of Oman[27]

E-accessibility: the ability of persons with disabilities and older persons to use ICT-based products, information and services to the same extent as all other persons.

Persons with disabilities: persons 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.

Older persons: persons aged 55 years and older whose capacity to interact normally with ICTs is reduced as a result of their advanced age.

Assistive ICTs: innovative technologies that help persons with disabilities and older persons to use ICTs.

ICT-based public equipment: any ICT-based product or tool located in a public place, such as self-service kiosks, terminals and ATMs.

Information: set(s) of logical, interrelated data in electronic format which can be accessed, stored and made available in various formats, including text, image, audio, and multimedia.

E-services: services provided to the public that can usually be accessed via mobile telephone or computer.

Government agency: any institution or unit which is responsible for carrying out administrative and regulatory functions, exercises authority and is directly responsible for or accountable to the public, such as ministries, councils, Government bodies, and municipal authorities.

3. National jurisdiction

[Insert country name] is a signatory to the Convention on the Rights of Persons with Disabilities (hereafter referred to as the Convention), which entered into force in May 2008. The Convention recognizes accessibility as necessary to allow persons with disabilities to exercise their fundamental rights and freedoms. Signatories are obliged to take appropriate measures to ensure that persons with disabilities have access to ICTs, emergency services and online services on an equal basis with others.

4. Vision

Example adapted from the experience of the United Arab Emirates

To create an inclusive society, free from barriers, which empowers persons with disabilities and guarantees them a decent life.

5. Objectives

Template 1

The objective of this national e-accessibility policy is to regulate the transition to e-accessibility in public services provided by the Government and the telecommunications sector, as well as those provided by the private sector (namely, health, education, e-commerce, commercial payment systems, and private companies that have more than 50 employees and provide public services, or produce or distribute digital content in any form). The following actions will be taken to that end:

Communication service providers will be required to supply telephones enhanced with e-accessibility technologies for persons with disabilities and improve their digital service interfaces (including for emergency services) to bring them in line with e-accessibility standards, ensuring that such services are supported with location data from digitally accessible public telephones for use by persons with disabilities, as appropriate and where necessary.

Public-sector institutions will be required to begin improving the accessibility of the digital services provided through their websites and mobile applications, in line with an action plan for priority services for persons with disabilities.

The public and private banking sectors will be required to make improvements to the digital services available through their web pages, mobile applications, self-service kiosks, and ATMs, and to distribute kiosks and ATMs at advertised sites that are easily accessible to persons with disabilities.

A schedule will be drawn up to ensure that e-accessibility requirements are met in all these sectors by a predetermined date.

Mechanisms to enforce and monitor compliance with e-accessibility requirements will be established, and national and international technical standards will be set to which these services must comply (for instance, WCAG 2.0, conformance level A, AA or AAA).

Template 2

The objective of these guidelines is to provide an enabling framework to support the development of a culture and practice of e-accessibility, through the following actions:

- Identifying the general principles applicable to e-accessibility.
- Introducing measures to ensure that persons with disabilities have access to public ICT devices, services, applications, and content in urban, semi-urban and rural areas on an equal basis with others.
- Taking steps early in the design and implementation process to improve the accessibility of public ICT services with a view to reducing the cost of providing e-accessibility services.
- Making e-accessibility services more affordable through subsidies and incentives, where feasible.
- Identifying and addressing barriers to the achievement of full e-accessibility.
- Applying the principle of universal design in the implementation of objectives.

6. Partnerships with civil society organizations specialized in providing services to persons with disabilities

First: as a key component of national e-accessibility policy, persons with disabilities must be actively involved in every task force that deals with disability-related issues, and existing legislation should be enhanced to encourage the involvement of persons with disabilities in policymaking.

As part of those efforts, persons with disabilities must play an active role in:

Carrying out the necessary preparations, studies, data-gathering activities, and opinion polls before designing the national e-accessibility policy.	Drawing up the national e-accessibility policy, related action plans and any legislation submitted to parliament in support of the policy.	Implementing, integrating, overseeing, and monitoring the policy, and ensuring the continuous improvement of the policy.

Second: under the national e-accessibility policy, financial resources must be allocated to ensure that persons with disabilities are able to participate in such processes.

Third: the national e-accessibility policy must be based on the principle that no decision that affects persons with disabilities should be taken without the participation of those persons.

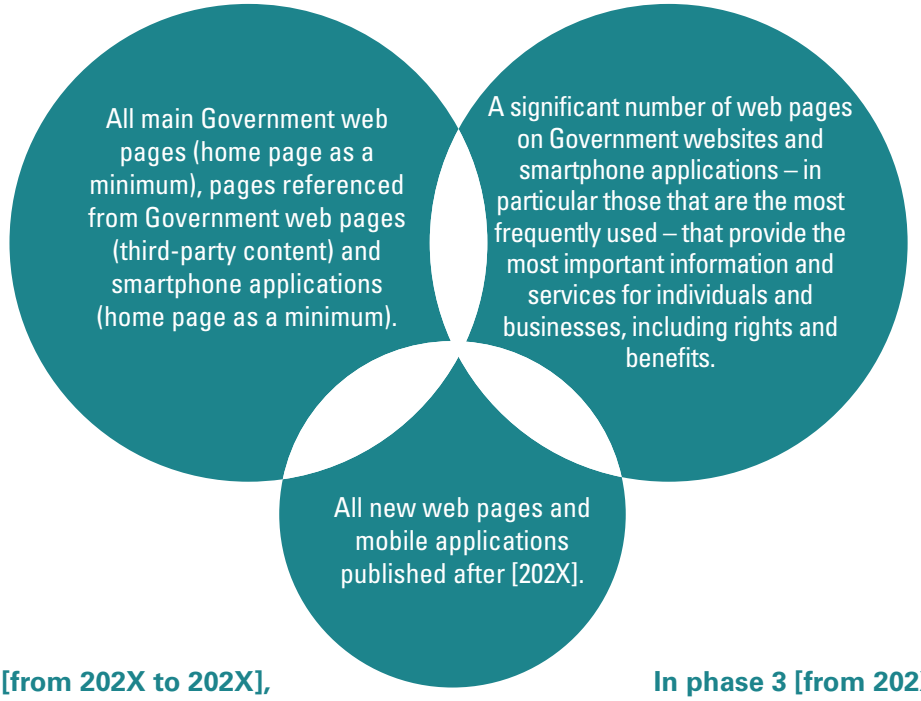
Fourth: the national e-accessibility policy must aim to enhance the awareness of stakeholders – including Government agencies, relevant civil society organizations and persons with disabilities – about the importance of involving persons with disabilities in the process of formulating policies that apply to them.

7. Action lines

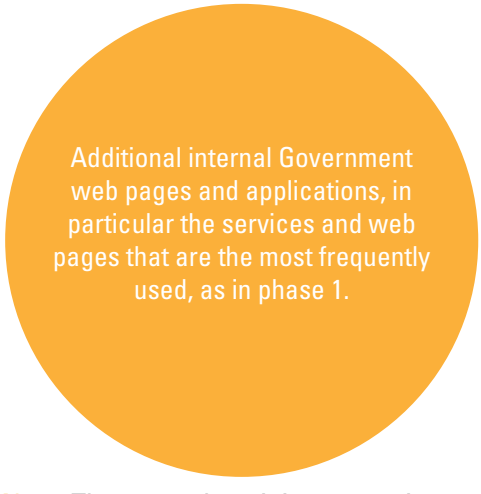
Example 1: Action lines adapted from the Canadian experience

The scope of the e-accessibility policy (action lines) is defined according to the phases of implementation, as follows:

In phase 1 [from 202X to 202X], the policy applies to the following:



In phase 2 [from 202X to 202X], the policy applies to the following:

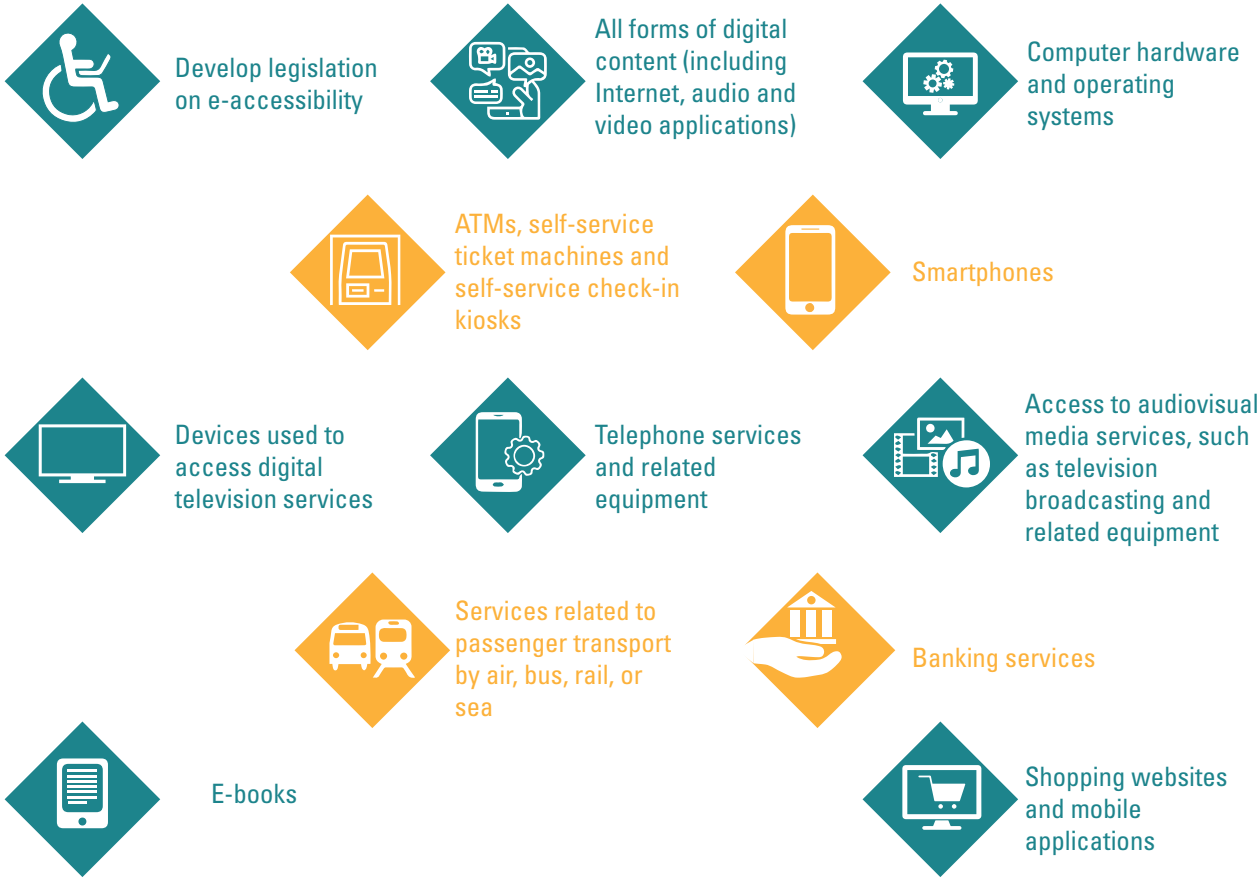


In phase 3 [from 202X to 202X], the policy applies to the following:

Note: These are the minimum requirements. All departments are encouraged to make more rapid progress, where possible.

Example 2: Action lines adapted from the experience of the United States

Action areas as defined by [name of country]:



Example 3: Action lines adapted from the Omani experience

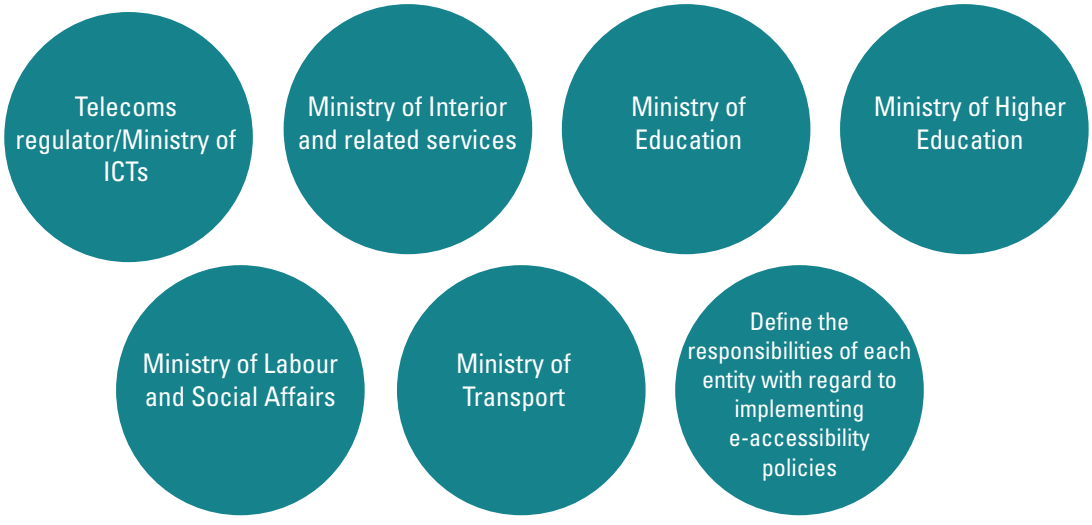
The e-accessibility regulations in [name of country] have the following two main components:

1. The use of ICTs, such as computers and mobile telephones.
2. Access to data, information, digital services, and applications through electronic means.
3. The policy does not cover physical accessibility.

These regulations are not applicable to national security interests or Government employees engaged in defence or national security.

Areas of focus and action lines

1. Define the areas of focus in the public sector:



2. Define the legislative requirements by amending or issuing legislation in accordance with the requirements of national e-accessibility policies and the provisions of the Convention on the Rights of Persons with Disabilities (CPRD).
The legislature must consider the best way to transpose the rights provided for in the Convention into domestic legislation, which will vary according to each country's constitution and laws as follows:

3. Define which departments in each ministry are responsible for e-accessibility, and work in cooperation with those departments to enhance national e-accessibility policies. Alongside legislators and policymakers responsible for drawing up e-accessibility policies, officials within such departments play an important role in achieving e-accessibility.

4. Public procurement departments:
Public procurement departments are among the key players involved in ensuring e-accessibility and meeting service needs.
In practice, procurement departments in the ministries implementing e-accessibility are at the frontline for purchasing new e-accessibility services and enhancements. In countries that have implemented e-accessibility policies, in particular those that involve Government products (such as in the United States, Denmark, Ireland, and Canada), experience shows that developing the capacity of national procurement departments, including by providing training tools, has a positive impact on achieving e-accessibility.

As mentioned in a number of media reports, ITA of Oman worked with 10 Government sectors (labour and employment, health, education, transport, communications, e-government, the media, banking, internal affairs, and the Ministry of Social Development) to draw up its e-accessibility policy published in September 2012.

8. Awareness-raising and inclusion

The following are examples of awareness-raising and inclusion:

The [national telecommunications authority/national disability authority/ministry] is responsible for raising awareness of these guiding principles and the rights of persons with disabilities with regard to ICTs.

The [national telecommunications authority/national disability authority/ministry] and the relevant service providers are responsible for educating the public on how persons with disabilities use public facilities. Such information must be provided to the public in easily accessible formats and must take into account the inputs and information provided by persons with disabilities themselves and their representatives from relevant organizations.

Providers of public telecommunication services must do the following:
- Ensure that appropriate signage, including universal symbols where appropriate, is provided in the immediate vicinity of public payphones, telephone booths and Internet access points in local communities, with clear indications on how to access those facilities.
- Train employees on how to serve customers with disabilities and familiarize employees with all e-accessibility features intended for such customers. Such training must cover how to use assistive devices and how to interact with persons with disabilities in a practical and functional manner.

9. Mechanisms to enhance e-accessibility

Below are some examples of mechanisms that can be used to enhance e-accessibility:

Non-discrimination:

Providers of e-accessibility services must avoid discrimination – including unintentional – against persons with disabilities by failing to make facilities, products or services accessible. One way to do this is to implement the principle of universal design throughout their own organizational structures by conducting awareness-raising programmes and advertisements about e-accessibility and the services, options and equipment available to support e-accessibility for persons with disabilities. In addition, they must do the following:

Ensure that public service websites are consistently accessible.

Provide spaces, equipment and software as required for e-accessibility without discrimination based on location (urban vs. rural) or economic factors.

Provide accessible spaces, equipment and software.

Make independent public e-accessibility devices available to blind persons and persons with visual impairments, deaf persons, persons with hearing impairments and persons with limited mobility.

Remove all obstacles that hinder access to the physical spaces where e-accessibility services are provided.

Emergency services

Persons with disabilities must be able to use any means of communication to contact the emergency services for free, regardless of the technology or device used.

Training

Employees of entities that provide public services must receive regular training on the fundamental principles of how to interact with customers who have disabilities. Such training must include information on the culture, languages and social standards of persons with disabilities, in addition to the principles of e-accessibility, availability, solutions, and information sources.

10. Requirements for compliance with standards

Example of requirements for compliance with standards:[28]

Digital services and websites must comply with the guiding principles on the accessibility of web content set out in WCAG 2.0 published by the Web Accessibility Initiative of W3C, at the appropriate conformance level (A, AA or AAA). ICT-based public equipment must be available to and accessible by persons with disabilities and older persons.

Templates of requirements for compliance with standards

Template 1 United States	When implementing e-accessibility policies in practice, [name of country] and certain Government institutions (such as ministries and agencies) adhere to three main standards: • WCAG 2.0, level AA as the main e-accessibility standard. • The Americans with Disabilities Act of 1990, as amended. • Article 508 of the Rehabilitation Act. Note: The level of compliance with these standards varies from state to state.
Template 2 European Union	WCAG 2.0 at level AA without modifications for web content, and WCAG 2.0 at level AA for web-based documents and programmes, in accordance with the Guidance on Applying WCAG 2.0 to Non-web Information and Communications Technologies (WCAG2ICT).[a] Participating States are requested to issue an e-accessibility report on websites and smartphone applications specifying the level of accessibility and indicating all non-accessible content.
Template 3	All public-service Government websites must demonstrate level AA compliance with WCAG 2.0. All public-service Government websites must comply with the best practices adopted by W3C, including the Mobile Web Best Practices 1.0.

a W3C Web Accessibility Initiative, "European Union". Available at https://www.w3.org/WAI/policies/european-union/.

11. E-accessibility statement

Public and private entities should be required to include an e-accessibility statement on all websites, smartphone applications, self-service kiosks and ATMs, and in locations visible to users.

Such statements must include the following information, as a minimum:

- A commitment to ensuring e-accessibility for persons with disabilities.
- Which accessibility standards are applied, such as WCAG 2.0 or WCAG 2.1.
- Contact information for technical support teams if users experience technical difficulties.

The following information should also preferably be included:

- A clear indication of any accessibility restrictions on the website or e-service, to avoid user fatigue.
- Measures being taken to guarantee e-accessibility.
- The basic technical requirements, such as which browsers support e-accessibility applications.
- The environments in which the content has been tested.
- Links to national and local laws and policies in effect with regard to implementing the e-accessibility policy.

Note: E-accessibility data are important for several reasons, including the following:

1. Demonstrate to users that accessibility is taken into consideration.
2. Provide users with information on the accessibility of content.
3. Demonstrate commitment to e-accessibility and social responsibility.

12. E-accessibility statement templates

Template 1 Adapted from Qatar	Accessibility statement for the Government's Hukoomi platform[29]
Template 2 Adapted from Oman	Accessibility statement for the official e-government services portal[30]
Template 3 Adapted from Saudi Arabia	Accessibility statement for the Unified National Platform[31]

13. Governance

National e-accessibility policies use the same national governance, enforcement and follow-up tools applicable to all other policies.

The policy may include enforcement, follow-up and evaluation regulations that specify the following information:

- Public body responsible for monitoring implementation of and compliance with the time-bound action plan for the policy.
- Focal point in each ministry, department or section responsible for implementing the assigned tasks regarding e-accessibility.
- Expected completion date for each implementation stage of the policy and action plan.
- Mechanisms and indicators in place to measure success in implementing the policy and its action plan, and the frequency of implementation reporting.

Template adapted from Canada

The 2019 Act to ensure a barrier-free Canada (Accessible Canada Act) specifies the pace of work for agencies responsible for monitoring, implementation, auditing, and enforcement.

To ensure that all regulated entities fulfil their commitments, the Act proposes that a mix of proactive measures be used to ensure compliance, including the following, among others:

- Inspections: the Accessibility Commissioner can conduct inspections to ensure that regulated entities meet the requirements set out in the Act and its implementing regulations.
- Compliance audits: the Accessibility Commissioner can examine records and other relevant information held by regulated entities to ensure that they meet the requirements set out in the Act and its implementing regulations.
- Compliance orders: if the Accessibility Commissioner believes that a regulated entity is not upholding its responsibilities, he or she can make a compliance order requiring the regulated entity to terminate the contravention or take the steps required to achieve compliance.
- Notice of violation containing a warning: if there are grounds to believe that a regulated entity has committed a violation, the Accessibility Commissioner may issue a notice of violation containing a warning to return to compliance with the Act and its implementing regulations.
- Notice of violation containing a penalty: if there are grounds to believe that a regulated entity has committed a violation, the Accessibility Commissioner may issue a notice of violation setting out a penalty fine.
- Administrative monetary penalties: the Accessibility Commissioner may instruct the regulated entity to pay a fine of up to 250,000 Canadian dollars, depending on the nature and severity of the violation.
- Compliance agreement: where a notice of violation has been issued, the regulated entity may request to enter into a compliance agreement to remedy the violation in a specified manner by a specified date. Such agreements may also provide for the reduction of the penalty for the violation.
- In the framework of these enforcement measures, regulated entities may appeal against decisions or request an administrative review to check for errors.

G. Monitoring and evaluation

The national e-accessibility policy should include a requirement to specify monitoring mechanisms and evaluate compliance with the policy through monitoring plans.

Monitoring plan template

Depending on the governance tools adopted at Government level and included in the national e-accessibility policy, action plans submitted by the Government agencies responsible for implementing the policy can be monitored and evaluated in accordance with the following table:

Monitoring activity	Objective	Frequency	Expected action
Tracking progress results	To ensure that the expected results have been achieved within the current progress monitoring cycle, in accordance with the performance indicators set out in the action plan for each entity responsible for implementing e-accessibility requirements under the national e-accessibility policy and its annual public action plan.	Monthly	The entity responsible for ensuring the correct implementation of the action plan for the national e-accessibility policy is able to address any unexpected slowdown or progress in project implementation.
Risk monitoring and management	To ensure that all risks identified in the action plan are taken into consideration, and to report any difficulties not covered in the action plan adopted by each entity responsible for implementing e-accessibility requirements under the national e-accessibility policy and its annual public action plan.	Monthly	The entity responsible for ensuring the correct implementation of the action plan for the national e-accessibility policy is able to manage all expected and unexpected risks in order to prevent delays in project implementation.
Learning (lessons learned)	To ensure that monitoring mechanisms provided for under the national e-accessibility policy and its action plan include mechanisms to facilitate the exchange of experiences and lessons learned in project implementation and risk management between Government agencies, private-sector entities and civil society organizations on a regular basis during project implementation. To ensure that lessons learned are applied to prevent errors from re-occurring and ensure the adoption of successful practices.	At least every three months	The entity responsible for ensuring the correct implementation of the action plan for the national e-accessibility policy holds a meeting with all entities that are carrying out projects, with the aim of exchanging lessons learned. The entity also provides training for staff members on any new requirements arising from such lessons and incorporates all lessons into guidance for new and ongoing projects.

Monitoring activity	Objective	Frequency	Expected action
Annual project quality guarantee	Ongoing and completed projects should be evaluated against national quality standards to identify their strengths and weaknesses. The results should be used in the continuous improvement of projects and decision-making mechanisms.	At least every three months	The entity responsible for ensuring the correct implementation of the action plan for the national e-accessibility policy reviews the strengths and weaknesses and uses such information to improve decision-making and project implementation.
Regular reviews and improvements	To ensure that quarterly periodic review reports are standardized among all entities that are implementing projects, and to ensure that monitoring data and implementation rates are submitted quarterly.	At least every three months	The entity responsible for ensuring the correct implementation of the action plan for the national e-accessibility policy receives and analyses those reports in line with national project evaluation procedures. The entity can also correct any mistakes in the project and step up the implementation schedule for any phase of implementation if required.
Annual reports	To ensure that annual reports are standardized among all entities that are implementing projects, and to ensure that monitoring data and implementation rates are included in such reports.	Annually (and after the completion of any project)	The entity responsible for ensuring the correct implementation of the action plan for the national e-accessibility policy receives the annual reports submitted and combines them into an overall annual report. The entity also analyses the reports in line with national project evaluation procedures and corrects any mistakes in the project.

The following best practices in monitoring may be adopted:

1 Set up a monitoring system for e-accessibility projects, regularly enter implementation data into the system, and link the system to performance indicators.

2 Connect e-accessibility projects to the Government public monitoring system and the performance indicators for Government projects.

H. Media strategy

The media, in all its forms, play an important role in the success and uptake of policies. When designing media campaigns as part of national e-accessibility policies, it is important to adopt a multifaceted approach that covers the following elements: (1) target stereotypes about disability; (2) clearly explain the policy; (3) conduct media campaigns on e-accessibility, containing illustrative content, images and videos, and enlist media outlets to disseminate the message to their audiences; and (4) use social media to disseminate materials, images and short messages and videos, bearing in mind the specific nature of this type of media and the need to carefully adapt content to suit each different platform.

Media strategies to support national e-accessibility policies can take either a large-scale and comprehensive approach, or a more gradual one. All countries should include an appropriate media strategy within the implementation mechanisms for their national e-accessibility policy. The strategy should be tailored to local social norms and aligned with a typical Government budget for similar campaigns.

Template media strategy to support a national e-accessibility strategy:

1. Establish concepts and reinforce the understanding of disability.

2. As part of a rights-based approach, establish an understanding of persons with disabilities as a special and diverse group within society, thereby justifying the need for different platforms and environments for work and creative pursuits. This approach is centred on the following points:

A

Disability is a social construct, not a medical condition; it arises from the interaction between individuals and the functional characteristics of their environment. For example, an individual's circumstances may be exacerbated by their disability (such as vision loss or impairment of intellectual or motor functions) depending on their ability to integrate into a specific social environment.

B

Persons with disabilities have the human right to be included in society. According to the Universal Declaration of Human Rights, "all human beings are born free and equal in dignity and rights". The inclusion of persons with disabilities is an important goal in and of itself.

C

Persons with disabilities are, like all other individuals, social beings. They thrive on social interaction, and they define themselves through their role in society. Inclusion is essential to ensure that the full and diverse potential of persons with disabilities is realized.

3. Engage disability rights organizations and civil society organizations in designing and implementing the media strategy on e-accessibility, based on the "nothing about us without us" principle enshrined in the Convention on the Rights of Persons with Disabilities.

4. Define the type of media campaign, the timing of its launch, its duration and its target audience. The main models of media campaigns are as follows:

Long-term public awareness campaigns

The aim of these campaigns is to raise awareness of disability issues among the public, including persons with disabilities, with the aim of changing negative perceptions about persons with disabilities and encouraging positive recognition of their skills, needs and rights. It is important to recognize that this kind of change happens slowly.

Focussed media campaigns

A

Campaigns to change laws, policies and services related to e-accessibility.

B

Regular campaigns (such as a national e-accessibility awareness week).

C

Awards and recognitions (such as an annual award for the service provider with the highest level of e-accessibility).

D

Specialized conferences on e-accessibility.

Social media campaigns

A

Partnerships with social media influencers to communicate the aims of e-accessibility to their followers.

B

Partnerships with civil society associations to build a follower base for e-accessibility media campaign pages.

Campaigns focused on standard e-accessibility templates

Launch a web page, a set of e-services and an application for smartphones and portable devices, all of which contain the full range of e-accessibility features, to be used as an example in media coverage.

Endnotes

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15 The Information Technology Industry Council (ITI) – VPAT. Available at https://www.itic.org/policy/accessibility/vpat.

16 EU Web Accessibility Compliance and Legislation- By Deque Systems -January 16, 2020. Available at https://www.deque.com/blog/eu-web-accessibility-compliance-and-legislation/.

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