Fourth report, by Member States to the General Conference, on measures taken to implement the Recommendation concerning the Promotion and Use of Multilingualism and Universal Access to Cyberspace - Sweden

Country: Sweden

Organization(s) or Entities responsible for the preparation of the report:
The Swedish National Commission for UNESCO has coordinated the report in collaboration with experts in different parts of the Government Offices of Sweden (Ministry of Foreign Affairs, Ministry of Culture, Ministry of Enterprise and Innovation, Ministry of Education and Research, Ministry of Justice, Ministry of Finance).

Name(s) of designated official(s) certifying the report:
Johan Lycke, Deputy Director-General, Head of Division, Ministry of Education and Research.

Brief description of the consultation process established for the preparation of the report:
The preparation has followed the regular procedure within the Government Offices of Sweden when producing a national response, hence including the responsible officers for different parts in the report in collecting, compiling and verifying information.

1. Development of multilingual content and systems

1.1 Please furnish detailed information explaining what measures have been taken to alleviate language barriers.

According to their licensing conditions, the public service broadcasting companies SVT, SR and UR offer programs in national minority languages, including the language of the indigenous people of Sweden (Sami people), and other minority languages in terrestrial broadcasts. A large part of this minority language content is offered on the internet through on-demand services, which provide some content exclusively for viewers and listeners on the web as well.

1.2 Please provide information on support given to capacity-building for the production of local and indigenous content on the Internet.

The Government provides funding to the website www.minoritet.se, which aims at spreading knowledge and information on Sweden's national minorities, minority languages and minority rights. This is done by increasing the knowledge of the majority population, decision-makers, civil servants and the national minorities themselves about Sweden's international obligations with regard to minority rights, and minority and discrimination legislation. The Sami

Parliament, Sametinget, a publicly elected body and state agency, is responsible for the website. In order to get the national minorities involved in the development of the website, a council is set up with representatives of all the national minorities.

In addition, Sametinget, produce and update information (www.samer.se) of the status of the indigenous people of Sweden (Sámi people) with the overall objective to increase public awareness of the Sámi indigenous culture.

1.3 Please describe the measures taken for formulating appropriate national policies on the issues of language survival, revitalization, development and promotion in cyberspace. Please include information about main legislation and/or policy measures, if any, and date of their introduction/adoption.

Utbildningsradion (UR), the Swedish Educational Broadcasting Company, is one of the program companies within the Swedish public service sector. Among its services, UR offers TV programs in the national minority languages through the on-line service UR Play. The UR broadcasting license states that the company has special responsibility for producing material for the national minorities and much of this is available via this open portal on Internet. Schools have access to more material at UR than the general public. As part of its work of making available previously broadcast material, UR operates an open online archive which contains entire programs and series of programs in the national minority languages and others. Since the archive is free and open to all, the material can be used by teachers as a supplement to their teaching in the national minority languages.

1.4 Please provide information, including references, on major events, projects, publications and examples of best practices identified during the reporting period that contributed to the promotion of and use of multilingualism and universal access to cyberspace.

See above.

2. Facilitating access to networks and services

2.1. Please report on national efforts to recognize and support universal access to the Internet as well as to promote access to the Internet as a service of public interest.

The latest broadband strategy for Sweden was presented by the Government in December 2016, with the vision *A completely connected Sweden by 2025*. The vision has three milestones, aiming at both fixed and mobile connectivity:

By 2020, 95% of households and businesses should have access to at least 100 Mbps; by 2023, the entire Sweden should have access to stable mobile services of good quality; and by 2025, the entire Sweden should have access to high speed broadband, meaning 98% of

the population should have access to 1 Gbps broadband in their residences and work places, the remaining 1.9% with 100 Mbps, and 0.1% with 30 Mbps.

To fulfil the goals set out in the Broadband strategy, the Government has focused on, among other things, in three strategic areas of work, where there are ongoing efforts: Roles and rules on the broadband market, cost-efficient network deployment, and enabling infrastructure and services for everyone.

In January of 2018, the Government decided to raise the level of functional access to broadband from to 10 Mbps and allocated funding for procurement of solutions to the small number of households and businesses located where there are no offers on the market to access 10 Mbps.

Overall, Sweden has good broadband coverage. 77 % of all households and businesses had access to 100 Mbps and 95 % had access to 30 Mbps in October 2017. The coverage of mobile broadband has expanded rapidly and the access to broadband via LTE (4G) has increased from 0% in 2010 to cover 99.99% of all households, also in remote and sparsely populated areas. According to the latest survey from October 2017, less than 60 households and workplaces lack access to any kind of broadband.

The majority of Sweden's population regularly uses the internet in order to run errands and buy goods and services. Men are using it to a slightly greater extent than women. The percentage of people (aged 16-85 years) who never have used the internet has fallen steadily to about 5 per cent, 4 per cent for men and 5 per cent for women. Those who remain as non-users are, inter alia, in the oldest groups in society.

The Government is promoting the use of the Internet in several ways. One example is an operating grant given to a network called Digidel, consisting of several actors such as stakeholder groups for elderly persons, libraries, different agencies on local, regional and central level. Digidel is working to get more people to use the internet.

The Government is also making efforts to ensure that persons with disabilities can use the internet. The Swedish Post and Telecom Authority (PTS) (http://www.pts.se/en-GB/) is playing a central role. Twice a year PTS organizes an innovation competition where businesses and other organizations apply for funding of service and product or studies in electronic communications. Furthermore, PTS is procuring services in the field of electronic communications and is working with several government mandates aimed, inter alia, at making the various media accessible to persons with disabilities.

The Swedish government has also made it possible for organisations to apply for operating grants with the Swedish Post and Telecom Authority (PTS) to finance projects aiming to help

persons with disabilities and special needs (include the elderly) to learn how to use it and digital services.

The government has moreover given the Internet foundation in Sweden, IIS, a grant of 9.6 million SEK to spread a successful concept of "digital inclusion centers" to more municipalities.

The Swedish University Network (SUNET) is dedicated to support the needs of the research and higher education communities within Sweden. SUNET's aim is to provide access to well-developed high-capacity and effective national and international data communication whatever their geographical location.

Organizations connected to SUNET are for example universities, university colleges and research funding organizations. SUNET also offer services to other government agencies and cultural institutions such as museums and archives.

2.2. Please also describe what mechanisms have been established at the local and national levels to facilitate universal access to the Internet through affordable and accessible telecommunications, and internet costs.

See above.

2.3. Please indicate the measures taken for encouraging the development of information strategies and models that facilitate community access and support cooperation on information and communication technologies (ICT) among public service institutions, including community telecentres, libraries, Internet access units, and others.

See above. The Swedish Government adopted a new digital strategy in June 2017: For sustainable digital transformation in Sweden – A Digital Strategy. The strategy outlines the focus of the Government's digital policy. The vision is for sustainable digital transformation in Sweden. The overall objective is for Sweden to become the world leader in harnessing the opportunities of digital transformation.

On September 1, a new Agency for Digital Government started. Its mission is to be the hub for digital government in order to promote and manage the digital transformation of the Swedish public sector. It will promote the development of common information strategies and models that facilitate access and support digital cooperation among public service institutions.

2.4. What efforts have been made in order to encourage Internet service providers to consider provision of concessionary rates for Internet access in public service institutions?

No information provided.

3. Development of public domain content

3.1. Please explain the legal and administrative measures adopted to give effect to the provisions of this part of the Recommendation: (a) recognizing and enacting the right of universal online access to public and government-held records, (b) identifying and promoting repositories of information and knowledge in the public domain and making them accessible by all, in particular persons with disabilities, linguistic minorities, women and girls and, (c) promoting and facilitating ICT literacy, as well as information and media literacy, including popularizing and building trust in ICT implementation and use.

Regarding making repositories of information and knowledge in the public domain accessible by all, the Swedish Post and Telecom Authority (PTS) (http://www.pts.se/en-gb/) is playing a central role. Twice a year PTS organizes an innovation competition where businesses and other organizations apply for funding of service and product or studies in electronic communications. Furthermore, PTS is procuring services in the field of electronic communications and is working with several government mandates, inter alia, aimed at making the various media accessible to persons with disabilities.

Many measures are in place in order to promote ICT. The following are some examples put in place by the Government: Increased digital literacy skills has been added to the national curricula for all age-groups. The national library of Sweden has been tasked to promote ICT-skills amongst librarians so that they can in turn inform visitors with ICT. A national committee has been tasked by the Government to promote media literacy during 2018-2020.

A recent survey shows that many initiatives are ongoing within the realm of ICT, and there needs to be better coordination amongst actors involved (governmental actors or NGOs). The Swedish Media Council has been tasked by the Government to create better coordination by promoting the exchange of information and best practices amongst the actors involved.

The Swedish National Agency for Education work on these issues

It is stated in chapter 10, 10 § Education Act (2010:800) that pupils should without any cost have access to books and other learning materials needed for contemporary education.

In the curriculum for primary, pre-school and recreation centre 2011, Lgr 11, there are general goals: pupils should after primary school be able to use modern technology as a tool for searching knowledge, communication, creativity and learning. In the curriculum there are also specifications regarding e.g. information search and source criticism for different grades. The Swedish National Agency for Education also works actively with information dissemination on ICT-literacy and skills.

In March 2017, the Swedish government made changes to the curriculum to clarify the schools mission to strengthen students' digital skills. The changes include, for example, strengthening of the students' ability to be source-critical, and introducing programming as a clear element in several different subjects in elementary school, especially in the subjects of technology and math. It is a way of strengthening the students' active participation in an increasingly digitized work and social life.

In October 2017, the Swedish government published a National Digitalization Strategy for the School System. The aim of the strategy is to provide children and students, young and adults with the skills they need for life and work life, which in the long run provides the basis for future skills supply. The strategy has three focus areas and, within each of them several objectives to be achieved by 2022. The focus areas are digital literacy for everyone in the school system, equal access and use, research and monitoring of digitization opportunities.

The education providers are responsible for developing ICT-literacy within the framework of their mission.

Pupils with disabilities

Chapter 3 Education Act states that all children and pupils should be given the guidance and encouragement they need in their learning and personal development in order to develop as far as possible and to the best of their ability in accordance with the aims of the education. Pupils who due to disability have difficulties complying with the various knowledge requirements are to be given assistance in order to counteract the consequences of the disability as far as possible. There are also provisions regarding for example support in the form of additional customizations.

The National Agency for Special Needs Education and Schools (SPSM) offers education providers special education on ICT and learning, skills development, appropriate teaching material and state subsidies for investments in increased access.

National minorities

The Swedish National Agency for Education is presenting on their web page e.g. information and knowledge on the five national minority languages in Sweden. There is information on educational resources and material for teaching in the national minority languages. The Swedish National Agency for Education also provides support for mother tongue education in the form of teaching material and support to different educational material projects.

On 22 December 2016 Government adopted the terms of reference (ToR 2016:116) for a public inquiry, the aims of which were to increase and improve access to teaching in the national minority language and to improve compliance with the two international conventions that Sweden has ratified pertaining to the national minorities and national minority languages. The intention in both cases is for the vitality of these languages to be

maintained in the future. The inquiry presented its proposals in November 2017, and these are currently being processed within the Government offices (Ministry of Education).

3.2. Please also provide information on whether open access solutions and web accessibility of public domain information were advanced and how, including supporting data, reference to best practices, examples and solutions.

Sweden has implemented the EU-directive on web-accessibility into Swedish law (2018:1937) and an ordinance (2018:1938). The Agency for Digital Government has a general mission to promote accessibility to information and digital services in the public sector.

Open Science and in particular Open Access to research information

Open Science is a fundamental part of the digitization of society, especially connected to research and higher education. The Open Science system describes the methods and practices of performing research, how researchers share, collaborate, organize and produce research outputs, both within and outside the academy. It also states how academic institutions organize to facilitate research quality and increased impact on society.

The Council of the European Union adopted conclusions on 'the transition towards an Open Science system' in May 2016. In the conclusion the Council acknowledges that Open Science has the potential to increase the quality, impact and benefits of science. A prerequisite for Open Science is Open Access to scientific results, such as publications and research data.

The Swedish objective is that publications, research data and scientific works that are the result of publicly funded research should be Open Access. This objective should be achieved within ten years of the bill, whereas Open Access to publications can develop faster.

The research bill emphasizes that all stakeholders in the research system, such as the higher education institutes (HEIs) and the research funders, share the responsibility for ensuring a successful implementation of Open Science. The Government of Sweden has assigned to the National Library of Sweden to nationally coordinate Open Access to scientific publications, and to the Swedish Research Council to nationally coordinate Open Access to research data. The Government of Sweden has also given these two organizations the mission to develop criteria for measuring to what extent research data and scientific publications meet the FAIR principles. These principles state that research should be *Findable, Accessible, Interoperable and Re-usable.*

National guidelines for open access to research

The above-mentioned assignments to the National Library of Sweden and the Swedish Research Council will lay ground for a national Open Science plan, with guidelines on open access. Since 2010 researchers with grants from the Swedish Research Council and other major funding bodies must publish with Open Access, which means that anyone using the

Internet can freely access, read and download the research results. Recent studies show that Open Access publications are disseminated more quickly and cited more frequently. This is one reason why increasingly more research funding bodies are requiring open access. Researchers receiving grants as of 2017 must publish with a so-called CC-BY-license, which enables the re-use and new use of the materials that the research findings were based on, as well as so-called text and data mining. Currently, the open access rules apply only to peer reviewed manuscripts in journals and conference reports, not to monographs and book chapters.

4. Reaffirming the equitable balance between the interests of rights-holders and the public interest

4.1. Please indicate what action your Government has taken in order to update the national copyright legislation and its adaptation to cyberspace. Please indicate also what consideration was given to the possibility of encouraging rights-holders and the lawful beneficiaries of limitations and exceptions to copyright and related rights protection to ensure that such limitations and exceptions are applied. Please provide information on open access policies adapted conditions to access open scientific data and any favorable conditions applied for marginalized groups, such as persons with disabilities.

No major changes have been made to the national copyright legislation in order to adapt it to cyberspace, as the legislation is essentially technologically neutral. The legislation, however, contains provisions on extended collective licenses which enable for example libraries and archives to various forms of digital use of works. It is mainly in this area that adaption of legislation to cyberspace has taken place. Swedish legislation is largely based on various EU directives on copyright and has a good balance between rights holders and public interests. At EU level, the European Commission has presented a regulation and directive on copyright in the Digital Single Market. One of the objectives of the proposals is to modernize the EU rules applicable to key exceptions and limitations in the areas of teaching, research and preservation of cultural heritage, focusing on digital and cross-border uses. Regarding the issue of marginalized groups, there is an exception in the copyright law that enables the making of copies that are adapted for persons with disabilities. On 1 October 2018, the EU ratified the Marrakesh treaty. At EU level, a directive and a regulation have been adopted for the implementation of the treaty in EU law. Sweden has implemented the directive into Swedish copyright law. The amendments took effect October 11, 2018.

4.2. Please also indicate what are the actions planned to give consideration to the development of technological innovations, including Free and Open Source Software (FOSS), and to their potential impact on access to information.

No information provided.

5. Final comments

5.1. What efforts has your Government made to establish a system of continuing monitoring of the implementation of the decisions taken at the World Summit on the Information Society and other internationally agreed development goals and commitments and what time-related goals and benchmarks has your Government set in this respect?

No information provided.

5.2. What are, according to your Government, the main issues, new challenges and actions that need to be further addressed for promoting multilingualism and universal access to cyberspace, including the evolution of the Internet and its governance? Please provide a brief description in your final comments.

Low and middle-income countries' need for support to build capacity in terms of infrastructure, market regulation, institutions and security is considerable. There is a great need to step up initiatives to support states that are still developing their approach to internet policy, to ensure that true universal access – also in terms of openness and freedom – becomes a reality.

As described above, access to high-speed broadband is overall good, but there is a difference in coverage between more densely populated areas such as cities and small towns, and areas that are more sparsely populated. There are currently state aid programs in place to help finance high-speed broadband projects in areas where no commercial investments are made and, as pointed out by the Government in the Broadband Strategy, there will be a continued need for funding in the years to come.

5.3. Please provide references to the main sources of information and data used in compiling this report and that could be of interest to share with other Member States, such as recent public policy strategies, reviews or evaluations; latest research or studies, and statistical data.

For sustainable digital transformation in Sweden – a Digital Strategy: https://www.government.se/information-material/2017/06/fact-sheet-for-sustainable-digital-transformation-in-sweden--a-digital-strategy