Fourth report on measures to implement the Recommendation concerning the Promotion and Use of Multilingualism and Universal Access to Cyberspace

FINLAND 2018

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.

In Finland a reasonably priced 1 Mbps broadband connection was made everyone's basic right in Finland as of July 1st 2010. 1 Mbps is fast enough to allow use of basic services of internet. Later the speed of this universal service connection was upgraded to 2 Mbps. Well-being of the society highly depends on how businesses, public administration and private citizens seize the opportunities provided by new applications in information and communications technology.

Finland (the Ministry of Transport and Communications) has published a national broadband strategy, named "Digital Infrastructure Strategy". The digital infrastructure strategy specifies Finland's technology-neutral broadband objectives for 2025 and the means by which they will be achieved.

Digital Infrastructure Strategy http://julkaisut.valtioneuvosto.fi/handle/10024/161066

Finland is one of the first countries in Europe to auction the 3,5 GHz spectrum that will allow the construction of 5G networks. The auction was concluded on 1st of October 2018. In addition, a sufficient amount of frequencies has been allocated for test, demonstration and experimental use. The 5G test network projects include representatives from the major global actors in the telecoms sector, along with small and medium-sized companies, network operators, public authorities, universities and research institutions.

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.

The goal of the "Broadband 2015" project was that by the end of 2015, more than 99% of users have access to a 100 Mbps broadband connection within two kilometres of their permanent place of residence or place of business. The project will continue until the end of 2019. In this context, users include permanent places of residence and permanent offices of businesses and public sector organisations.

In 2009, regional councils planned regional programmes of projects for building broadband infrastructure. In total, the programmes included some 800 projects and their combined costs were estimated to be nearly EUR 500 million. The projects included plans for expanding the broadband network system by 40,000 kilometres, enabling the provision of advanced communications services to approximately 130,000 users in sparsely populated areas.

In Finland, communications networks have traditionally been built up mainly on market terms. As an exception, construction of fixed broadband connections in sparsely populated has been supported with state aid since 2010.

A total of EUR 130 million of public aid is available to broadband projects. Of the total funding, EUR 66 million is state aid, approximately EUR 25 million is from the EU Rural Development Programme for Mainland Finland and approximately EUR 40 million from Finnish municipalities. The state aid is granted by FICORA.

Aid is targeted at improving the availability of connections in the geographically most remote areas. Some five per cent of all households are located in such areas. The areas that are eligible for aid are defined in a decree of the Ministry of Transport and Communications (246/2010, in Finnish)

Under the Act on Broadband Construction Aid in Sparsely Populated Areas (1186/2009, only in Finnish), the maximum amount of public aid is 66% of the eligible costs. This applies to broadband projects in which the operator responsible for the construction were selected by 12 November 2012.

In such projects, state aid is paid after the project has been completed, on the basis of actual costs. State aid payments are claimed from FICORA with a separate application.

The Act on Broadband Construction Aid in Sparsely Populated Areas was amended on 12 November 2012. After the amendment, the maximum total amount of public aid to broadband projects is 90% of the eligible costs of the project. The amendment did not change the share of state aid granted by FICORA and the share of the municipality's contribution. The amendment also enables FICORA to pay 50% of the state aid granted to a project immediately after the decision on granting aid has been made. This facilitates project financing.

2.3 The development of information strategies and models that facilitate community access and support communication technologies among public service institutions, incl. libraries

In Finland, the guiding principle in public libraries is to offer free access to cultural and information sources for all irrespective of their place of residence and financial standing. In accordance with the Government Programme, libraries are being developed to meet the challenges of the information society. In accordance with the Public Libraries Act libraries provide guidance and support in the seeking and use of information and in versatile literacy skills. The public libraries utilise digitalization in their service production and development of operations also, and they support and guide library users in managing the digital environment. Computer and internet access is available in all public libraries in Finland.

3. Development of public domain content

3.1.
b) identifying and promoting repositories of information and knowledge in the public domain and making them accessible to all

Finland is a society strongly based on information and its utilisation. Data systems and the information they contain are integral to the operation of the administration, and the administrative services have been extensively automated and made available in electronic format. Information between organisations is increasingly transmitted digitally, and the national basic registers are also widely utilised, for example.

Metadata of public open data are collated in the Avoindata.fi service (can be found also with the name Opendata.fi) and harvested to the European Data Portal. The service is developed

and maintained by the Population Register Centre together with the API catalogue in the Suomi.fi service.
https://www.avoindata.fi/en
https://www.suomi.fi/frontpage

One of the objectives of Prime Minister Juha Sipilä's Government Programme is to create favourable conditions for new business ideas through open data and better use of information resources. The Government also wants to strengthen knowledge-based decision-making and openness. When public information resources are opened up, the focus of activities will be shifting to utilising data and strengthening information skills as part of the digitalisation of administration and services.

One of the policy lines of the "Government Resolution on the utilisation of data in business activities" (2016) is that "the central government will influence through example the synergy benefits of data sharing".

According to the resolution, measures of different administrative branches will be enhanced to increase the provision of public data sets and interfaces. According to "Opening and utilisation of data in business activities and decision-making in Ministry of Transport and Communications sector" –assessment report (1/2017) there has been good progress in opening data but also interfaces and code. License creative commons Name 4.0 is used in all agencies. Website "Traffic Lab" acts as a contact point and experimentation platform for transport and communications data. Data catalogue of the administrative branch produced by open data group of the administrative sector can be found in Traffic Lab. https://www.trafficlab.fi/

According to the assessment report business applications utilizing open data in the administrative sector already exist. There is a recommended to include information on open data sources in Avoindata.fi data catalogue in Finnish, Swedish and English. Current measures have a sharper focus on promoting the utilisation of open data and enhance its impact. A detailed data map of the data produced in the administrative sector was produced in order to enhance its use in business and other activities. According to the recent government research report companies that used open transport data in their innovation activities, had greatest impact on their turnover.

Another policy line in "The Government Resolution on the utilisation of data in business activities" (2016) states that the use of data will be facilitated with a supportive regulatory framework. Act on Transport Services includes legislation that enhances better use of Transport Safety Agency Trafi's registers and market data compiled by Transport Agency.

According to the "The Government Resolution on the utilisation of data in business activities" (2016) growth and decision making knowledge base will be strengthened through expertise.

Data management and analysis expertise as well as research and innovation activity will be strengthened for the needs of the business community. The decision-making knowledge base as well as data-based growth will be strengthened through the development of expertise taking the skills needs of companies into account. Accordingly, a comprehensive picture of companies' skills needs was developed in a study financed by the Ministry of Transport and Communication in 2016.

Information on open data on the page of the Ministry of Finance
https://vm.fi/en/opendata

c) promoting and facilitating ICT literacy, as well as information and media literacy

The Finnish Government has published the Report on Ethical information policy in the age of artificial intelligence in September 2018. The themes of the report include establishing an information policy, the knowledge economy, making use of information and artificial intelligence, increasing the value of information, competence needs, and safe use of information. The report also calls for including information literacy skills in citizenship skills and emphasizes the importance of information literacy in an ethical and responsible society, where people are active and included in society. Regarding the ethics of information and artificial intelligence, the report also highlights that openness and information literacy are required to select data, use data processing technologies and interpret conclusions.

The Finnish government adopted The National Youth Work and Youth Policy Programme for years 2017-2019. Among other things, the programme sets out the guidelines for supporting youth work and related activities, including the key criteria for eligibility for state aid by national youth work centres of expertise pursuant to section 19 of the Youth Act. One of the four priorities is Digital youth work and information and counselling services for young people. The aim is to promote the use of digital methods in the different areas of youth work and competence development in the field of digital youth work. In this regard, VERKE was selected as a national centre of expertise for digital youth work. VERKE aims to promote welfare, inclusion and equality among young people by means of digital youth work. https://www.verke.org/verke/?lang=en

Public libraries promote ICT literacy in many forms (courses, informal learning, co-operation projects) and their activities related to all forms of literacy are accessible to all, and widely used.

Finland revised the national core curricula for basic education and the renewed curricula was introduced gradually starting from 2016. The new 2016 national core curriculum for basic education includes seven transversal skills, from which ICT skills and Multiliteracy skills are two of them. ICT skills and Multiliteracy skills play an essential part in many subjects in the new core curriculum throughout comprehensive school. Another major reform that was recently introduced is that matriculation examinations take place electronically, meaning that ICT is used in the examinations themselves and in the whole process related to matriculation. This has encouraged upper secondary schools to use more ICT in their instruction.

Financial resources have been channelled through the National Agency for Education and other organisations to using ICT in teaching. Moreover, between 2014 – 2018 the Ministry of Education and Culture allocated nearly EUR 30 million in subsidies to the:

- dissemination of pedagogical ICT skills for teachers who encourage and inspire their teacher colleagues to adopt the use of digital methods in teaching,
- renewal of initial and in-service training of teachers and reinforcing the school community's operational culture,
- development of the competence of tutor teachers and the development and dissemination of tutoring. Tutorship is seen as key element for promoting digitalisation and the development of a community-based culture as well as the dissemination of know-how by region to ensure equal opportunities for learners throughout the country.

The amount of applications received for these subsidies showed that teachers are well motivated to use ICT in teaching.

3.2. Open access solutions

A few examples:

Finna search engine provides access to the collections and services of archives, libraries and museums. Finna is continuously evolving service, currently containing material from more than 300 organisations. Users can browse and read material available on the web. Users can easily access images of museum objects and works of art, digital documents, books, maps and reference data whenever it suits them. Users can also renew loans and request material from various libraries in one place.

Finnish archives, libraries and museums have collaborated in designing Finna to meet user needs regarding its search functions and features. The National Library of Finland has used open-source software in Finna's technical implementation and will continue to develop the service based on received user feedback. The open source code software also allows for other national and international cooperation in the development of Finna.
https://www.finna.fi/?lng=en-gb

Etsin is a research data finder provided by the Ministry of Education and Culture of Finland that serves various fields of research. Etsin gathers metadata about existing research data from various external sources and also provides a web interface to enter metadata directly into the service. Comprehensive description of data plays a very important role in the visibility of the data. Etsin encourages this by adapting a common set of discipline-independent metadata fields and by making it easy to enter new metadata. The service also promotes adding unified information about the availability, ownership and licensing of data. Increased visibility and findability of the data promotes data reuse and helps bring merit to researchers. It also makes the results of research more transparent to funders. http://openscience.fi/etsin

AVAA is an open data publishing platform for research data. It serves both the producers and users of open data. AVAA furthers the availability of research data in different disciplines. Anyone can access and use the data on the portal. In order to publish data and applications one must authenticate through the Haka network and be granted rights to the server by the administrator of the service. AVAA offers applications for the use of open data, such as downloading and analysis by means of different visualizations. Using the currently available applications published on the platform, the user can e.g. study the spreading of pollution clouds on a map and download the dataset for further study. Through the portal, one may also access open map data through an API. https://avaa.tdata.fi/web/avaa/

The Finnish research infrastructures -service is a databank for researchers, research infrastructure service providers and funders. The service promotes sharing and openness by describing and showcasing research infrastructures and their services in a unified manner. The service is in its pilot phase. The information content and functionality are subject to change.
http://infras.openscience.fi/

EduCloud, an educational cloud service consisting of digital educational resources and applications that are designed to support teaching and learning for both teachers and students, was launched on 22 October 2014. It is financed by the Ministry of Education and Culture. The management of the service will be handed over to EduCloud Alliance, a large consortium that provides educational resources. The service offers educational resources, pedagogical games, and applications and services that can be used in teaching.

The vision is to create an open channel for services and resources that support teaching and learning. They can be produced by enterprises, associations, teachers and students, for instance. Educational resources and services would be easy to access during teaching sessions through cloud technology and it would be possible to further develop them together. The resources are deployed using a dispersed network service on the internet. https://educloudalliance.org/?lang=en

A pilot project for storing and sharing open educational resources (OER) in all levels of education (primary, secondary and higher education) has started in 2018. The aim is to promote the use and sharing of open resources through a centralized platform. The platform will store metadata of resources stored elsewhere or also the resources themselves.
"The Ministry of Transport and Communications Data Catalogue" includes open data and open access solutions in the transport and communications administrative sector:
https://www.trafi.fi/filebank/a/1484809293/11d1538d838fc0fb78689a8ac27a2688/23839-Liite_2_Datacatalogue_en.pdf

The Ministry of Transport and Communications Data Map (in Finnish) includes data sources, data branches, description, s data types and delivery of data as well as steering legislation in the administrative sector http://julkaisut.valtioneuvosto.fi/handle/10024/160317

Hallitus antoi 15.11.2018 esityksen eduskunnalle uudesta Digi- ja väestötietovirastosta. Kyse on toiminnallisesta organisaatiomuutoksesta, jossa Väestörekisterikeskuksen, maistraattien ja Itä-Suomen aluehallintovirastossa toimivan maistraattien ohjaus- ja kehittämisyksikön tehtävät yhdistettäisiin uudeksi kokonaisuudeksi. Viraston on tarkoitus aloittaa toimintansa 1.1.2020.

Tehtävät ja henkilöstö siirtyisivät muutoksessa Väestörekisterikeskuksen yhteyteen ja viraston nimi muutettaisiin Digi- ja väestötietovirastoksi, jossa nykyisten Väestörekisterikeskuksen ja maistraattien tehtävät kootaan yhteen. Uusi Digi- ja väestötietovirasto on esityksen mukaan valtakunnallinen viranomainen, joka toimii useissa alueellisissa toimipisteissä. Virasto edistää yhteiskunnan digitalisaatiota, turvaa tietojen saatavuutta ja tarjoaa palveluja asiakkaiden elämäntapahtumiin. Toiminnassa painottuvat erityisesti valtakunnalliset toimintatavat, yhtenäiset käytännöt ja digitaalisten toimintatapojen tuomat mahdollisuudet.

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

4.1. Update of the national copyright legislation

The Finnish Copyright Act (404/1961) has been updated continuously since its adoption. Amendments in 2015 included provisions based on extended collective licence on online recording service of television programmes, provisions on the adjustment of an unreasonable condition in an agreement on a transfer of copyright, and amendments to the provisions on civil enforcement measures such as the discontinuation order in cases of illegal file-sharing in the internet to cover also a new blocking order for cases where the infringer could not be identified or located. In 2016, the remuneration for lending from public libraries was extended to cover lending from academic libraries as well.

4.2 Free and Open Source Software

There was an Open Science and Research Initiative in 2014-2017, established by the Ministry of Education and Culture. The aim was to promote the reliability of science and research, to support the internalisation of open science and research in the research community and to increase the social impact of research and science. It was noted, amongst other things, that open science requires proper national co-ordination system.

In 2018, the coordination task was appointed to the Federation of Finnish Learned Societies with funding from the Ministry of Education and Culture. The aim of the co-ordination is to promote further national debate on the objectives and means of open science, to increase cooperation and to raise awareness of the opportunities, challenges and solutions of open science. The coordination is based on the cooperation of the entire research community, including universities, polytechnics, research institutes, financiers, libraries and archives.
https://avointiede.fi/home

The search portal for the content and services of Finnish archives, museums and libraries, Finna, is based on open source software solution. The National Library of Finland is gradually developing Finna together with archives, libraries and museums. The open source code software also allows for other national and international cooperation in the development of Finna. Source code of Finna and its components has been published at GitHub.
https://www.finna.fi/?lng=en-gb

During recent years several Finnish public libraries have started using open source library system KOHA.

5. Final comments

5.1. World Summit on the Information Society monitoring

A follow-up group for the World Summit on the Information Society (WSIS) has been established in Finland. The group meets regularly under the auspices of the Ministry for Foreign Affairs of Finland to discuss and adopt positions on recent developments regarding WSIS. The members of the group consist of many stakeholders, like those from civil society, private sector, academia and Ministries, including the Ministry of Transport and Communications.

The WSIS follow-up group also organizes annually the Finnish Internet Forum (FIF) http://internetforum.fi which is the Finnish equivalent of the Internet Governance Forum (IGF). The FIF will be organized for the 10th time in spring 2019 and the public consultation for themes is taking place in November 2018. The IGF was a key product of the WSIS process promoting multistakeholderism in the governance of the internet. Finland has been a key supporter of the IGF providing the IGF with considerable funding since the beginning of its mandate. Finland has also supported the extensions of the mandate of the IGF until 2025.
Furthermore, Finland supported WSIS monitoring more broadly on a global level by funding the WSIS+10 review report in 2015 which provided food for thought for the overall review by the UN General Assembly of the implementation of the outcomes of the WSIS.
Finland participates in various UNGIS (United Nations Information Society Group) related activities and has highlighted the importance of universal and open access to ICT, especially broadband internet, for global development. This is reflected in our development policy and

cooperation through multilateral, regional and bilateral programmes and funding. Finland has supported the work of UNCTAD, UNCTAD/CSTD, UNECA and UNESCO.