

Fourth report

on the actions taken in Hungary to give effect to recommendations as formulated in the 2003 October UNESCO General Conference concerning the promotion and use of multilingualism and universal access to cyberspace

Focusing on the developments and activities in Hungary in recent years with respect to the advancement of multilingualism and universal access to information in cyberspace the present report addresses the relevant issues in the order as laid out in the recommendation.

1. Development of multilingual content and systems

1.1. Measures have been taken to alleviate language barriers

Significant initiatives have been launched to support the development of (multilingual) digital content and innovative communication technologies.

Hungary is a member of the European Language Resources Cooperation Network¹ (ELRC) project

ELRC manages, maintains and coordinates the relevant language resources in all official languages of the EU and CEF associated countries. These activities will help to improve the quality, coverage and performance of automated translation solutions in the context of current and future CEF digital services.

Fundamentally, ELRC Network will raise awareness and promote the acquisition and continued identification and collection of language resources.

ELRC Data - Implements the acquisition of additional language resources and related language processing services, as well as their provision to the language resource repository of the CEF eTranslation platform. The objectives are to acquire high-quality IPR-cleared language resources in all CEF languages in areas relevant to CEF DSIs, as well as to contribute and complement language resource collection in the Member States. The aim is to reach an acceptable level of automated translation quality in key areas of CEF DSIs where multilingual functionalities are needed.

In Hungary, there are currently 13 nationalities recognized by law, who have the opportunity to participate in national education, and to apply to their own public education institutions or classes. Development of teaching materials was implemented twice in the last years (between 2009-2011 and 2012-2014) with the support of the Hungarian Government, in order to help the education of students belonging to national minorities. Currently, within the framework of one of the European Union's priority project (ID No. EFOP-3.2.2-VEKOP-15) nearly 280 teaching tools will be produced by 2020 for bilingual schools and for language teaching schools of national minorities.

1.2 Capacity-building for the production of local and indigenous content on the Internet

On the 21st of October, 2015 the Hungarian Institute for Educational Research and Development in collaboration with Microsoft Hungary launched the National Public Education Portal, which is free to use and it aims at becoming the collection point of all sorts of methodological and educational online materials that can assist teachers in their educational-training profession, and it contains contents for students and parents as well. National Public Education Portal fits into the National Core Curriculum, and as a complex learning supporter system, it is a significant step for

¹ <http://www.lr-coordination.eu/>

developing a learning-teaching environment that meets the expectations of the 21st century, and an opportunity to reach the "Competitive Knowledge for All" goal. The thousands of interactive exercises, knowledge tests, digital curriculum and textbooks available here provide effective support for teachers, students and parents in teaching and learning in classroom and at home.

The further development of the portal is under process in the framework of one of the European Union's priority project, allowing adding new functions, and - among others – contents for students belonging to national minorities.

In 2012, the Hungarian Diaspora Council decided to launch the so-called **Julianus program**², with the purpose of creating a comprehensive register of the Hungarian material heritage – buildings, works of art, monuments, memorial plaques, streets, libraries, archives, museums etc. – in order to promote the wide-spread familiarization of the Hungarian culture. With the modern systematization of such Hungarian material heritage, we can get an overview of how Hungarian communities living in diaspora have contributed to the universal Hungarian culture. The program is entitled "Julianus", in reference to our aim to search for and collect Hungarian material heritage which is to be found in the diaspora territories.

The primary goal is to collect the following material heritage:

- Hungarian houses and centers
- Educational institutions and schools established by Hungarians
- Churches, parsonages, presbyteries, buildings of religious orders
- Retirement/elderly homes
- Hungarian-owned cemeteries
- Museums, archives and libraries
- Monuments, memorials and memorial plaques
- Street and square names, memorial parks
- Other material heritage, which demonstrate the presence of Hungarians.

1.3. Appropriate national policies on the issues of language survival, revitalization, development and promotion in cyberspace

The Research Institute for Hungarian Communities Abroad (NPKI) was established in 2011 in the framework of Bethlen Gábor Fund Management, working as a national agency under the Prime Minister's Office. The main goal of its creation was to create an institution operating according to scientific standards, which can convey the results of research related to Hungarian communities abroad and the efficiency of their governmental support, in a form that can be utilized for related policies. The activity of NPKI can be divided into three major groups:

- acquiring and summarizing knowledge (research, analysis, background materials)
- presentation of knowledge (publications, events)
- transferring knowledge (education)

NPKI also collects and publishes relevant sources of national culture for the Hungarian community living in Hungary, in the Carpathian Basin, or elsewhere in the world.

- **Inter-Active Terminology for Europe (IATE)** is the EU's inter-institutional terminology database. IATE has been used in the EU institutions and agencies since summer 2004 for the collection, dissemination and shared management of EU-specific terminology. The project partners are:

European Commission, European Parliament, European Council, Court of Justice, Court of Auditors, Economic & Social Committee, Committee of the Regions, European Central Bank, European Investment Bank, Translation Centre for the Bodies of the EU.

² <http://www.nemzetiregiszter.hu/julianus-program-en>

The project was launched in 1999 with the objective of providing a web-based infrastructure for all EU terminology resources, enhancing the availability and standardisation of the information.

IATE incorporates all of the existing terminology databases of the EU's translation services into a single new, highly interactive and accessible interinstitutional database. The following legacy databases have been imported into IATE, which now contains approximately 1.4 million multilingual entries: Eurodicautom (Commission), TIS (Council), Euterpe (EP), Euroterms (Translation Centre), CDCTERM (Court of Auditors).

The multilingual content of the IATE contains the Hungarian terminology as well.

- **National Research Infrastructure Survey and Roadmap:**³

In Hungary the creation of the National Research Infrastructure Roadmap is marked by several stages and milestones. Preparations are already started in 2008, in the framework of the National Research Infrastructure Survey and Roadmap (NEKIFUT) project which identified the strategic research infrastructures (SRIs) which have outstanding importance for the economic and social development. The register of research infrastructures was updated in 2014.

The National Research Infrastructure Committee (NKIB) was established in 2014, to provide, as one of its main tasks, the professional background for the creation of the new national roadmap, coordinated by the NRD Office. The NKIB comprises the representatives of scientific and administrative organisations representing the main fields of science, the university and academic sector, and governmental actors responsible for research infrastructure policies.

The current situation of the National Research Infrastructure Roadmap: 2018. May: Document recommended by NKIB for approval and submission to the European Commission. The document summarises the story of creating the Roadmap, presents the current situation of domestic research infrastructures, their connection to major international research infrastructures, the upgrading process and financial background of research infrastructures. It also highlights the need to monitor research infrastructures and identifies the criteria of monitoring and of setting development directions.

CESSDA HU Network (Consortium of European Social Sciences Data Archives) - Hungarian Academy of Sciences (HAS) Centre for Social Sciences. The task of CESSDA ERIC, as stated in its statutes, is to provide a full-scale sustainable research infrastructure enabling the research community to conduct high-quality research in the social sciences contributing to the production of effective solutions to the major challenges facing society today and to facilitate teaching and learning in the social sciences.

HUNCLARIN Network (Common Language Resources and Technology Infrastructure) – HAS Research Institute for Linguistics. HunCLARIN is the strategic research infrastructure network of leading Hungarian research and development knowledge centres in language and speech technology. It aims to support research and innovation with language technology tools and resources, especially in the field of humanities and social sciences. The present nine members (1 coordinator and 8 partners) of HunCLARIN represents the forefront of Hungarian language and speech processing. The language technology resources (e.g. mono- and multilingual and thematic corpora) and tools (e.g. morphological analysers) developed by them enable, among other things, the content analysis of large corpora (e.g. from a particular historical era) and the automatic coding of psychological meanings.

ELEXIS – European Lexicographic Infrastructure - HAS Research Institute for Linguistics Project. The ELEXIS project was launched in 2018 with the participation of 17 European institutions. Hungary is represented by the MTA Research Institute for Linguistics. The project primarily aims to integrate, expand and harmonise national and regional works relating to modern and historical lexicography. The goal is to establish a sustainable infrastructure which, on the one hand, provides effective access to lexical data in the digital age, and on the other hand, compensates for the differences between research communities with varying lexicographical resources. Furthermore, it is also a priority for ELEXIS to give a major boost to the culture of open access in lexicography, in line with the European Commission's recommendation.

³<http://nkfi.gov.hu/english-2017/hungarian-research/national-research>;
<http://nkfi.gov.hu/english-2017/hungarian-research/national-research-infrastructure-roadmap-2018>

- **Industry 4.0 National Technology Platform⁴**. The Industry 4.0 National Technology Platform was established under the leadership of the Institute for Computer Science and Control (SZTAKI), Hungarian Academy of Sciences, with the participation of research institutions, companies, universities and professional organizations having premises in Hungary, and with the full support and commitment of the Government of Hungary, and specifically that of the Ministry of National Economy.

The background of the initiative is that Hungary, too, is witnessing the advent of the era of a new technological change, when the internet-based economy is transforming the very basics of the production and logistic systems. The theoretical and practical problems to be resolved are of such complexity that make the cooperation between the research and university spheres on the one hand and industrial companies on the other hand indispensable, both in the national and the international arena.

Currently, the Platform has 7 Work Groups: Strategic Planning; Employment, Education and Training; Production and Logistics; ICT Technologies (safety, reference architectures, standards); Industry 4.0 Cyber-Physical Pilot Systems; Innovation and Business Model; Legal Framework.

- *NESSI-Hungary Software and Services National Technology Platform*,⁵ which aims to elaborate development and research strategies in information service architecture and software infrastructure to serve a knowledge-based society.
- *E-Governmental Free Software Competence Centre*:⁶ sets the target to support (give advice and technical support) several projects aimed at introducing free software in the public administration sector. Plans to document the process and the results in the form of case studies, which will definitely be of help for future free software migration projects. The EKOP-1.2.15-2011-2011-0001 “E-Governmental Free Software Competence Centre” is a project under the Electronic Public Administration Operational Programme. The main objectives are: to promote the growing share of open source applications in public administration and to increase the interoperability of different systems by information technology developments through the use of open source tools and the use of open standards.

- **eGovernment in Hungary**. It is an important strategic goal for Hungary to modernize its public administration and to increase the use of modern information and communication technologies in the interactions between state institutions themselves as well as between state institutions and citizens. During the last five years, considerable measures have been taken by the Hungarian government to reform the public administration of the country. The most important results of these reforms include the reduction of administrative burdens and the simplification of administrative procedures.

Since 2010 the number of ministries has been reduced to 9, and the number of central public administration institutions decreased from 649 to around 300. At the same time on the level of the territorial administration 17 former administrative organs became integrated into the so called County (or in case of Budapest District) Government Offices. These changes made it possible to separate front office and back office functions. The electronic restructuring of the back office functions began on a standardized basis, in the framework of projects financed by EU funds.

Another important step towards a less bureaucratic public administration was the setting up of the system of physical points of single contact since January 2011, these are called Government Windows. In autumn 2015 there will be altogether 278 physical PSCs in Hungary. These physical PSCs make it easier for the citizens to personally administer their affairs. The physical PSCs draw on the electronic solutions available through the central electronic PSC portal. This suits the general requirement of the inclusion principle as well. At the moment approx. 300 procedures can be administered in the Government Windows.

⁴ <https://www.i40platform.hu/en>

⁵ <http://nessi-hungary.com>

⁶ <http://szabadszoftver.kormany.hu/>

- **Research Institute for Linguistics of the Hungarian Academy of Sciences:** The primary tasks of the Research Institute for Linguistics of the Hungarian Academy of Sciences include theoretical and applied research in general linguistic issues, as well as in Hungarian linguistics, Uralic studies, and phonetics. The Institute also undertakes the on-going compilation of the comprehensive dictionary of Hungarian. Other projects investigate different variants of Hungarian and minority languages in Hungary, as well as issues in language policy. Further tasks include the assembly of linguistic corpora and databases. The Institute operates a public counselling service and prepares expert reports on relevant affairs on demand. The Institute also runs the Theoretical Linguistics Programme jointly with Eötvös Loránd University. Online linguistic databases of the Research Institute: Hungarian National Corpus, Verb Argument Browser, Corpus of the Academic Dictionary of Hungarian, Old Hungarian Corpus.

2. Facilitating access to networks and services

Number of the Internet subscriptions by access services, 31 December (2003–)

At the end of the period	Public switched network (by modem, dial-up) + ISDN	xDSL	Cable tv	Wireless	of which mobile internet	Other	Total
2003	391 398	114 813	77 189	60 538	..	22 654	666 592
2004	320 494	235 969	135 803	88 122	..	14 489	794 877
2005	241 611	372 523	212 145	155 988	..	18 470	1 000 737
2006	85 878	597 331	374 647	251 774	199 784	19 995	1 329 625
2007	62 985	739 028	563 593	434 361	356 721	32 056	1 832 023
2008	24 742	806 569	718 060	678 123	570 835	83 420	2 310 914
2009	22 403	800 013	782 430	1 036 898	933 000	161 799	2 803 543
2010	15 137	789 657	893 177	1 407 039	1 306 912	236 454	3 341 464
2011	13 527	801 165	970 499	2 254 948	2 154 842	292 386	4 332 525
2012	12 897	774 458	1 055 078	3 278 677	3 177 412	334 529	5 455 639
2013	12 452	765 846	1 144 496	4 176 116	4 072 242	383 939	6 482 849
2014	8 754	780 905	1 229 170	5 253 440	5 139 320	420 407	7 692 676
2015	4 953	788 253	1 300 059	5 764 608	5 647 284	471 570	8 329 443
2016		774 450	1 364 536	6 317 425	6 191 403	529 781	9 001 928
2017		747 736	1 414 272	667 6813	6 546 269	626 979	9 480 413

Source: Hungarian Central Statistical Office

According to the latest (2017) data of the Hungarian Central Statistical Office, there were 9 480 413 Internet subscriptions by access services.

The access to the internet in Hungary is growing continuously. As we can see, only the growing of xDSL stopped during the years, but the wireless, the mobile internet and the other communication channels are unstopably expanding. This is an international information society trend in developed countries.

ICT usage in households and by individuals (2005–)

Denomination	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
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Access to ICT devices (household level)										
Households having mobile phone	79,9	84,4	86,4	88,0	90,4	93,2	94,7	95,4	96,0	
Households having desktop computer	40,7	47,1	50,6	54,6	56,8	58,6	59,5	59,1	58,3	53,2
Households having portable computer	6,3	9,3	11,4	15,7	21,0	26	31	35,1	41,6	45,4
Households having handheld computer	1,6	1,8	1,8	2,8	3,6	3,9	4,7	4,5	4,8	
Households having internet connection	22,1	32,3	38,4	48,4	55,1	60,5	65,2	68,6	71,5	73,0
Households having broadband internet connection	10,9	22,0	33,0	42,3	50,9	52,2	60,8	68,0	71,0	72,4
Computer and internet use (individual level)										
Individuals who have ever used a computer	43,3	59,5	62,4	68,5	67,7	70,3	73,9	75,9	77,0	78,9
Individuals who have actually used the computer (real user)	42,1	54,1	58,3	63,4	62,6	64,1	69,3	71,8	73,2	76,0
Individuals who have ever used the Internet	39,9	48,5	54,4	62,7	63,7	67,6	72	74,2	75,9	77,9
Individuals who have actually used the Internet (real user)	37,2	44,9	51,6	58,7	59,3	62,2	68	70,6	72,6	75,7
Individuals who have ever ordered goods or services over the Internet	8,9	8,2	12,2	15,7	18,9	22,2	26,6	30,3	33,3	38,5
Individuals who have actually ordered goods or services over the Internet (real user)	5,3	5,0	6,9	7,7	8,9	10,3	12,7	14,7	16,8	20,2

Source: Hungarian Central Statistical Office

Based on the data of the Hungarian Central Statistical Office, in Hungary, 7.800.000 people have access to the internet in 2014. The total population of Hungary on January 1, 2014, were 9.877.365, so 79% of Hungarian people have broadband internet access. 71% of people used the internet at least weekly, and 62% used the internet every day in 2013.

Enterprises using the Internet to interact with public authorities (2008–)

Denomination	2008	2009	2010	2011	2012	2014	2015	2016
To obtain information from public authorities' websites or home pages	73,7	77,3	93,0	93,8	94,9	91,3	93,2	92,9
To obtain forms from public authorities' websites or home pages	73,1	76,8	88,8	89,9	93,1	89,4	90,9	91,4
To return filled in forms electronically	64,4	69,5	82,9	84,5	91,4	87,9	89,3	90,1

To treat an administrative procedure completely electronically without the need for paper work (including payment, if required)	37,0	44,0	50,9	77,5	86,3	83,7	84,8	86,1
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Source: Hungarian Central Statistical Office

Unfortunately, there is data only until 2016, but the trend is very clear: the usage is growing, and is close to 100%.

In order to ensure that the lack of financial resources does not exclude a single Hungarian citizen from participating in the digital world, the Government has initiated the introduction of the Basic Digital Success Package for those who do not yet have an Internet subscription. The Digital Success Package is at least 15% cheaper than the price of the most affordable Internet subscription packages in the service providers' offerings.

In Hungary the rate of Value Added Tax on Internet services was reduced in two stages, first From 1 January 2017 from 27 to 18 percent, and from 1 January 2018 to 5 percent.

3. Development of public domain content

3.1. The legal and administrative measures

(a) Recognizing and enacting the right of universal online access to public and government-held records

Since the last reporting period, main projects about the development of publishing governmental data, and development of the governmental infrastructures and data sharing are the following:

- National Info-communication Strategy 2014-2020 (available only in Hungarian).⁷ After analyzing the current situation, it describes the development of digital infrastructure, and based on this, the development of digital skills, digital economy and the digital government.
- The goal of Hungarian Government is to reach the full broadband internet availability in the whole country until 2018. It will cost 200 billion HUF (Digital Nation Development Program, Governmental Decision 1162/2014. (III. 25.).
- The National Info-communications Service Company Ltd. (NISZ)⁸ is the leading ICT provider in the public sector in Hungary. The company operates the critical IT networks of the Hungarian state as well as the Public Services Portal, the Citizens' and the Corporate Mailbox. NISZ provides telecommunications, IT and e-government services for 275 public institutions and 3 million citizens. Thanks to the developments of NISZ since 2018, citizens can manage most public administrative tasks in Hungary online. Information on the project in preparation, under way and completed projects here: <http://www.nisz.hu/en/projects>
- "Postal Agora" programme, where various community services are available for customers at postal outlets operating with IT support (project of Hungarian Post Office).
- There is free access to
 - the news database of MTI Hungarian News Agency⁹
 - the Hungarian Official Gazette: the official journal of Hungary, which publishes laws and other legal documents¹⁰
- National Legislation Database. According to section 2 (4) of Government Decree 338/2011. (XII. 29.) on the National Legislation Database, the translations of the laws specified by the minister responsible for justice shall be published in the National Legislation Database.

⁷<http://2010-2014.kormany.hu/download/b/fd/21000/Nemzeti%20Infokommunikációs%20Stratégia%202014-2020.pdf>

⁸http://www.nisz.hu/en/about_us

⁹<http://mti.hu/mti/Default.aspx>

¹⁰<https://magyarkozlony.hu/>

Based on the above provision, the National Legislation Database webpage¹¹ contains the English translations of Hungarian laws prepared within the framework of the legislation translation programme of the Ministry of Justice of Hungary.

3.1. (b) Identifying and promoting repositories of information and knowledge in the public domain and making them accessible

To facilitate digital publication, to ensure universal access to cultural and scientific content in digital form, several public repositories are evolving and working properly, like National Audiovisual Archive of Hungary (NAVA), Videotorium, Hungarian Electronic Library, and Hungarian National Digital Archive and Film Institute (MaNDA). These public repositories are presented in the Third report.

3.1. (c) Promoting and facilitating ICT literacy, as well as information and media literacy, including popularizing and building trust in ICT implementation and use

At the end of 2015, the Hungarian government launched a comprehensive development program on the Hungarian digital ecosystem based on the results of the national consultation on the Internet and digital developments. The Digital Success Programme (DSP) aims to make every Hungarian citizen and business a winner of digitalisation.

The strategies of the Programme have been developed through a wide-ranging dialogue, paying particular attention to the consultations with professional and advocacy organizations, and with market, civil and scientific actors as well.

Strategies of the Digital Success Programme 2.0:

- Digital Child Protection Strategy of Hungary¹²
- Digital Export Development Strategy of Hungary¹³
- Digital Education Strategy of Hungary¹⁴
- Digital Startup Strategy of Hungary¹⁵

The implementation of DSP is an integral part of the activities of the newly (May 2018) created Ministry of Innovation and Technology. (Before that, DSP was coordinated by a commissioner of the Prime Minister.)

As a result of a year of research and development work of a team of hundreds of pedagogical experts, psychologists and practitioners, the Education 2030 Learning Sciences Research Group at Eszterházy Károly University made proposal for the new National Core Curriculum.

The new National Core Curriculum (NCC) aims to make all the fields – which are capable of defining the modern content of education and pedagogy, from education research to learning sciences – contribute to the success of the primary and secondary education in Hungary. Its mission is to develop a scientifically based, concrete and coherent proposal for the further development of education, and to make it accessible to policy and stakeholders (teachers, learners, parents). In the new conception of NCC, digital literacy and digital education has an important role to play.

¹¹ <http://www.njt.hu/njt.php?translated>

¹² <http://www.kormany.hu/download/f/3b/21000/The%20Digital%20Child%20Protection%20Strategy%20of%20Hungary.pdf>

¹³ <http://www.kormany.hu/download/1/4b/21000/The%20Digital%20Export%20Development%20Strategy%20of%20Hungary.pdf>

¹⁴ <http://www.kormany.hu/download/0/4b/21000/The%20Digital%20Education%20Strategy%20of%20Hungary.pdf>

¹⁵ <http://www.kormany.hu/download/2/4b/21000/The%20Digital%20Startup%20Strategy%20of%20Hungary.pdf>

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

4. 1. Government action has taken in order to update the national copyright legislation and its adaptation to cyberspace. Information on open access policies adapted, conditions to access open scientific data and any favourable conditions applied for marginalized groups, such as persons with disabilities.

The Hungarian copyright legislation is in line with those international copyright and related rights conventions that may be considered as relevant in relation to the adaptation of the copyright system to cyberspace, such as the WIPO Copyright Treaty and WIPO Performers and Phonograms Treaty and the Beijing Treaty on the Protection of Audiovisual Performers. (It is to be mentioned however that Hungary signed but has not yet ratified the Beijing Treaty.)

On 1 October 2018 the European Union deposited its instrument of ratification of the WIPO Marrakesh Treaty to Facilitate Access to Published Works for Persons Who Are Blind, Visually Impaired or Otherwise Print Disabled. The deposit means that the European Union will effectively become a party to the treaty as of 1 January 2019. This will allow persons with print disabilities in the EU and organisations serving their needs to participate in the exchange of books and other print material in accessible formats with third countries that are also parties to the treaty. At the European level, a Directive and a Regulation were adopted in 2017 for the implementation of the treaty in EU law. The deadline for Member States to transpose the Directive into national law ended on 11 October 2018. The Regulation entered into force on the following day, 12 October 2018. Hungary timely transposed the Directive by an act and a government decree.

The framework provided by these major multilateral conventions is also complemented by the European Union's Copyright related *acquis communautaire*, since Hungary is a Member State of the EU since 2004. Hence, during the important challenge of updating our national copyright system it is inevitable that such process shall respect the aforementioned international and European principles. The dossier on the reform of the European copyright system has been on the Agenda of the European institutions for years and Hungary has actively participated in the negotiations in this field ever since. In 2012 the Hungarian Council of Copyright Experts (CCE) was requested to conduct examinations and create studies related to the copyright reform initiative launched by the European Commission under the title "Licensing Europe". The results of the CCE's work were published and articulated during the negotiations held in the EU Council.

The Hungarian Government adopted the Act CXXV of 2009 on Hungarian Sign Language and the Use of Hungarian Sign Language, considering that deaf and deaf-blind persons are equal members of the Hungarian society having equal rights, recognizing the cultural and community building power of sign language, in order to lay down the linguistic rights of deaf and deaf-blind persons and to ensure their equal access to public services, in accordance with the Convention on the Rights of Persons with Disabilities.

The Hungarian Government adopted the Act CXXV of 2003 on Equal Treatment and Promotion of Equal Opportunities, and the Act XXVI of 1998 on the Rights and Equal Opportunities of Persons with Disabilities. (It was one of the principal reasons why the UN honoured Hungary with the Roosevelt International Disability Award in 2000.)

The Hungarian Government adopted Act LXXV of 2018 on Accessibility of Public Sector Websites and Mobile Applications to serve compliance of the European Parliament and the European Council Directive 2016/2102.

4.2. 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.

The Government of Hungary has established the Ministry of Innovation and Technology, which is fully responsible for Hungary's technological innovation policy, developments and processes. The Minister of Innovation and Technology is responsible for the following technological and innovation tasks are included in the 94/2018. (V. 22.) according to the Government Decree on the Terms of Reference and Responsibilities of the Members of the Government:

„Section 128: The Minister shall be responsible for information technology

(a) prepare the strategy for an infocommunication infrastructure development and service policy in accordance with Article 13 and contribute to its implementation;

(b) in the case of budgetary entities under its management or control and of publicly owned companies over which the holder of property rights or property rights is exercised;

(ba) oversee the operation and development of their infrastructure for infocommunication infrastructure;

(bb) has a right of understanding with regard to the identity of its managers in charge of infocommunication infrastructure and of its responsibilities for the information and communication infrastructure of IT security managers;

(c) organize the processing of national data assets.

Section 136 The Minister is responsible for the financing of research, development and innovation matters within the framework of his responsibility for the coordination of science policy, with the assistance of the Minister responsible for education, and may exercise the functions and powers provided for in a separate Act.”

5. Final comments

The internet penetration in Hungary is high, ca. 97 percent of the population can reach online data and information. There are a lot of (interactive) data sources about the Hungarian culture, and cultural objects in various topics and formats. In recent years, many projects have been launched with a view to developing the quality and the openness of public and governmental data. To reach the truly value-creator usage of the internet there is a great need to develop the information literacy of Hungarian people, besides this to help to learn foreign languages (and culture) for everybody.