

Fourth consultation on the application of the 2003 Recommendation concerning the Promotion and Use of Multilingualism and Universal Access to Cyberspace

Country: ESTONIA

Organisations or entities responsible for the preparation of the report:

Ministry of Culture
Ministry of Economic Affairs and Communications
Ministry of Education and Research
Ministry of Justice
Estonian National Commission for UNESCO

Contact person: Madli Kumpas, Estonian National Commission for UNESCO, unesco@unesco.ee

Brief description of the consultation process established for the preparation of the report

The consultation process was coordinated by the Estonian National Commission for UNESCO. The implementation of the recommendation is divided between the government area of several ministries and the questionnaire was communicated with the Ministry of Culture, Ministry of Economic Affairs and Communications, Ministry of Education and Research, and Ministry of Justice. The report is a consolidated outcome of the answers provided by the officials in the respective ministries.

Elements for reporting on the specific provisions of the Recommendation

1. DEVELOPMENT OF MULTILINGUAL CONTENT AND SYSTEMS

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

Estonian language policy is regulated by Language Act¹ that was passed and entered into force in 2011. The official language of Estonia is Estonian. In addition to Estonian, official information can be found online – in many cases – in English and Russian (Estonian State information portal², public institutions' websites, integration websites, banks, etc.). According to the Language Act, there is a right to use the languages of a national minority in public administration in local governments where at least half of the permanent residents belong to a national minority.

Estonian as the second language gained relevance as an important part of the government's policy after Estonia regained independence in 1991. Various activities financed by the state and the European Social Fund are aimed at integrating children, adolescents and adults whose mother tongue is other than Estonian into the Estonian society.

In order to improve the level of Estonian language learning in the schools and pre-school institutions that are taught in Russian, the activities of the language immersion programme continue and an internal student exchange programme is underway. All the schools that are attended by new immigrants, including those who have received or applied for asylum, receive need-based support from the Innove Foundation³ language immersion centre and the regional Rajaleidja Centres. During the 2017/2018 academic year, 63 kindergartens and 37 general education schools participated in language immersion programmes. 22.2% of the children attending kindergartens that are taught in Russian are in language immersion groups, and 24.2% of all children in the schools where Russian is the language of instruction study in language immersion classes.

¹ Text in English available: <https://www.riigiteataja.ee/en/eli/512012016001/consolide>

² <https://www.eesti.ee/et/>

³ <https://www.innove.ee/en>

The Estonian language houses have been established in Tallinn and Narva⁴. The Estonian language houses provide a comprehensive service for language teaching and integration: they organise and coordinate Estonian language learning; support and develop practical opportunities for learning and using the Estonian language; provide diverse information related to integration; as well as compile and share methodological knowledge related to language learning. In addition to introducing the possibilities for Estonian language learning, the purpose of these institutions is to continue the promotion of Estonian-language cultural life and the creation of Estonian-language social networks that includes both Estonians and residents of different national backgrounds.

International houses have been established in Tallinn⁵ and Tartu⁶ that provide services for foreigners studying or working in Estonia. In the Ministry of the Interior's administrative area, foreigners are offered post-arrival services to assist them in adaptation and involvement in local life. In order to support the foreigners to acquire the knowledge, skills and elementary Estonian language proficiency necessary for successfully coping in Estonia as quickly and easily as possible, the Estonian government provides newly arrived immigrants with the opportunity to participate in an introductory welcoming programme. The Ministry of the Interior supports and promotes the daily contacts of new immigrants with public, private and third-sector organisations through the formation and development of a support network that is focused on improving the necessary public services. Broader aim of the Ministry of the Interior in the field of adaptation is to form a system of support services that is comprehensive, flexible and timely.

According to the 2017 survey of the integration of Estonian society, the social cohesion in key areas (Estonian language proficiency and importance, state identity, citizenship, etc) had increased. Also, the Estonian language skills of the people of other nationalities has improved in recent years. If in 2008, 19% of people of other nationalities could not speak any Estonian, by 2017, the percentage had essentially been halved to 10%. In the past ten years, the percentage with passive language proficiency has essentially remained the same. The percentage of people with active language proficiency has increased by 9% compared to 2008.

The Ministry of Culture supports and promotes the preservation of the languages of the national minorities and the cultural heritage of their cultural societies in Estonia, as well as the sustainability and administrative capacity of the umbrella organisations and cultural societies of the national minorities. In the government area of the Ministry of Education and Research the best models for multi-lingual and multi-cultural educational institutions have been collected.

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

Cultural Policy 2020⁷ as well as the Estonian Information Society Development Plan 2020⁸ set the objective of digitizing a valuable cultural heritage and confirmed the need to ensure the preservation, availability and accessibility of the cultural heritage.

In the development plan of the area of government of the Ministry of Culture for 2019-2022⁹, it is envisioned that by 2022 the objects of significant cultural value for Estonia are digitally available. In longer perspective, the vision is that by 2030 the significant part of Estonia's cultural heritage is available in the virtual environment, located in electronic archives, museums and libraries; and is thereby available internationally and, depending on the type of heritage and the interest therein, to be translated into other languages.

⁴ <https://www.integratsioon.ee/en/estonian-languages-houses-and-councelling-centers>

⁵ <https://workinestonia.com/internationalhouse/>

⁶ <https://www.facebook.com/internationalhousetartu/>

⁷ https://www.kul.ee/sites/kulminn/files/culture2020_eng.pdf

⁸ https://www.mkm.ee/sites/default/files/digital_agenda_2020_estonia_engf.pdf

⁹ https://www.kul.ee/sites/kulminn/files/180228_allkirjastatud_kum_ak_2019_2022.pdf

"Digitization of the Cultural Heritage 2018-2023 Action Plan"¹⁰ was approved in 2018 in collaboration between the Ministry of Culture, Ministry of Economic Affairs and Communication, and Ministry of Education and Research. Also, a great contribution was made by Estonian memory institutions, incl. the initiators – the Art Museum of Estonia, Estonian National Museum, National Library of Estonia, Estonian Film Database, and National Archives of Estonia – and other memory and cultural institutions. The main objectives of the action plan are the resource-efficient digitisation of a critical mass of the cultural heritage, preserving the cultural heritage and making it publicly available.

According to the action plan: (1) up to a third of the cultural heritage of Estonia's memory institutions will be made available digitally; (2) a consolidated architecture and service for the archiving of digital cultural heritage, its long-term storage and backup will be developed; and (3) the information on 1.2 million cultural heritage objects will be made available, at least, as third-level open data. In order to achieve these objectives, the management structure will be reorganised and the preconditions will be created to: (4) increase the knowledge and awareness related to the digitised cultural heritage in memory institutions and partner organisations as well as among youth; (5) improve the opportunities for the active reuse and processing of digitised cultural heritage in the private sector; (6) raise the awareness of the population related to the digitised cultural heritage and increase satisfaction with online services in the cultural field. The projects implemented will encompass the digitization of documentary, film, photographic, artefact and art and printing heritage, as well as the analysis and implementation of the infrastructure. A major achievement of cross-sectoral cooperation can be seen in this joint development of digitization and related infrastructure development activities. The total cost of the activities is 9.16 million euros, of which 8.28 million is planned to be covered by the European Union structural funds.

Regarding the online representation of local communities and dialects, communities or culture institutes such as *Võro*¹¹, *Mulgi*¹², *Kihnu*¹³ and *Seto*¹⁴ have webpages where community news or some other content is provided in the respective dialects. Depending upon the community organisation, these information channels and institutions are supported by different government organisations, e.g. Ministry of Culture, Ministry of Interior, Ministry of Rural Affairs, Enterprise Estonia.

For two local dialects – *Võro* and *Seto* – the Language Technology Research and Development Programme “Estonian Language Technology 2018-2027”¹⁵ and previous natural language programmes for Estonian language have provided the development of language technology support¹⁶ (speller, hyphenator, machine translation, speech synthesizer and other vital applications) by collecting language resources and combining them into a uniform language corpus that can also be used in linguistic research.

At the webpage of the Institute of the Estonian Language¹⁷, the dictionaries of Estonian language, dialects, cognate languages as well as some bilingual dictionaries and terminological databases are available for free.

1.3. Please describe the measures taken for formulating appropriate national policies on the issues of language survival, revitalisation, development and promotion in cyberspace. Please include

¹⁰ https://www.kul.ee/sites/kulminn/files/kultuuriparandi_digiteerimine_2018-2023_tegevuskava_1.pdf

¹¹ <https://wi.ee/>

¹² <http://www.mulgimaa.ee/fi/>

¹³ <http://www.kihnuinstituut.ee/meist/>

¹⁴ <https://www.setomaa.ee/kogukond/se>

¹⁵ https://www.keeletehnoloogia.ee/en?set_language=en

¹⁶ <https://www.keeletehnoloogia.ee/en/projects-2011-2017/voro-and-seto-language-corpus/voro-and-seto-language-corpus>

¹⁷ <https://www.eki.ee/EN/dictionaries>

information about main legislation and/or policy measures, if any, and date of their introduction/adoption.

There is no separate policy for language in cyberspace, Estonian language policy is regulated by Language Act¹⁸. Strategic planning for the development of the Estonian language started in 1998. The strategy covers four areas: (1) Estonian as the native language; (2) Estonian as the second language; (3) Estonian abroad; (4) multilingualism, including foreign languages. The strategy is used as a blueprint for sustainable planning and financing all four areas covered with a special focus on Estonian as the native language. Government's language policies are developed and implemented in consultation with the Estonian Language Council – a substructure of the Estonian Ministry of Education and Research established in 2001. “The Development Plan of the Estonian language 2011-2017”¹⁹ was adopted in 2011 and it is currently prolonged.

Research in the field of the Estonian language and culture has been supported under government programmes since 1999. The programmes have ensured on-going support for the field and enabled the development and support activities required for research in the Estonian language, literature and folklore to continue. The programmes have contributed to the general objective enshrined in the Constitution of the Republic of Estonia: to ensure the preservation of the Estonian people, the Estonian language and the Estonian culture through the ages.

The national programme “Estonian language and cultural memory II (2014-2018)” supported research and development activities in the field of the Estonian language and culture. Compatriots' Programme²⁰ supports the study and use of the Estonian language of the Estonian community that resides temporarily or permanently abroad. The programme supports the expatriates when they want to return to Estonia and offers information about Estonia and Estonian communities abroad. The Programme of Academic Studies of the Estonian Language and Culture Abroad²¹ supports the teaching of Estonian in higher education institutions abroad.

The Language Technology Research and Development Programme “Estonian Language Technology 2018-2027”²² of the Ministry of Education and Research has helped to ensure that the position of the Estonian language technology compared to languages of similar sizes is stable. As a result of the work done, important basic technologies have been developed, and applications that are actually used by the end-user for speech recognition, speech synthesis, and machine translation have been created. Applications are based on extensive language resources and text analysis tools. The programme also supports the Centre of Estonian Language Resources (CELR)²³, through which the possibilities of language technology are introduced to the widest possible audience.

1.4. Please provide information, including references, on major events, projects, publication 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.

Some examples:

- State museums, public institutions, banks, bigger local governments, and two larger Estonian public libraries provide their website information at least in three languages: Estonian, English and Russian.

¹⁸ Text in English available: <https://www.riigiteataja.ee/en/eli/512012016001/consolide>

¹⁹ https://www.hm.ee/sites/default/files/eestikeelearengukavainglise.indd_.pdf

²⁰ <https://www.hm.ee/en/activities/estonian-and-foreign-languages/programmes>

²¹ <http://haridus.archimedes.ee/en/academic-studies-estonian-language-and-culture-abroad-ekkav>

²² https://www.hm.ee/sites/default/files/estonian_language_technology_2018-2027.pdf

²³ <https://keeleressursid.ee/en/>

- Online Estonian courses *Keeleklikk* and *Keeletee*²⁴ are freely available for all beginners and intermediate level language learners.
- App NUMU Smart Museum²⁵ integrates museums with unique diversified content and offers games, audio guides and interactive activities. The goal is to take people to the museum and help them become an interactive part of the exhibition.
- Programme *Digipööre*²⁶ develops digital skills and the use of digital tools in education and in lifelong learning. It encompasses developing teachers' digital skills, ensuring students with the necessary skills of operating online, increasing the use of digital tools in the whole population, etc. The programme contributes to the implementation of “The Estonian Lifelong Learning Strategy 2020”²⁷.
- The Language Technology Research and Development Programme “Estonian Language Technology 2018-2027” supports the development of machine translation systems. E.g. private company Tilde received a support for machine translation system²⁸ that was used during the Estonian Presidency of the Council of the European Union. Also, automatic speech translation from Estonian to English and Latvian is being developed in collaboration with University of Tartu and Tallinn University of Technology and this system has been already used at conferences, meetings etc²⁹.
- TEXTA Toolkit³⁰ enables automatically to index, analyse and classify constantly created and changing information – for example, comments of the home page, or incoming e-mails. This toolkit has been successfully used to detect in an instant, whether the comment in an Estonian newspaper contained something insulting, threatening, obscene or racist. Toolkit allows to perform fast and precise search simultaneously in Estonian, in Russian and in English. This enterprise is again supported by the Language Technology Research and Development Programme “Estonian Language Technology 2018-2027” and Enterprise Estonia³¹.

2. FACILITATING ACCESS TO NETWORKS AND SERVICES

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

Access to the Internet for all with good quality and affordable price has been political priority for many years. Internet prices are rather low and choice of services in most areas wide thanks to well-functioning telecom market and tough competition. Government involvement has been mainly targeted to accelerate the development of rural areas where commercial interest to invest in infrastructure has been weak or absent. Significant public funding is used for PPP project “ESTWIN” to build high speed fibre-optic connections to countryside³². According to data from November 2018 there has been 6226 km of base network connections built. Base network topology foresees that every citizen or business should have broadband network connection point in the distance no more than 1.5 km. Although wireless last mile connectivity is available throughout the country, the Government has recently initiated new project where building of the fibre to the home last mile connections is subsidised with public money.

²⁴ https://www.keeletee.ee/index_en.html

²⁵ <http://augmentedtours.eu/en>

²⁶ https://www.hm.ee/sites/default/files/2_digipoorde_programm_2018-2021.pdf

²⁷ https://www.hm.ee/sites/default/files/estonian_lifelong_strategy.pdf

²⁸ <https://translate.tilde.com/et>

²⁹ <https://live.neurotolge.ee/>

³⁰ <https://www.texta.ee/en/front-page/>

³¹ <https://www.eas.ee/?lang=en>

³² <https://www.elasa.ee/>

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.

In addition to answer 2.1. as a result of transparent market conditions, light regulation and fair competition between telecom operators the price for Internet in Estonia is among the lowest compared worldwide and the price and availability are not significant barriers to Internet usage.

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

Free access to e-government services is provided from public libraries. In 77% of the municipality's public libraries, the user can connect his/her smartphone and other devices to a library Wi-Fi network for free. In a quarter of libraries users can use library equipment for e-services. Around 20% of libraries have dedicated IT equipment and computers connected to the Internet for that purpose. Every school in Estonia has Internet access and to improve the access, the Information society Strategy³³ was updated in 2018. Many other public service institutions and local governments are offering free Wi-Fi access in their premises or public areas.

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?

Many public institutions are procuring Internet access with the help of State Information System Authority³⁴. Aggregating the demand creates possibilities for lower connection prices. Between 2016–2020, a project for modernizing the Internet infrastructure in public school buildings is implemented with a help of central funding. Thanks to the volume effect there is a possibility to have lower prices compared to the situation where schools are acting independently.

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) Recognising and enacting the right of universal online access to public and government-held records,

According to Public Information Act³⁵ all data in public sector is public by default. In justified cases (e.g. privacy, security, copyright, business secrets issues) access can be restricted. Law lists categories of data which should be made proactively accessible online, including government databases and document registries. Everybody can apply for public information in electronic form without the need to specify the reason. Systematic campaigns will be executed by government in order to reduce risk behaviour in ICT use and reduce cyber risk among different target audiences.

(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,

³³ <https://www.mkm.ee/en/objectives-activities/information-society>

³⁴ <https://www.ria.ee/en.html>

³⁵ Text in English available: <https://www.riigiteataja.ee/en/eli/ee/514112013001/consolide/current>

In 2018 the Public Information Act³⁶ was amended to include web accessibility requirements for public information presented on the Internet making access to data sources more convenient for people with disabilities.

In order to facilitate convenient access to public sector information and services, the State Portal³⁷ compiles information and brings together government e-services or relevant links for citizens, residents and officials. All services of the portal are free of charge, excl. those, in case of which the fee has been established separately or determined by a legal act. The State Portal is developed according to WGAC 2.0 AA³⁸ accessibility standards and supports keyboard only navigation, zooming in and out and using a screen reader.

The aim of the "Digitization of the Cultural Heritage 2018-2023 Action Plan" is to increase the awareness of the population and the use and reuse of digitised cultural heritage for business services, as well as improving the efficiency of the services provided by memory institutions and increasing satisfaction related to the quality of the public services.

The Estonian Library for the Blind³⁹ publishes, produces, collects, stores and lends audio and Braille literature, tactile books and other materials in the available form for the print disabled people. Braille production includes mainly fiction for adults, children's literature and popular science literature. Since September 2008 patrons can order on-demand audio books and e-books. The selection of on-demand audio books and e-books is limited because the character of recordings has to be digital and comply with copyright law. In April 2012 the Estonian Library for the Blind created the system Veebiraamatukogu⁴⁰ for downloading and streaming audio and e-books, newspapers and journals.

Within the Language Technology Research and Development Programme "Estonian Language Technology 2018-2027" speech synthesis interfaces for screen readers for the blind, smartphone applications, generation of e-books and reading subtitles in digital television network have been developed, in collaboration with Estonian Public Broadcasting and the Estonian Association for the Blind.

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

One of the objectives of the Lifelong Learning Strategy 2020⁴¹ by the Ministry of Education and Research is to contribute to the more expedient and effective use of modern digital technology upon learning and teaching and to improve the digital competence of the entire population. In essence, the digital focus means a knowledgeable and smart study process, integrating digital opportunities and culture into the process, enriching thereby studies, taking into better consideration the needs of the present learners and contributing to meeting labour market needs. The following actions have helped to promote and facilitate ICT literacy in Estonia:

1. Maintaining a constantly up-to-date electronic environment for learning and teaching that provides teachers with class teaching materials and pupils with the opportunity to learn and complete homework tasks independently, e.g.:
 - ELIIS⁴² is an online software solution that provides innovative and digital solutions for pre-schools and kindergartens to organize their daily work. 50% of kindergartens use this system.

³⁶ <https://www.riigiteataja.ee/en/eli/ee/514112013001/consolide/current>

³⁷ <https://www.eesti.ee/et/>

³⁸ <https://www.w3.org/TR/2008/REC-WCAG20-20081211/>

³⁹ <http://www.epr.ee/sisu/index.php?lang=2>

⁴⁰ In English 'Web library'; <http://www.veebiraamatukogu.ee/en/>

⁴¹ https://www.hm.ee/sites/default/files/estonian_lifelong_strategy.pdf

⁴² <https://www.eliis.ee/>

- The two most widely used web applications for schools in Estonia are e-Kool⁴³ and Studium⁴⁴. 85% of Estonian schools use e-School system that provides an easy way for parents, teachers and children to collaborate and organize all the information necessary for teaching and learning.
 - For general education, vocational education and higher education institutions the learning environment Moodle⁴⁵ is one of the most widely used learning management systems in Estonia that supports community-based learning over the Internet and is suitable both for the creation of online courses and for supporting classroom teaching.
2. Developing educational materials and making them available online, e.g.:
 - *Koolielu*⁴⁶ is an integrated educational portal that contains news, advertisements of pedagogical courses, educational materials, etc. The portal targets teachers at all levels of education.
 - *E-Koolikott*⁴⁷ is an environment initiated by the Ministry of Education and Research and it contains preschool, basic, general and vocational education materials. It comprises digital learning material arranged by keywords on the basis of the curriculum and its primary purpose is to allow free access of digital learning materials from a single portal.
 3. Working on educational modules for teachers to give them an understanding of ICT tools and necessary skills to use them.

In 2012, the Ministry of Education and Research initiated the ProgeTiger program⁴⁸ with the aim to increase the technological literacy and digital competences of learners so that conscious and smart integration of digital opportunities into studies could actually take place by 2020 also in the smallest schools of the furthest villages. More than 4,100 teachers have participated in trainings. The ProgeTiger technology program had affected 85 percent of Estonian schools and 44 percent of kindergartens with its activities by 2018. Equipment in the amount of more than 830,000 euros has been purchased to 446 schools and kindergartens for teaching robotics, programming, 3D modelling as well as multimedia and attention has been paid to increasing the teachers' technological literacy.

In 2013, the Information Technology Foundation for Education (HITSA)⁴⁹ was established by the Republic of Estonia, the University of Tartu, Tallinn University of Technology, Eesti Telekom and the Estonian Association of Information Technology and Telecommunications. The role of HITSA is to ensure that the graduates at all levels of education have obtained digital skills necessary for the development of economy and society and the possibilities offered by ICT are skilfully used and help to improve the quality of learning and teaching at all levels of education.

In 2018 the "e-Community" project funded by the Ministry of Economic Affairs and Communications and supported by the European Social Fund "Increasing Digital Literacy" continued. By the end of 2018, BCS Koolitus and the National Library of Estonia trained 670 out of 1000 librarians to instruct citizens in using public and private e-services.

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.

In addition to answers 3.1.a, 3.1.b and 3.1.c, Estonian Open Government Data Portal⁵⁰ provides access or links to datasets to enable the reuse of unrestricted public sector data by general public.

⁴³ In English 'e-School'; https://ekool.eu/index_en.html

⁴⁴ <https://studium.com/>

⁴⁵ <http://moodle.hitsa.ee/>

⁴⁶ In English 'School life'; page available only in Estonian: <https://koolielu.ee/>

⁴⁷ In English 'e-Schoolbag'; <https://e-koolikott.ee/>

⁴⁸ <https://www.hitsa.ee/it-education/educational-programmes/progetiger>

⁴⁹ <https://www.hitsa.ee/>

⁵⁰ <https://opendata.riik.ee/>

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 adaption 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 favourable conditions applied for marginalised groups, such as persons with disabilities.

Estonia as an EU Member State must keep its legislation, including copyright related legislation, in line with EU law. Therefore during recent years, 3 directives have been transposed (directive 2012/28/EU on certain permitted uses of orphan works⁵¹, directive 2014/26/EU on collective management of copyright and related rights⁵², directive (EU) 2017/1564 on certain permitted uses for the benefit of persons who are blind, visually impaired or print-disabled⁵³) and two regulations ((EU) 2017/1128 on cross-border portability of online content services⁵⁴ and (EU) 2017/1563 on the cross-border exchange of accessible format copies for the benefit of persons who are blind, visually impaired or print-disabled⁵⁵) become to force. All of the named amendments also correspond to the changes in digital environment. The latest instruments (so called Marrakech directive 2017/1564 and Marrakech regulation 2017/1563) also help certain stakeholders (blind and visually impaired persons) to benefit more effectively from limitations and exceptions. Those amendments to EU law derive from an international treaty⁵⁶ and therefore give broad and uniform protection also outside EU, in 3rd countries. Most recent amendments in EU law are currently being discussed in the EU institutions, those include a variety of different questions aiming to make EU copyright legislation meet the challenges of the digital era even better⁵⁷.

The assurance that limitations and exceptions are applied is given *via* detailed norms in our Copyright Act⁵⁸, Law of Obligations Act⁵⁹ and enforcement system (Code of Civil Procedure and Penal Code).

⁵¹ Directive 2012/28/EU of the European Parliament and of the Council of 25 October 2012 on certain permitted uses of orphan works.

⁵² Directive 2014/26/EU of the European parliament and of the Council of 26 February 2014 on collective management of copyright and related rights and multi-territorial licensing of rights in musical works for online use in the internal market.

⁵³ Directive (EU) 2017/1564 of the European Parliament and of the Council of 13 September 2017 on certain permitted uses of certain works and other subject matter protected by copyright and related rights for the benefit of persons who are blind, visually impaired or otherwise print-disabled and amending Directive 2001/29/EC on the harmonisation of certain aspects of copyright and related rights in the information society.

⁵⁴ Regulation (EU) 2017/1128 of the European Parliament and of the Council of 14 June 2017 on cross-border portability of online content services in the internal market.

⁵⁵ Regulation (EU) 2017/1563 of the European Parliament and of the Council of 13 September 2017 on the cross-border exchange between the Union and third countries of accessible format copies of certain works and other subject matter protected by copyright and related rights for the benefit of persons who are blind, visually impaired or otherwise print-disabled.

⁵⁶ Marrakesh Treaty to Facilitate Access to Published Works for Persons Who Are Blind, Visually Impaired or Otherwise Print Disabled (WIPO, 2013).

⁵⁷ Proposal for a Directive of the European Parliament and of the Council on copyright in the Digital Single Market and Proposal for a Regulation of the European Parliament and of the Council laying down rules on the exercise of copyright and related rights applicable to certain online transmissions of broadcasting organisations and retransmissions of television and radio programmes.

⁵⁸ Text in English available: <https://www.riigiteataja.ee/en/eli/527112018001/consolide>.

⁵⁹ Text in English available: <https://www.riigiteataja.ee/en/eli/508082018001/consolide>.

As to Open Access policies, Estonia has transposed the directive of re-use of public sector information⁶⁰. Relevant amendments can be found in our Museums Act⁶¹, Archives Act⁶², Public Libraries Act⁶³, National Library of Estonia Act⁶⁴. The aim of the directive is to encourage Member States to make as much material held by public sector bodies available for re-use as possible. This year, amendments were proposed aiming to adapting the directive to the recent developments in the field of data management and use. The overall objective is to contribute to the strengthening of the EU's data-economy by increasing the amount of public sector data available for re-use, ensuring fair competition and easy access to markets based on public sector information, and enhancing cross-border innovation based on data.

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.

As an example, all basic components and prototypes developed with the support of the Language Technology Research and Development Programme "Estonian Language Technology 2018-2027" are publicly available and usually without any restrictions.

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?

Information society development activities are planned in relevant national strategies. When designing those strategies internationally agreed goals and commitments are taken into account. Afterwards monitoring and benchmarking is performed against national strategies.

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.

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.

The main sources of information used in compiling this report are indicated throughout the report.

⁶⁰ Directive 2013/37/EU of the European Parliament and of the Council of 26 June 2013 amending Directive 2003/98/EC on the re-use of public sector information.

⁶¹ Text in English available: <https://www.riigiteataja.ee/en/eli/509032016002/consolide>.

⁶² Text in English available: <https://www.riigiteataja.ee/en/eli/504032016002/consolide>.

⁶³ Text in English available: <https://www.riigiteataja.ee/en/eli/507122017002/consolide>.

⁶⁴ Text in English available: <https://www.riigiteataja.ee/en/eli/504032016003/consolide>.