

N N G e - m e e t i n g

Riga, 15 April 2021

Programme

Start at: 8.00 (UTC+00:00) GMT Reykjavik
10.00 (UTC+02:00) CEST Copenhagen, Oslo, Stockholm
11.00 (UTC+03:00) EEST Helsinki, Riga, Tallinn, Vilnius

Zoom link: <https://zoom.us/j/94020210563>

EEST time	11.00 - 18.00	
11.00 – 11.15	Welcome / start-up	
11.15 – 12.15	COUNTRY REPORTS <ul style="list-style-type: none">• Denmark• Finland• Iceland• Sweden	Each country 10 + 4 min
12.15 – 12.30	Break	
12.30 – 13.45	COUNTRY REPORTS <ul style="list-style-type: none">• Norway NLN• Norway Unit• Estonia• Lithuania (short introduction)• Latvia	Each country 10 + 4 min
13.45 – 14.30	Break	
14.30 – 16.00	DISCUSSIONS	
	Project results on cooperation in cultural heritage domain between memory institutions; library data on Wikidata	Eduards Skvireckis
	RDA – Implementing the new RDA Toolkit	Hilde Høgås
	Experience of Share VDE project	
	Interlibrary-Loan	Asbjørn Risan
16.00 – 16.15	Break	
16.15 – 18.00	DISCUSSIONS	
	Criteria for compiling publishing statistics	Elza Ungure
	The impact of Covid-19: experience, lessons learned, success stories	
	Invitation to join NNG (procedure)	Experienced NNG members
	NNG meeting 2022	
	Wrap-up	

NNG annual meeting

Riga - April 15, 2021 - Zoom platform

Meeting minutes

A total 34 participants took part, including 2 participants from guest organisations*.

Country	Institution	Name
Estonia	National Library of Estonia*	Kadi Mälton
Denmark	Danish Bibliographic Centre	Hanne Hørl Hansen Line Jung Lindhard
	Royal Danish Library	Leif Andresen
Finland	National Library of Finland	Marja-Liisa Seppälä Osma Suominen Riitta Koikkalainen Nina Hyvönen Juka Hakala
Iceland	National Library of Iceland	Ragna Steinarsdóttir
	Consortium of Icelandic Libraries	Sigrún Hauksdóttir
Latvia	National Library of Latvia	Anita Goldberga Maira Kreislere Eduards Skvireckis Uldis Bojārs Elza Ungure Ilva Āķe Jogita Sauka Dita Leitāne Anita Rašmane Lilita Rašmane Inta Virbule
Lithuania	Martynas Mažvydas National Library of Lithuania*	Roma Stabrauskienė
Norway	National Library of Norway	Hilde Høgås Kjersti Rustad Trine Anita Adolfsen Frank Berg Haugen Oddrun Pauline Ohren Frank Haugen
	Unit	Asbjørn Risan Erling Fossan Anita Elleras
Sweden	National Library of Sweden	Miriam Björkhem

1. Welcome round

2. Country Reports

2.1. Denmark

- 2.1.1. There is no consensus on funding sources for RDA implementation in Denmark as RDA implementation will be a national scale transition involving public libraries and scientific libraries both and it will affect national bibliography as well. A political decision on the introduction of RDA is awaited.
 - 2.1.2. There are concerns about the utility of implementation of new RDA: when it was decided to implement RDA and to relinquish the Danish cataloguing rules based on AACR, RDA was a practical guide but has since become a theoretical network. A strategy is being developed on limited RDA implementation in areas where benefits are seen (e.g. authority data), but there are no noticeable benefits of implementing RDA in manifestation records.
 - 2.1.3. Danish Bibliographic Centre was able to work successfully during the pandemic as typically all employees have access from home, and there was a successful previous logistics experience. As the result, there were no production delays.
 - 2.1.4. The number of new records for the national bibliography in 2020 was the same as in 2019. There was a slight decrease in number of printed books.
 - 2.1.5. A strategy is being developed for a new way of looking at the library metadata: the approach to the creation of library metadata is taken from the creation of the national bibliography, meaning that certain standards must be met, and is objective. There is nonetheless a discussion on metadata for the public since, for example, in Covid-19 situation patrons were forced to choose resources by themselves without any help from librarians. When producing metadata, librarians have to think in terms of user needs to make metadata more appealing to them. There is an ongoing process of adding metadata to formal records to keep up the system.
 - 2.1.6. A website Buggi.dk was launched where reading recommendations are available for adults and children. The recommendation system is based on the level of difficulty, reading experience, type of literature (e.g. romance, fiction), etc. and expressed through emojis (less text) to make finding a book easier and to encourage reading.
 - 2.1.7. A long-planned AI project has been launched to compare manually assigned subject headings to subject headings assigned by an AI tool to deliver the best result to a user.
 - 2.1.8. The introduction of the systems Alma and Primo continued. The new system Leganto has been introduced by the Royal Danish Library since the last NNG meeting.
 - 2.1.9. The movement towards a consortium continued: 6 out of 8 universities have joined the system and till the end of 2021 more education institutions will be included.
 - 2.1.10. The book processing was delayed due to the pandemic in the Royal Danish Library but as of April 15, 2021 the library staff had already started working on-site part-time.
 - 2.1.11. The Royal Danish Library has concluded an agreement with Elsevier on behalf Danish institutions to provide easier access to research publications for Danish researchers and universities.
- Q:** Did the Royal Danish Library have any problems merging Aleph installations with Alma? How successful were the tests loads to Alma?
- A:** In spring 2021, the Royal Danish Library finished the first part of merging the records of titles using the Alma feature for merging records with the same OCLC number (field 035). Several hundred thousand records have been merged already. As different libraries had different tradition of cataloguing, there is a necessity for different kinds of clean-up and it will be a long-term process.

2.2. Finland

- 2.2.1. The National Library of Finland has a new strategy which supports the goal of the Ministry of Education and Culture of serving individuals and society. The strategy is available online: <https://www.kansalliskirjasto.fi/en/news/equality-responsibility-and-strengthening-societys-knowledge-base-are-the-national-libraries>.

2.2.2. The situation of the library system in Finland:

There are 17 scientific libraries in Finland (including the National Library of Finland) which use Koha as the library system, Finna as a user interface and Melinda as a description environment.

Some of the former Voyager libraries have now started the implementation of Alma. First Alma libraries have been in production since December 23, 2019 and the rest since August 2020. So far there have been no major problems with the introduction of the Alma system and the National Library of Finland is not involved in this process, the libraries do it themselves.

- 2.2.3. The National Library of Finland is developing an open-source tool Annif for automated subject indexing and classification. It is a framework where different algorithms for text classifications can be plugged in. It is designed to be multilingual and it can support any subject vocabulary.

A team of 3 persons has been involved in the development of Annif. New algorithms have been evaluated and integrated together with the CSC. The quality of the automated subject indexing has improved. Finto AI service for API has been launched and integrated into several systems. YSO vocabulary is already being used and other vocabularies are being tested. The system and the service are being integrated into many systems (e.g. document repositories for several university libraries).

A community of users is emerging in Finland and abroad, tutorials, a user forum and user documentation are created. Potential users include various organizations in Finland and abroad.

- 2.2.4. In the end of November 2020, the National Library of Finland published the National Library of Finland's name authorities in KANTO – Finnish Agent Data open data (<https://finto.fi/finaf/fi/>). In KANTO one can, for example, find different forms of agents' names and identifiers (ISNI, ORCID, business identity code). An important aspect of KANTO is linking authors to their publications. By publishing authorities as open data, the data can be used more widely outside of libraries, for example in public or private business sector to improve copyright management. KANTO is under CC0 license.

- 2.2.5. An updated translation of the new RDA will soon be published. Most of the policy statements are finished and published on the website of the NLF. Finnish policy statements have to be published also on CMS of RDA toolkit; it will take the rest of 2021 to publish all the documentation there.

- 2.2.6. The National Library of Finland uses centralised long term digital preservation system hosted by the Finish Centre for Scientific Computing. The system is also used by a large number of other organizations: archives and museums. The system has concentrated on bit level presentations (technically not very advanced). It is expected to meet the functional requirements for document migration in near future. The plan is to wait for a more detailed design and then carry out the actual implementation in 2022.

2.3. Sweden

- 2.3.1. The National Library of Sweden is in the process of a major reorganization. It affects all bibliographic areas and the focus is on metadata standardization and coordination at the level of the Library and also nationally.

Due to changes in the organizational structure, it is now possible to work more closely along with cataloguers during the practical work of creating the national bibliography (before the metadata division was part of the IT department, which allowed for close cooperation with developers). The new organization enables us to combine practical and more theoretical metadata work and to put more effort into the legal deposit matters, where there is a need for more attention to coverage control and collection requirements.

With regard to the metadata shift, there is a move towards less manual work and more automation. In order to achieve that, developers, cataloguers and standards have to be brought together. In this context, in addition to the metadata representative, representatives for national infrastructure Libris and KBLab are also expected to attend the NNG meeting in 2022.

- 2.3.2. Umbrella project *Metadata Shift* is meant to create a link between the work in the KBLab and the activities of smaller projects, which helps to eliminate manual procedures and make more use of available automated means.

KBLab: successful work in the field of AI – metadata are created with good results for resources that do not have any metadata at all (e.g., audiovisual material etc).

<https://www.kb.se/in-english/research-collaboration/kblab.html>

- 2.3.3. The development of the national infrastructure Libris continues. Libris is based on BIBFRAME and linked data. It is not a project anymore and the focus is on identifying priorities for development needs.
- 2.3.4. Sweden are using RDA for most of the manual cataloguing. The implementation of the updated RDA will be formulated and performed as a project, which has not yet started. With the movement towards the linked data, there is a hope that RDA will be the connecting element for the whole bibliographic world. The RDA implementation project will be launched in 2021.
- 2.3.5. With a new cataloguing tool and a new format there is a lot of need for training. If we can talk about the positive effects of Covid-19, it really forwarded the development of online tutorials. The Swedish library community is actively involved in learning and socializing: now we have to do it online increasingly more and Swedish librarians are getting better and better at it.

2.4. Iceland

- 2.4.1. In 2019, it was decided to implement the library system Sierra in Iceland, but when Innovative Interfaces was acquired by ProQuest in 2020 it was decided to discontinue working on the new discovery system (it was really one of the main reasons why the system Sierra was chosen). Negotiations were launched with Ex Libris and an agreement was reached.

Alma and PRIMO VE are currently being implemented in Iceland and it is a very busy time: the data architecture is being explored and the first data load is expected shortly.

- 2.4.2. Elsevier service for research is about to be implemented in the National Library of Iceland in the nearest future.
- 2.4.3. The National Library of Iceland negotiates services providing access to electronic resources for the whole country. Last year it was decided to discontinue EBSCO as it overlaps with many other databases and electronic journals and due to unavailable metadata resource is not accessible through PRIMO.
- 2.4.4. The Library worked on the data policy for several databases which the Library runs, for example, digitized journals (a popular website in Iceland as it is accessible remotely). Publishers pay for the digitization of their own material, but the National Library of Iceland has to coordinate metadata.
- 2.4.5. Another important area of work concerns open access issues (metadata policies, open access policies for the University).
- 2.4.6. The National Library of Iceland has implemented RDA already in 2016.
- 2.4.7. During the Covid-19 pandemic, the Library was closed to the public for a month. The staff was able to work nonetheless: a few people at a time on the Library premises, but the most of the people working remotely. Covid-19 has not affected the number of publications.
- 2.4.8. Iceland has some distinctive characteristics. There are around 300 libraries and all of them will be connected within the same system; Alma seems to be able to provide that. Additionally, almost 1/3 of the database consists of analytical records – journal articles, book chapters, songs from musical records –, which does not seem to be a problem for Alma either.
- 2.4.9. There is an insurmountable problem with Icelandic names: Alma does not provide a solution for name components. I.e., Icelandic names have to be put in 3 separate subfields: first name, middle name and patronymic or family name. In Alma, they would go in a single subfield. The system will not be able to comply with this sorting order if all name elements will be in the one subfield since the Icelandic name order is rooted within the culture; for example, a phone book is compiled by first name, and inverted names have never been used.

Q: Question on Alma implementation in Iceland: is the idea to have a local database or shared data with other Alma users?

A: There will be local databases (institutional), not a network.

The system architecture consists of one network zone and 9 institutional zones. The network zone consists of the Union Catalogue, the Icelandic Authority Data and the Icelandic Consortium for Electronic Subscriptions, www.hvar.is. The National Registry resides as well in the network zone in order to make basic patron information available.

The libraries reside in the 9 institutional zones. Cataloguing will be done in the network zone and synchronized to each of the institutional zones which will have their own bibliographic databases.

Q: Are there authority records created and linked to bibliographic records?

A: There is an authority database for Icelandic names mostly.

This is the problem if working with Alma: there is no possibility to update the authority records for names unless all name elements, a whole name string is in one single subfield *a*.

2.5. National Library of Norway

- 2.5.1. There will a tender start for a new system shortly to replace the outdated audio-visual archival system Mavis. The needs and the market is currently analysed and detailed requirements for the system are being defined. The aim is to decide on the new system by the end of 2021. Metadata migration and the implementation of the new system will be a long-term process.
- 2.5.2. Norwegian genre and form thesaurus has been launched in collaboration with the Biblioteksentralen SA and Bokbasen AS. The collaborative negotiations have resulted in a common list of terms used in thesaurus (terms in Norwegian and English linked to the Library of Congress Genre Form Terms). The thesaurus has been launched within a new service – the National Library vocabulary service based on SKOSMOS – and it works very well.
- 2.5.3. The number of legal deposit copies in Norway has not changed much in comparison with the figures for 2019: the number of books is unchanged, while the number of periodicals exhibits a small decrease.

The main focus is on the digital legal deposit since, according to the Legal Deposit Act, digital publications and digital printing files both are subjects of the Law. The National Library of Norway is in the process of establishing the workflows for digital files in addition for physical objects. Workflows for sound recordings, newspapers and other periodicals have already been implemented.

- 2.5.4. An agreement has recently been signed with one of the largest distributors of e-books and digital audiobooks in Norway to deposit digital printing files for printed books in addition to e-books and audiobooks, including a minimum set of metadata for each publication.
- 2.5.5. A form was launched on the website earlier in 2021 where smaller publishers can upload and deposit monographs.
- 2.5.6. The work on creating an authority file for original works has been going on for several years now, through participation in Share-VDE during the past couple of years. Share-VDE is a library driven collaborative project, originally an American initiative but lately several European national libraries – the British Library, the National Library of Finland, and the National Library of Norway – have joined too. The project is coordinated by the Italian company Casalini Libri. The main purpose of the project is to establish a data processing workflow along with an infrastructure. The data processing takes place by gathering metadata records in MARC and BIBFRAME and generating federated linked data. In recent years, the focus has been on a new data model in Share-VDE: BIBFRAME extended by RDA work concept OPUS (as BIBFRAME does not have work concept). In 2021, the focus is mainly on the discovery platform and less on the revisions of the algorithms for retrieval of entities and the data model.
- 2.5.7. AI-lab of the National Library of Norway carries out experimental AI related activities including automated classification according to the Dewey Classification System. The training data have been identified and are ready for use in the experiment. The results are not yet known. Experiments in automated classification will be based on the Transformer Model for the Norwegian language. The goal is to assess whether better results will be delivered than if traditional machine learning algorithms would be applied.

2.6. Unit

- 2.6.1. In January 2021, the government decided to split the Unit into two parts: a directorate for strategic planning and a new agency for the delivery of services to the sectors. The library services will be part of the service delivery agency. The library services will not experience a lot of change directly, but there will potentially be a new name and a logo. The directorate will be established in July 2021 and the service delivery agency will be established in January 2022.
- 2.6.2. Alma has been in use since 2016. In general, the system covers the needs of the consortium. The need for support is decreasing, but the support received is more complex than in the beginning.
- 2.6.3. RDA was introduced by the consortium in 2019 and the main work of implementation was done by the National Library of Norway. The Unit is taking part in a project led by the University of Oslo to investigate entity-based cataloguing. The project is funded by the National Library of Norway.
- 2.6.4. The contract for the current library system is approaching its end. Hence, during 2021 a user satisfaction survey will be carried out to identify the weaknesses and to define a baseline for actions after the end of current contract.
- 2.6.5. The discovery and delivery tool is based on Primo delivered by Ex Libris. The main areas of focus in 2020 were universal design and provision of the service in line with the new legislative requirements. The work will continue in 2021.
- 2.6.6. The work on the National open access repository NVA was started back in 2019 with the pilot launched in 2020. Now, more functionality is being added to the system. According to the project plan, the majority of the institutions will start migrating to NVA from the local repositories during the second half of 2021.
- 2.6.7. During 2019-2020, a project "Masterdatakilder" (Master Data sources) was conducted by the Unit. The project was delayed for various reasons during 2020 but will be restarted in 2021. The main goal of the project is to establish a new generic metadata platform and support research process. The Unit hopes to report the results of the project in the NNG meeting 2022.
- 2.6.8. During the Covid-19 pandemic, the Unit has been operating almost as normal, except the work is performed from home. Libraries are temporarily physically closed, but the systems provided by the Unit have helped institutions to manage the situation quite well.
- 2.6.9. There is a focus on the functionality of Interlibrary-Loan (ILL) and integration with external systems, in particular in relation to article delivery. A shortcoming was identified during the pandemic: there is a need for the ability to send articles and copies of documents directly to end users without giving them the access to a physical copy, but there are legal obstacles to this.

2.7. Estonia

- 2.7.1. The National Library of Estonia holds the role of a national library, a parliamentary library, a research library, a development centre for librarianship and a cultural centre.
- 2.7.2. One of the tasks of the National Library of Estonia is to collect legal deposit copies. The new Legal Deposit Copy Act came into force on January 1, 2017. Pursuant to the Legal Deposit Copy Act, in addition to 4 copies of each printed publication publishers must also submit output-ready files of printed publications and films.
- 2.7.3. The Publisher Portal was launched in December 2016. Through the Portal publishers can inform the National Library of Estonia about their new publications and apply for the international standard numbers ISBN, ISSN and ISMN. The Portal also makes it easier for publishers to submit e-books and output-ready files of books for archiving, to manage the legal rights of their publications, and to view the statistics on the use of their publications.
- 2.7.4. The National Library of Estonia and the Consortium of the Estonian Libraries Network is in the process of RDA implementation:
 - 2.7.4.1. Since 2017, authority records are submitted to VIAF.
 - 2.7.4.2. Since 2020, new authority records for persons are created according to RDA.
 - 2.7.4.3. The RDA Registry is translated into Estonian but has not yet been published on the official website.
 - 2.7.4.4. It is planned to implement reviewed rules for corporate bodies in November 2021.
 - 2.7.4.5. It is planned to implement RDA for printed monographs in 2021.
- 2.7.5. The Estonian National bibliography database ERB is a separate database comprising retrospective and current national bibliography. There is a plan to launch the national bibliography data as a subset of the joint catalogue ESTER in 2022. Catalogue ESTER is a shared catalogue of the largest libraries in Estonia (3.3 million titles).
- 2.7.6. An analysis of modernisation of the library system in Estonia took place in 2018-2019 and revealed a picture of a very resource-draining situation of more than 800 libraries per 1.3 million people with 3 different library systems in use. Suggestions were made to implement a single common library system for all Estonian libraries. Thus, customer needs and hopes regarding the use of a library catalogue as well as costs of a common library system (licences, implementation, management) are currently being explored. The project is in the business analysis phase as of the time of the NNG meeting 2021.
- 2.7.7. There is an AI strategy in Estonia since 2018 and various AI projects are implemented. Work began on prototypes of two services for the Estonian National bibliography in 2019: Automatic Subject indexing/tagging (inspiration from Annif (Finland)) and Ask a Librarian chatbot. Both prototypes were successful and the development will continue also in 2021.
- 2.7.8. A state of emergency was declared in Estonia in the middle of March 2020. The Library was able to react quickly and continued to provide basic services. When the reading area was closed, the Library moved online and started to provide contact-free services (e.g., self-service Book Dispenser, video consulting, etc.).

2.8. Lithuania

- 2.8.1. The National Library of Lithuania (NLL) is performing its mission – to be Lithuania's knowledge space creating value for the society. The NLL plays a significant role in the fields of the national documentary heritage preservation, mainstreaming and integration into the areas of the European cultural heritage. The NLL creates value for various society groups not only ensuring the access to the documentary heritage published in Lithuania and global knowledge, but also providing the spaces for work and cooperation, by arranging events, developing educational activity for families, the youth and older people, increasing their cultural experience, social integration and competitive ability in the labour market.

By concentrating the information competences NLL to provide conditions and possibilities for all service users to take information-based decisions, to encourage information studies and creation of information products. The concentration of information competences has to ensure the use of information as strategic resource of all society activity area development.

- 2.8.2. The Online Catalogue of the National Library provides information on documents acquired by the Library: Lithuanian books, books in foreign languages, printed music, maps, periodical and continuing publications, audio CDs, and e-resources.

The Union Catalogue of the Lithuanian Integrated Library Information System (LIBIS) provides information on documents from the collections of 80 Lithuanian libraries.

The National Bibliographic Data Bank provides information on documents published in Lithuania and Lituanica documents.

The data bank of digital cultural heritage content from archives, libraries and museums provides access to digitized manuscripts, old books, newspapers and magazines, metrics and other most valuable national cultural heritage objects.

The Union Catalogue of the Lithuanian Integrated Library Information System (LIBIS) provides information on documents from the collections of 80 Lithuanian libraries.

Lithuanian publishers catalogue contains information on publishers of books, serials, music and electronic resources operating in Lithuania.

- 2.8.3. Publications of the national current bibliography prepared by the National Library are intended to provide bibliographic information on documents published in Lithuania, obtained on the basis of a legal deposit. National retrospective bibliographic publications (checklists, indexes) prepared by the National Library, Kaunas County Public Library, Wrublewski Library of the Lithuanian Academy of Sciences, Vilnius University Library are intended to provide bibliographic information on documents published in Lithuania in all languages and outside Lithuania and their parts before 1940. The Lithuanian national bibliography series are published according to the National Bibliographic Data Bank information.
- 2.8.4. Martynas Mažvydas National Library of Lithuania is a participant of the YIVO Vilnius Project ("The YIVO Vilna Collections Project"). The aim of the "YIVO Vilnius Project" is to create the largest digital collection preserving the historical memory of East European Jews.

- 2.8.5. The "Modernisation of the Lithuanian Library Information system" project is being implemented by the Library. The Lithuanian Library Information system LIBIS was established in 1997-2011. Since 2012, the system has been constantly developed. The new project provides modernisation of the functionalities for the library staff. There is a plan to connect Lithuanian libraries into a common information network and to create a joint LIBIS library catalogue. The new network will allow to create corporate cataloguing network and to use common resources to ensure data protection, updates and submission of data. The network will also allow to adapt the LIBIS interface to modern technologies and mobile services to create a network for data exchange between LIBIS and external information systems. In the modernized LIBIS system, UNIMARC will be used as the standard for the data structure to process all entities defined in the IFLA Library Reference Model (LRM). The implementation of the project will increase the efficiency of Lithuanian libraries.

2.9. Latvia

2.9.1. Amendments to the Law on the National Library (2020) define the role of the National Library of Latvia. There is an aspiration to prepare a completely new version of the Law in 2021.

2.9.2. Challenges of RDA implementation

2.9.2.1. In accordance with a decision in connection with the development of the national bibliography promoting entification and data enrichment, more access points for Active Agents have been made and a broader thematic coverage has been provided.

2.9.2.2. More detailed physical attributes of media, formats as well as characteristics of content (audio, video, images) have been made.

2.9.2.3. The relationships between different entities in bibliographic records need to be revealed, including Work to Work relationships, i.e., the connection between a film based on a literary work in that work's bibliographic record, for example.

2.9.2.4. The RDA standard was chosen as the base standard for creating person, family and corporate body entity data as part of the digital resource platform project for Latvian memory institutions (libraries, archives, and museums).

2.9.3. Authority data development

2.9.3.1. All new authority records of the national thesaurus (uniform titles, thematic subjects, geographical names and subjects of form/genre) have been supplemented with language codes and LCSH terms in English where possible as well as with links to external identifiers.

2.9.3.2. Bibliographic and authority data are ready to be moved to a web based system.

2.9.3.3. A solution has been found for creation of authority data for buildings and other objects with names (churches, residential buildings, cathedrals, manors, castles, lighthouses, railway lines, stations, vehicles, etc.). Now these entries are created as thematic headings or geographical name headings, not as corporate body authority records.

2.9.3.4. Relationship links between authority records (Linky MARC) have been established within the ALEPH database.

2.9.4. The Open Data Portal (<http://dati.lnb.lv/>) was created in 2021 in the framework of the project "Latvian Memory Institution Data in the Digital Space: Connecting Cultural Heritage".

The Ontology service of the National Library of Latvia has published the Library's thesaurus data set ontologies (genre/form ontology; geo ontology and subject authority ontology) as Linked Open Data (about 56 000 concepts) in the Open Data Portal.

2.9.5. Following the Finnish experience, in 2020, the first steps were taken to export the thesaurus data to SKOSMOS environment. Currently, it is possible to search the terms only in Latvian. In April 2021, preparatory measures were taken for automated addition of language codes to multilingual thesaurus terms. Identifying the attributes by which to distinguish different languages has proven to be a complicated process. Thesaurus data converted into SKOS ontology will be used on the open platform for Digital Cultural Heritage data of Latvian libraries, archives and museums.

2.9.6. National bibliography

2.9.6.1. The data set of the National Bibliography monographs 2017-2020 has been prepared in accordance with RDA and can now be published in the form of open linked data.

2.9.6.2. A solution has been introduced in PRIMO allowing to search the national bibliography data as a separate data set.

2.9.6.3. In 2020, form/genre facets were introduced in Primo. Display facets of form/genre objects as well as search functionality by form/genre terms is provided for music, visual resources, fiction and e-resources.

- 2.9.7. Scientific activities of the National Library of Latvia were evaluated in 2020 by the international auditors' company Technopolis Group and assigned a rating of 4 (out of a scale of 5) confirming good results in terms of the research quality, social and economic impact, research environment and the potential for development.

The main research directions of the NLL are knowledge organization and data creation, national authority data (including national thesaurus), data presentation and conversion into linked data and semantic web, a paradigm change regarding communication of scientific discoveries and research results (including digital publishing, open access, open data), digital cultural heritage, digitization, long-term preservation, language corpus and digitally created cultural heritage, literary and publishing studies.

- 2.9.8. In 2020, the National Library of Latvia in cooperation with the University of Latvia launched a project "Latvian Memory Institution Data in the Digital Space: Connecting Cultural Heritage". The aim of the project is to study and describe the potential for "semantic cooperation" of cultural heritage institutions in Latvia and to test particular models of knowledge management potentially applicable to the case of Latvia.

3. Discussions

3.1. Project results on cooperation in cultural heritage domain between memory institutions; library data on Wikidata

Eduards Skvireckis, National Library of Latvia:

The National Library of Latvia participates in the project “The Latvian Memory Institution Data in the Digital Space: Unifying Cultural Heritage”. One of the project tasks is to prepare and publish the Latvian national bibliography as linked open data. There are plans to publish the thesaurus and most of the authority data as linked open data as well. A data set of the national bibliography of monographs for the period 2017-2019 is already prepared in accordance with RDA and can be published in the form of linked open data.

The next steps include:

- establishing data model (something similar to Fennica);
- setting up a server and a user-friendly static webpage where sparkling queries with Spark SQL could be executed;
- providing downloadable RDF data.

After the national bibliography will be published in linked open data format, there will be two paths to choose from:

- 1) using LOD internally (annotations, data representation, data visualisation, data analysis, knowledge organization, etc.);
- 2) using LOD externally: connecting linked open data sets to servers of other institutions and using them internationally.

Using URIs from other data sets and connecting them would be the easy choice. It is essential to connect these data sets, but should we stop there?

Linked data on the Web exist in many shapes and forms, they can be published using RDF files in various syntaxes. Data sets can use different ontologies. Different forms of query linked web interfaces exist. If we want to have query linked data on the Web, we must be able to cope with data heterogeneity but neither all of us, nor the end users are capable of doing that.

How, then, could libraries and other memory institutions connect the data in a meaningful way? How could we make this universal knowledge base free to use by everyone and how could we ensure that all knowledge institutions could collaborate fulfilling the main role of libraries to serve as a bridge between knowledge creators and knowledge users?

There are two ways to address this conundrum:

- 1) to create some kind of a knowledge graph querying framework;
- 2) to participate in a common universal knowledge base to which Wikidata could be a potential solution.

Q: Have you considered putting bibliographic data, authority files, thesaurus on the Wikidata? Have you considered, have you done it, do you plan to do it?

The NLL has started to interact with Wikidata by mapping MARC fields to Wikidata properties and preparing data sets to upload into Wikidata. We are starting with person entities, but institutions, geographic thesaurus, thematic thesaurus and works will follow.

There are plans to map Wikidata properties to MARC fields and further to BIBFRAME ontology and RDA RDF ontology. The NLL sees Wikidata as a place where all data could come together and the end users could use all the data externally and analyse them in meaningful way.

Osma Suominen, National Library of Finland: There are some activities in this area in the National Library of Finland, more in relation to authority data. General Finnish ontology concepts (places, topics, general concepts) have been mapped to Wikidata using already existing mappings. The NLF has been mapping the Library of Congress Subject Headings for many years, so those mappings were used for indirect mapping: first from YSO to LCSH, then from LCSH to Wikidata. Several thousand potential mappings were elaborated that way. Similar mappings were obtained from broadcasting companies. All this work had to be done mainly manually. Mix'n'match tool provided by Wikidata community was used to produce some more mappings. Till now, only a fraction of YSO has been processed. Work authority would sort of be the most natural thing to map to Wikidata (the NLF does not have proper Work authorities yet).

The main ontology used in Canto is RDF. The NLF has published corporate name authority file on Finto service some years ago (person names were not included). It was a long process and there were lot of discussions about whether publishing name authority file for persons as open data is permitted because of the privacy issues and GDPR. Now, a permission from lawyers has been obtained and the data have been published.

The data model used is RDA with a small addition of SKOS to work properly in SKOSMOS. There is a summed application of information with RDA properties and with SKOS labels. Entities have a SKOS concept type and an RDA specific agent type both.

In SKOSMOS, one can use any classes and properties, not just from SKOS but anything, as long as the definitions of these properties and classes are included within the vocabulary data (the way RDA properties can work). Definitions from RDA files from the RDA Vocabulary service were used but the translations were not complete: labels in Finnish and Swedish would also be desirable.

There are also scripts in Canto for putting the data together and converting from MARC to RDF format. The scripts are available online:

<https://github.com/NatLibFi/Finto-data/tree/master/vocabularies/finaf>.

3.2. Experience of Share VDE project

Oddrun Pauline Ohren, National Library of Norway:

The Share VDE project is a large project with many participants and a meeting point of various opinions and different traditions; it is very collaborative and that is the challenge. There are working groups where libraries negotiate and define the project agenda.

Working with bibliographical data is a complicated issue. When dealing with MARC fields, we can influence the result, e.g., the conversion to other data models etc. Participation in the Share VDE project, on the other hand, is a different case since a consensus has to be reached and it is not always possible to influence what is determined as a priority.

The development of a discovery service for visualisation and editing of entities was set as the priority of 2021. Meanwhile, data clustering and processing were not priorities and therefore it is still unknown whether it will be possible to get high quality work entities from Share VDE. It is difficult to plan for the next stages of activities as negotiations take much longer than expected.

Osma Suominen, National Library of Finland: the NLF has the same goals and the same concerns. The NLF is mostly interested in data enrichment, which mainly motivated the involvement in the project. Unfortunately, the process is slow and a consensus must be achieved. Lately the main goal has been the development of a discovery interface, in which the NLF is not really interested in since Finland has already spent lot of resources building a custom discovery system for Finnish memory institutions FINNA and therefore is in no need for a discovery system of Share VDE.

Oddrun Pauline Ohren is involved in a working group that is developing an entity model. The working group has agreed on the need for an RDA work concept. Going beyond the limitations of a BIBFRAME work model was a good development on Share VDE part. While American libraries would like to stick with BIBFRAME, the new developments have to comply with the regular BIBFRAME but also the new model.

Q: Could the fact that every library joins a project with different goals lead to the loss of the highest goal?

Oddrun Pauline Ohren, National Library of Norway: Participation is strongly encouraged by the Casalini Libri coordinators: they are contacting people and trying to get new members. The National Library of Norway clearly stated its agenda after having many internal discussions. As there were not too many options for obtaining work authority file, the NLN decided to join. There is an annual membership fee and everyone has a right to leave the consortium.

There are varying agendas. Original participants, American academic libraries are more united all working in the BIBFRAME sphere. When Europeans joined with the RDA model, there was a need for some extension and it caused a lot of discussions. Hence, the need for an extra entity was evident already before the NLN joined the project (at that time it was called Superwork).

Osma Suominen, National Library of Finland: A big motivation for participation for the NLF is staying in touch with the BIBFRAME community (users, adopters) as there are just a few big players in the BIBFRAME world. It is an opportunity to see where it is going and to influence it by expressing our concerns and requirements.

Oddrun Pauline Ohren, National Library of Norway: Another reason for joining the project for the NLN was the Entity management tool J.Cricket. Share VDE was planning to develop a linked data editor but so far the entity management tool J.Cricket does not yet exist. It was clear that some changes would be needed in the data. It was planned that the editing facility would be integrated into the discovery tool, i.e., that it would not be an isolated tool. Users of the discovery tool have to be authorised and it will be possible to edit linked data directly within the discovery tool. It makes sense to integrate the facility; the search, navigation and visualisation requirements are practically the same for the users of the editor and the discovery tool. It was decided to merge the tools, but the editing facility will be added after the search facility.

3.3. RDA – Implementing the new RDA Toolkit

Trine Anita Adolfsen, National Library of Norway:

RDA are the official cataloguing rules in Norway. It was decided to translate RDA into Norwegian for use by cataloguers.

Since RDA was restructured during the new RDA3R project, the challenge is to move forward as RDA has transformed from a set of rules into a framework describing the entity model with the LRM concepts incorporated. Therefore, there is a need for guidance, templates and a lot of training and tutoring for the cataloguers.

In 2021, the NLN has developed national guidelines as a base for other institutional libraries and there are plans to set up working groups for cataloguers to identify where extra effort should be put in.

Q: Where are you in development, planning, using the new RDA toolkit. Have you been planning to take on this task?

Marja-Liisa Seppälä, National Library of Finland: At the National Library of Finland the new RDA toolkit has been translated and a lot of policy statements are being prepared together with the national expert group of Finnish libraries. Most of the colleagues have admitted that the new RDA is difficult but not impossible to implement. The new RDA has the same text, but the structure is different and difficult to navigate.

There is an active library network of cataloguers in Finland and these expert groups help a lot with the implementation of RDA. Several application profiles and workflows have already been elaborated based on the MARC21 format and they are very useful for cataloguers as they don't have to use the new RDA directly.

We can agree with the Norwegian colleagues that the implementation of the new RDA is a challenge. It is obvious that we require a new kind of training and instructions to help cataloguers to navigate the new RDA toolkit. There are training sessions planned next spring and the implementation will then follow in 2022-2023. It is necessary to understand and to get really into the entity-based model in order to explore the actual needs for tutoring as cataloguers are accustomed to using the MARC format.

Q: What about the language of the new RDA? It seems “constructed” and difficult to understand.

Trine Anita Adolfsen, National Library of Norway: It is very “constructed”, fragmented and it describes a model (i.e., it is not an instruction of where to start and what the next step will be) – this is a challenge. This is why there is a need to develop guidelines and policy statements, workflows, a description from top to bottom. There is much more work than apart from the actual implementation of the RDA rules.

Hanne Hørl Hansen, Danish Bibliographic Centre: The idea and the potential of RDA is to change the data model and to leave MARC at some point. Reliance on MARC is a striving backwards and could be dangerous.

Eduards Skvireckis, National Library of Latvia: Somehow RDA has turned from a standard of content into a data model. We are talking about RDA RDF and still using MARC. Actually, RDA is proposing that we move away from MARC to some other environment but we don't have it yet (North America has Synophia or BIBFRAME – a linked data environment where one can create bibliographic data – it started out as an experiment but is now integrating RDA). It is difficult for cataloguers to understand how to use RDA in the MARC environment.

Trine Anita Adolfsen, National Library of Norway: It's hard to imagine still using MARC as a data format in 10 years, but for now we have to deal with it. MARC21 is technically not able to present the RDA data model, thus it is confusing and difficult to give any guidance and to present the data model in MARC format. It is difficult to read RDA “through MARC glasses”.

Maira Kreislere, National Library of Latvia: RDA is easier to understand for specialists who create authority records. In the NLL, we make interlinked connections with other entities in authority data, for example, person's connection with an institution or with works. There we can see the value of RDA, not so much in bibliographic data. In 2021, we started to make some relationships between two bibliographic records, for example, if a film is based on a literary work. We decided to implement relationship designators in bibliographic records. I agree, RDA is more of a data model than a set of cataloguing rules. We started implementing RDA in 2017 beginning with a translation of the vocabulary and the glossary into Latvian. The RDA implementation started with bibliographic records of monographs. We are now moving through serials, analytics and audio-visual materials and there we are faced with more difficult cases because it is difficult for cataloguers to understand the connections between entities.

Hanne Hørl Hansen, Danish Bibliographic Centre: If we all have concerns about the lack of guidelines, there is need for a stronger collaboration in the NNG area to deliver the message to EURIG (the European RDA Interest Group) to create such base guidelines and application profiles.

3.4. Interlibrary-Loan

Erling Fossan, BIBSYS Consortium, Norway: The BIBSYS consortium is facing legal restrictions from licensing vendors. Within the ILL service, articles cannot be electronically delivered to the end user, printouts have to be made and users have to pick them up or printed articles have to be sent to end-users via mail instead. It is due to the licence terms: there are restrictions on the electronic delivery of articles.

The most interesting model would be delivering an article to an end-user directly using the ILL. Using the ILL to order articles is difficult for libraries outside the consortium (abroad) as the integration with other library systems is lacking. So the shortcomings we face with the ILL are both legal and technical. Due to the restrictions, libraries may turn to paid services, e.g., CCC Get It Now and Subito, to provide quick delivery.

RapidILL from Ex Libris could also be an option. It is sort of a hub service database, where whatever one publishes may be lent to other libraries. Others can search and request articles from within the database and the service is free. One has to join the network of libraries and accept the “you give and you get” principle. The service is integrated with the Alma ILL, hence requests can be made directly from Alma.

Q: Do you use the ILL, especially for articles; who provides the service, and how is the service delivered to the end user? Are there any common problems associated with using the ILL?

Leif Andresen, Royal Danish Library: There are agreements with the Danish copyright organisation about the articles from Danish journals: they can be delivered to end users as PDF files using e-mail but a reimbursement must be paid to the copyright holders (the copyright organisation transfers it to its members). Copyright is an obstacle to the distribution of publications and articles to users, but libraries do not have many other options: the provision of the service must be negotiated with the right holders. There are costs associated with providing the ILL service, but the cost of delivering electronic articles is still lower than for a postal service.

In addition to ILL, an alternative option for concluding agreements with publishers/right holders is offered by agreements with Elsevier, which provide Open Access to publications from Danish universities, etc. This way the libraries can negotiate along with other actors.

Anita Goldberga, National Library of Latvia: It is possible to request articles with national content from the NLL. One should fill out an online form and request the article. This is paid service. The NLL also accepts IFLA vouchers; for European countries it is 1-2 IFLA vouchers per unit.

3.5. Criteria for compiling publishing statistics

Elza Ungure, National Library of Latvia:

Internationally, publishing statistics (i.e., statistics on books, periodicals, ephemerals, etc.) is compiled based on different, not always explicitly available and sometimes even altering methodologies leading us to having data which are not only incomparable between different countries, but sometimes are even incomparable in time series of a single country. This limits the usability of statistics and limits the analytical potential, i.e., it is difficult to make informed decisions about policies, business orientations based on the data and they are also not always suitable for research purposes.

For the past couple of years, the National Library of Latvia has been working to ensure the comparability of the statistical data on publishing in Latvia. As this process is about to conclude, we are starting to focus more on the aspects of usability of the publishing statistics as well as on interoperability with other data.

Nationally, a lot of improvements have already been made:

- a data set of non-aggregated data about publications in Latvia from 1991 till today is published enabling data analysis in many dimensions and through time series;
- a data set of descriptive metadata for publishing statistics in form of annual collections of statistical materials has also been published (currently in Latvian only);
- similar metadata are in development for the official statistics, which are submitted to the Statistical Bureau, as well as for the data set;
- we are also considering the potential for enrichment of the statistics with other data we have (e.g., authority data).

Whilst planning the changes, we have discussed the desired improvements for increased usability of the statistics with local publishers. Publishers have also informed us that the Federation of European Publishers is also starting to focus on the issue of international comparability of statistics considering the potential for harmonisation and unification of the international data. Since this is something we have also thought about and also what we have discussed with researchers internationally, we are thinking of starting with setting smaller goals and hope to connect with colleagues from the Nordic/Baltic Sea region and neighbouring countries to try out the processes on unification on a smaller scale, and to generally exchange experiences and insights to get a sense of a direction in which to move regarding the future of the statistics.

Q: Are the institutions you represent involved in compilation of publishing statistics or is it, perhaps, that publisher associations publish the statistics but libraries still provide the data for them?

Hanne Hørl Hansen, Danish Bibliographic Centre: Since the 1970s, when the Danish National bibliography was first registered electronically, the publishing statistics have been published annually. A couple of years ago, there were changes and now the statistics are compiled and published by an official statistical institution, the Statistics Denmark based on the data from the national bibliography.

There was a project initiated by the Ministry of Culture with an aim to extend the publishing statistics to include additional information. Discussions with publishers were organized and it became apparent that publishers are not eager to share the information about the circulation/print runs, sales etc., hence Denmark publishes only the base information of what is recommended by the ISO Standard. There are lot of data collected and made available on the website of the Statistics Denmark: <https://www.statistikbanken.dk/BOG03>.

Leif Andresen, Royal Danish Library: The Standard *ISO 9707:2008 – Information and documentation — Statistics on the production and distribution of books, newspapers, periodicals and electronic publications* is used for compiling publishing statistics in Denmark. UNESCO standard was taken over by the ISO standard. 2008 is the latest edition. The standard seems obsolete in some areas and there is an ongoing work by the Committee to update the standard.

Elza Ungure, National Library of Latvia: There are similar struggles in Latvia with publishers not willing to disclose the information we as librarians otherwise do not have access to. Many countries, it seems, have different approaches because of the attitudes of publishers. On the one hand, publishers would be interested to know the data on turnovers, print runs and circulations, but on the other hand some of them themselves are not willing to provide their own data; there is yet no solution in sight.

Kjersti Rustad, National Library of Norway: Every year publishing statistics are published based on the legal deposit with figures showing how many objects of different media types have been deposited each year. There are also statistics based on the national bibliography including the number of titles published per year. Statistics are reported to the Statistics Bureau of Norway and the Ministry of Culture. In Norway, there is no cooperation with Norwegian publishers; these are separate worlds.

Elza Ungure, National Library of Latvia: This is another issue: some countries have different bodies/organisations responsible for different types or segments of publishing statistics and it is not always clear whether the figures are comparable.

Roma Stabrauskienė, Martynas Mažvydas National Library of Lithuania: The Martynas Mažvydas National Library of Lithuania collects and disseminates the statistical data on documents published in Lithuania since 1992. Till 2018, the annual publication “Lithuanian press statistics” was published, since 2017 in electronic form only.

The collection, processing and analysis of the statistical data is based on the Lithuanian standard LST ISO 9707: 2011 and UNESCO recommendations.

Legal deposit copies received by the National Library from publishing houses, companies, scientific institutions, and other organizations as well as individual publishers are the source of the primary statistics. Received legal deposit copies are recorded during the reporting year, they are stored in the National Archive Collection of Published Documents and are included in the national bibliographic accounting. The legal deposit copy is the primary source of statistical data. Missing data are obtained by contacting publishers.

Comprehensive statistical accounting applies to books and brochures selected on the basis of quantitative criteria - number of pages (more than 7 pages), circulation (usually more than 50 copies) and in terms of quality - criteria for the general public and non-temporary content.

Statistical information is presented in various aspects: text language, thematic, layout, by publishers, place of publication and expression in quantitative indicators - number of publications and circulation. The first issues are excluded from the total number of publications.

Comprehensive statistics also include serials (newspapers and magazines).

Their quantitative indicators - number of titles, numbers, annual circulation - are presented according to the language of the text, periodicity, publishers.

For continuous publications (collections of scientific works, various reports of organisations, collections of statistics, calendars, yearbooks, almanacs, etc.) only basic indicators are provided.

Statistical data on books, brochures and other monographic type publications are entered and processed in the system LIBIS and the publishing data collection system in MS Excel format. Statistical data on books newspapers, magazines and continuous publications are entered and processed only in the local publishing data system in MS Excel format.

Publishing statistics prepared by the National Library are also published in publications of the Lithuanian Department of Statistics and other official statistics reports.

Q: There is also a problem of defining what publication should be included in the publishing statistics. If someone asks: “How many books were published?”, what do they mean? Only books that can be purchased at a bookstore?

Elza Ungure, National Library of Latvia: It was one of the topics in the discussions with publishers. Some of them object to self-published works or publications of municipalities and state institutions like informative publications or research reports being included in the statistics. As librarians we definitely see these publications as books and also, for example, informative newsletters published by municipalities as newspapers that should somehow be counted. I.e., there are national criteria used by the NLL as a statistical institution, but it does not really sit well with publishers as one of our clients, and it also differs by country. This makes us think about how to provide the best user experience based on different views and needs, but it seems like there is no common ground and no easy answer.

Hanne Hørl Hansen, Danish Bibliographic Centre: The standard ISO 9707:2008 defines publications and makes a distinction between commercial and non-commercial publications (grey literature). Grey literature is considered books bibliographically contrary to the publishing industry, which would not consider them books. In Denmark, we make a distinction between these kinds of books by marking them either as commercial publications or non-commercial publications. Everything that is sold is considered commercial.

Leif Andresen, Royal Danish Library: It is not a question of profit, but of sales. In Denmark, there is no problem: the tradition of the national bibliography defines statistics. Also the Act on Legal Deposit defines that everything that is printed has to be delivered to the Royal Library. Regarding legal deposit, there is no distinguishing between books and other printed materials. The only criterion is public distribution (not sales). For example, if one writes a book about their family, prints it in 10 copies and gives it to family only, the legal deposit requirement does not apply. But if one gives 3 of the copies to a local store to sell, the legal deposit requirement does apply.

Roma Stabrauskienė, Martynas Mažvydas National Library of Lithuania: There are cases when a publisher applies for an ISBN, the library then makes a record, but later the publisher decides to not publish and the library has to remove the bibliographic record from the database.

Elza Ungure, National Library of Latvia: For us, it would be hard to make a distinction between commercial/non-commercial publications because since we don't get any data about the turnover, sales, etc., we could not really be sure about which publication is being sold. But the public distribution criterion does apply. Statistics are never complete nonetheless; e.g., we sometimes receive legal deposits later, hence publications are counted in the next year's statistics.

3.6. The impact of Covid-19: experiences, lessons learned, success stories

(besides what was mentioned in the country reports)

Hanne Hørl Hansen, Danish Bibliographic Centre: We noticed a huge change in loans: loans of movies for streaming from the library have increased during the Covid-19 pandemic. It makes us think about who is the real audience of our bibliographic data: professional colleagues or an end user. This is an issue we need to address in our library cataloguing strategy to make bibliographic data more attractive and to encourage patrons to use library resources instead of random data on the internet.

Kjersti Rustad, National Library of Norway: Most of the books in the library collection are digitalized. According to the Legal deposit act, it is allowed to make documents available to the public, researchers and other libraries with certain limitations, for example, only two users at a time can use a book etc. When it came to Covid-19, the National Library of Norway concluded an agreement with the Ministry, the Publishers' Association and Kopinor (an organisation which coordinates rights licensing with publishers). The agreement provided for a possibility to make books available to almost anyone. While the Library is closed, a user can submit an electronic application to the Library to gain access to books and other media remotely. The agreement provided for some payments. The system worked from March to July 2020. It was a great success; people had access to materials although libraries were closed.

Uldis Bojārs, National Library of Latvia: During the state of emergency in Latvia, there also was an agreement with the copyright holder organisation; the Ministry was involved as well. As a result of the agreement, people had remote access to digital resources without the restrictions.

Asbjørn Risan, Unit: From the perspective of academic libraries, the use of physical books has dropped since March 2020. There were some changes made in the discovery system that promoted electronic resources. Physical resources were available only for the interlibrary loan. Systems helped us to cope with the situation when the physical space and physical books were not available. We have not seen reports about the use of electronic articles yet and are waiting for the national statistics to see the effects. It is expected that it will have increased a lot but we don't get figures from the discovery system. Libraries had digitized most of their collections before but the digitization rate still increased a little bit during the Covid-19 pandemic.

Anita Goldberga, National Library of Latvia: Do you have some post-pandemic measures planned for getting clients back to libraries? In Latvia we are little worried: will the library be the same as before the Covid-19 pandemic. Perhaps users will now wish to use digital services only and will not be interested in coming back to the library as a physical space. Users might demand free remote access to all resources to which they have now gotten used to.

Leif Andresen, Royal Danish Library: There was a meeting of the association of public libraries and this question was one of the key issues discussed. The focus was on highlighting the services libraries provide on-site. Libraries are very aware of the situation of having to return to normalcy. We need to do something to attract people again. The situation is different for research libraries: they serve as a place to work. We also doubt that students will keep away from libraries, they will likely be very happy to return, to use the premises and to connect with other students again.

Ragna Steinarsdottir, National Library of Iceland: During the Covid-19 pandemic, libraries managed the situation pretty well: provided services for students and researchers by photocopying materials and mailing them to users or making them available at the entrance of the library. Libraries increased the number of digital materials in their collections. Historians were the ones most displeased with having no access to archives as not all archives and manuscripts are digitized.

With the increase in supply of digital materials people will not be ready to come to the library for access to resources as they did before. We can see it already: libraries are now open and usually this time of the year is very busy and libraries in Iceland are crowded; it is not what we're seeing now. Library users appear to have found other resources.

Roma Stabrauskienė, Martynas Mažvydas National Library of Lithuania: The Library typically provides a wide range of services: digital exhibitions, reading rooms etc. But for now employees are working remotely and there is a prohibition to visit the Library premises.

3.7. Invitation to join NNG

How can parties which are not NNG members yet join the network?

What is NNG, what are the benefits of joining and what are the obligations?

Hanne Hørh Hansen, Danish Bibliographic Centre: NNG started as the Scandinavian Virtual Union Catalogue (SVUC). It was a cooperation between institutions responsible for compiling union catalogues and national bibliographies. The members are mainly national libraries but also institutions like Unit and DBC. There was a cooperation agreement stipulating that members should give free access to union catalogues to other Scandinavian states.

At some point it switched and became more of forum for cooperation and exchange of experiences regarding bibliographic area (bibliographical aspects as well as technical aspects) since there were common problems and issues to solve. Miriam Björkhem from the National Library of Sweden drafted a new cooperation agreement. To become a member, an organisation is obligated to sign the agreement.

Normally we decide on the time and host/organiser of a following annual meeting openly during each meeting. The Network also provides some added value in-between the meetings, e.g., visits, working groups etc. The network is not formal: there is no chairman or committee, only member parties interested in cooperation and exchange.

Line Jung Lindhard, Danish Bibliographic Centre: An excerpt from the minutes of the first meeting reads: the members will continue to give each other mutual access, free of charge, to their bibliographical union catalogues for information retrieval and copying of catalogue records, whilst not stating the exact technical means for doing so. The letter "Mutual free access to union catalogues for information retrieval and copying of records" was distributed in advance in order to gather signatures from the heads of each member organization. The National Library of Sweden volunteered to compile and archive the signed documents from all members.

3.8. NNG meeting 2022

Asbjørn Risan, Unit: The host of the next meeting is decided by looking at who organized the previous meetings and following the order in a cycle. The next country on the list is Iceland.

Proposal: As April and May 2022 might not be a good time for Iceland to be a host for the meeting, there might be a switch with Sweden. It will be discussed amongst the countries and NNG will be informed about the decision via e-mail.

4. Updating the NNG mailing list

Mailing list is administrated by the Unit. For any updates to the list, e-mail addresses should be sent to asbjorn.risan@unit.no.

5. Closing

Country report – NNG



DK

Danish report to NNG April 2021

Nordic Networking Group on bibliographic and infrastructure topics (NNG), Virtual - 15 April 2021

RDA in Denmark

As mentioned last year the Danish state and KL (the municipalities) are considering the implementation of RDA in Denmark. Because of the pause in activities due to the 2020 legislation and the 3R-project, a new implementation strategy is underway.

The goal for the implementation is to implement the useful parts of RDA that actually improve the catalogue and support the end user tasks in the Danish libraries thereby avoiding changes that we consider inferior or deficient.

KOMBIT (on behalf of KL) has been commissioned to describe a new implementation scenario and estimate the costs of the technical implementation in the national infrastructure, which DBC will be responsible for.

The scenario will in all probability be based on a limited transition to RDA; using RDA for a few but important entities such as works, persons and corporations, but not on the descriptive parts of the manifestations.

A new repository for the RDA entities works, persons and corporations, VERA, will be established as part of the implementation but also with a limited scope.

The former Danish profile must be considered deprecated – the same is to be said when it comes to the analysis and the development of the format etc., which all were based on a full implementation of RDA and a change of data model.

DBC

The national bibliography and cataloguing for libraries during Corona: DBC is not physically closed but all staff has been ordered to work from home if possible from March 2020 onwards. There has been a controlled and strictly limited number of staff members physically present at DBC. This means that we have been able to receive materials from the publishers as usual. The staff has collected the books, serials, recordings etc. at DBC – brought the material home and back - avoiding rush hour in public transport etc. This has been possible because most of the staff already have had the possibility to work from home before corona.

The number of new records for the national bibliography in 2020 is therefore similar to the number from 2019. We have seen a big drop on physical books (3000), but within this number there is an unknown amount of books in the Department for Legal Deposit at the Royal Library, which haven't been handled during 2020 due to the lock-down. There has been an increased numbers of online audiobooks in 2020 – which compensates for the drop in physical books.

Last year we informed you about a debate going on in our Metadata department: the schism between cataloguing for the catalogue and cataloguing for the end user.

DBC now works towards a strategy on this subject. Of course the national bibliography should follow international standards (based on the material in hand, timeless, objective in its notes etc.) but why make the same limits for the library cataloguing for end users in a public library? We are for example discussing making completely new kind of entries to facilitate end users perception of series statements in order to make crossover between multivolume editions – sequel novels etc. with no regards to what is actually mentioned on the material in hand – but based on what people often use as a title. Also we need to be more aware that cataloguing a material in some ways is an ongoing process: a title for a group of books sometimes first appear after a time and we need to go back and add such things to the record.

DBC works at present on infrastructure projects regarding a new strategy on search as well as presentation in order to make a new version of Library.dk.

We mentioned last year *Læsekompasset* (<https://laesekompas.dk/>), an inspirational site for adult fiction based on new types of metadata i.e. appeal factors and AI in the recommendation system and that DBC was working on a similar site for children in order to support the fight against the declining reading among children. The site is launched as *Buggi.dk* – an inspirational site where children can search and choose a book from parameters such as length, difficulty and illustrations using emojis to reflect the content of the books.

Artificial Intelligence: Last year we informed you about our search for tools and methods to give us more evidence on how our subject headings actually works compared to other methods. We have now got this project funded and it will take place during 2021 comparing the quality of subject headings, AI-trained service and simple search in online documents.

Royal Danish Library

The library is as many other libraries affected by the Covid-19 pandemi. In many months the library have been closed but since December the borrowers can request and pick-up books etc. Access to electronics resources have been unaffected. Cataloging for legal deposit have been closed in several months, but now we are working part-time. The Danish governments reopening plan include that the libraries can open 19th april 2021.

The Royal Danish Library's original plan was to start using RDA as cataloging rules at the same time as starting with Alma. However, the general Danish postponement of RDA implementation have the implication that the Danish Royal Library RDA implementation also is postponed. So a detailed plan is awaiting the national solution.

In 2019 was implemented Primo VE as new discovery system and Alma as new integrated library system for Royal Danish Library and Aalborg University. Since have to more universities joined this corporation and together with the four universities that Royal Danish Library support, now six of the eight Danish universities are part of the joint system. The main part of a match-and-merge project have been done since New Year. The library have worked a lot with cleaning up after the conversion from danMARC2 to MARC21, but there are still many unsolved issues.

The national negotiations with vendors of electronic articles etc. to university and research libraries was transferred to Royal Danish Library. This new organization of handling licensing of electronic articles had early 2021 resulted in an important development. Royal Danish Library has negotiated an agreement in place with one of the world's largest providers of scientific journals, Elsevier, which gives Danish researchers and universities easier access to publication in the publisher's journals - without additional payment.

A large part of the total global research is today locked behind payment walls, where the scientific publishers demand money both to publish research articles and to provide access to read them. The new agreement means in concrete terms that there will no longer be a ceiling on how many research articles Danish researchers can have printed in Elsevier's publications. In addition, there will be immediate and free access to Danish research publications.

The agreement with Elsevier supporting over 30 Danish institutions, including the eight universities take effect from January 2021 through to the end of 2024, and the estimate is that the agreement as a whole will lead to a saving on Danish expenses for Elsevier.

NNG e-meeting 2021

Country Report 2020 from The National Library of Finland

National Library of Finland

The National Library's new strategy for 2021–2030 strongly supports the Ministry of Education and Culture's goal of serving individuals and society through education, competence, science and technology. Our collective memory as a nation is a resource upon which we build.

The National Library has impact on society and research through its unique collections and online services, for more details, see our web pages: "[Equality, responsibility and strengthening society's knowledge base are the National Library's central goals in the coming years](#)".

Finna

Finna.fi provided free access to material from 438 Finnish museums, libraries and archives and there were 44,2 million visits to Finna services during the year 2020.

One of the main action points during 2020 was the integration between Finna and new systems (MuseumPlus, Collecte, Cumulus and YKSA) used in museums. In 2020 PCI (Primo Central Index), which has been used as the central article index in Finna, was renewed to CDI index (ExlibrisCentral Discovery Index).

Vision for Finna's services in 2025 includes smart and participatory access to cultural and scientific materials for everyone. Finna is also promoting access to information and lifelong learning. For more Finna vision details, see <https://www.doria.fi/handle/10024/177029>.

Melinda

Melinda is a data repository currently containing the Finnish national bibliography (Fennica), Finnish National Discography (Viola) and Finnish article database (Arto) as well as metadata about the materials in higher education libraries, research libraries and public libraries. Altogether Melinda provides now more than 16 million bibliographic records and 172 libraries are taking part in co-operative cataloguing done in Melinda environment.

Library systems

In Finland 17 scientific libraries (including National Library of Finland) have implemented open source library system Koha during 2018-2019. All these libraries use Finna as UI and Melinda as their description environment.

Another part of former Voyager libraries have now finished the implementation of commercial SaaS-system, Ex Libris's Alma. First Alma libraries have been in production since 23.12.2019 and the rest since August 2020.

Finto

The national thesaurus and ontology service Finto develops linked open vocabularies and ontologies, and tools for using vocabularies in the Finnish public sector. The linking of the General Finnish ontology YSO to Wikidata has been continued.

During 2020 we have been piloting agile software development in Skosmos, the open source vocabulary publication platform (software for Finto.fi). Also the use of VocBench vocabulary editing software was piloted for Finto vocabularies.

Annif

In 2018 the National Library of Finland started developing a new tool called Annif for automated subject indexing and classification. Annif is built upon a combination of existing natural language processing and machine learning tools including Maui, fastText, Gensim, Omikuji and TensorFlow. It is designed to be multilingual and it can support any subject vocabulary (in SKOS or a simple TSV format). It can be used either via a command-line interface or a microservice-style REST API.

In 2019-2020 Annif development has advanced rapidly. We have evaluated new machine learning algorithms in a joint project with CSC. Using better training data and algorithms, the quality of Annif subject suggestions has improved significantly. We also launched Finto AI, an automated subject indexing tool and API service for indexers. So far the main focus has been on subject indexing using YSO, but we have also achieved promising results on automated classification using the DDC-based YKL classification used in Finnish public libraries.

The launch of Finto AI in May 2020 brought Annif officially into production use. Annif-assisted automated subject indexing has now been integrated into document repositories for several university libraries (JYX / University of Jyväskylä, Trepo / University of Tampere, Osuva / University of Vaasa, Taju / University of the Arts Helsinki, Theseus / many universities of applied sciences). We also collaborate with the book distributor Kirjavälitys. They send the description texts for new books to Finto AI and get back suggestions about possible subjects. Their metadata experts then select the most appropriate subjects. This information is then stored in the Melinda union catalogue, so we get early access to Annif assisted subject indexing for new book titles.

Annif is an open source tool and it is increasingly being adopted outside our institution, with many organisations setting up their own installations of Annif. The Finnish national broadcasting company Yle is in the process of switching to Annif for indexing online news articles in Finnish and Swedish. The national audiovisual institute Kavi is going to adopt Annif for the new Ritva system for cataloguing radio and TV programmes. The National Library of the Netherlands has set up their own Annif public testbed instance. The German National Library intends to switch from the commercial Averbis platform to Annif for both DDC classification and subject indexing with GND. We are closely collaborating with ZBW, the Leibniz institute for economics in Germany, on the development of Annif, for example new algorithms. Together with ZBW, we have produced an online tutorial for getting to know Annif, which includes videos and exercises for self-study.

ISNI

ISNI project ended in 2020 and we are currently planning the processes needed for continual ISNI allocation into our everyday workflows. We have signed the contract for a RAG status and have begun devising the processes delivering ISNIs to other agent databases for other organisations. There has been preliminary interest from the publishing sector as well as copyright organisations.

Share-VDE

In the end of 2019 the National Library of Finland made the decision to join SHARE-VDE collaboration for 3 years (2020-2022). Our primary goals are

- to enrich our MARC record with URIs
- conversion from MARC to RDF using the BIBFRAME vocabulary (and other additional ontologies as needed)
- data publication according to the BIBFRAME data model
- learning more about entity-oriented representation of bibliographic data, e.g. work extraction/clustering and linked agents

RDA status in Finland

The aim is to release the full translation and the most essential policy statements of the new RDA by the end of 2021. Most of the text has already been published in the RDA Toolkit but all the Finnish policy statements are still missing. The training sessions will be organized in 2022.

Iceland: Country report

Iceland is currently in the process of implementing a new library system; Alma by ExLibris. We had previously decided to go with Sierra, but when Proquest acquired Sierra they cancelled all work on their new opac and were unable to fulfil their obligations. We then took up negotiations with Alma, also a part of Proquest, and came to an agreement.

Now Iceland is in the phase of looking at data formats and framework. Nine institutions will be set up in Alma and migrated from 11 ADMs in Aleph. The first test load will be ready towards the end of May.

ExLibris needs to consider many distinctive features of the Icelandic environment.

To begin with, there are more than 300 libraries of all sorts and sizes sharing the same database. Another peculiarity is that analytical records for journal articles, book chapters and songs in musical records comply almost one third of the database. Alma seems to be able to deal with the above.

What Alma seems not to be able to deal with is Icelandic names.

According to RDA and AACR2, Icelandic names are always recorded in direct order, even when a person bears a family name; Ragnar Arnarson not Arnarson, Ragnar.

Traditionally Icelandic names are sorted 1) First given name 2) Patronymic or family name 3) Middle name(s). To do this correctly we need more granularity than Marc21 offers. In all our previous library systems we have placed each name component in a separate subfield, providing the necessary granularity. We can play around with the name components.

Apparently in Alma, names can only be updated from subfield a. We are asked to merge all our name-subfields into one string. We are very reluctant to do that but have not been able to convince Alma. It is impossible to sort names correctly if they are all in one string. The worrying part is that we are losing granularity and 30 years of cataloging history with Marc. All these years catalogers have been putting effort into deciding what is middle name and what is patronymic or family name. It is not always simple. One of our cataloger's name is Kristín Lilja Thorlacius Björnsdóttir and her name sorts Kristín Björnsdóttir Lilja Thorlacius. Lilja and Thorlacius is considered middle name components.

We are probably going to lose this battle. One cataloger said that it is like telling Israelis that their script should not be from right to left. They should do like we do – left to right.

Country Report from the National Library of Latvia (NLL)

NNG e-meeting

Riga, 15 April 2021



Amendments to the Law on the National Library 2020

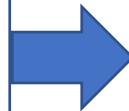
Law defines the role of the National Library of Latvia as:

- a competence centre for the digitization of cultural heritage, including maintenance and development of the cultural sector thesauri
- a data centre of national importance
- responsible for publishing of the National Encyclopedia

Challenges of RDA implementation

- More access points for active Agents and provide wider thematic coverage
- More detailed physical attributes of media, formats as well as the characteristics of content (audio, video, images)
- Fixed need to reveal the relationships between different entities in bibliographic records, for instance, Work to Work relationships in bibliographic data in a closest future

Ashes in the Snow (Motion picture)



Based on: Sepetys, Ruta, 1967-.
Between Shades of Gray.

Authority data development

- Authority data for Series – instruction completed in 2021
- Relationship links between entities in authority database (Linky MARC)
- Linking of national authority records with the entries of the e-version of the National Encyclopedia
- New authority records of the national thesaurus are supplemented with:
 - Language codes, LCSH terms in English –

450 ## |a Feminism |9 eng

750 #0 |a Feminism

|1 <http://id.loc.gov/authorities/subjects/sh85047741>

|u <http://id.loc.gov/authorities/subjects/sh85047741>

|2 LCSH

|4 N

Authority data development

Named churches, residential buildings, cathedrals, manors, castles; lighthouses, railway lines, stations, vehicles
– entity identification **from Institution to thematical subject or geographical names:**

110 2 |a Rundāles pils



150 ## |a Rundāles pils (Latvija)

450 ## |a Rundāle Palace (pils : Latvija) |9 eng

Relationship links:

500 1# |w r |i Architect: |a Rastrelli, Bartolomeo Francesco, |d 1700-1771 |0 LNC10-000093240

500 1# |w r |i Related person: |a Biron, Ernst Johann, |d 1690-1772 |0 LNC10-000072844

510 2# |w r |i Related Institution: |a Rundāles pils muzejs |0 LNC10-000074429

550 ## |w g |a Pilis |z Latvija |0 LNC10-000066706

751 #7 |a Rundāle Palace

|1 <https://www.wikidata.org/wiki/Q1123987>

|u <https://www.wikidata.org/wiki/Q1123987>

|2 Wikidata

|4 N

Open Data Portal

Latvian Memory Institution Data in the Digital Space: Connecting Cultural Heritage

Ontology service

The National Library of Latvia (NLL) ontology service publishes NLL's thesaurus data set ontologies (genre/form ontology; geo ontology and subject authority ontology) as Linked Open Data.

Latvijas Nacionālās bibliotēkas (LNB) ontoloģiju serviss publicē LNB tēzaura datu kopu ontoloģijas (formas/žanra ontoloģija; ģeogrāfisko nosaukumu ontoloģija un tematisko priekšmetu ontoloģija) saistīto datu formā.

Linked Digital Collection "Rainis un Aspazija" (RunA)

Linked dataset of the [RunA collection](#) is structured data about collection objects, entities and links between them. Entity data also contain references to data about these entities found in other sources of information. Data for each collection object and entity are available in [RDF/XML](#) and [Turtle RDF](#) format.

Publishing in Latvia (1991-2019)

Extensive information on publishing output (non-aggregated, without number of copies) based on legal deposit copies and reports from publishers.

Plaša informācija par Latvijā izdotajiem izdevumiem neapkopotā veidā (bez tirāžām), kas veidota, balstoties uz izdevēju piegādātājiem izdevumu obligātajiem eksemplāriem un pārskatiem par izdevējdarbību.

Open Data Portal

Latvian Memory Institution Data in the Digital Space: Connecting Cultural Heritage

<http://dati.lnb.lv/>

NLL genre/form ontology

Content languageEnglish

Search

Alpha-navHier-nav

Audioieraksti (lv)

- Audiogrāmatas (lv)
- Audioieraksti cittautiešiem (lv)

There is no term for this concept in this language

SKOS:PREFLABEL

Audioieraksti (lv)

FOREIGN PREFLABELS

Audioieraksts

Fonogrāfa ieraksti

Ieraksti, audio-

Ieraksti, fonogrāfa

Ieraksti, skaņu

Skaņu ieraksti

Skaņu ieraksts

Sound recordings

Audioieraksti

Latvian

URI

<http://dati.lnb.lv/onto/genre/LNC10-000263173>

Download this concept in SKOS format:

[RDF/XML](#) [TURTLE](#) [JSON-LD](#)

skosmos:created 6/5/18, skosmos:modified 6/9/20

National bibliography

Primo

Latvijas Nacionālā bibliotēka

Library Search

Journal Search

Browse

Fetch

Everything

Union Catalog and databases

Online databases

National Bibliography

Tweak my results

COVID 19

Sign in to get complete results and to request items



0 selected PAGE 1 7,406 Results

1



BOOK

2 versions of this record exist. See all versions >

Ražas svētki "Vecauce-2020". Pētniecība COVID-19 ēnā : zinātniskā semināra rakstu krājums / atbildīgie par izdevumu: Zinta Gaile, Dace Siliņa ; angļu valodas redaktore Gundega Gaile ; vāku dizains: Inese Gura ; Latvijas Lauksaimniecības universitāte. Lauksaimniecības fakultāte, LLU mācību un pētījumu saimniecība "Vecauce".

Ražas svētki "Vecauce" (2020 : Vecauce, Latvija)
2020

Available at NLL:Central close stock Books in Latvian (L2020-3/503) and other locations >

Online access >

2



ARTICLE

Daugavpilī izsniegti 6000 siekalu testu "Covid-19" noteikšanai : [par masveida testēšanas uzsākšanu Daugavpilī] / Ivars Soikāns

Ivars Soikāns

Latgales Laiks Nr. 75 (2020, 6. oktobris), [1.]-2. lpp. Tas pats krievu valodā laikrakstā "Латгалес лайкс" № 75 (6 октября 2020), [1.]-2. lpp. Tas pats tiešsaistes laikrakstā "Latgales Laiks" Nr. 75 (2020, 6. oktobris), [1.]-2. lpp. Tas pats krievu valodā tiešsaistes laikrakstā "Латгалес лайкс" № 75 (6 октября 2020), [1.]-2. lpp. ISSN 1407-9208.

Check holdings at NLL:Periodicals Reading Room Newspapers in Latvian and other locations >

Online access >

3



ARTICLE

Covid-19 infekcijas aktualitāte dzemdību aprūpē / Dr.med. Dace Rezeberga, Inese

Sort by Relevance

Advanced search

Availability

Available in the Library (6,762)

Full Text Online (5,388)

Resource Type

Articles (7,290)

Journals (88)

Books (23)

Serial (1)

Subject

Epidēmijas (3,537)

COVID-19 (slimība) (2,841)

Koronavīrusu infekcijas (1,252)

Vīruslimības (1,061)

Ārkārtas situācijas (619)

Show More

Subject - form/genre

Audiointervijas (772)

Dokumentālā publicistika (219)

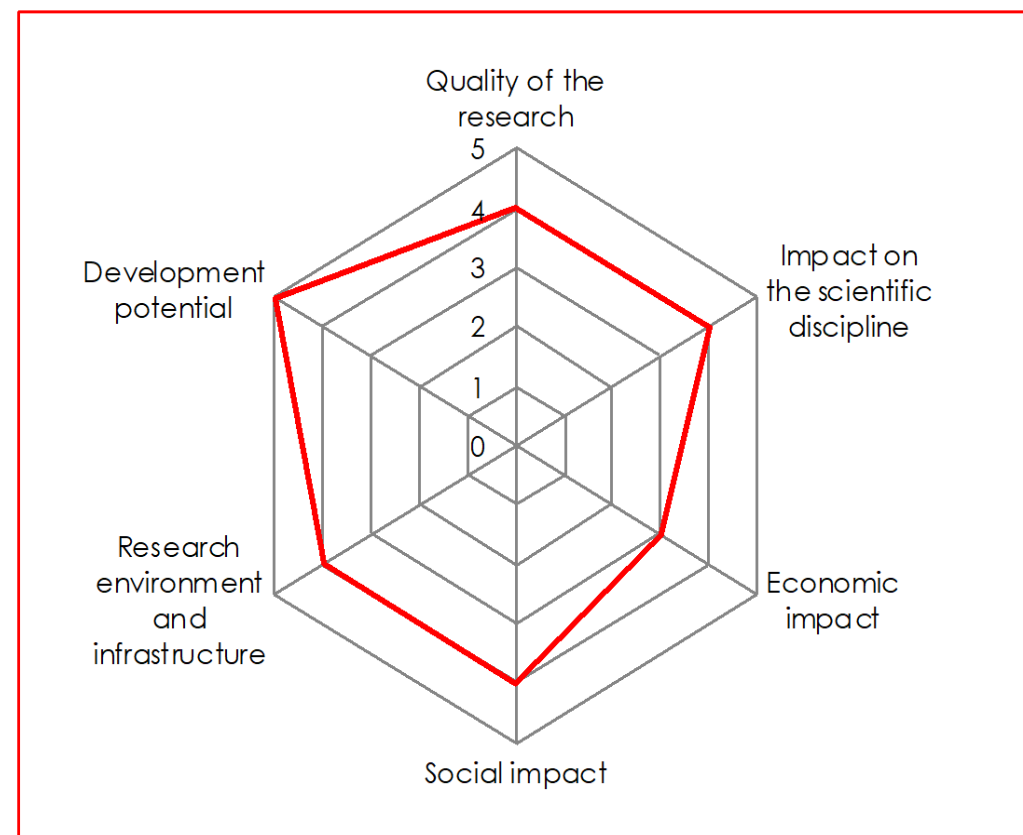
Filmed interviews (772)

Interviews (772)

Interviews (Sound recordings) (772)

The NLL Scientific Research Evaluation Scores (2020)

Criteria	Scores
Quality of the research	4
Impact on the scientific discipline	4
Economic impact	3
Social impact	4
Research environment and infrastructure	4
Development potential	5
OVERALL SCORE	4



Thank You !
Questions?

Country Report from the National Library of Latvia

NNG e-meeting, Riga, 15 April 2021

Legislation

09.10.2020: the Law On the National Library of Latvia (1993) was amended:

- The law stipulates the role of the National Library of Latvia (NLL) as a competence centre for the digitization of cultural heritage:
 - managing the digitization of Latvia's cultural heritage;
 - creating a digital library of Latvian cultural heritage;
 - providing advisory support services on the digitization of cultural heritage.
- Defines the NLL as a data centre of national importance:
 - maintaining and developing data centre infrastructure;
 - providing data processing, storage, data-system accommodation and long-term storage services to public-administration, scientific-research, education and cultural institutions (fee-based services).
- Reinforces the NLL's role in maintaining cultural sector thesauri and ensuring their public availability, as well as in ensuring the creation, maintenance, publishing, and availability of the National Encyclopaedia in printed form and electronically in the internet.

One of the NLL's 2021 priorities is to resume work on the development of a new law on the National Library of Latvia: a roadmap for the law-development process and a concept for the new law's main principles have already been developed.

Implementation of RDA

In 2020, the creation of bibliographic records in accordance with RDA was started for:

- sheet music,
- articles in periodicals (analytics).

In 2020, a methodology for creating bibliographic records for audio resources in accordance with RDA was developed. Its implementation is planned for 2021, at the same time as the RDA methodology is to be approved for video resources.

Challenges of RDA implementation:

- Creating records has become more complicated, the amount of data to be entered for each record has increased.
- More attention is being paid to the creation of access points for individuals and institutions, both as active agents and as topics. This decision was made in connection with the development of the national bibliography.
- The physical attributes of resources (physical attributes of media, formats) as well as the characteristics of content (sound, images) are revealed in more detail.

- There is a need to reveal the relationships between different entities in bibliographic records. This becomes particularly relevant when developing methodologies for audiovisual resources, for example, disclosing the connection between a film based on a literary work in that work's bibliographic record.

In cooperation with the International ISSN Centre, the new *ISSN +* cataloguing system was tested, enabling record creation in the ISSN database in accordance with RDA.

RDA Reference

In 2020, the translation and editing of RDA Reference 5000 terms, values and relationships was completed. The mapping of terms, values and relationships with identifiers of elements, entity classes, values and properties defined by the RDA Registry was defined more clearly. The process of publishing the RDA Reference in the International RDA Registry has started. Some of the RDA reference elements and assessments will also be used in the Reference Data System of the Common Platform of Cultural Heritage Institutions, performing entification of authoritative records, retrieving them from local systems and publishing them in the form of linked data.

Authority data

- Authority records of persons, families, works, institutions, geographical names, events continue to be sent to VIAF.
- In 2021, the development of the methodology for creating authority records for series will be completed and the training of data creators will be started.
- Relationship links between authority records (Linky MARC) within the ALEPH database have been established.
- A methodology for creating authority records for collections of works (collected works, selections) and for works of two or more authors has been developed.
- Research was performed on authority data received back from VIAF. External resource ID (*Wikidata*, ISNI, ULAN and VIAF ID) were identified as to be included in authority data in the future. The automated insertion of data identifiers – (VIAF, ISNI, *Wikidata* and ULAN) received back from VIAF – into the authoritative data created by the NLL has been started.
- National authority records (persons, literary works and topics) have been linked with entries in the e-version of the National Encyclopaedia.
- Research and experiments were carried out on the export of authority data sets to *Wikidata*.
- All new authoritative entries of the national thesaurus (uniform titles, thematic subjects; geographical names and subjects of form/genre) have been supplemented with:
 - language codes,
 - LCSH terms in English;
 - links to external identifiers: Library of Congress Name Authority File (LC NAF), Library of Congress Subject Headings (LCSH)
 - identifiers of *Wikidata*, Virtual International Authority File (VIAF), National Cultural Heritage Board, entries in the Latvian National Encyclopaedia and Latvia's Place Names Database.
- A solution has been found for creating authority data for buildings with names (specific churches, residential buildings, cathedrals, manors, castles, etc.) as well as other named facilities (lighthouses, railway lines, stations, vehicles, etc.): separated from institutions, they are created as thematic subjects or geographical-name subjects.

- Authoritative records of form/genre terms have been linked with entries of the Faceted Application of Subject Terminology (FAST), Library of Congress Genre/Form terms (LCGFT) and in some cases (mainly literary genres) also with the authority entry of the Czech National Authority Database (NKRC) as well as with *Wikidata* ID.

Development of the national thesaurus

In February 2020, the use of form/genre facets in *Primo* was started: display facets of form/genre objects, as well as search by form/genre terms is provided for music, visual resources, fiction, and e-resources.

Transformation of thesaurus data in the form of SKOS ontology (SKOSMOS) has been performed. Three data sets have been created – Thematic subjects terms, form/genre terms and geographical names (in total, about 56 000 concepts). Work continues to improve these datasets. A public access domain <http://dati.lnb.lv/> is provided for publishing datasets.

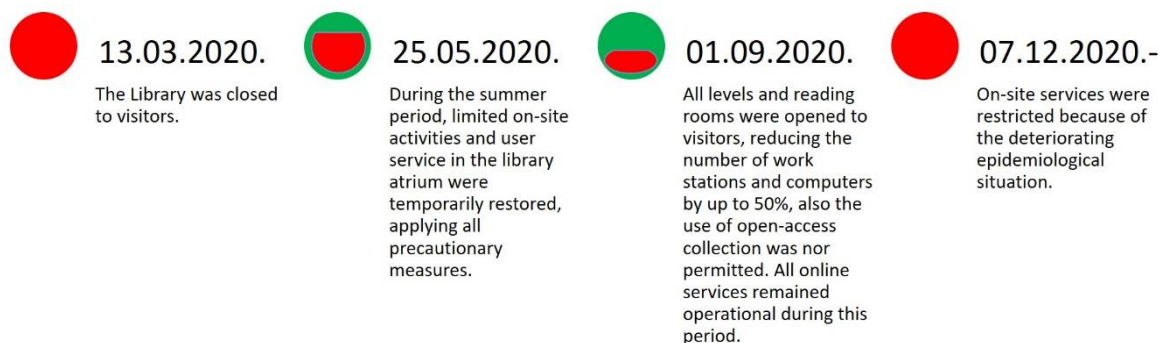
National bibliography

- The data set of the National Bibliography monographs 2017-2020 has been prepared in accordance with RDA: data are of sufficient quality to be published in the form of open linked data.
- A solution has been introduced in PRIMO providing the option to search national bibliography data as a separate data set.

The Latvian Memory Institution Data in the Digital Space: Unifying Cultural Heritage Project

Data standards, data models, dictionaries, ontologies used by foreign libraries and other memory institutions (*Intermi; Finto et al*) were studied as part of the project. The situation has been analysed by comparing the key entities of international conceptual data models of archives, libraries and museums (RiC CM, IFLA LRM, CIDOC CRM). The development of a concept for inter-institutional cooperation has started by initiating a uniform approach to cultural heritage data. The knowledge gained from project research was used to participate in working group meetings, where the technical specification and process management for the development of the Cultural Heritage Reference Data Solution were discussed. The reference data solution will be based on the data model developed within the project, which will solve the current problem of fragmentation of authority data in Latvian memory institutions. The RDA standard will be used to identify agents in the reference data solution.

Work during the COVID pandemic:



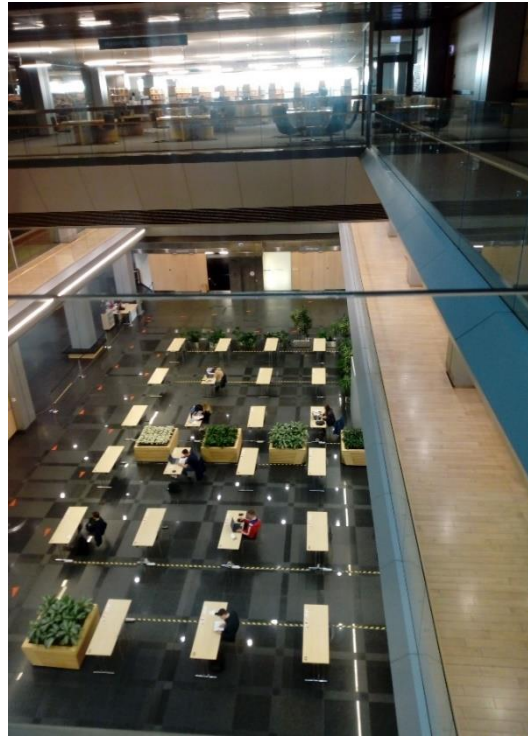
- Users were provided with remote services, events and educational events, also extensive work was carried out on inventory and the re-cataloguing of collections, digitization, the promotion of collections and streamlining library processes.
- The NLL provided remote access to:
 - 12 digital collections on its website www.digitalbiblioteka.lv,
 - more than 20 foreign full-text subscribed databases, the National Encyclopaedia www.enciklopedija.lv,
 - lectures, discussions, conferences, readings and other types of audio and video content on the NLL social networks.
- A licence agreement was concluded with AKKA/LAA (copyright supervisory authority providing free access to all the content in the NLL's digital periodical and book portals. Subsequently, portal traffic doubled compared to the same period in 2019.
- New services:
 - Online consultations on the *Zoom* platform.
 - A Digital guide for informing users about the library and its services.
 - On-demand digitization. Fee-based service. At the end of 2020, it was decided that readers could have ten pages per week scanned free of charge. Books, maps, posters, sheet music, photographs, etc. have been digitized as part of the Digitization on Demand service.
- Work from home has contributed to an increase in the intensity of data-generation work, reflected in performance indicators for NLL collection development, the national bibliography, and the data and knowledge system, for example:
 - the number of authority records has increased by 10%;
 - the number of enriched records has increased by 14% (ID added: LCSH, *Wikidata*, *Orcid et al*).

COVID challenges:

- The provision of remote services requires better knowledge of e-resources and the ability to be flexible in extraordinary situations, as well as good technology management skills;
- remote services are not suitable for visually impaired people who need direct contact;
- pandemic employee stress, uncertainty around work issues, special precautions in serving readers, many changes in the work environment and organization.

Activities on the NLL's work planning for the period after the COVID crisis in order to develop a recovery programme for the return to “normality”:

- return of readers
- attendance is “safe”
- development of new services
- communication with partners and potential rental customers
- compensation for losses
- staff training, especially in communication
- to reaffirm a sense of security, creativity and emotional comfort in readers during their attendance at the NLL.



Caption: During the summer period, limited on-site activities and user service were temporarily restored in the Library atrium, applying all precautionary measures.

Country Report: National Library of Norway

NNG meeting 15 April 2021

Introduction

The National Library of Norway (NLN) is responsible for legal deposit, the Norwegian National bibliography and National Authority files. The library is a part of the BIBSYS consortium.

Replacing Mavis

Replacing Mavis, our outdated audio-visual collection system, is an ongoing story. In these days, we start working on requirements and will issue an invitation to a tender for a new system -- a Competitive procedure with negotiations -- as soon as we can. Our goal is to have a new in house before the end of the year.

Legal Deposit

The National Library is still in the process of establishing digital workflows for legal deposit. In addition to physical objects, both digital publications and digital printing files are subject to legal deposit according to the Legal Deposit Act from 2016 with Regulations from 2018. We have recently signed an agreement with one of the largest distributors of e-books and digital audiobooks in Norway to deposit on behalf of most publishers digital printing files for p-books in addition to e-books and audiobooks, including a minimum set of metadata for each publication. We have earlier this year launched a form on our website where smaller publishers can upload and deposit monographs. Previously, we have already implemented workflows for sound recordings, newspapers and other periodicals.

Norwegian thesaurus of genre and form and NBVOK

In February we launched [Norwegian thesaurus on genre and form](#). The thesaurus has been developed under the leadership of National library of Norway, in collaboration with Biblioteksentralen SA and Bokbasen AS, and is an integration and reconciliation effort between the genre/form terms used by the participants, the work has expanded to develop a fully-fledged hierarchical thesaurus with labels in Norwegian and English, definitions and links to the Library of Congress Genre Form Terms where applicable. The thesaurus is published in another new service, *nbvok* (*The National Library vocabulary service*) based on SKOSMOS, developed by the National Library of Finland.

Authority file on Works

Our National authority file on Works is still being pursued through participation in SHARE-VDE, a library-driven collaboration between several American academic libraries and some European national libraries (British library, National Library of Finland and National Library of Norway (NLN)). The coordinator is Casalini Libre AS, an Italian metadata supplier and software provider, assisted by the Danish company Samhaeng on the user interaction side.

The main goal of the project is to establish a data processing & discovery infrastructure in which bibliographical linked data entities are extracted from metadata and authority data submitted regularly by member libraries, to be made available for exploration through the joint discovery interface. Full provenance of metadata is maintained, so each library may retrieve its own processed data at any time.

Since the last NNG meeting, great progress has been made in terms of infrastructure development, in particular the discovery & editing platform. Also, the project's entity model has been finalized, basically compliant with BIBFRAME, but with extensions to fit into RDA oriented settings. However, the necessary modifications of the data processing algorithms to support the new entity model are still to be completed and verified. For NLN this is a cause of great worry, since we have still not been able to confirm that the SHARE-VDE infrastructure will be able to generate (RDA) work entities of acceptable quality from our data. We expect indications on how the land lies within the coming few months.

AI and language technology

Our AI-lab, a small development section in the NLN, has built a Norwegian [BERT-model](#) – a Transformer Model for the Norwegian Language, using both digitised and born digital objects for training. So far, the language model has been fine-tuned towards Named Entity Recognition with state-of-the-art results. Also, we have just started experimenting with Dewey classification using our BERT model.

NLN also hosts the Norwegian Language Bank (part of the CLARIN infrastructure) providing language resources, tools and guidance to researchers as well as language technology companies.

RDA

Almost all libraries are using RDA for cataloguing. The RDA Toolkit release in December 2020 provides a translated version in Norwegian. The next big task is to prepare for the new Toolkit by creating new or revising existing policy statements and application profiles, investigate the needs for training, and establish a “task force” for experience in using the new Toolkit for supporting the development of policy statements.

NNG meeting 15th of April 2021

Country Report from Unit, Norway

Unit

Unit - the Norwegian Directorate for ICT and Joint Services in Higher Education and Research was officially established on the 1st of January 2018 and is formed by the previous organizations: Ceres, BIBSYS and parts of Uninett.

Unit's main office is located in Trondheim, with a branch office in Oslo. Unit delivers services and support to about 220 institutions in higher education, research and public service.

Unit has 4 main branches:

- Research services
- Education services
- Administrative services & strategic acquisitions
- IT development

In addition, there are two supporting divisions with Strategy & governance and Administrative support.

The department of library services are located in the division of research services.

In January 2021 the government decided to split Unit into two parts; a directorate with administrative, management and strategic tasks for the education sector and an agency for delivery of services to the sectors. Other governmental bodies will be incorporated into the new directorate and the service delivery agency. The library services will be part of the latter.

The directorate will be established in July 2021, and the service delivery agency will be established January 2022.

Library system

Alma has been live since 2016, and the BIBSYS consortium has become experienced with the new system. Alma is a large and complex system, and with monthly releases there are perpetual ongoing changes to assess. The need for support is decreasing. In general, the system largely covers the consortium's current needs. Interlibrary-Loan (ILL) functionality and integration with external systems, especially related to article delivery are a focus. Legal challenges related to delivery of electronic files directly to the end-users are looked into.



The system supports RDA (in MARC) and the consortium started using RDA during 2019 in compliance with the central work done by the National Library of Norway. Unit will continue to support this transition. Unit are also part of a project lead by the University of Oslo to investigate entity-based cataloguing. The project is funded by the National Library of Norway.

GDPR, data privacy and data security are some of the main strategic areas related to the system and need to be balanced against the need to have an open system in regards of functionality and data. Unit have participated in a GDPR task force consisting of Ex Libris customers in Europe, which will recommend actions for Ex Libris and customers to ensure GDPR compliance.

Unit has initiated work on assessing future solutions for the consortium and will continue work on a strategic approach to what solutions the consortium needs beyond the current library system. A user satisfaction survey will be performed during 2021 to identify pain points and the general satisfactory level to form a baseline for the actions after the lifetime of the current contract.

Discovery & delivery tool

Oria is based on Primo delivered by Ex Libris. Unit provides central configuration and customization, but the institutions themselves can override the central configuration and customize their Oria instance according to their own preferences.

In addition to the standard application from Ex Libris, Unit develops and maintains add-on functionality and services to meet the needs of the consortia.

The search system contains the entire BIBSYS Library Database with about 10 million records, in addition to the Primo Central Index (PCI) of electronic articles. Unit has also added other local content and special collections; e.g. the institutional repositories, the authority registry and special collections from the University of Bergen and NTNU.

One of the main focus areas in 2020 was universal design and to make sure that the services are in alignment with new requirements in the legislation. This work will continue in 2021.

Reading lists

Unit provides a solution for maintenance of and access to readings list for the educational institutions based on Leganto from Ex Libris. The solution is organized as a stand-alone consortium with 23 institutions.

There are currently more than 9250 reading lists in the system and there has been more than 3.7 million reading-list-views¹.

¹ Figures from 2020.



Verifying compliance with universal design and new legal requirements will be an important area related to the reading list solution.

National open access repository

The Ministry of Education has released new guidelines to provide open access to research articles, to support EU's decision on full open access by 2020. The suggested guidelines states that deposit of a research article in an institutional repository is a prerequisite to be counted in the results-based financing.

In 2018 Unit delivered a report to The Ministry about how such an archive could be realized. The report suggested establishing a National repository; Nasjonalt vitenarkiv (NVA). The Ministry of Education and Research asked Unit to establish NVA and Unit began the development during the fall of 2019.

The repository-functionality was piloted during 2020 and additional functionality are developed in parallel. According to the project plan the majority of the institutions will start to migrate to NVA from the local repositories during the second half of 2021.

Semantic web, metadata and authority-files

As part of a bigger project in Unit; Masterdatakilder (Master Data sources) Unit plans to establish a new generic metadata platform (entity-register). The main goal for this platform is to store, maintain and share all types of controlled vocabularies that are not maintained elsewhere. Local topic/subject authorities are the first metadata planned for the new platform. These authorities are currently maintained locally.

The project was delayed for various reasons during 2020, but will be restarted in 2021.

Authorities for people, corporations and conferences may be moved to the new entity registry, among representations of the bibliographic records. The platform will form the base of the semantic web/linked data approach at Unit, with planned functionality for a new navigation within the data and query-options using SPARQL.

The metadata is licensed with open licenses.

National strategy for libraries

In 2019 the Norwegian government published a new national strategy for the libraries of Norway.² This also includes the educational and research libraries.

² <https://www.regjeringen.no/no/dokumenter/nasjonal-bibliotekstrategi-2020-2023---rom-for-demokrati-og-dannelse/id2667015/>



The strategy contains a chapter for infrastructure and metadata and Unit has in co-operation with the National Library of Norway been given the responsibility to operationalize some of the measures in the strategy; like the establishing of an open metadata well/data sea for bibliographic records and the distribution of joint/common authority registries. It is the National Library of Norway that has the overall responsibility to follow up the strategy.

The activity in 2020 has been limited by the Corona-situation.

COVID-19 / Corona

The Corona-situation has affected the libraries and Unit during 2020. The libraries have been physically closed for periods of time and there has been a need to change/configure the systems to support the situation (take-away libraries, focus on the electronic content, ILL, preventing requests on physical material, extend loans, prevent overdue notifications etc).

The libraries has been digital for quite some time (also before Covid) and the general impression is that the libraries has handled the situation well and that the systems has helped to support and simplify the situation.

There has also been a focus on strengthen the accessibility of electronic materials for the end-users. One legal obstacle which needs to be addressed in future negotiations with vendors is the limitation in providing the end-users with digital copies of articles as part of the ILL process.

Discussion topic: Criteria for compiling publishing statistics

Within the context of publishing studies, it is very apparent that internationally publishing statistics are compiled based on different, not always explicitly available and sometimes even altering methodologies. Therefore, the data are not only incomparable between different countries, but sometimes are even incomparable in time series of a single country. This limits the usability and usefulness of statistics for researchers, publishers, and policy makers alike.

For the last couple of years, we at the National Library of Latvia have been working to ensure the comparability of the statistical data on publishing in Latvia collected and compiled by our team. As this process is about to conclude, we are starting to focus more on the aspects of usability of the publishing statistics as well as on interoperability with other data. Hence, we are curious to discuss, whether others also perceive comparability, usability, and interoperability of publishing statistics as an issue and if, perhaps, are also working towards some improvements.

“Interlibrary-Loan (ILL) functionality and integration with external systems, especially related to article delivery are a focus. Legal challenges related to delivery of electronic files directly to the end-users are looked into. One legal obstacle which needs to be addressed in future negotiations with vendors is the limitation in providing the end-users with digital copies of articles as part of the ILL process.”

For discussion:

How are digital articles delivered to end-users when obtained by ILL? By print-out, or electronically?

- BIBSYS consortium is facing legal restriction from licensing vendors against delivering electronically to end-user.

To what extent is article ILL used, and how is it handled?

- Is anyone considering Ex Libris product RapidILL?
- Could we benefit from more Nordic networking?

Or, is article delivery offered by pay services, like *CCC Get It Now* and *Subito*?

Discussion topic: Bibliography and other library data on Wikidata

As a basis and reason for this proposal for the discussion is the ongoing project "Latvian Memory Institution Data in the Digital Space: Connecting Cultural Heritage" where one of the tasks is to prepare and publish Latvian national bibliography as linked open data.

NLL has prepared data set of the National Bibliography monographs for the period 2017-2020 in accordance with the RDA and can be published in the form of open linked data.

The next steps would be:

- to establish a data model that we could use (like [Fennica](#))
- setting up a server and a SPARQL endpoint
- setting up a Web client (that is, a user-friendly static Web page where SPARQL queries can be executed client-side)
- provide downloadable RDF data dumps

All that is crucial and very important not only for national bibliography but for all kinds of data that libraries and all other memory institutions produce and hold, such as, thesauri, authority files, etc.

But what next? What would be the step after that? There are two main roads that we can take:

- 1) internal LOD use - for annotations, for data representation, data visualization, data analysis, knowledge organization, etc.
- 2) external - to connect our LOD outside the local institutional servers. But how and in what way to do that?

The first and easy answer would be - **to use URI's from other datasets** (like ORCID, WSNI, VIAF, Wikidata, etc.). It is essential but we shouldn't stop just here.

Linked Data on the Web exists in **many** shapes and forms. Linked Data can be published using plain RDF files in various syntaxes, such as JSON-LD, Turtle, RDF/XML, and more. Using different ontologies etc. Next to that, different forms of queryable Web interfaces exist, such as **SPARQL endpoints** and **Triple Pattern Fragments (TPF)** interfaces. If we want to query Linked Data from the Web, we need to be able to cope with this heterogeneity.

And there are only a few people that can understand and handle all this technical stuff and manage to get something out of it.

So the question is...

How libraries and other institutions all over the world can connect their data in a meaningful way so they can carry out the **vision** that one of the information science fathers **Paul Otlet** once dreamed at the end of the 19th century and begging of the 20th century - **Universal Knowledge base** (incl. *Universal Bibliographic Control*) where all institutions would collaborate to build one and universal knowledge base for everyone to freely use?

And in doing so fulfilling the main role of libraries - serving as a **bridge between knowledge creators and knowledge users**.

There could be two ways:

- 1) to build or use some kind of a knowledge graph querying framework (like [Comunica](#) etc.) where all memory institutions would have to participate
- 2) to participate in ONE knowledge base as a connecting node for relevant data that memory institutions hold

And here steps in the **Wikidata** as one of the possible solutions, as a knowledge base that everyone can freely use. And, finally, the question for discussion:

Have you considered putting your data (bibliography, authority, etc.) into Wikidata?