

Nordic Networking Group on bibliographic and infrastructure topics (NNG)

Meeting minutes 19-20 April 2018, Helsinki

Short URL: <https://tinyurl.com/nng2018-minutes>

Attendees

Country	Institution	Name
Denmark	DBC	Hanne Hørl Hansen
		Line Jung Lindhard
	Royal Danish Library	Leif Andresen
Finland	National Library of Finland	Juha Hakala
		Minttu Hurme
		Nina Hyvönen (day 2)
		Tarja Mäkinen (day 2)
		Marja-Liisa Seppälä
		Osma Suominen
Iceland	Consortium of Icelandic Libraries	Sigrún Hauksdóttir
		Sveinbjörg Sveinsdóttir
	National Library of Iceland	Ragna Steinarsdóttir
Latvia	National Library of Latvia	Uldis Bojārs
Norway	BIBSYS	Jone Thingbø (day 1)
	National Library of Norway	Hilde Høgås
Sweden	National Library of Sweden	Anna Berggren
		Miriam Björkhem

Day 1 - April 19th, 2018

1. Welcome round
2. Final approval of meeting minutes from 2017
 - 2.1. The meeting minutes were approved
3. Reports from members
 - 3.1. Denmark
 - 3.1.1. Library System for nearly all public libraries has now been rolled out for (almost) the whole country. They use the DBC well of data for their catalogs. The system is not open source but built upon some open source services by DBC. The functionality is limited compared to the old systems it replaces. The internal data model is based on DanMARC, which is quite different from MARC21.
 - 3.1.2. The state is withdrawing from DBC as it doesn't want to own private companies for political reasons. As a consequence the state has given notice of termination on the contract on the national bibliography, and it is uncertain what will happen regarding the national bibliography.
 - 3.1.3. DBC has the current contracts for providing library services for some years. It seems likely that IT services will still be bought from DBC in the future.
 - 3.1.4. There is an agreement with WorldCat. When cataloging a book, they first check the national union catalog, then WorldCat. The metadata is converted from MARC21 to DanMARC. Nothing important is lost.
 - 3.1.5. If Denmark moved to MARC21, a lot of metadata would be lost. There are many subfields for different kinds of materials. It is likely that DanMARC2 will be used and maintained until the switch to BIBFRAME.
 - 3.1.6. Royal Danish Library currently has two Aleph systems (and two discovery platforms) because of a merger. The library first thought about merging into a single Aleph system but that would have been difficult. Instead the library is now preparing a tender for a completely new system. It should be a widely used system, but none of these support DanMARC2. The RDL could move to MARC21, but it would be difficult. Deadline for bids could be in July-August. The bid will be both for the backend and the discovery platform.
 - 3.1.7. There is a new prototype system for finding literature by mood. These moods must be added into the metadata records. The information is provided by a group of librarians who read books to make book recommendations. You can also state things like "the main character is a boy developing into manhood" to describe the fictional work. These are represented as subject headings but they are not really subjects the book is about. This way of describing fiction provides for more explorative search, a bit similar to Netflix recommendations. The

Finnish system BookSampo (Kirjasampo.fi / Boksampo.fi) is somewhat similar but doesn't describe books by mood.

3.2. Finland

- 3.2.1. Finna national search interface / discovery portal has been growing. Over 24M visits in 2017 in total for the national Finna.fi and the organization specific interfaces. All university libraries have changed from Voyager OPACs to Finna for their discovery. Many public libraries, archives and museums are also using it. The first Koha based libraries have joined in 2017. Finna Street is a new mobile web app that shows historical pictures from nearby the place you.
- 3.2.2. Finto national thesaurus and ontology service is being developed further. We are trying to convert from the General Finnish Thesaurus YSA to the General Finnish Ontology YSO. All the metadata has to be converted.
- 3.2.3. Melinda union catalog is growing. Some more public libraries have joined. Article database Arto is going to be moved to Melinda. Another more commercial article database maintained by BTJ was discontinued and given to the National Library and merged with Arto, increasing its size by 600 000 records. The metadata quality was quite high. Also planning to merge the national discography Viola with Melinda.
- 3.2.4. NLF is trying to expand authority work to other libraries. Some subfield \$0 links were added to Melinda, linking bibliographic records to authority records and making it easier to keep these synchronized.
- 3.2.5. NLF is making progress with ISNI. Some 40,000 organization authority records have been sent in March and we are waiting for feedback. Several test loads were done beforehand. We had to enhance the records with organization types and location codes. The ISNI requirements are quite strict, they require e.g. UNESCO location codes. We are planning a similar batch load of persons. Eventually these names will be incorporated into ISNI (if they aren't already there) and given identifiers, which we can then put back into our authority records. Finland intends to become an ISNI registration agency.
- 3.2.6. Finland has not cooperated with VIAF because of data protection concerns. A safe harbor agreement would have been needed but OCLC couldn't legally do that. With ISNI the situation is a bit different because although maintained by OCLC, it is based in Europe so follows European data protection rules. The data ombudsman has been very strict in the past and has forbidden libraries from publishing e.g. year of birth. In Denmark the situation is such that year of birth can only be published if it is required to separate between people with the same name.
- 3.2.7. The National Bibliography Fennica has been published as Linked Data in the data.nationallibrary.fi service.
- 3.2.8. The joint acquisition project to obtain a new library system was terminated in the spring 2018. The partners had too different needs,

for example e-resource management. Now some university libraries together with the National Library are starting to implement an open source system based on Koha (and Coral for e-resource management). The other university libraries are continuing with acquisition of a commercial SaaS system. Both groups are leaving behind their Voyager systems by the end of the year 2019. It seems likely that CSC (that currently hosts the Voyager systems and have people who understand the software deeply) will continue hosting the Koha based systems, while the SaaS platform will of course be hosted by the vendor.

- 3.2.9. The long term preservation project for libraries, archives and museum has specified a package architecture based on the METS format, for the content submitted to the archive. We also have documentation (available in English) on which formats are archivable. However, more specific guidelines are still needed, e.g. for EPUB documents. CSC is working on the ingestion and feedback system. Several million packages are already in the system but a lot of archival functionality remains to be built. The system is open source and all modules are available from Github. There is a quota (in terms of terabytes) specifying which organizations are allowed to submit material and how much. The National Library is submitting web archive data into long term preservation. In web content the archival is done on bit level, there is no intent to do migrations. The next step is to archive documents from the DSpace document repositories and digitized materials, for which we have a lot of technical metadata (e.g. scanner settings) that needs to be packed into the packages. The cost of creating a proper digital archive is very high so it makes sense to have a national level project to share those costs, instead of each organization building their own solution. There is no public access to the archive, all access will go through participating organizations.

3.3. Iceland

- 3.3.1. An invitation to tender for a new library system to replace the current Aleph system has been issued on 26 March 2018. Tenders will be opened in May 9th, which is also the deadline for responses.
- 3.3.2. The project was initiated in September 2017. Preparatory work took nine months, organized into specialist groups. An extensive requirements list (110 pages) was published in March 2018 (see https://www.landskerfi.is/sites/default/files/lb-skjol/requirements_list_for_a_new_library_system_0.pdf).
- 3.3.3. In Iceland, about 300 libraries share the same Gegnir database, which is currently based on the Aleph software from Ex Libris. Since each library wants, to some extent, to preserve their independence in specifying system parameters, circulation and patron related & consortium features were challenging to specify.
- 3.3.4. A lot of requirements have been made, including both the current functionalities and a wish list of additional features. Due to the sheer number of requirements it will not be easy to respond. Many system

requirements are however at “SHOULD” level, which indicates they are desirable.

3.3.5. In the second round, a number of bidders will be selected and asked to solve predefined use cases..

3.3.6. Eventual decision will be based on responses to questions & predefined use cases and price. The role of use cases is to double check that the requirements are actually met.

3.3.7. Vendors have been told that they can co-operate to meet the requirements if their applications alone do not cover all the requirements.

3.3.8. The new system should be up and running in the end of 2019.

3.3.9. Funding is not expected to be a problem since Landskerfi bókasafna consortium has been putting money aside for this project.

3.3.10. Iceland has recently joined VIAF. All data was submitted (authority and bibliographic), nothing was filtered. ISNI participation has been discussed, but no decision to join has been made yet.

3.3.11. RDA conversion is currently work in progress.

3.4. Latvia

3.4.1. The National library's (NLL) new building was completed 2014. The beautiful design was inspired by a play by famous Latvian writer Rainis.

3.4.2. The National library uses Primo and Aleph & MARC 21 & AACR. Gradual transition to RDA is under way, and 2.5 people are available for RDA-related work. The entire RDA will not be translated, just the key parts. That was a good decision since RDA is constantly evolving and maintaining the complete Latvian translation would be difficult.

3.4.3. Aleph-based electronic union catalogue of the libraries of national importance includes collections from 13 major Latvian research libraries since 2000.

3.4.4. Unlike major research libraries, public libraries use a domestic library system.

3.4.5. National library is responsible of authority control and maintains Primo user interface to its own databases.

3.4.6. The national library hosts also a system for electronic legal deposit.

3.4.7. Selective web archiving is done, but the data cannot be made publicly available; legal deposit limitations apply. The same applies to other e-materials covered by the legal deposit act.

3.4.8. Latvia has been participating in VIAF since 2013, but is not a WorldCat member. VIAF data is sent quarterly.

3.4.9. Locally created authority records contain both the original and Latvian name forms. Without the former it would be difficult to carry out duplicate control in e.g. VIAF.

3.4.10. Subject headings have been translated from LCSH and the terms in Latvian have been linked to the English terms in LCSH. Therefore it would be possible to link e.g. the Finnish subject headings to Latvian ones via LCSH.

3.4.11. Producing linked data is a priority. Work level records are being produced in a multi-step process with the goal to have work level

- authority records. Catmandu, Python and some proprietary tools are used in linked data production.
- 3.4.12. NLL's linked data uses BIBO, Dublin Core and Schema.org, as well as SKOS + FOAF.
 - 3.4.13. The library has digital repository which was custom-built for the library by a Latvian vendor. There is even a linked data API (<http://dom.lndb.lv/>); however, other library systems are not using it yet.
 - 3.4.14. Within repository usage of linked data allows interlinking of collection and document metadata, as well as linking of documents to one another. Multiple representations of the metadata (as linked data) have been published; supported formats include XML and RDF.
 - 3.4.15. Linked data collection pilot project "Rainis un Aspazija" (RunA) is available at: <http://runa.lnb.lv>
 - 3.4.15.1. [collection object example: http://runa.lnb.lv/60316/](http://runa.lnb.lv/60316/)
 - 3.4.16. This pilot is a collection of objects from the author Janis Rainis and his wife Aspazija. Objects have comments with further links to e.g. works of these authors. A prototype text annotation tool has also been built, to facilitate manual annotation work.
 - 3.4.17. Publications about the RunA project and the annotation tool:
 - 3.4.17.1. <https://www.jlis.it/article/view/83-106>
 - 3.4.17.2. <http://ceur-ws.org/Vol-1608/paper-04.pdf>
 - 3.4.17.3. <http://ceur-ws.org/Vol-2014/paper-08.pdf> (annotation)
 - 3.4.18. Latvia is interested in joining NNG.
 - 3.5. Norway / National Library
 - 3.5.1. The Government public library strategy 2015-2018 requires various services to be delivered for public libraries. The national library is responsible of implementing such services, including RDA implementation, Bibliotekssøk (search across all Norwegian library catalogue) and authority files for personal names and corporations & works.
 - 3.5.2. The National authority file contains more than 100.000 names. It is a subset of BIBSYS authority file.
 - 3.5.3. The authority file for names is currently linked only to BIBSYS (Alma) database. The next step is to populate the authority database with names from other databases as well.
 - 3.5.4. Work on a national authority file for Works continues at the National Library of Norway. During the past year, the library has developed a data model to represent works based on the Library Reference Model (LRM) and primarily using vocabulary from the RDA registry. There is also a simple typology of works, as well as rules for the automatic extraction of works from the BIBSYS-catalog.
 - 3.5.5. The National Library expects to finish work on the automatic extraction in May. The next major stage in the project is devoted to a manual clean-up of the automatically extracted work clusters, involving the merging of identical work clusters, the correction of titles and other attributes and the assignment of relationships between works where possible. This stage will initially be focused on Norwegian

language-based works, but will gradually be expanded to include foreign language works and other work types (music, films, etc). The authority file will be made available to librarians and to system developers via an API later this year.

- 3.5.6. More information in Norwegian:
<https://bibliotekutvikling.no/ressurser/kunnskapsorganisering/kunnskaporganisering-utvikling/verksregister/>
- 3.5.7. Cataloguing of manifestations will in the future use work level records and provide links to them.
- 3.5.8. The National Library has become an ISNI Registration Agency. ISNIs have been automatically assigned to nearly all legacy names retrospectively, and assignment of ISNIs for new authority records will start before the end of 2018.
- 3.5.9. Biblioteksøk (search and interlibrary loan across all Norwegian library catalogues) was beta released in May 2017 for libraries and end users in five counties. Since then four more counties have been included, three new counties will be included in May before an official release covering all libraries in Norway by the end of 2018..
- 3.5.10. The database will facilitate searching & ILL. Bibsys libraries however decided not to provide ILL services via Bibliotekssøk for their own users although they will support ILL requests initiated by customers in other libraries.
- 3.5.11. NCIP is used for ILL, which limits the possibility of sending ILL requests from abroad. Some specific functionality has been added to NCIP to allow for instance article requests.
- 3.5.12. In Denmark the new ISO ILL protocol ISO 18626 is used; DBC, Systematic and Axiell have already implemented it.
- 3.5.13. The National Library will start using RDA before the end of 2018. The library is responsible for implementing RDA in Norway. The Norwegian translation of RDA was completed in December 2017, but due to the RDA Toolkit Restructure and Redesign (3R) Project, the Norwegian RDA Toolkit will not be released before the end of 2018.
- 3.5.14. Public libraries are still using NORMARC, Bibsys and the national library MARC 21. NORMARC allows very specific description of carriers, and this information is used to produce e.g. statistics. MARC 21 is less detailed, and this is the biggest problem in the NORMARC – MARC 21 format conversion.
- 3.5.15. No MARC 21 training will be provided either by the national library or other libraries. When libraries update their systems and start using MARC 21 they must organize format training by themselves.
- 3.5.16. More than 250.000 books have been digitized by the national library, and this enables data mining and various machine learning –related experiments. For instance, there is an application which can recommend a subject description for a book.
- 3.6. Norway / BIBSYS
 - 3.6.1. The NNG web site is hosted by BIBSYS. It should be used more actively to inform other partners about the work done. This might

enable other partners to avoid repeating work done or making the same mistakes the others have possibly made.

- 3.6.2. As an example of work already done, BIBSYS evaluated several library systems, and this information could be made available to everyone.
- 3.6.3. Many NNG partners seem to be interested in interlinking their authority files.
- 3.6.4. Linked (semantic) data may cause performance issues and BIBSYS is investigating the reasons for that both in code and in data.
- 3.6.5. BIBSYS has undergone major organizational changes; it is now part of a much larger organization with additional responsibilities.
- 3.6.6. The annual report says: The Ministry of Education has carried out a major structural change, and BIBSYS is part of this change. As of January 1 2018, BIBSYS, CERES, and parts of UNINETT are gathered in a new administrative agency. The new organization has been given responsibility for managing the digitization strategy and given a coordinating role in the higher education sector. The organization has spent much time laying the foundation for implementing the new role. However, the main goal is to deliver our services with at least as good quality as before. A reorganization will take place with effect from 1 January 2019, where the goal is a unified organization. Until this is in place, BIBSYS exists as a department of the new organization. The organization has only a preliminary name, "Kunnskapsdepartementets tjenesteorgan", pending a new official name.
- 3.6.7. New organization has 200 people, divided between Oslo and Trondheim. It has new tasks, such as co-ordination of some IT activities in university sector. Digitization is the first area where centralized services are provided.
- 3.6.8. UNINETT part of the new organization has acquired for instance learning systems. It has now become an infrastructure provider. CERES has developed student information systems.
- 3.6.9. BIBSYS staff is happy about this organizational change. It gives better possibilities for co-ordination of activities in e.g. acquisition of CRIS systems. Even further extensions are being hoped for. For instance, Norwegian center for research data could be incorporated.
- 3.6.10. Specifying the mandate of the new organization may be a bit challenging.
- 3.6.11. Alma is in production in BIBSYS database. Libraries are satisfied, although there are still challenges with e.g. ILL functionality.
- 3.6.12. The consortium is investigating what services will be needed in the next decade. Switching from the current application to open source is one option under consideration.
- 3.6.13. Alma is a cloud based system and it has served the libraries well; performance is good, and there has been no issues with security. Version updates are frequent, which is both good and bad. New features are added often, and they have to be tested and trained.

3.7. Sweden

- 3.7.1. National library strategy is under development and will be completed in 2019. But a draft exists, and it will be published & presented in the Web next May: *Tisdagen den 8 maj kl. 10 – 11 livesänds en presentation där Erik Fichtelius lämnar ett utkast till nationell biblioteksstrategi. Sändningen sker via <https://nationellbiblioteksstrategi.blogg.kb.se> och texten publiceras samtidigt på <https://nationellbiblioteksstrategi.blogg.kb.se/rapporter/>*
- 3.7.2. There is a parallel on-going study on national library service platform which has just started and will be completed 2018.
- 3.7.3. Libris XL open source system will be released in June 2018 (which means that there is a slight delay from the schedule announced in the 2017 NNG meeting). The system will not be fully functional, but it will support cataloguing of serials and simple monographs. Libraries cataloguing music and other complex materials will have to wait further.
- 3.7.4. All existing data has to be migrated into the new system. 80-90 % of all records are either serials or simple monographs, so these material types were prioritized.
- 3.7.5. New format and new cataloguing processes will be introduced, so Libris XL is a big step. Since every library will catalogue materials into Libris first, the change involves every library in Sweden.
- 3.7.6. Bibliographic data can be imported in MARC format, stored in Libris XL in Bibframe/XL format, and then exported in MARC again. The final MARC record will not be exactly the same. In some cases metadata will change but it will still deliver the same or even better functionality than current Libris MARC records.
- 3.7.7. Libris is the first organization to go into production with Bibframe-based system. Conversion back to MARC 21 is a unique feature of Libris XL.
- 3.7.8. The first version of Bibframe would not have been suitable for Libris needs. Bibframe 2.0 is much better in this respect.
- 3.7.9. KB has just joined ISNI, after having been s VIAF member for a long time. There are already about 70.000 ISNIs for Swedish names due to the VIAF cooperation. No batch loads to ISNI database have been sent yet. Finnish delegates mentioned that the Finnish MARC 21 – ISNI XML conversion tool is open source and available for free in Github: <https://github.com/NatLibFi/MARC21ToISNIMARC>

Day 2 - April 20th, 2018

- 5. European BIBFRAME workshops / Leif Andresen
 - 5.1. A small working group has been preparing these workshops,
 - 5.2. The first workshop in Frankfurt in 2017 had 41 attendees including Sally McCallum and several people representing NNG. The meeting was very successful and highlighted the fact that many European national libraries

- already have Bibframe related activities; mainly experimental but also production oriented (e.g. Libris XL).
- 5.3. Due to the workshop the Library of Congress is now aware of Bibframe activities in Europe.
 - 5.4. There is now a 2018 organizing committee which has prepared the agenda of the 2nd workshop which will take place in Florence in September 2018. The meeting will be hosted by Casalini Libri and there is room for 60 attendees.
 - 5.5. There was a Bibframe pre-meeting before 2017 SWIB meeting. One topic discussed there was the possibility of creating local extensions to Bibframe. It should be possible to dumb them down to the basic Bibframe using similar mechanism than in Dublin Core.
 - 5.6. The first day of the Florence meeting will be Bibframe tutorial; the workshop will take place Tue-Wed.
6. Linked open data (LOD) – current status and future plans
 - 6.1. Sweden
 - 6.1.1. KB is busy implementing Libris XL which relies on open linked data.
 - 6.1.2. Libraries have talked about the benefits of open linked data, but so far discussion has been theoretical: there are no practical results to show.
 - 6.1.3. In order to change this situation, KB has a cooperative project with Wikimedia to demonstrate the benefits of Libris XL both within and beyond the library community. Libris XL metadata will be used to enrich Wikimedia, first with manifestation metadata and later with work metadata (once the work level records have been created).
 - 6.1.4. There are no limitations on how the usage of Libris XL metadata.
 - 6.1.5. KB will arrange later in 2018 a workshop in Stockholm in which Libris XL will be presented.
 - 6.2. Norway
 - 6.2.1. BIBSYS is developing an open linked data solution for Nasjonalbiblioteket.
 - 6.2.2. Authority records are the first step, initially for works, then for names.
 - 6.3. Iceland
 - 6.3.1. Not much to report yet. Open linked data for works and names have been discussed. The tender for new library system takes open linked data into account.
 - 6.4. Finland
 - 6.4.1. The Finnish national bibliography Fennica was published as Linked Data in December 2017. Link to Osma's presentation: <http://tinyurl.com/fennica-ld-nng>
 - 6.4.2. Bibframe catches much of the original metadata, so the initial migration from MARC to Bibframe in the pipeline does not lose much information.
 - 6.4.3. MARC records cause problems because their content may change depending on when they have been created, since cataloguing rules and practices have changed over time.
 - 6.4.4. Global graph of bibliographic data would make this data more relevant since then it would no longer exist in a silo which is difficult to use outside libraries.

- 6.4.5. Finnish data model cannot be used for cataloguing purposes, but Osma believes that it does not need to be extended much to reach that goal.
- 6.4.6. Wikidata has already been extended with library linked data. Finnish places contain links to the subject headings describing these places in YSO ontology. See for instance the Wikidata entry for Turku <https://www.wikidata.org/wiki/Q38511> contains a link to Turku in YSO (URL <http://finto.fi/yso-paikat/fi/page/p94447>).
- 6.5. Latvia
 - 6.5.1. Uldis's presentations are published on the NNG-website as an appendix to the minutes.
 - 6.5.2. It is important to add URIs to metadata to provide a basis for linked data.
 - 6.5.3. The national library's digital object management system is based on a relational database system, so applying linked data may not be simple.
 - 6.5.4. Latvia has made some experiments with Osma's migration tools.
 - 6.5.5. VIAF co-operation has provided a good basis for linked data production.
 - 6.5.6. MARC format is not an ideal starting point; for instance tags 150 & 450 do not have a code indicating the language of the term, which is a problem when the data is migrated.
- 7. Discussion on VIAF & ISNI experiences
 - 7.1. Iceland
 - 7.1.1. Iceland has sent the entire all data (authorities and bibliographic records) to OCLC because OCLC demanded it. Bib records are only used in VIAF, not in WorldCat.
 - 7.2. Norway
 - 7.2.1. Norway has sent information to VIAF on personal and corporate names for years. Information is taken from Bibsys, with (in VIAF) Norwegian flag on those names that are from the national bibliography. There are 100.000 names like that, then million more from Bibsys.
 - 7.2.2. The next step is to update the records with ISNI. NB's VIAF records have been updated to the ISNI database.
 - 7.3. Latvia
 - 7.3.1. Latvia has participated in VIAF since 2013. It took a year to make the decision in the library to give the data to OCLC for free. Data is delivered quarterly; OCLC retrieves it from an FTP server. A selection of bibliographic records is sent in order to complement the authorities.
 - 7.3.2. The library imports VIAF ID's and ISNI numbers.
 - 7.4. Denmark
 - 7.4.1. In Denmark, authorities for personal names have been sent to VIAF since 2014 in DANMARC2 format.
 - 7.4.2. Since 2017 data has been imported from VIAF to enrich authorities. ISNIs, VIAF IDs, Wikidata IDs, nationality, year of birth and death and gender are retrieved. A decision has been made not to retrieve

additional name forms from VIAF although local authority records could be enriched with them.

8. RDA – status reports

8.1. Iceland

8.1.1. Catalogers have quite positive view of RDA. Catalogers manual is the most used reference. [link to Ragna's slides]

8.1.2. Training material is in Icelandic. Can be shared if others are interested.

8.2. Denmark

8.2.1. Decided to go for RDA. Current rules are no longer maintained. Danish profile for RDA has been created. Worried that RDA is changing and have to revise the Danish version. Completely Danish vocabulary has been submitted to the RDA registry, with definitions. Format has to be changed to fit in RDA specific data. Also working on representation of authority data. There is a 4 step plan for managing the conversion (including taking care of data extension) in all libraries. The vision for RDA is to change the cataloging model, make more use of authorities and cut the information in manifestation level records. Performance issues must be investigated. Funding for planning comes from the Danish Digital Library. A committee (Leif, Danish culture agency and Digital library) asked DBC to make a proposal for how to go forward with RDA.

8.2.2. The first idea was to change the cataloging model and to implement the whole model at once. This didn't work, because all library systems would have to change at the same time. So instead the first step is implementing RDA cataloging rules with DanMARC2. Make sure that it's possible to add links to authorities (eg agents) and works. But these links will at first be local. Eventually these will create a mass of entities. The first step will be rather small for libraries.

8.2.3. Step number 2 is creating a national authority registry. Authority records are still new in Denmark and only used within DBC. All the libraries must learn how to make authority records and exchange them.

8.2.4. Step 3 is changing the data model. This is the largest step technologically. Interfaces must be changed so that entities can be searched and traversed. Trying to produce use cases and identify illustrative cases to envision the future.

8.2.5. Step 4 is creating proper Linked Data. BIBFRAME or some other format will be used, DanMARC2 will be left behind. This step may actually be merged with step 3.

8.2.6. Need to also provide flat, non-RDA MARC for some systems, but this will be the exception not the rule. DanMARC2 has already been amended to fit in some RDA specific data so that RDA fields can be retained for imported records. One main challenge is splitting up existing records into works, expressions and manifestations. Statistical methods will be used for extracting works and expressions. Small

project was done to test this. Problem is that there are no authority records for agents and this makes work extraction difficult. So agents will need to be extracted first. Want to use the same method and model both for old and new records. However, extracting expressions is especially difficult and may be skipped for old records. Data quality among the 37M records varies a lot, they come from many different sources.

8.3. Finland

- 8.3.1. Entirely different situation than in Iceland. Negative views on RDA among libraries due to increased time required for RDA cataloguing. Despite the concerns of the library sector, RDA is being applied at archives and museums. The national library has received a request from libraries that we should make RDA policy statement supporting so called lightweight cataloging, so that RDA cataloging wouldn't take so much time. Libraries have cut cataloging resources at the same time RDA was implemented.
- 8.3.2. Started cooperation with publishing sector, trying to harmonize RDA cataloging instructions with Finnish version of ONIX and to align terms of equivalent elements (at least in translations). The aim is to get richer and better quality metadata from publishers to the union catalog and national bibliography. Publishers are more positive to RDA and libraries.
- 8.3.3. Data models are going to be harmonized also with research data model.
- 8.3.4. We are making a full translation of RDA. The deadline September 2018 is unrealistic. End of the year is more realistic, or perhaps a full year from the original release of the new RDA version 3R. Finnish catalogers are tired of continuous changes in RDA. They are not used to frequent changes in rules and terms.
- 8.3.5. Some current RDA rules are very U.S. centric, e.g. representation of dates. The new rules will be more international. Other problems occur with place names. National practices may be different. Plan is to implement 3R step by step, not changing everything at once. Will need an application profile for creating authorized access points (e.g. mix of author and title). This is discussed within EURIG. Have to avoid making profiles on many levels (RDA, European, national, local...), it would be better to have a set of examples of how RDA is used in Europe with a minimum level of common ground but not a full application profile. A workshop is coming up.
- 8.3.6. The first year of RDA was easy, a honeymoon phase. People with a negative view are now more vocal than those with a positive view.

8.4. Norway

- 8.4.1. Waiting for the Montreal process to finish (Oct-Nov). Will not use present RDA toolkit which will change. Looking forward for the English version of the new toolkit.

- 8.4.2. Small group (2 people) working full time on RDA and larger group starting cataloging with RDA. They are learning it now and will then train others. By the end of the year the National Library should be able to start RDA and other libraries coming later. Have to coordinate with BIBSYS.
- 8.4.3. Trying to learn from everyone else, e.g. reading policy statements and making visits. Might use Iceland survey results to set a positive mood.
- 8.5. Sweden
 - 8.5.1. In second year of using RDA. Still optimistic, it runs well. National RDA office with two people. Good to cooperate and share difficulties. During 2017 the RDA office was established, with a national RDA committee with representatives from libraries and vendors (e.g. BTJ). They discuss practices and education needs.
 - 8.5.2. The national library was the first to use RDA. Some libraries have joined in but most haven't. They are still waiting for the new LIBRIS XL system. National MARC format translation was enriched with RDA fields many years ago. Cataloging rules can coexist for some time although it's not ideal.
 - 8.5.3. Most Swedish catalogers use workflows in Swedish. Translated the core terminology and workflows but not a full translation. That's enough for catalogers. Usage of RDA toolkit is not very heavy. The licensed quota of simultaneous RDA users has been reduced from 100 to 25. Got the national profile included in the toolkit. Swedish catalogers are facing new RDA rules and new cataloging system. Could use Icelandic experiences to brighten the mood.
 - 8.5.4. Training material heavy on films in Swedish. Relying a lot on Library of Congress material. Big part of RDA office work is to ensure that RDA is working in the new cataloging client. Not everyone has adopted RDA in Sweden. They now need to do the change when the new system is introduced. Hope that people will now see the point of RDA.
 - 8.5.5. Need demonstrations for how RDA is useful, what can be done which couldn't be done before. Selmathon workshops were eye-openers for some catalogers.
 - 8.5.6. Old Swedish AACR2-based cataloging rules were stable for a very long time. The RDA world is living, moving, changing - as it should be. But catalogers are not used to this.
 - 8.5.7. RDA is the real move away from catalog cards! It is adapted to the web environment. This is the only way forward, a way to serve users better. It's better for customers that all 100 authors of a scientific paper are included, rather than only the first three. But catalogers don't like the extra work this brings.

9. SVUC agreement

- 9.1. All current members have received copies of the signed agreement. Any outstanding issues with the agreement (such as proposals to extend it) can be discussed here.
- 9.2. The signing process took almost one year.

- 9.3. NNG membership is separate from the SVUC agreement. Active members are welcome. Hosting NNG meetings and preparing a report ahead of the meeting is expected from members.
- 10. NNG members and membership: current status and future plans
 - 10.1. Estonia
 - 10.1.1. ELNET was initially very interested in signing the SVUC agreement but contact was lost.
 - 10.1.2. Decided to wait and see whether Estonia is interested in joining SVUC and NNG.
 - 10.2. Latvia
 - 10.2.1. Latvia would be interested in joining the agreement. What to do next? Management at National Library of Latvia is positive for data exchange, i.e. the SVUC agreement. Joining NNG was not discussed in Latvia but the forum is interesting.
 - 10.2.2. Everyone agreed that Latvia should be allowed to join. The agreement will be extended and Sweden will send the revised document for signing. Others don't need to re-sign the agreement since it allows for extension.
 - 10.2.3. There shouldn't be technical issues since other organizations are already accessing the Latvian databases. NLL is using Aleph which should be able to access Z39.50 interfaces provided by other SVUC partners.
 - 10.2.4. NNG membership will be discussed in Latvian management and then decided on the mailing list.
- 11. Next meeting
 - 11.1. Denmark will host the next NNG meeting in the Copenhagen area. Preliminary dates are 8-9 April 2019.
- 12. Other issues
 - 12.1. Legal deposit – current status and future plans
 - 12.1.1. In Sweden preparing to revise the legal deposit law. Started from a wish list.
 - 12.1.2. In Norway there is a new law, but waiting for regulations. Major changes. According to the old law seven copies were distributed to major university library. Under the new law a digital copy is deposited for every printed book and the national library may distribute it to a small number of simultaneous users. Details to be set in the regulations. Workflows and systems must be rebuilt. This work has not yet started due to lack of details. The new law also allows asking for metadata from publishers.
 - 12.1.3. In Denmark the Royal Danish Library last year prepared a report about collecting digital copies of printed books.
 - 12.1.4. In Finland there is no plan to change the law but guidelines are currently being revised.
 - 12.1.5. In Latvia working with issuers of periodicals to get layout files. Full text search will be limited to library network due to copyright concerns.

- 12.1.6. Icelandic law is from 2002 so ripe to be changed but a wish list is still being prepared. Would like to see the wish lists from Sweden and others.

13. EUDAT project / Juha Hakala

- 13.1. Research data is a high priority for the EU. They support projects that establish European/global services. EUDAT has had two phases since 2011 and has built a set of services for global customers. EOSC (European Open Science Cloud) is being built in two separate initiatives, EOSC Hub and EOSC Pilot. EU has informed that once these projects are over three years from now, further 70M euros will be available for the next phase.
- 13.2. There are many problems in this area. There are national services being built as well as domain-specific ones, especially for healthcare. What is the role of a European or global service? Who needs it and for what purpose? B2FIND is EUDAT union catalogue for metadata. It has two problems: 1) technical - incoming metadata in different formats, lack of cataloging rules and coordination. (There are exceptions) 2) many organizations send hierarchical data described on many different levels, but in B2FIND this gets fragmented into disconnected records that nobody can understand. There are plans to rebuild the whole database from scratch.
- 13.3. From the project management perspective bigger database is better, but this approach has sacrificed data quality. There is irrelevant material in the database, metadata which does not describe research datasets but e.g. publications.
- 13.4. B2FIND has implemented SRU access but it has not been published yet.
- 13.5. What should libraries' role in research data? In Finland the National Library has been training the people who will teach researchers. Because libraries are maintaining metadata about research outputs (articles etc.) they should have a role in how the research data ecosystem is being shaped.
- 13.6. Research data will be on the agenda for next year's NNG.

Danish report to NNG April 2018

Nordic Networking Group on bibliographic and infrastructure topics (NNG), Helsinki 19-20 April 2018

Implementation of RDA

The preparations for the shift to RDA includes in 2018 mainly further analysis and technological development of the national library infrastructure.

Implementation of RDA as new cataloging rules is the responsibility of Agency for Culture and Palaces. The national Danish Bibliographic Committee advise the agency and preparation of Danish Policy Statement, translation etc. is handled by the committee and working groups set up by the committee.

Implementation of RDA in the national union catalogue is the responsibility of Danish Digital Library and will be carried out by DBC.

The Danish strategy for RDA-implementation entails also the implementation of an entity-relation data-model. The goal is to implement all WEM-entities and convert before-RDA-records into the new model.

A roadmap for implementation in the national union catalogue has been drawn by the national Agency for Culture and Palaces and the Danish Digital Library and is planned to be carried out in four steps:

Step 1: Denmark is cataloguing according to RDA in an expanded danMARC2-format or MARC21 and it is also possible to use foreign RDA records.

Authority records can be used at a local level.

The union catalogue will receive bibliographic records according to both old rules and RDA

Step 2:

A national repository for authority entities is established and will be referred to through URI or VIAf-id.

All contributors to the union catalogue are free to contribute and exchange data with the national repository, - and can use the national repository to enrich the local catalogue.

Preparing a change of data model in the union catalogue (from bibliographic record to manifestation records)

Step 3:

Implementation of the new data model (entity/relation model), including handling of “pre-RDA” records in the new model – still in MARC. The catalogue will now be able to honor solutions using new ways of seeking and showing relationships in order to meet the demand for exploring in the catalogue.

Step 4:

The format will change from MARC and library data are now stored as linked data in a www environment.

The present situation is:

- The RDA vocabulary is translated into Danish and uploaded to RDA registry
- A Danish Policy Statement is formulated
- An adjustment of the Danish MARC-format is about to be finished in the next months.

- A working group is working on the requirements and rules for the national repository of authority data
 - A workshop between The national Danish Bibliographic Committee, Danish Digital Library and developers from DBC have discussed different scenarios and visions for using RDA comparing to current rules – what will the users gain from the move to RDA?
 - Further analysis regarding implementation of a new data-model in the national infrastructure, how old records and new entities can co-exist, which formats to use and support, and search, retrieval and presentation of entities in user interfaces is or will be carried out by DBC.
 - A range of Research & development projects on reconciliation of “pre-RDA” records. The first project will focus on person entities, and will be carried out by DBC later this year.
 - Establishing a National Repository for Authority Data – a project plan is not yet prepared
 - Information – ongoing
 - Education - a working group have been set up to prepare a strategic plan.
- In May DBC will host the annual EURIG-meeting and DBC has invited the libraries to a Danish RDA-day informing them on the plans and progress regarding RDA.

When it comes to a timeline, we plan to start cataloguing according to RDA by the middle of 2019. We don't know yet how many years it will take us to be at step 4.

The Joint Library System: Cicero Library Management System

The system, which use the national data repository and several web services developed by DBC, is now the only system used in public libraries in Denmark, which is the national data repository acts as a true union catalogue.

DBC

At August 7, Jane Wiis became new CEO of DBC. Among other things, she has been a vice-president at the Local Government Denmark, which are one of the owners of DBC. The other owner - The Danish State - wishes to withdraw from DBC, so the ownership of DBC is discussed at the moment.

As a consequence of their withdrawal the state has given notice of termination on the contract on the national bibliography, (termination can take place after five years of notice). Also the contract for library.dk is under termination. Library.dk is the common online platform for access to library content in Denmark. It is not yet decided what will happen.

A new way of conveying mostly fiction by using other terms illustrating moods etc. in order to make the access to library resources more explorative and user friendly than our neutral subject headings is under development with partners and a prototype was launched in April. <https://content-first.demo.dbc.dk/> (Can't be reached by Internet Explorer)

Royal Danish Library

The Royal Danish Library have decided to move from the Aleph systems to a more modern library platform. After the merge of The Royal Library and State and University Library of Aarhus, the new library still have two different Aleph systems.

The new library platform will serve four universities (Copenhagen, Aarhus, Roskilde and Aalborg) and all national library function - including serving the public libraries with among other services the National Loan Center and Library Centre for Integration.

We are still in the preparation phase including a visit to Norway with interesting visits to BIBSYS and Nasjonalbiblioteket. The intention is to start a new system in 2019.

The Royal Danish Library plan to start using RDA as cataloging rules at the same time.

We have an open blog about the process with a new system in Danish: <http://bibliotekssystem.kb.dk/>

NNG meeting in Finland, 19.-20.4.2018

Country Report from The National Library of Finland

Finna

The National Library of Finland maintains the Finna service and is responsible for its development and building a cooperation network around it. The customer interface is built on the basis of open source code software VuFind, and Finna is gradually replacing the user interfaces of all Finnish libraries, archives and museums.

The National Library maintains also Finna's national interface: [Finna.fi](http://finna.fi) which aims to provide all the freely available material of the partner organizations. There is an open interface of the finna.fi service at api.finna.fi, which provides unrestricted access to the metadata of finna.fi under the CC0 licence.

There were over 24 million visits to Finna-interfaces during year 2017, and the use is growing this year, too.

The first Koha-library in Finna (OUTI-kirjastot) published the beta version of organisational Finna in February 2018.

As an interesting application for Finna-data, there is Finna Street: <https://www.finna.fi/Search/StreetSearch?go=1&lng=en-gb> which searches Finna's historical photographs based on user's location.

Finto

The national thesaurus and ontology service Finto (www.finto.fi) is being developed further in a research- oriented project in 2016-2018. Both the Finto service and the open source software Skosmos powering it are being developed with an emphasis on making them a better fit for the needs of the public sector outside of the memory organization domain. In the library sector one of the main

goals of the project is to aid in the change from thesauri (YSA) to light-weight ontologies (YSO) in subject cataloging.

Melinda

Melinda is a data repository currently containing the Finnish national bibliography as well as metadata about the materials in higher education libraries, several research libraries and several public libraries. Currently, the service and the database related to it work in Aleph library system which is supplemented with several in-house developed additional components.

Melinda's roadmap for the next project period (2017-2020) includes updating both the Melinda co-operation model and Melinda's technical platform to suit better modern requirements for bibliographic metadata and moving towards actual open linked data. We are also aiming to increased co-operation with non-library metadata providers (ie. publishers etc.) and integration with other national and international metadata services.

In 2018 there will be more new public libraries joining to Melinda, Finnish article database (ARTO) will be integrated into Melinda, and preparations for integration of Finnish National Discography (VIOLA) are ongoing.

ISNI

A bit over 40 000 organisation authority records were sent to the international ISNI database as a batch load in March 2018, and a similar batch load for person authority records is being prepared.

Linked data services

The Finnish National Bibliography Fennica has been published as Linked Open Data in December 2017 at the new service data.nationallibrary.fi, which also functions as a data catalog listing open data sets and APIs provided by the various systems of the National Library. The Linked Data service is a prototype that is used to gain experience and collect feedback. The data has not yet been

extensively linked with other data sources. We are planning to link it with other library data sets (including other national libraries) as well as Wikidata, VIAF and ISNI.

Library systems

Finnish higher education libraries (libraries currently using the Voyager system) are in the process of preparing a tender to acquire a new back-end system.

The joint acquisition project was terminated in the spring 2018 as it became apparent that different libraries have too different requirements to acquire same system. Part of libraries (including National Library of Finland) decided to start implementing open source library system Koha, while another part of libraries is continuing with acquisition of a SaaS-system. Both groups are hoping to move on from Voyager before the end of year 2019.

13th April 2018

Authors: Ragna Steinarsdóttir, Sigrún Hauksdóttir and Sveinbjörg Sveinsdóttir

NNG meeting in Helsinki, 18 – 19 April 2018

Country Report from the Consortium of Icelandic Libraries and The National and University Library of Iceland

1. Introduction

“Landskerfi bókasafna hf.” or Consortium of Icelandic Libraries, www.landskerfi.is is a public limited-liability company. The company is jointly owned by the municipalities and the state. The consortium operates the following systems and services from Ex Libris; Aleph 500, SFX, Primo, Primo Central Index and bX recommender services. The Consortium also has a contract with Overdrive Inc. regarding lending of E-books and Audiobooks through the Overdrive platform. Furthermore, the cultural historical database Sarpur is operated by the consortium.

2. System Operations Overview

Gegnrir – The National Library System of Iceland

Gegnrir is the national library system of Iceland. It serves both as a union catalog and as a library system for approximately 290 libraries. Among the member institutions are the National and University Library of Iceland, several smaller universities, most public libraries, primary and secondary school libraries, also research and special libraries. Gegnrir is currently built upon the Aleph software from Ex Libris.

<i>The size of the system by end of 2017 is:</i>	
Bibliographic records:	1.217.686
Items:	5.939.806
Circulation:	2.975.862
Borrowers:	174.532
Libraries:	290

Leitir.is – A National Discovery Portal

Leitir.is, <http://leitir.is> is a locally hosted National Discovery Portal for Iceland. It is a single access point to the diverse collections of the Icelandic libraries, museums and other institutions. Leitir is the search and discovery platform for the Consortium, and is using the Primo software from Ex Libris. Access to electronic country licenses is provided via the Primo Central Index Service and SFX. A recommendation service for electronic licenses is provided via the bX recommender Service.

Sarpur – A National Cataloging System for Museums

“Sarpur”, <http://www.sarpur.is/>, is an Icelandic designed cultural database. It is used to catalog and record artifacts, photographs, archaeological sites, historic buildings, place names and cultural history. Sarpur is used by museums and cultural heritage institutions around Iceland.

Rafbókasafnið - E- and Audio Books Lending

Rafbókasafnið is accessible via <http://rafbokasafnid.is>, which redirects the user to <https://rafbokasafnid.overdrive.com/>. It went live in January 2017. The Consortium of Icelandic Libraries is responsible for the technical aspects of the project but the Reykjavik City Library is in charge of acquisition and user services. All public libraries that are part of Gegnir are now members of Rafbókasafnið. The public libraries are 62 in total. Overdrive offers predominantly books in English and it has turned out to be difficult to acquire e-books from Icelandic publishers for lending through Overdrive.

	All forms		Ebooks		Audiobooks	
	Titles	% of all titles	Titles	% ebooks	Titles	% audiobooks
Total titles	4.432	100%	3.677	100%	762	100%
English	4.119	93%	3.366	92%	753	99%
Icelandic	174	4%	174	5%	0	0%
German	84	2%	83	2%	1	0%
French	26	1%	25	1%	1	0%
Other languages	37	1%	29	1%	7	1%

3. Bigger Projects and Activities

VIAF

Iceland is now a formal member of VIAF. We delivered our data to OCLC in late February this year, it was being tested until the middle of March, and in April the alert symbol was removed from our icon. The implementation process was very smooth, quick and professional on behalf of VIAF and our data merged surprisingly well with existing data. The next step is to enrich our authority data with VIAF data.

RDA - Global changes to legacy files

In order to finish the transition to RDA, global changes have to be done on the AACR2 bibliographic and authority data. The work has been delayed due to the preparation of a tender for a new library system, we are finally entering the last stages of the analysis / mapping. The essence of the changes is to create the 33x fields from other means in the records, changing abbreviations to full text and when possible to insert relators.

Tender for a Library System

On 26 March 2018, the Consortium of Icelandic Libraries issued an invitation to tender for a new library system, including a search and discovery platform (optional). The new library system will replace the current one, Aleph from Ex Libris. The advertisement can be found on TED, <http://ted.europa.eu/TED/notice/udl?uri=TED:NOTICE:136303-2018:TEXT:EN:HTML>. All the procurement documents are accessible via this link. The procurement was first announced with a RFI (Request for Information) early January.

Tenders will be opened on 9 May. After that selected bidders will be asked to demonstrate on-site early summer how pre-defined use cases can be carried out in their systems. Their performance will be judged by a group of specialists, the results will be part of the final score for the evaluation for the award criteria.

The preparations for the making of the procurement documents, in particular the [list of requirements](#), have been quite extensive since September 2017, when the project was officially initiated. During the months of September and October four groups of specialists from the libraries collected requirements regarding loans, patrons, metadata and management of materials, which served as the foundation for the requirement list. In addition to these requirements a special focus was on requirements such that the system will meet the complex and diverse infrastructure of the Consortium, offer powerful means for integration options and ensure privacy of patrons.

Kunnskapsdepartementets tjenesteorgan

ICT Services for Education and Research

NNG meeting in Helsinki, 19 – 20 April 2018

Country Report from BIBSYS, Norway

Organizational change

The Ministry of Education has carried out a major structural change, and BIBSYS is part of this change. As of January 1 2018, BIBSYS, CERES, and parts of UNINETT are gathered in a new administrative agency. The new organization has been given responsibility for managing the digitization strategy and given a coordinating role in the higher education sector. The organization has spent much time laying the foundation for implementing the new role. However, the main goal is to deliver our services with at least as good quality as before. A reorganization will take place with effect from 1 January 2019, where the goal is a unified organization. Until this is in place, BIBSYS exists as a department of the new organization. The organization has only a preliminary name, "Kunnskapsdepartementets tjenesteorgan", pending a new official name.

Library System

Alma has been live for more than two years, and the BIBSYS consortium has become more used to the new system. Alma is a large and complex system, and with monthly release there are ongoing changes that may be demanding to be updated on. There is still high demand for support. In general, the system largely covers the consortium's current needs, but there are some challenging areas like Inter-Library-Loan (ILL) functionality and integrations with proprietary software to support national library's special needs.

BIBSYS has begun work on assessing future system solutions for the consortium and will continue work on a strategic approach to what solutions the consortium needs beyond Alma.

Discovery & delivery tool – Oria

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

In addition to the standard application from Ex Libris BIBSYS 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 7.5 million records and about 30,5 million holdings, in addition to the Primo Central Index (PCI) of electronic articles. BIBSYS has also added other local content and special collections.

Implementation of the new graphical user interface offered by Ex Libris has been delayed due to performance issues. The performance is better and acceptable, and about 10 institutions have started to use the new GUI.

National open access repository

The Ministry of Education has released new guidelines to provide open access to research articles, to support EUs 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. The Ministry has asked the new organization to investigate how such an archive should be realized. Such a realization could affect the system landscape in general, but especially Brage and Cristin.

DLR – Digital Learning repository

DLR is a digital service that collects, preserves, and distributes learning resources. DLR is an integration solution that constitutes a hub of learning resources used for teaching from various sources. DLR is integrated with several learning management systems to operate as learning object repository (LOR). There is an increasing interest in the solution, which has been modernized by restructuring the code to micro services.

BIRD - a platform for institutional research data

BIRD is a digital service that collects, preserves, and distributes research data. There is increasing interest for research data infrastructure, due to requirements from funders to deposit research data which the research results are based upon. A consortium is established and several institutions are interested to join the cooperation. BIRD is merged with DLR platform, where end user functionality is built on the top of DLR. Ongoing activity to implement Data Management Plan (DMP) in the solution.

Semantic web

The semantic web platform represents the Library database and authorities as RDF. The platform intends to make the library catalog available online in a useful way. The technology enables enriching the data with external sources. It would be very interesting to find some common linking points with linked data from other countries, but then the national data should be processed using the same rules to generate work keys.

The semantic web platform is using Blazegraph as the technical solution for the triple store. Blazegraph is open source, but there seems to be a slowing community and BIBSYS will check the market for alternatives. We are working together with the National Library of Norway to add works as an entity into the platform and have plans to add subject headings. The graph has become extensive and we are facing a performance issue that we are currently working to solve.

A GUI on top of the semantic platform is developed for the maintenance and creation of work-authorities. The same functionality will be used to maintain subject headings and authorities for persons in the future. One obstacle is the lack of a defined international data model and export-formats for works. This makes the integration with other systems more challenging.

Country Report: National Library of Norway

NNG meeting in Helsinki 19 – 20 April 2018

Introduction

The National Library of Norway is responsible for legal deposit and the Norwegian National bibliography. The library is a part of the BIBSYS consortium, using Alma as cataloguing system for books, periodicals and recorded music. An Australian system, Mavis, is used for bibliographic and preservation metadata for audio-visual material.

The Governments Public Library Strategy 2015-2018

In August 2015, the Norwegian Government presented a strategy for public libraries for 2015-2018. The National Library is responsible for implementing the strategy. The Infrastructure part of the strategy includes authority files (names, works), RDA, Biblioteksøk (search across all Norwegian library catalogues), WebDewey, free metadata supply to all public libraries.

National Authority File for Names – ISNI

The National Authority File consists of more than 100,000 personal and corporate names. The file is a subset of the BIBSYS Authority File.

The National Library has become a member of ISNI (International Standard Name Identifier). ISNIs has been automatically assigned to nearly all legacy records in the National Authority File for Names. Assignment to new authority record will start before the end of 2018.

Biblioteksøk (Library Search)

Biblioteksøk (search and interlibrary loan across all Norwegian library catalogues) was beta released in May 2017 for libraries and end users in five counties. Since then four, more counties have been included, three new counties will be included in May before an official release covering all libraries in Norway by the end of 2018.

RDA

The National Library is responsible for implementing RDA in Norway. We completed the Norwegian translation of RDA in December 2017.

Due to the RDA Toolkit Restructure and Redesign (3R) Project, we will not release the Norwegian RDA Toolkit before the end of 2018.

A small “vanguard” group in the National Library has started cataloguing with RDA in Alma. The same group will plan, and be responsible for, RDA training, and for a Norwegian Policy Statements. The National Library will start using RDA sometimes before the end of 2018.

We take part in the EURIG Cooperation (European Interest Group).

More information in Norwegian on:

<https://bibliotekutvikling.no/ressurser/kunnskapsorganisering/kunnskapsorganisering-utvikling/rda-resource-description-and-access/>

Authority file for Works

Work on a national authority file for Works continues at the National Library of Norway. During the past year, we have developed a data model to represent works based on the Library Reference Model (LRM) and primarily using vocabulary from the RDA registry. Concurrently, we have developed a simple typology of works, as well as rules for the automatic extraction of works from the BIBSYS-catalog. We expect to finish work on the automatic extraction in May. The next major stage in the project is devoted to a manual clean-up of the automatically extracted work clusters, involving the merging of identical work clusters, the correction of titles and other attributes and the assignment of relationships between works where possible. This stage will initially be focused on Norwegian language-based works, but will gradually be expanded to include foreign language works and other work types (music, films, etc). The authority file will be made available to librarians and to system developers via an API later this year.

More information in Norwegian:

<https://bibliotekutvikling.no/ressurser/kunnskapsorganisering/kunnskapsorganisering-utvikling/verksregister/>

Nordic Networking Group on bibliographic and infrastructure topics (NNG)

Annual meeting in Helsinki 19-20 April 2018

Country report Sweden

National library strategy / National library service platform

As reported last year the Swedish government has given the National library of Sweden the task of forming a national library strategy. This work is conducted by a special task group, and will be concluded in 2019. Since the last NNG meeting there has been a preliminary report on the current state of certain key areas (http://nationellbiblioteksstrategi.blogg.kb.se/files/2017/09/Den_femte_statsmaktern_WEBBVERSION.pdf) (in Swedish). The group has suggested a parallel study concerning a national library service platform. This has received funding and is just starting up. The study will be carried out during 2018.

Resource Description and Access (RDA)

The National library started using RDA 1 January 2017, and is now well into its second year. A national RDA office has been formed at the National library, and in December the National RDA Committee held its first meeting. The committee consists of the RDA office and representatives from different Swedish library types and other interested parties. Although the National library in Sweden has a coordinating role, the cataloguing situation in the national infrastructure is still hybrid RDA-KRS (*Katalogiseringsregler för svenska bibliotek*, older rules based on AACR2). This is not meant to be a long-time solution, but as the rule sets are compatible it works in the shared infrastructure. Swedish cataloguers are offered a national access to the RDA toolkit also during 2018.

The Swedish RDA office continues to take part in the EURIG cooperation (European RDA Interest Group). The Swedish work with RDA can be followed at www.kb.se/rda (content in Swedish).

New national infrastructure and the Libris XL platform

The last few years the National library has been involved in a major infrastructure project. The goal is to replace the current technical platform Voyager with a custom-built open source system – Libris XL. Libris XL is based on RDF and the

principles of linked data. This means a new backend, and new support systems but also a new cataloguing client. At the NNG meeting last year the XL developing team presented the work. We are now planning the first release early summer 2018. An important part of the implementation work is communicating with the Swedish library community and offer training e.g. using films. Follow the work at <http://librisbloggen.kb.se/> (content mostly in Swedish).

ISNI

Sweden has been long-time members of the VIAF cooperation (Virtual International Authority File, <http://www.viaf.org/>). VIAF is strongly connected with ISNI (International Standard Name Identifier, <http://www.isni.org/>), which we have just recently joined. The National library has started as a member and is not yet a registration office. This means that we can apply for and add ISNIs to our own data and according to the needs of the national authority work. We hope that this important identifier will make our data even more valuable and increase its usage.

Automated vs manual cataloguing

For many years the work in the Swedish national infrastructure has used data from the publishers as a means of getting bibliographic information early and support the manual cataloguing work. This is an ongoing work in which we try to find additional sources for metadata, and cooperate with others, both within and outside the library community. We are also exploring different ways of enriching our metadata. In Swepub (a database for Swedish scientific publications) we are currently testing a tool for automated classification building on abstracts.



National Library of Latvia

<https://lnb.lv/en>

Photo: User:Zairon / Wikimedia Commons / CC-BY-SA-4.0

Areas for applying Linked Data

- Authority data
- National bibliography
- Digital collections
- Connecting library information systems

Areas for applying Linked Data

- Authority data
 - Linked Data via VIAF (Persons, ...)
 - Subject authority data – future plans, linking to LCSH
- National bibliography
 - interested in publishing as Linked Data
- Digital collections
 - "Rainis and Aspazija" pilot project
- Connecting library information systems
 - DOM (Digital Object Management) system

FMT	AU
LDR	nz a n 4500
001	LNC10-000201657
005	20140422135631.0
008	140422in anznnaabn a ana
040	a LV-RiVB b lav
150	 a Saistītie dati
450	a Atvērtie saistītie dati
450	 a Linked data
670	a Bojārs, Uldis. Atvērtie saistītie dati (http://www.slideshare.net/CaptSolo/linked-open-d
670	 a Kongresa bibliotēkas autorit. ierakstu datne
91503	a 20140422.03agnesez
CAT	a 03AGNESEZ b 01 c 20140422 l LNC10 h 1356
550	a Metadati w g
550	a Semantiskais tīmeklis w g
SYS	000201657

Details

Visualization

Suggest Terminology

Linked data

URI(s)

- > <http://id.loc.gov/authorities/subjects/sh2013002090>
- > <info:lc/authorities/sh2013002090>
- > <http://id.loc.gov/authorities/sh2013002090#concept>

Instance Of

- > [MADS/RDF Topic](#)
- > [MADS/RDF Authority](#)
- > [SKOS Concept](#) 




Scheme Membership(s)

- > [Library of Congress Subject Headings](#)

Collection Membership(s)

- > [LCSH Collection - Authorized Headings](#)
- > [LCSH Collection - General Collection](#)
- > [LCSH Collection - May Subdivide Geographically](#)

Variants

- >  Data, Linked
- >  Linked open data
- >  LOD (Linked data)

Rainis and Aspazija

- Creative Personalities
- Public Figures
- Opinion leaders



Project motivation:

150th anniversary of Rainis and Aspazija (2015)

Linked Data pilot project

- Linked [Digital] Collection
 - a collection of interlinked objects
- Diverse, multi-format content
 - Personal correspondence (annotated)
 - Literary works
 - Posters, archive documents
 - Audio / video

<http://runa.lnb.lv>

Angst Jungfrau! perumkumpi!

Der Julep Linsen atangs schaden gar sehr
erweitet "D. L. Kaktus" no Julep Speculum
bet neidroschungen winnt parakstet uf
faut, galten. Lote lichte Kaktus nicht
passt man Julep mehlgruen.

Sauemet man Julep zu petroschu par
Linsen atrecht; man lichte Julep
patekkanst perumkumpi patekkanst Julep
an wehl perumkumpi an perumkumpi per mehl
wentele.

Der angst Jungfrau

Rog II/4/99

Julep

Plecker

Rain m.

4ten ^{Tag} Donnerstag
1895.

Meine Tante!

Ich habe bereits gesagt, wie
ich die Tage vor Tante's Geburtstag, alle bis
auf den Tag, die ganze Zeit bis Donnerstag
nicht mit mir verbrachte. Wie ich selbst
ich nicht schmecke mit der Trauer, und
Tante's nicht bis in die Eingeweide.
Und dann das Gefühl, wenn ich wieder
bei dir sein könnte! Mir ist es, als
würde ich in einer ganz neuen
Welt der Arbeit das Glück finden
können, als würde ich blühende
Gärten finden und die Freude.
O wie könnte mir glücklich, glücklich
sein, wenn wir es verstanden! Man
wird es das Glück verstanden, wenn
es in das Wissen ist und wenn man
füllt es sich in seinen blühenden
Wäldern, wenn es nicht ist.
Ich kann nicht mehr ganz nachdenken
sich in dieses Wissen, dann ist es für
ich, ob ich die das Wissen, die große
Mannschaft haben kann, ob ich die
nicht hat werden. O Tante, ich

Rainis Rīgā 1894. gada 4. (16.) februārī

Augsti cienījamā jaunkundze!

Ar Jūsu laipnu atļauju šodien gribēju ievietot "D[ienas] L[apā]" kādus no Jūsu dzejoļiem, bet neiedrošinājos viņus parakstīt uz savu galvu. Ļoti lūdzu kādās rindiņās paziņot man Jūsu vēlējumu.

Saņemot manu sirsnīgu pateicību par laipno atvēli; man būs sevišķi patīkams pienākums pateikties Jums arī vēl personiski un parunāt par mūsu veikalu.^[1]

Ar augstcienīšanu,

Jūsu Pliekšāns.

Rīgā II/4/94.

Vēstule (107206). Pirmpublicējums D, 1930, 8. nr., 930.lpp. (ar nepareizi atšifrētu datējumu - "Rīgā, 2. IV 94."). Publicēta arī RuA, 23.lpp. (ar tādu pašu datējumu); RGGr, 1977, 6.lpp. (ar datējumu "[1894. gada] 4. februārī"); RKR, 19, 186.-187.lpp. (ar datējumu "1894. gada 4. (16.) februārī").

^[1] Aspazija šai sakarā paskaidrojusi: "Nebija jau tas nekāds saimnieciskais veikals, tās bija parastās literāriskās darīšanas. Cik atceros, Āronu Matīss lūdza no manis kādas biogrāfiskas ziņas "Saimnieču un zelteņu kalendāram". (RuA, 23.lpp.).

"Saimnieču un zelteņu kalendārs" bija pirmais latviešu sievietei domātais kalendārs. Pirmos piecus gadus (1892-1896) to izdeva DL, vēlāk (līdz 1913) tam bijuši citi izdevēji. Par kalendāra sastādītāju 1894. un 1895. gada izdevumā norādīts Āronu Matīss, taču DL ievietotajos sludinājumos viņš minēts kā sastādītājs vai redaktors visām piecām avīzes izdotajām grāmatām. Āronu Matīss pats (Āronu Matīss. Manas dzīves atmiņu grāmata, 1938, 196.lpp.) par savējiem gan uzdod tikai divu pirmo gadu izdevumus. Atzīmējams, ka kalendāru 1893. gadam (t.i., pirmo, 1892. gadā izdoto grāmatu) DL izsniedza kā prēmiju (pielikumu) saviem 1892. gada pēdējā ceturkšņa abonentiem.

"Saimnieču un zelteņu kalendāra 1895. gadam" titullapā publicēts [Aspazijas Vācijā gravēts fotoportrets](#) un sniegtas [biogrāfiskas ziņas "Aspazija"](#) (112.-115.lpp.). Vēlāk RuA atrodams Āronu Matīsa foto ar parakstu "Āronu Matīss, Raiņa un Aspazijas draugs, pirmais Aspazijas biogrāfs", kas vedina domāt, ka viņš arī gatavojis biogrāfisko materiālu. Savukārt K. Dziļleja Aspazijas Kopotu rakstu

rī :

Turtle RDF

RDF/XML

Saistītie objekti

[Rainis, Jānis,
1865-1929](#)

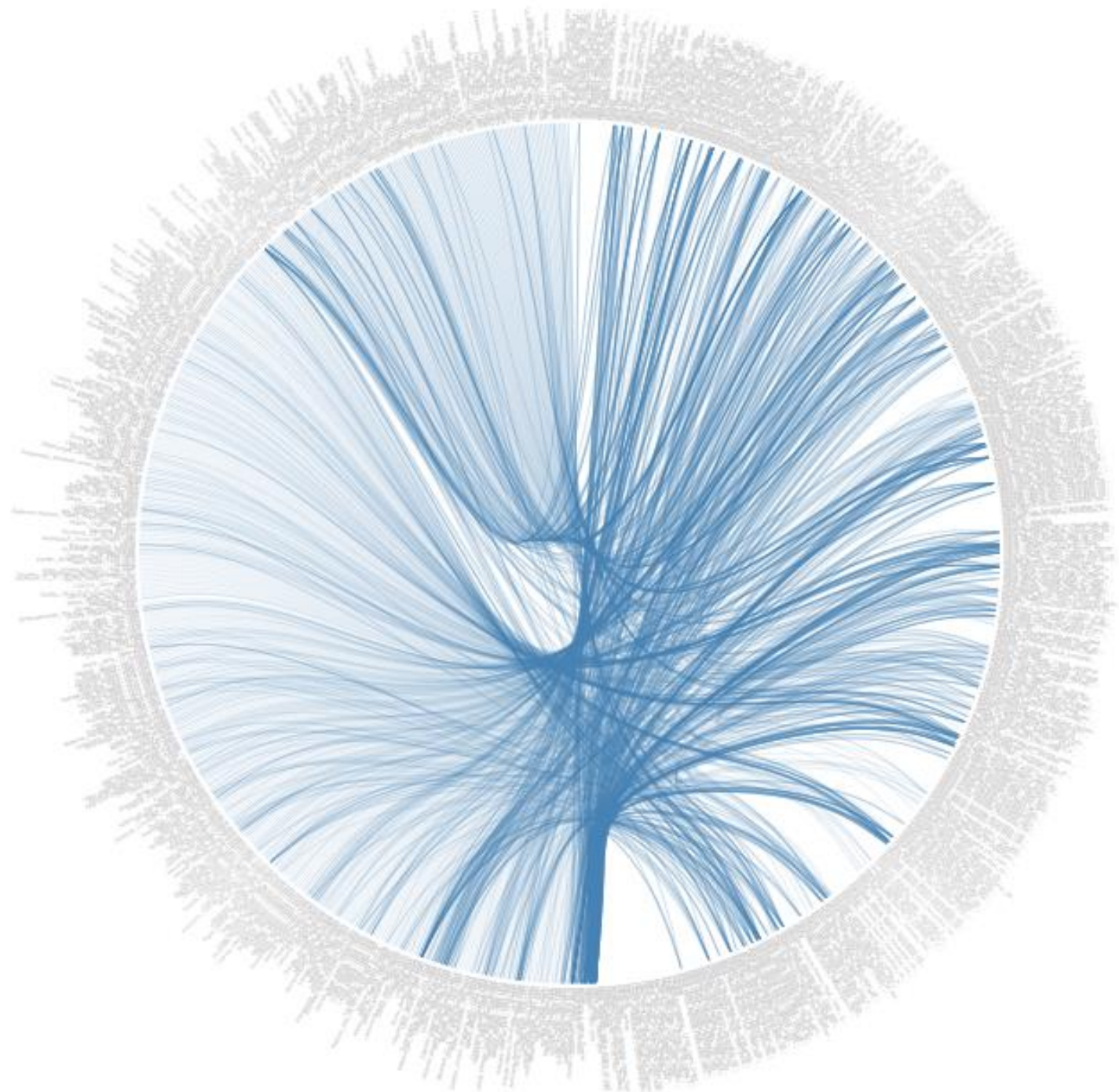
[Rīga \(Latvija\)](#)

[Aspazija,
1865-1943](#)

[Āronu, Matīss,
1858-1939](#)

[Dienas Lapa.](#)

[Saimnieču un
zelteņu
kalendars ...
gadam.](#)



<http://runa.lnb.lv/60316/>

a bibo:Document ;

dct:title "Raiņa vēstule Aspazijai Rīgā, 1894. gada [...]"@lv ;

dct:language <http://id.loc.gov/vocabulary/iso639-2/lav> ;

dct:creator <http://runa.lnb.lv/lnc04-000030988/> ;

bibo:recipient <http://runa.lndb.lv/lnc04-000123642/> ;

dct:subject <http://dom.lndb.lv/data/auth/209746> ;

dct:spatial <http://dom.lndb.lv/data/auth/121539> ;

dct:abstract "Vēstules transkribētais teksts, komentēts.;

Sastādītājs un komentāru autors Jānis Zālītis. Redaktore Sandra Zobena."@lv ;

foaf:depiction <http://runa.lnb.lv/ftp_files/60312/60312.png> ;

bibo:owner

<http://dom.lndb.lv/data/clas/locationorganization#737> ;

dct:hasPart <http://dom.lndb.lv/data/obj/file/268846.xml> ;

owl:sameAs <http://dom.lndb.lv/data/obj/60316/> .

`<http://runa.lnb.lv/60316/>`

`bibo:annotates <http://runa.lnb.lv/60312/> .`

`<http://runa.lnb.lv/60316/>`

`dc:references <http://runa.lnb.lv/LNC10-000003165/> ;`

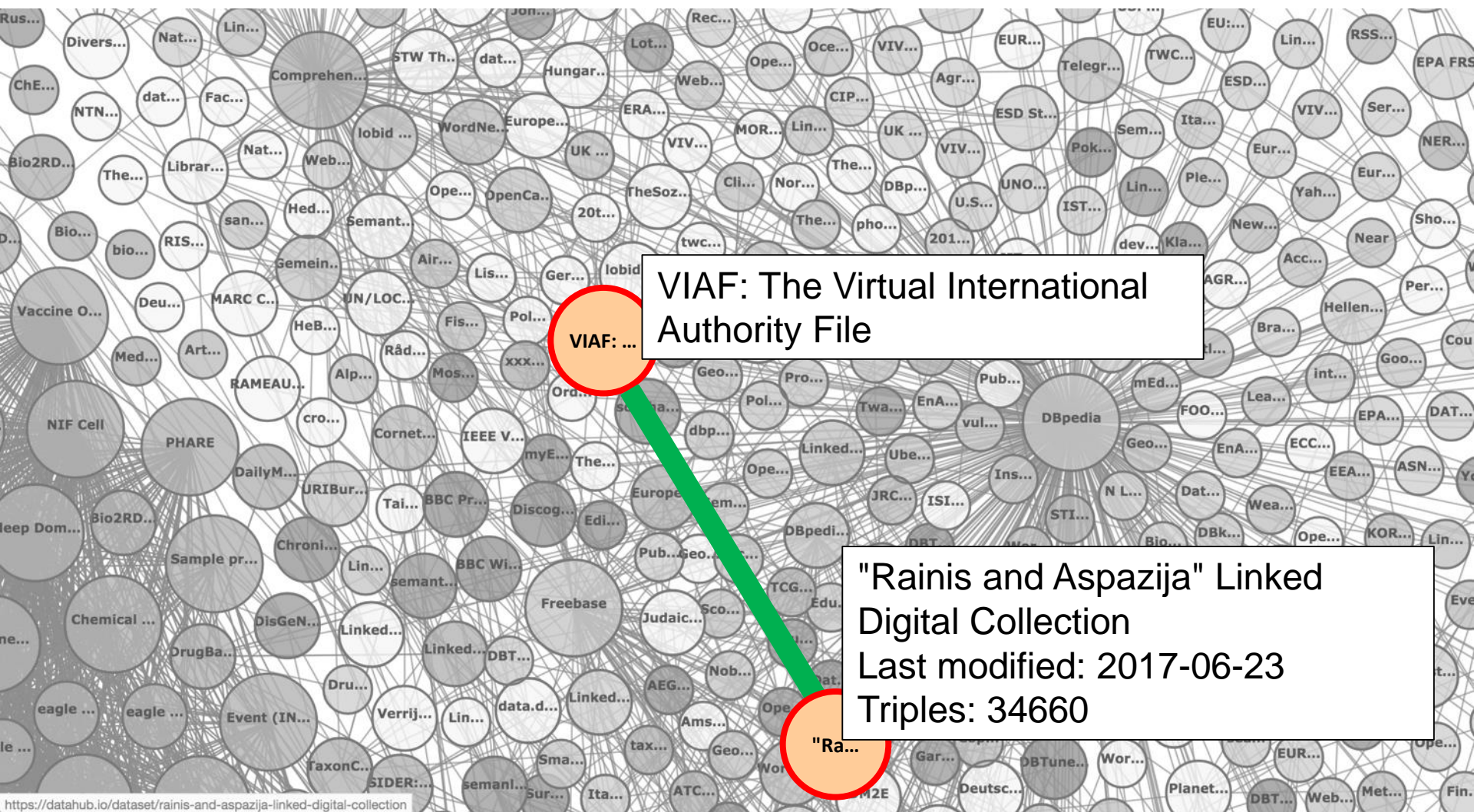
`# [...]`

Not shown here:

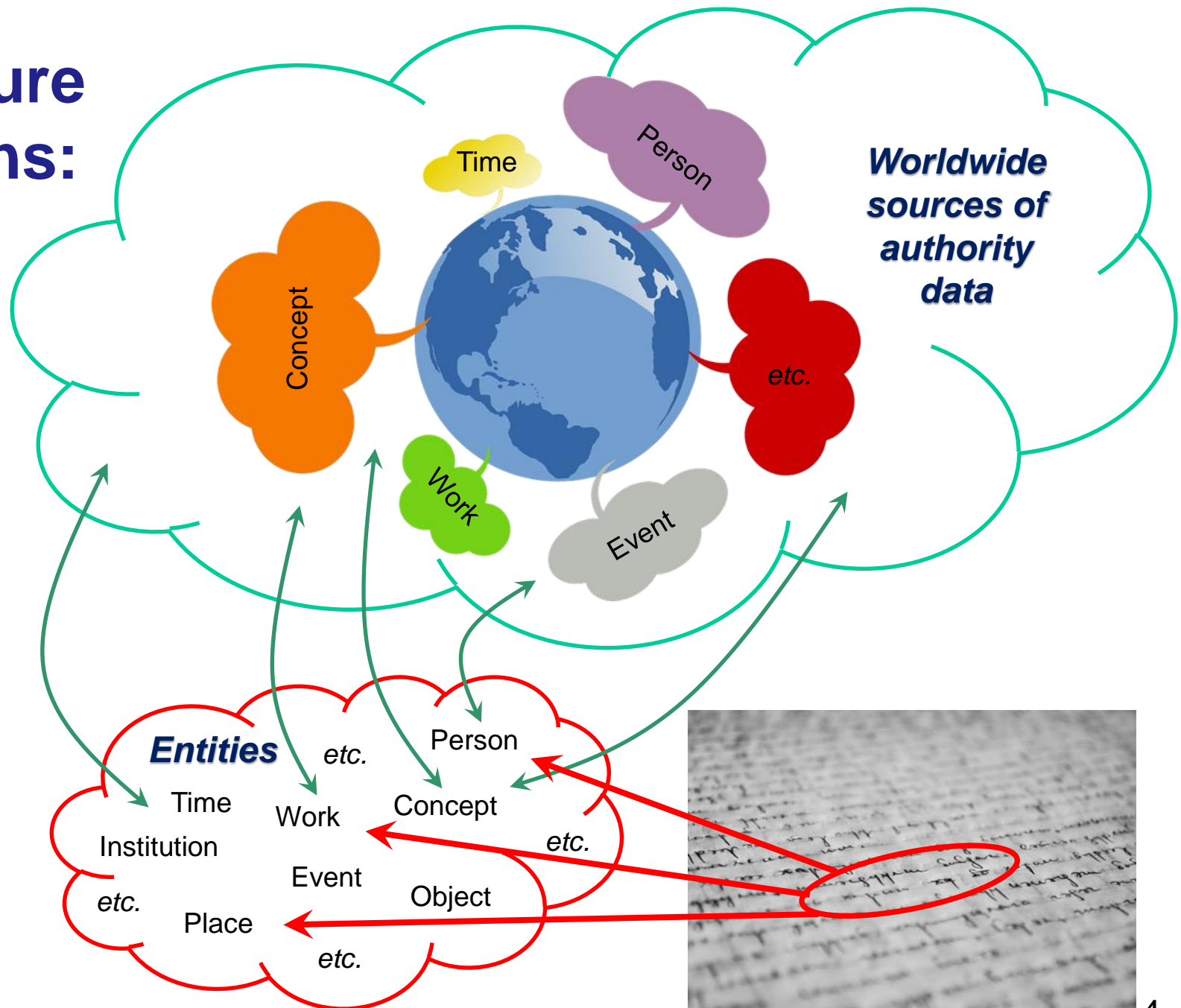
- Object metadata also expressed using Schema.org

RDF vocabularies used:

- Bibo (Document, Letter, ...)
- Dublin Core
- Schema.org
- SKOS, FOAF, ...



Future Plans:



ANOTĒŠANA

Saliktā anotācija



savācēji, pie kam es viņiem došu parakstīt priekš šīs sapulces to svinīgo solījumu, kāds tika ņemts no viņiem arī **Satversmes Sapulcē**. Es lūgšu parakstīt šo solījumu: „Es apakšā parakstīties, **Valdis Bumbers**, dodu solījumu, ka izpildīšu Saeimas kopsēžu balsu skaitīšanas pienākumus taisnīgi un pēc 'sirdsapziņas. " un tāpat arī „Es apakšā parakstīties, **Nikolajs Bergs**, dodu solījumu, ka izpildīšu Saeimas kopsēžu balsu skaitīšanas pienākumus taisnīgi un pēc sirdsapziņas." Tad es lūgšu augsto sapulci izvēlēties 3 balsu skaitītājus. Es lūdzu minēt kandidātus. (Balsis no zemnieku savienības: „**Briedis!**“) **Briedis**. Vai neminētu arī kandidātus no kreisā spārņa? No kreisā spārņa tiek minēts **Kalējs**. Kā trešais tiek minēts **Bachmanis**. [Vai būtu kādi iebildumi pret šiem skaitītājiem? Ja iebildumu nav, tad tie ir pieņemti. Saskaņā ar **Latvijas Republikas Satversmes ieviešanas likuma 7. pantu** man šī sapulce ir jāvada līdz tam brīdim, kad viņa ievēlēs savu priekšsēdētāju. Es lūdzu minēt kandidātus uz Saeimas priekšsēdētāja amatu. Es esmu saņēmis priekšlikumu no sociāldemokrātu frakcijas, kura liek priekšā kā kandidātu uz Saeimas priekšsēdētāja amatu **Fridrichu Vesmani**. Vairāk kandidāti netiek uzstādīti? Piemērojoties **Satversmes Sapulces kārtības rullī 23. pantam** vēlēšanas tiks izdarītas slēgti, pie kam es atļaušos paskaidrot, ka **Saeimas** locekļu kungus es lūdzu palikties uz vietām. Viņiem tiks izdalītas zīmītes un kad zīmītes būs izpildītas, kad tanīs būs ierakstīts attiecīgais kandidāts, tad viņas atkal no vietām saņems atpakaļ. Es lūdzu balsu skaitītājus izsniegt zīmītes. Vai visi Saeimas locekļi ir saņēmuši zīmītes? Acīmredzot, jā. Vai visi ir jau uzrakstījuši? Es lūgšu balsu _ skaitītājus savākt zīmītes. (Balsis no vietas: „Kā jāraksta?“) Var rakstīt to kandidātu, kurš ir minēts — protama lieta, minēts ir viens kandidāts — Vesmanis — bet var iesniegt arī baltas zīmītes, kā katram patīkas. Vai visi ir nodevuši zīmītes? Nevieni neatsaucas, tāpēc es pieņemu, ka visi ir nodevuši. Es lūdzu skaitītājus ieņemt vietas referenta ložā. — Vēlēšanu iznākums: par **Fridrichu Vesmani** nodotas 72 balsis, pret to 12, atturējušās 14 balsis. Tātad **Fridrichs Vesmani** ir ievēlēts par Saeimas priekšsēdētāju. (Aplausi.) Es uzaicinu **Fridrichu Vesmani** ieņemt vietu. Saeimas priekšsēdētājs **Fr. Vesmanis**: Augsti godātie deputātu kungi! Ieveļot par Saeimas priekšsēdētāju strādnieku frakcijas kandidātu, tās frakcijas kandidātu, kura ir mazākumā šinī augstā namā un atrodas asa opozīcijā pret pārējām

Atpakaļ

☒ Briedis, Augusts (1877-1937)

Pabeigta



☒ Kalējs, Jānis (1881-)

Pabeigta



☒ Latvijas Republikas Satversme...

Pabeigta



Saglabāt

Dzēst

Pamatdati

Parametri

Adresācija

ID 298

Entīte

Kalējs, Jānis (1881-) (Persona)



[[search]]

Normālforma

[lav] Kalējs, Jānis (1881-)

Klase

Persona



[[search]]

Tips *

☒ Parasta ☐ Struktūrāla

Statuss *

☒ Pabeigta ☐ Nepilnīga

☐ Privāta

Entity Database

- The hub for all information about entities
 - Entity information is global (across projects) and public
- Each entity has a class
 - Person, Location, Date, Literary work, ...
 - Classes can be user-defined
 - Classes define suggested properties & link types
- Most entities have labels + language tags

Normālforma

Aspazija (1865-1943)

Klase

Persona

Normālformas

- **lav** Aspazija (1865-1943) *primārā*
- **lav** Pliekšāne, Elza (1865-1943)
- **lav** Rozenberga, Johanna Emīlija Lizete (1865-1943)
- **lav** Rozentalde, Johanna Emīlija Lizete (1865-1943)
- **lav** Elza Pliekšāne (1865-1943)

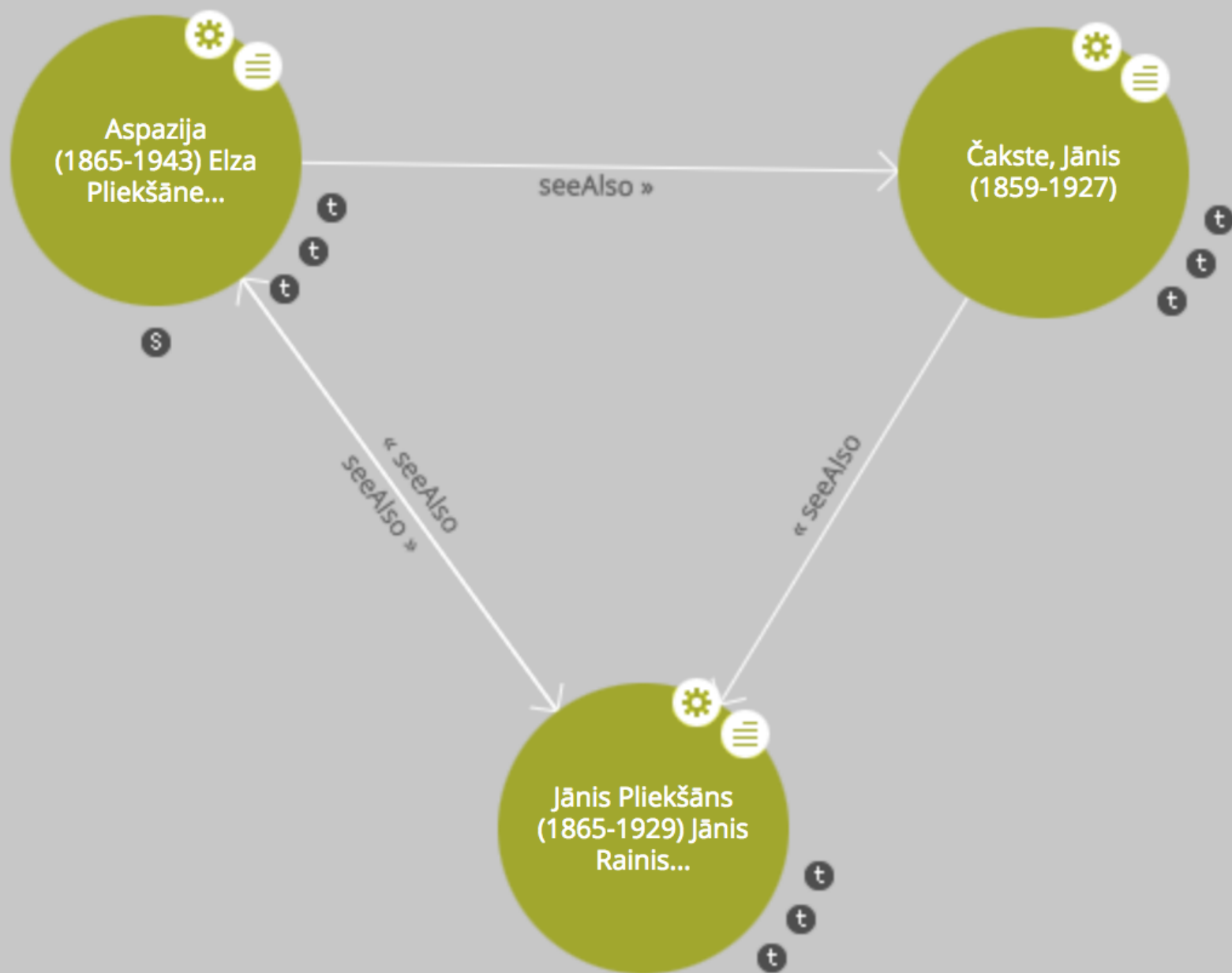
Ārējo identifikatoru saraksts

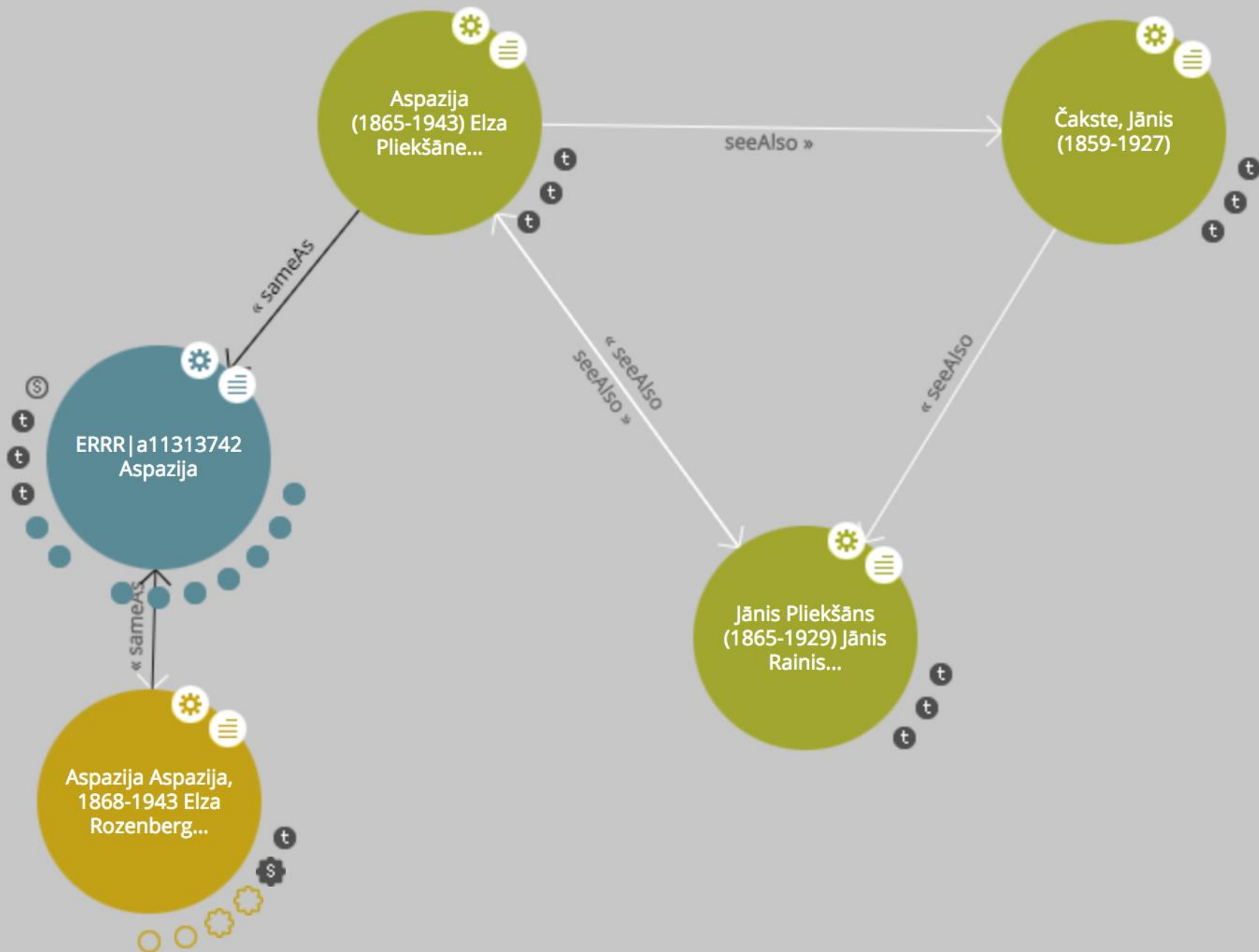
- **Linked Data** VIAF <http://viaf.org/viaf/12431977>
- **Web** Wikipedia (LV) <https://lv.wikipedia.org/wiki/Aspazija>
- **Web** Wikipedia (EN) <https://en.wikipedia.org/wiki/Aspazija>
- **Web** LNB Autoritatīvā DB https://kopkatalogs.lv/F/?func=direct&local_base=LNC10&doc_number=000000612
- **Web** ISNI <http://www.isni.org/isni/0000000117431825>

Piezīmes

Saistītās entītes

- [Rainis, Jānis \(1865-1929\)](#) (Persona)
- [Čakste, Jānis \(1859-1927\)](#) (Persona)







RDA in Iceland

Ragna Steinarsdóttir

National and University Library of Iceland

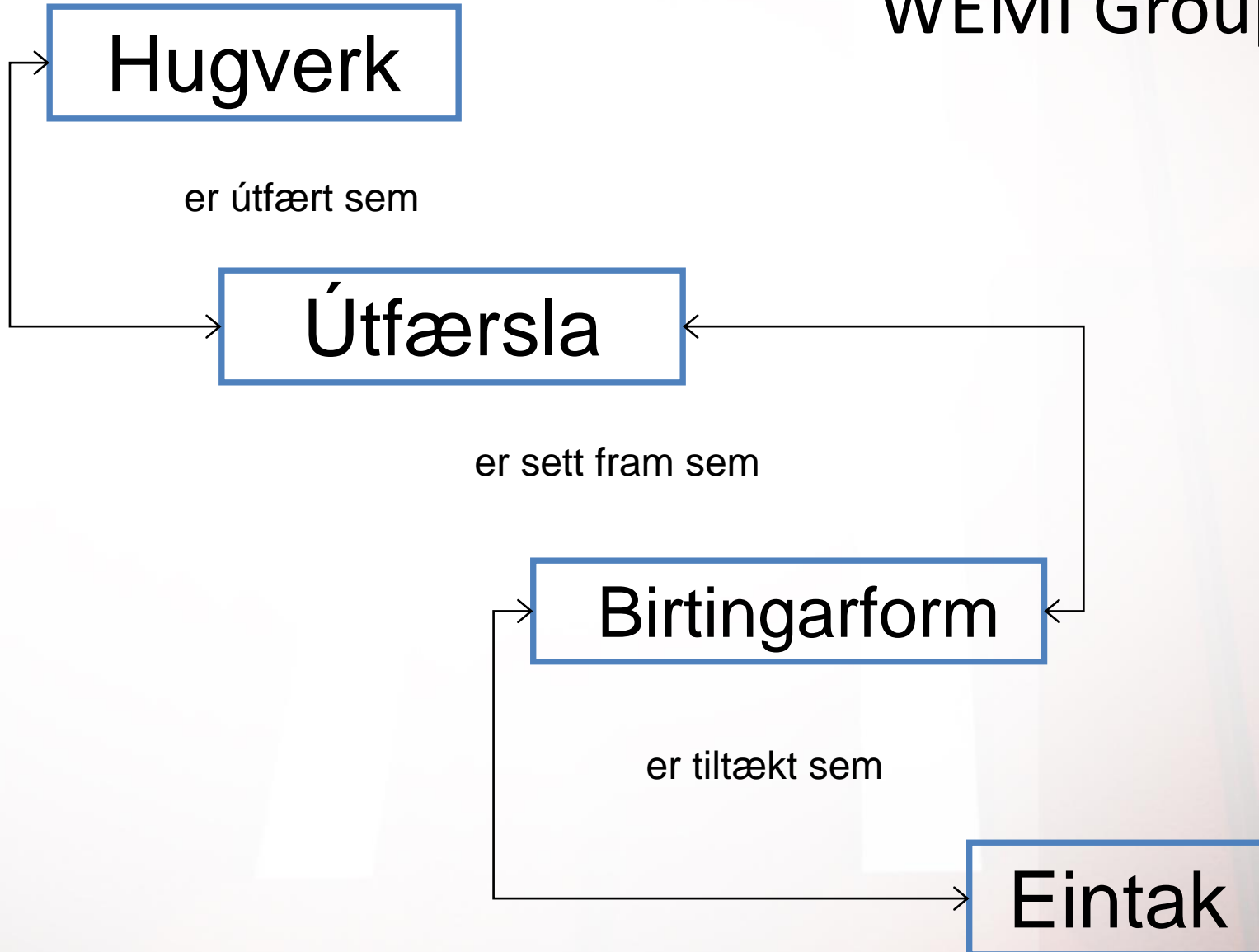
Iceland

- Population: 330.000
 - Similar to the town of Alicante, Spain
- Language: Icelandic
 - We learn English and Scandinavian languages in elementary school
 - Almost everyone can speak and read English
 - German, French or Spanish in grammar school

Library environment

- One library catalogue since 2003
- 300 libraries
- library system is Aleph
 - A new system within two years
- Run by a system office owned by state and municipalities
- National and University Library most prominent data quality manager
- 80-90 active cataloguers

WEMI Group 1



Relationship designators

performer	prf	flytjandi
photographer	pht	ljósmyndari
producer	pro	framleiðandi
publisher	pbl	útgefandi
puppeteer	ppt	leikbrúðustjórnandi
recordist	rcd	upptaka
screenwriter	aus	handritshöfundur
singer	sng	söngvari
storyteller	stl	sögumaður
translator	trl	þýðandi
<i>(writer of afterword)</i>		höfundur viðprents
<i>(writer of foreword)</i>		höfundur viðprents
<i>(writer of introduction)</i>	win	höfundur viðprents
<i>(writer of postface)</i>		höfundur viðprents
<i>(writer of preface)</i>	wpr	höfundur viðprents

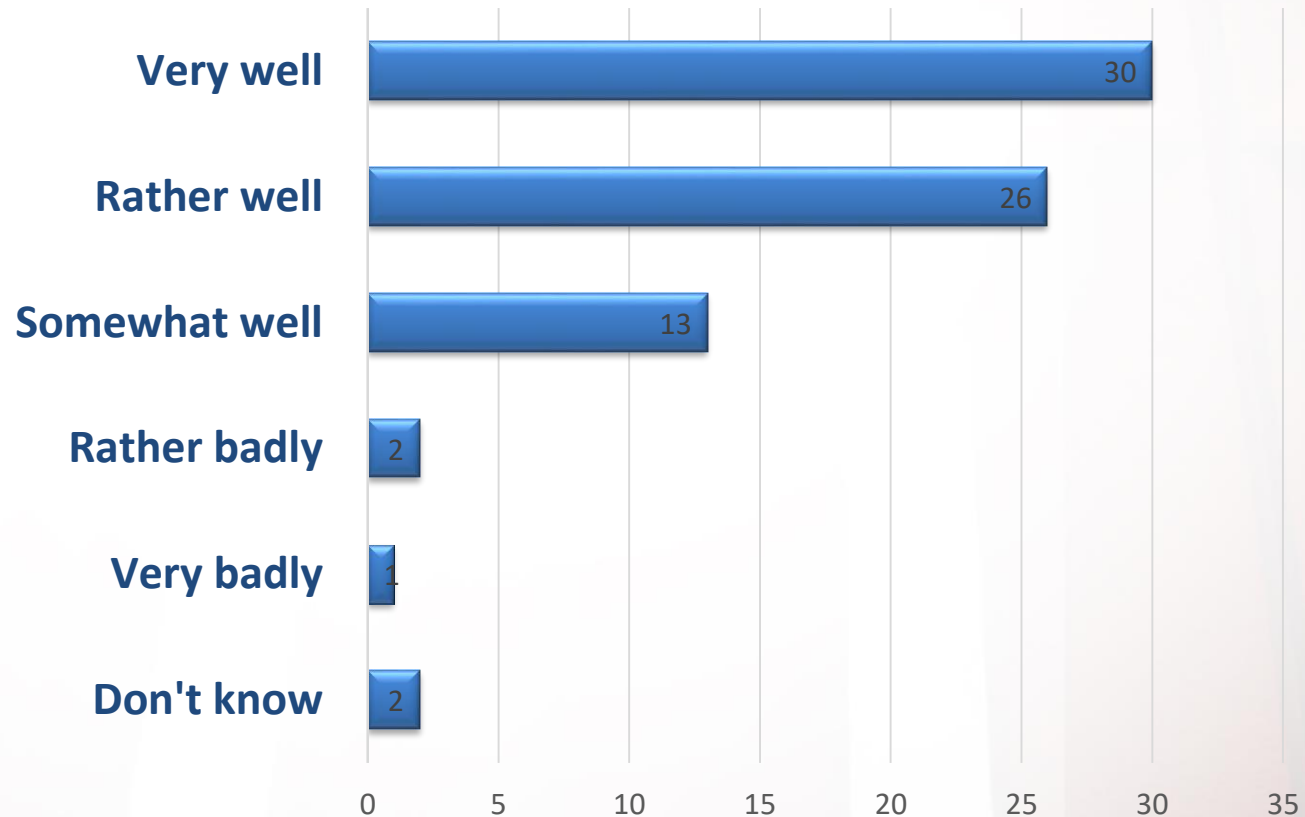


Survey among cataloguers

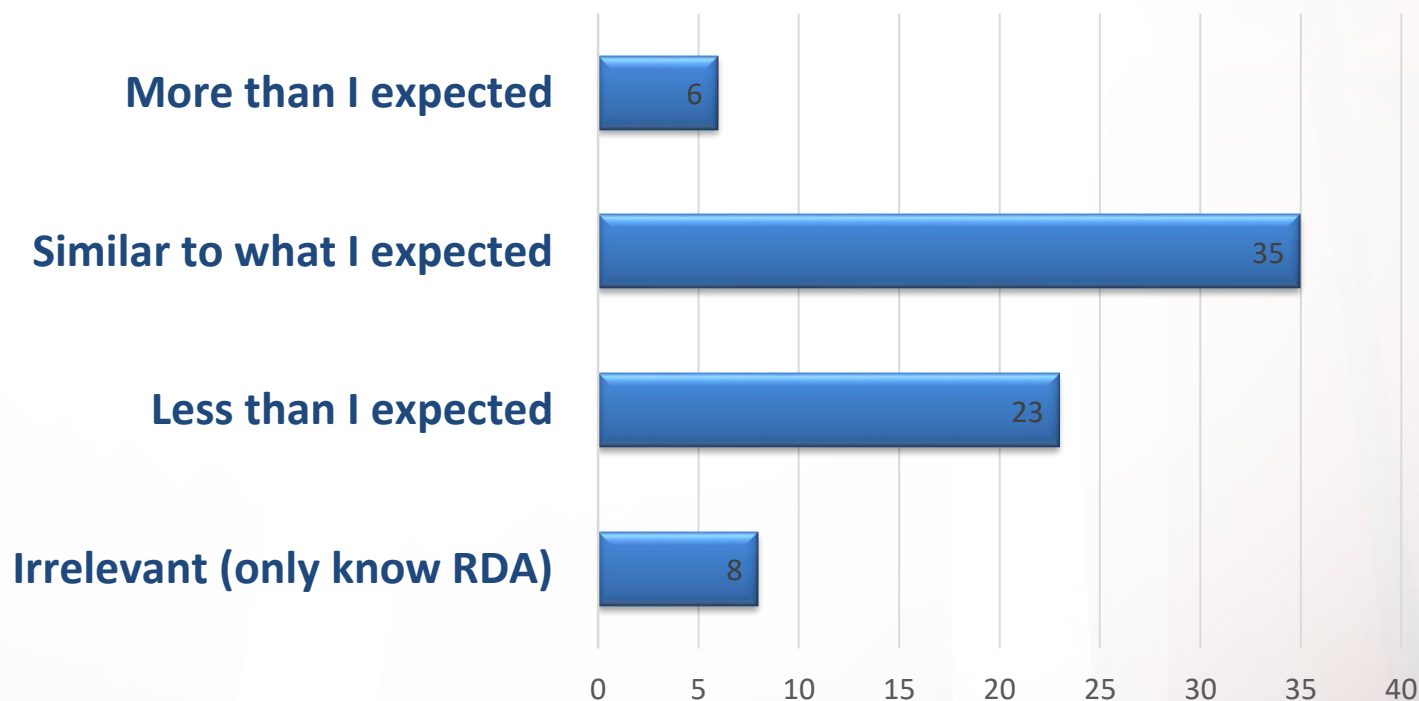
Survey among cataloguers

- A survey after the training in 2016
 - Very positive outcome, 99% were satisfied with the training
- A new survey in September 2017
 - After 16 months of RDA cataloguing
 - 76 answers out of 80-90 active cataloguers
 - Not everyone answered all questions

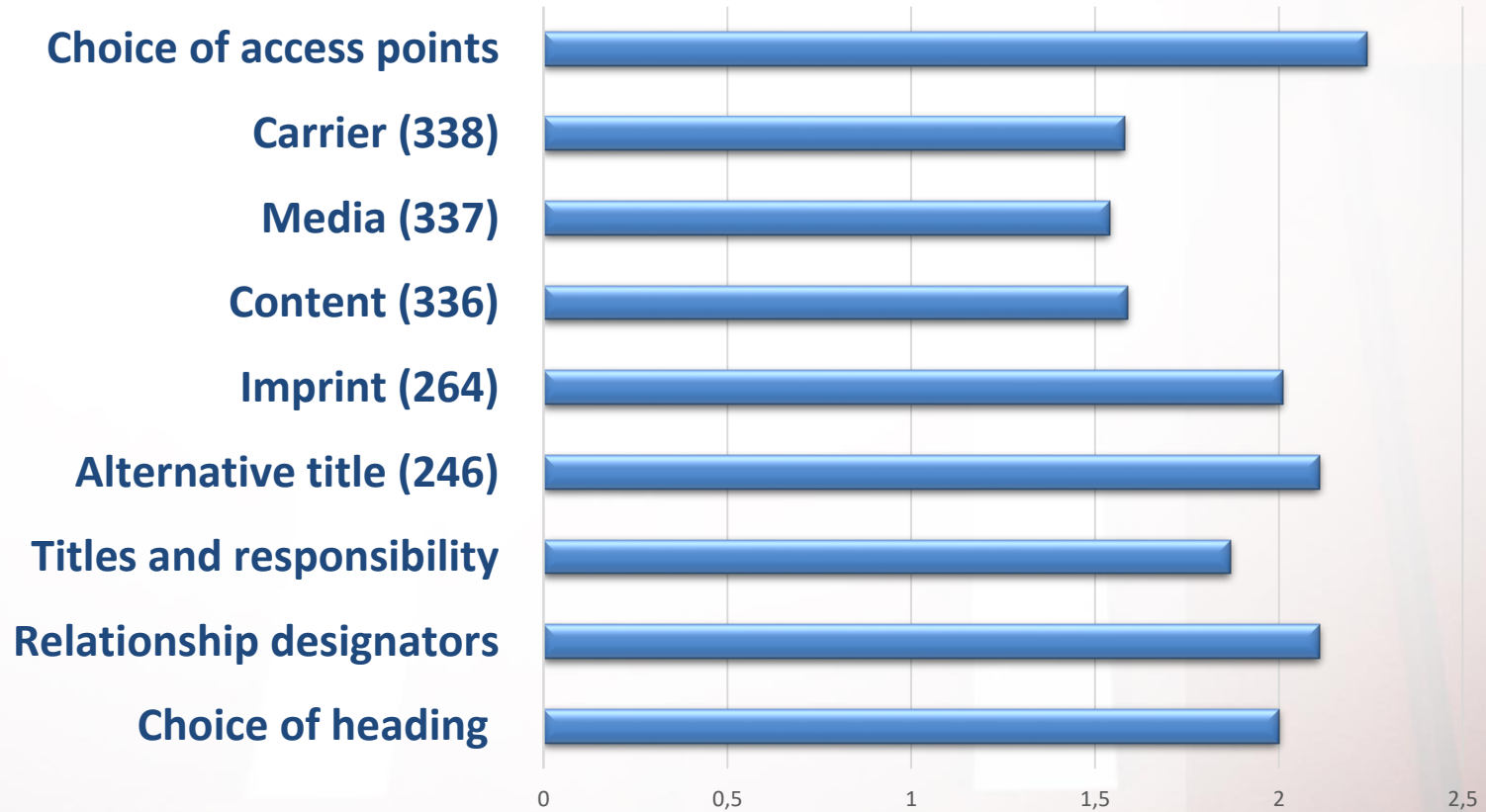
How are you doing?



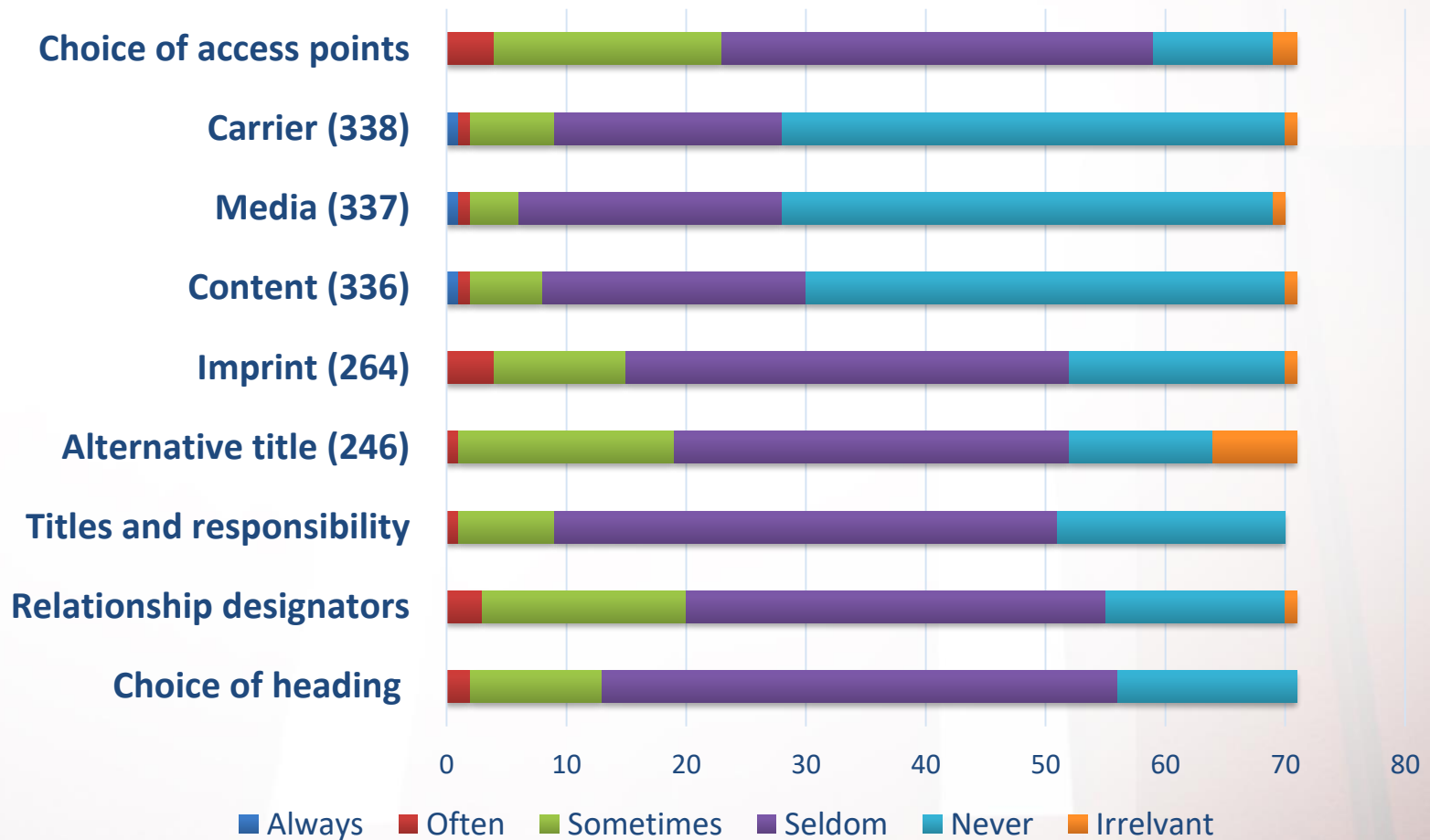
Has RDA changed your cataloguing practices?



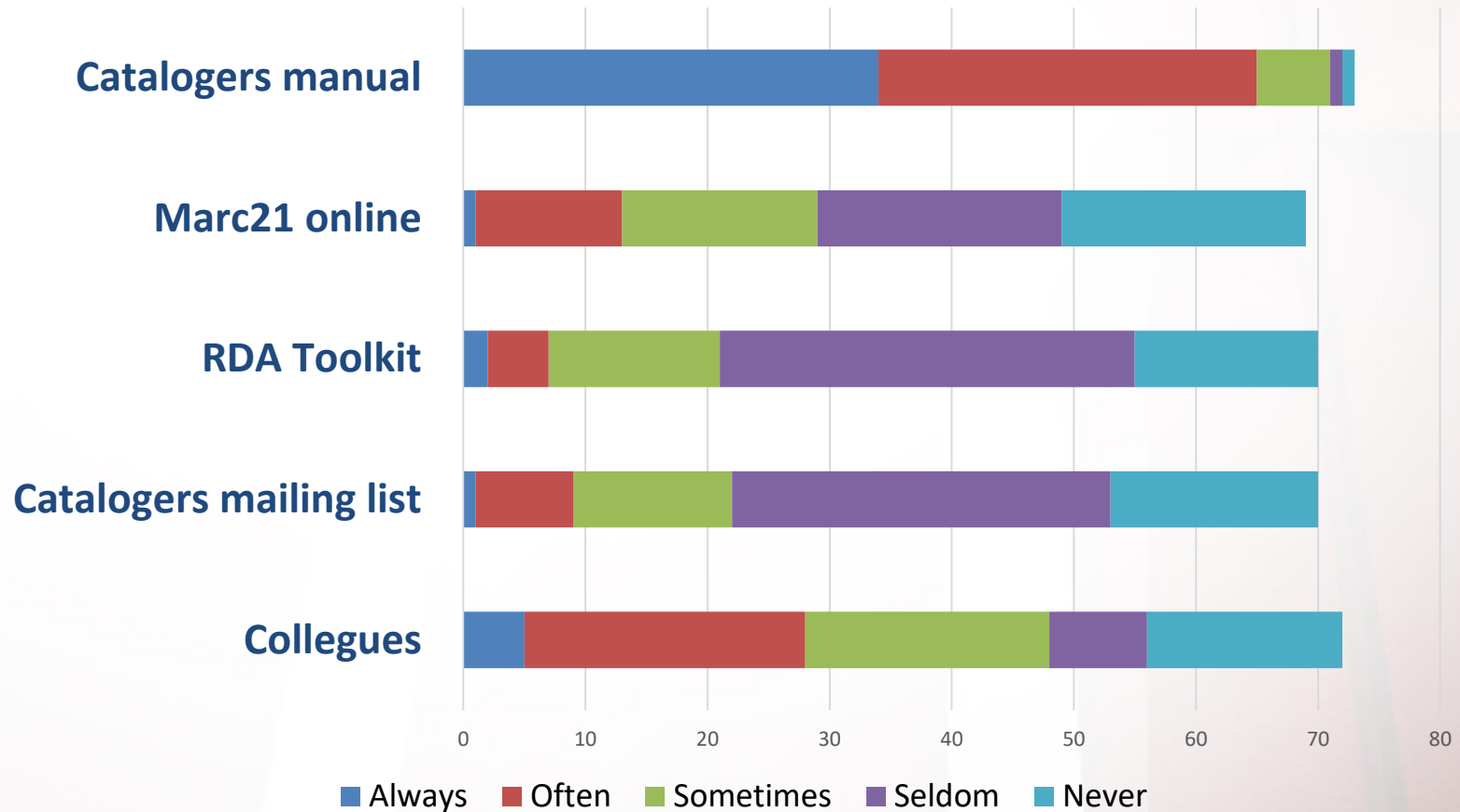
What is difficult in RDA?



What is difficult...



Cataloguing aids



What cataloguing instruction is needed?

