

The Development of Library Sector Terminology in Latvia and Problems and Solutions for Translating RDA¹ Standard Terms

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ABSTRACT

The National Library of Latvia (NLL) is the methodological centre of Latvian libraries in data creation and ensuring the development of data standards as well as the methodical centre co-ordinating the terminology work of library field and related branches. The historical insight shows the development of terminology work and allows to trace the development of terminology work and problems. The terms are adopted and approved by the subcommittee of the Terminology Commission of the Latvian Academy of Science (LAS).

The article highlights the role of the NLL in the implementation and translation of Resource Descriptions and Access (RDA) standard in Latvia. It is the standard for descriptive cataloguing, intended for use by libraries and other cultural organizations such as museums and archives. The RDA standard includes a set of data elements, guidelines and instructions that can be adapted for other information communities around the world, such as museums and archives. The translation problems of RDA Glossary are described, as well as principles and solutions for correct reproduction of RDA terms and their explanations in Latvian. An overview is provided of how the correct, appropriate terminology was followed in the translation process of the terms, so that the chosen term, in the appropriate meaning, could be used throughout the translation and related documents.

¹ Resource Description & Access.

Finally, the influence of RDA terms on the common data model of Latvia memory institutions for the unified discovery of cultural heritage digital resources is also outlined.

KEYWORDS: terminology, terms and databases; translation/adaptation of terms; implementation of RDA; RDA Glossary.

ANOTACIJA

Latvijas nacionālā bibliotēka (LNB) yra Latvijas bibliotēku metodoloģiskais centrs, dirbantis duomenų kūrimo ir duomenų standartų vystymo užtikrinimo srityse. Tai yra ir metodinis terminologinį darbą bibliotekų ir kitose susijusiose srityse koordinuojantis centras. Istorinės įžvalgos atskleidžia, kaip vyko terminologinis darbas, ir leidžia nustatyti šio darbo procesą bei problemas. Terminus apibūdina Latvijos mokslų akademijos (LMA) Terminologijos komisijos pakomisė.

Straipsnyje pabrėžiamas Latvijos nacionalinės bibliotekos vaidmuo įgyvendinant ir išverčiant Išteklių aprašymo ir prieigos standartą (angl. *Resource Description and Access*, RDA) Latvijoje. Tai aprašomojo katalogavimo standartas, skirtas bibliotekoms ir kitoms kultūros organizacijoms, tokioms kaip muziejai ir archyvai. Šis standartas – tai duomenų elementų, gairių ir instrukcijų rinkinys, kurį galima pritaikyti ir kitose informacinėse bendruomenėse visame pasaulyje, tokiose kaip muziejai ir archyvai. Straipsnyje aprašomos RDA standarto aiškinamojo žodyno vertimo problemos ir tikslaus terminų ir jų paaiškinimų perkėlimo į latvių kalbą principai ir sprendimai. Apžvelgiama, kaip terminų vertimo procese buvo pasirenkama tiksli ir tinkama terminija taip, kad pasirinktas terminas atitinkama reikšme galėtų būti vartojamas visame vertime ir susijusiuose dokumentuose.

Pabaigoje pabrėžiama RDA standarto terminų įtaka bendrajam Latvijos atminties institucijų duomenų modeliui, kuris yra skirtas bendrai skaitmeninių kultūros paveldo išteklių paieškai.

ESMINIAI ŽODŽIAI: terminologija, terminai ir duomenų bazės, terminų vertimas / adaptavimas, RDA standarto įgyvendinimas, RDA standarto aiškinamasis žodynas.

A BRIEF OVERVIEW OF THE DEVELOPMENT OF LIBRARY SECTOR TERMINOLOGY IN LATVIA

With the changing social, political and economic conditions and rapid technological development, the library and information sector, including terminology, has undergone tremendous changes in recent decades. The development of the web technologies has led to the emergence of new concepts and terms, and causes the need to adapt and implement international standards and regulations based on the new philosophy about the openness, interoperability and reusability of data.

The role of national terminology in the development of the library and information sector has grown, but new challenges have also arisen in finding suitable terms or creating new ones that would provide semantically accurate definitions of new realities and concepts. Terminology efforts have not always successfully identified terms or come up with innovations. Frequently, new terms have not been adopted nor used in practice.

The first developers of Latvian library terms were Latvian library practitioners and theoreticians. During the development of library terminology in the pre-World War II period, the magazine *Librarian* (*Bibliotekārs*, 1937–1940) was interesting in that to describe library work processes, it utilised important concepts of library science, such as: *norādes* (“references”), *sējums* (“volume”), *izdevums* (“issue; edition”), *saturs* (“content”), *katalogs* (“catalogue”), *inventāra grāmata* (“inventory book”), *oriģināls* (“original”), *eksemplārs* (“item”), *grāmatu patapināšana* (“book lending”). Some of these have maintained their relevance during the era of technological development.

A key event in the development of national terminology was the establishment of the Terminology Commission of the Latvian Academy of Sciences (LAS) in 1946. The scope of the Commission’s work was very wide-ranging and covered the development of national terminology in many scientific spheres. From 1948 onwards, the terms approved by the Commission were regularly published, first as drafts in terminology newsletters, then in dictionaries, and were mandatory for official use. The establishment of the LAS Terminology Commission also started the development of library sector terminology. In 1957, the first dictionary of library terminology was published in Russian and Latvian. The dictionary included some 1,300 library and bibliography sphere terms, as well as common terms from the publishing and book science. In order to develop terminology for the library science to create, adopt, publish and implement exact library science terms in practice, in the 1960s/70s, the Research Department of the Latvian SSR Vilis Lācis State Library (today the NLL) began actively working on terminology. In 1969, library specialists established a Subcommittee on Library and Bibliographic Terminology. During the period the Subcommittee operated, from 1976 to 1994, it issued a continuation edition *Bibliotekārie un bibliogrāfiskie termini* (“Library and Bibliographic Terms”). Each list of terms included new or edited terms relating to different library operations – cataloguing, index-

ing, the organisation of library work, the provision of library services; they also included the first translations of computer science concepts. From its inception until 1990, the Terminology Commission published 58 terminology newsletters and 15 dictionaries. On the basis of this abundant array of published terms, more than 40 collections of library terms were prepared and published in the early 1990s in Latvian and Russian. Later in the 1990s, more dictionaries were created in four languages already: additional translations of terms with definitions in English and German were provided. One important contribution to the development of library sector terminology, as well as to the development of the Latvian language itself, was the publication of *Bibliotēku fondi un katalogi* (“Library Collections and Catalogues”). Previously inaccurate designations of terms and incorrect uses of foreign language loanwords were eliminated during the preparation of the publication. Dictionaries of terms have not been published frequently in the Latvian library sector, so Janete Stevenson’s *Dictionary of Library and Information Management* (1997) was translated and published in Latvian in 2001 (*Bibliotēku un informācijas pārvaldība*) and actively used in practice. The publication covered 4,500 key terms not only in library and information science, but also in information management, business, accounting, book printing and publishing.

Beginning in 1999, terminology work was coordinated and managed by the LAS Terminology Commission. It consisted of about 30 subcommittees of different sciences. The main task for each subcommittee was to implement the national terminology policy in cooperation with the State Language Centre. Decisions made by the LAS Terminology Commission were accorded legislative status. Use of the approved terms was mandatory in national legislation, in the media and in the documentation of all types of institutions. In 2000, a LAS Terminology Commission subcommittee on Library Science, Bibliography, Book Science and Information Science Terminology was established under the leadership of specialists from the NLL. In accordance with the expansion of international communication between professionals as well as local structural reforms, at the end of 2011 the LAS Terminology Commission was expanded by establishing a Subcommittee on Information and Documentation Terminology, also involving archival specialists. Currently, 11 library and related branch specialists are actively involved in this subcommittee. The tasks set for the Information and Documentation Terminology Subcommittee are:

- evaluation of terms in draft legislation on information and documentation, and legislative publications;
- advising legal and physical persons on terminology issues in the information and documentation field;
- coordination of operations with institutions and organisations working in the spheres of information and documentation;
- ensuring the free availability of related branch terms on the web.

The Information and Documentation Terminology Subcommittee works on the development and ratification of terms, which includes the translation and adaptation of terms and their explanations from international standards and guidelines, as well as the translation and adaptation of terms submitted by library and related experts, academics or students. The subcommittee of LAS ensures the work of terminology in Latvia, recommends the principles of term formation and translation, and ensures co-operation between cultural and scientific organizations involved in the work of terminology.

With the development of technological options and the use of previously prepared data from *Tiešsaistes terminu banka: arhīvi, bibliotēkas, muzeji* (“Online terminology bank: archives, libraries, museums”) database created between 2005–2012 in which more than 3,000 terms and terminological collocations were accumulated, a new Database of Library, Archive and Museum Terms² was released to users in 2017. The purpose of the database developed and maintained by the NLL is to promote co-operation on terminology issues between cultural heritage institutions. Cooperation partners in creating the database were the LAS Terminology Commission, the National Archives of Latvia, the University of Latvia, the NLL, and a number of museums. This resource includes terms and their explanations from the library sector and related branches in Latvian, term equivalents in English and, where possible, also in German and Russian. Different branch legislative documents were used in selecting terms, including adapted international standards, professional literature, as well as lists of terms currently required in practice. Terms are accorded different statuses in the database – approved, amended, temporary and obsolete, as well as terms from repealed standards and legislative documents retained for research purposes. In order to obtain the required terms more quickly, the database

² Available at: <http://termini.lnb.lv>.

also includes terms that have not yet been approved, granting them temporary status. The terminology database has been rated positively as easy to use, as it provides explanations of terms and their sources.

In the autumn of 2017, the LAS Information and Documentation Terminology Subcommittee, together with the NLL Library Development Centre and the Bibliography Institute, and involving the LAS Terminology Commission, renewed the tradition of organising conferences dedicated to library and related sector terminology. The theme of the 2021 Terminology Conference is “The Interoperability of Data of Cultural Heritage Institutions in the Digital Space: Terminological Aspect”, to which experts from Estonia, Lithuania, Finland and Germany have also been invited.

At the end of 2018, the Latvian national terminology portal³, developed by the Tilde technology company in partnership with the State Language Centre, the Latvian Language Agency and the LAS, was released to the public. The terminology portal provides access to information from more than 96 collections of terms in a number of languages. The Latvian national terminology portal also includes data from the *AkadTerm* database, thus also terms from the Database of Library, Archive and Museum Terms created by the NLL.

One source of supplementation for national library terminology is also related to professional standardisation – the adaptation of international standards to the needs of Latvian libraries and the development of national standards. The introduction of each new, functioning standard enriches the terminology of the library sector. English has become the main source of internationally used foreign words, leaving the formerly imposed Russian to fade into oblivion. For their part, explanations of standard terms have been, to a great extent, modified and adapted to the operating sphere of the specific standard.

IMPLEMENTATION OF THE RESOURCE DESCRIPTION AND ACCESS (RDA) STANDARD IN DATA CREATION IN THE LATVIAN LIBRARY SYSTEM

The creation of data in libraries is a continuous process, their form and also content must always comply with the internationally recognised standards, which themselves are always undergoing development (Gold-

³ Available at: <https://termini.gov.lv>.

berga et al. 2014: 3–4). Fulfilling this condition ensures that data created by an institution can be universally re-used and included in the global knowledge network.

The NLL acts as the methodological centre on data creation for Latvian libraries and for ensuring the development of data standards. NLL Bibliography Institute data experts and data creation specialists actively follow innovations concerning data, evaluate and promote new international metadata models and standards, and make decisions on their implementation. They also create high-quality and authoritative data, saving other libraries' resources, so optimising their operations and improving overall data quality. The prevalence of new data content formats and the increase in published electronic resources have contributed to the need to change the rules for cataloguing resources according to the 21st century information flow requirements. The RDA standard includes a set of data elements, guidelines and instructions that can be adapted to other information communities around the world, such as museums and archives.

In 2013, following a structural change, the NLL Bibliography Institute established a Data and Knowledge Management Department, within which a team of RDA implementation experts was established. The main goals and preconditions for RDA implementation team were defined as:

- higher quality management of digital resources and openness of data to the web;
- the inclusion of data created by Latvian libraries in international data circulation and ensuring of the reusability of data;
- the use of AACR2⁴ in data creation since 2000 has facilitated the implementation of the RDA standard in the creation of union catalogue data by the NLL and scientific libraries.

Because of a lack of funding, it was decided not to translate the entire RDA document, but only certain sections (RDA Reference, introduction, list of RDA core elements; AACR2 and RDA comparison tables, etc.) (Goldberga et al. 2014: 3–4). One influencing factor was that partial translation does not require payment of the licence fee and this significantly reduces development and maintenance requirements.

⁴ AACR2 – Anglo-American Cataloguing Rules, second edition, updated version in 2005.

RDA STANDARD TRANSLATION RULES AND INTERNATIONAL EXPERIENCE

One of the goals set by the RDA developers was to ensure standard usability in foreign language communities. The language for RDA standard is English, and in order for these materials to be used in other languages, countries had to decide on their translation. The RDA copyright holders have signed translation agreements with other organisations/partners (such as publishers, national libraries or library organisations) to ensure high quality RDA translations. An RDA translation policy has been elaborated, stipulating translation options and requirements. The first internationalisation initiatives began as early as 2013, with the publication of the first translations of RDA into French and German using the RDA Toolkit⁵. Further information on RDA translation and conditions is also available in the RDA Registry⁶. This contains semantic web representations of entity⁷, elements, and relationship designators in the form of identifiers approved by the RDA Steering Committee (RSC)⁸.

Different approaches to RDA translation are offered:

- complete translation, including the RDA Toolkit;
- partial translation that can be used in the learning process (does not include the RDA Toolkit and can be used locally);
- partial translation – RDA Reference – can be used online, available in the RDA Registry with a translation language interface.

The RDA translation project is unique and at the same time flexible and open to different usage provisions. In order to translate the RDA completely, both appropriate financial resources and specialists (translators, editors) are required, who have knowledge and also practical experience in working with data creation standards and data models, as well as a very good command of English.

Since the first RDA translations, RDA implementation processes and the situations in several European countries have been studied. In *RDA in Europe: Implementations and Perceptions* (Ducheva, Pennington 2017) authors study data creation communities in 12 European countries (both

⁵ Available at: <https://rdatoolkit.org>.

⁶ Available at: <https://www.rdaregistry.info>.

⁷ Entity – an abstract class of a physical or conceptual thing in the universe of human discourse (RDA).

⁸ Available at: <http://www.rda-rsc.org>.

English and non-English speaking) that were included in the survey. It was found that the interest in RDA and its implementation in Europe grew rapidly after the EURIG (European RDA Interest Group)⁹ meetings in 2013 (National Library of Sweden, Stockholm) and 2016 (NLL, Riga). The study's summary indicated several reasons why RDA implementation activity is insufficient and what problems non-English-speaking European countries face. One of the main reasons hindering the implementation of RDA is its high cost. Several countries, for example, Sweden, Latvia and Iceland decided to partially translate the RDA by developing national guidelines based on the RDA standard. Norway and Spain considered complete translation to be a prerequisite for the successful implementation of RDA, as data creators must be able to work with this standard in their native language. The authors (Ducheva, Pennington 2017) also mentioned the NLL's experience in their article.

TRANSLATION OF RDA GLOSSARY TERMS, ELEMENT VALUES AND ENTITY RELATIONSHIPS

Translation is a singular psychological process, because any translation has significance for the manifestations contained in a nation's culture, human consciousness and subconscious. Translation can be achieved more quickly and simply by using foreign words that are implanted into the Latvian language from various sectors. If the word to be borrowed is international, it has advantages and is more easily recognised. However, large numbers of foreign words make texts incomprehensible, as crucial content is not accurately perceived. The trend in the development of the Latvian language, with increasing influence, is that foreign words are gradually displacing Latvian words in everyday use. The problem is that there are no, or no easily applicable, Latvian terms corresponding to these foreign words.

The RDA Glossary will play an important role in the day-to-day work of Latvian library specialists, because without a unified terminology and understanding of concepts, the implementation of RDA is impossible. In order to be able to correctly reproduce a specific RDA term in Latvian, its meaning must be precisely determined in the context of the RDA data model, also how the term is used in English must be understood. In

⁹ Available at: <http://www.rda-rsc.org/europe>.

such cases, the explanations of terms found in library term dictionaries and special literature are useful. The term-translating process must follow the principle that the chosen term, in its appropriate sense, is used throughout a document, as well as in interrelated documents. When the translation of the RDA Glossary was started, it was important to keep in mind that RDA is a new data creation standard, with a new philosophy and influence, and is intended for use in an international multilingual environment. The RDA standard was linguistically developed on the basis of the AACR2 standard appropriate to the English language and which was itself developed by English-speaking countries. With the development of RDA as an international multilingual environmental standard, problems have arisen with adapting RDA terms and their explanations to the idiosyncrasies of other languages. Phrases that are well understood in English are not easy to translate and adapt to other languages, including Latvian. Speaking at international seminars, specialists from English-speaking countries using RDA have also noted that the English language which the RDA standard document uses to explain terms is quite complicated and ambiguous. Representatives of non-English speaking countries, on the other hand, emphasise the problems in translating term explanations (Behrens 2019). The explanations are not suited to the day-to-day work of data creators, the language is complicated and texts are very theoretical. Looking at the existing translations of terms and entity relationship designators in the RDA Registry, it can be seen that not all terms and relationship designators have been translated into national languages. This could mean that there were problems translating a particular term or relationship. Clearly, this is a temporary solution, because the Registry contains terms and also explanations that are retained in English. The idiosyncrasies of languages are noticeable, for example, the use of gender in the recording of roles of responsibility – *autors/autore* (“author”). In languages where these roles are expressed with a gender, translators are forced to decide on the use of the same gender role designator for persons of both sexes. In the general international practice, the male gender is accepted as the common gender designator. This was also accepted in the translation of the RDA Glossary in Latvian. Further problems arise with the expression of various entity relationships, which can be achieved in English with the help of short phrases, for example, “adaptation of work”. However, the expression of the same phrase in Latvian requires the use of grammatical

declinations. Another challenge is the extensive use of synonyms that is characteristic of the English language, and it is not always possible to successfully find a suitable term in the Latvian language. For example, in English, the terms “publishing, releasing, issuing” have different nuances, while in Latvian this is often denoted by one or two terms (*izdošana*, *publicēšana*) whose semantic meanings are very close. When a new term is being introduced, several language equivalents can often be used in different sectors and documents, and such a situation hampers uniform understanding and the use of the term in the documents of national significance. Such example is the Latvian language equivalents for the term “Entity”: the appearance of *entīte*, *entītija* (in library science) and *entitāte* (IT) in documents in different sectors. The choice of the most appropriate equivalent is still under discussion.

Translators wanted to add additional comments to the explanations of RDA Reference terms, which would provide clarifying explanations. However, the RSC indicated that this would confuse users as to which is the fundamental guideline and which the explanation appended by the translators. There was a wish for the RDA document to include examples illustrating the specific relationships between entities, but this proposal also did not gain backing, although it was widely aired at European RDA Interest Group (EURIG) meetings (EURIG Annual Meeting 2020). Views on the complexity of the entity relationship network are based on an insufficient understanding of the IFLA LRM¹⁰ entity hierarchies and their relationships. These aspirations were well understood, as libraries still create data in the MARC structure, but in the future RDA data will be created as linked data, requiring a different approach to data structuring, and these examples will be less relevant (Dunsire 2019). The RDA standard is not linked to a specific data entry standard, but rather directed to the use of web technologies for creating cultural heritage metadata (open-linked data, persistent identifiers in entity identification, web dictionaries and ontology services). The translation had to ensure coverage of all the elements that make up a definition, even though word order may differ. The RDA Glossary’s publication requirements do not allow for the simplification or abridging of definitions.

In 2010, the NLL started translating the 2008 version of the RDA Glossary with approximately 520 terms and their explanations. At first, it seemed

¹⁰ IFLA Library Reference Model (LRM) https://www.ifla.org/files/assets/cataloguing/frbr-lrm/ifla-lrm-august-2017_rev201712.pdf.

that translating the Glossary would pose no problems as, in perusing the terms, they seemed generally known, but each new version of the Glossary has been supplemented with new terms and explanations in English, mostly unrelated to the library sector. A task was set to comply with the idiosyncrasies of the Latvian language and mutual conceptual conformity with the terms as expressed in English, without also setting the goal of achieving a mandatory lexical coincidence. In 2012/2013, the RDA Glossary was supplemented with 728 new or revised terms and their explanations. Terms such as “unmediated; media; preliminary” for which finding suitable Latvian terms was no easy task. Terms such as “blueprint process or blueprint process; white print process, silver halide” which thus far had appeared rarely or not at all in the work of Latvian library data creators and which were not in use, were also included. The Glossary included a number of terms from the printing sector, for example, “duodecimo or twelvemo”; video and audio terms were also supplemented with, for example, “coarse groove; encoded bitrate”, etc. The inclusion of such terms, rarely used in the library environment, in the RDA Glossary indicated that the terms necessary for the description of resources in other cultural heritage institutions are also being integrated into the RDA standard.

In order to ensure translation quality, data creation specialists for the NLL’s special collections (music, audio visual resources, maps, etc.), as well as from the collection preservation department, were invited to act as consultants to specialists from other cultural heritage institutions. A number of assumptions had been made in the translation process: general explanations already known to us should be used; it is not enough to find an appropriate Latvian word, the word must be provided with a precise explanation of the term in order for it to be used to describe various resources, and at the same time the term could be successfully integrated into international circulation.

The translation of many sector-specific terms required an in-depth understanding of the processes involved in the definitions, for example specific types of dance notation or medieval music notation, or processes related to book printing.

For example, one interesting term was “Table book” – “A format of notated music that consists of a music book made to be placed on a table and displayed in such a way that the performers can read their parts while seated or standing across or around the table. Each part is notated separately, usually in a configuration that presents, when the book is open,

different parts in inverted and/or perpendicular positions”. Even though contact with such resources may be relatively rare, such materials may nevertheless be present in the collections of cultural heritage institutions.

One real challenge was translating terms related to digital files, given that it is often not easy to apply Latvian words that directly express the semantic meaning of these specific terms. Many of these terms are being used without translating them into Latvian, for example: “Master” – “A generation that is created from the process of digitisation at the highest resolution and often used to make derivative copies”. We managed to apply a Latvian translation to this term, which also reveals the semantic meaning of the term. A number of terms related to this generation of digitisation can then be derived, e.g., *plates pirmatnis* (“Disc Master”) and *audiolentes pirmatnis* (“Audio Tape Master”). The RDA Glossary includes a group of terms describing resource materials, and these are mostly very specific terms whose translation requires research and in-depth investigation. One of the more difficult terms to translate was “unmediated”, for which a number of new words were tried initially, but they were unsuccessful and did not fit into everyday use. Nonetheless, a very successful term was eventually found, that reveals the meaning of the term. New terms appear for entity relationships, such as: “Prequel; Sequel; Remake” – terms that are widely used in the music and film industries, but which required research to apply equivalent Latvian terms.

However, in the further translation practice, the assumption about referencing translations of terms found in various local information sources and using these in the Glossary was rejected because it did not comply with the RDA Glossary publication requirements. When translating terms from the RDA Glossary, we drew attention to the fact that the previously known AACR2 terms were being replaced by disparate RDA terms or differing translations of terms. Problems arose in translating relationship designators between Work, Expression, Manifestation, and Item (WEMI¹¹). It was important to precisely specify reciprocal relationships. To do this successfully,

¹¹ **Work** – A distinct intellectual or artistic creation, that is, the intellectual or artistic content (RDA).

Expression – An intellectual or artistic realization of a work in the form of alpha-numeric, musical or choreographic notation, sound, image, object, movement, etc., or any combination of such forms (RDA).

Manifestation – A physical embodiment of an expression of a work (RDA).

Item – A single exemplar or instance of a manifestation (RDA).

Agent – An entity who is capable of deliberate actions, of being granted rights, and of being held accountable for its actions. An agent includes a collective agent and a person (RDA).

the RDA entity relationship model had to be understood and this was not straightforward for data creators working with MARC data structures.

At its November 2016 meeting, the RSC agreed to integrate the IFLA Library Reference Model (LRM) into the further development of RDA. IFLA LRM is a high-level conceptual reference model developed for modelling entity relationships. As a result, a unified and logically consistent model has been created, which covers all aspects of bibliographic data, simultaneously modernising and extending data modelling. Under the influence of the LRM, three completely new entities have been added to the RDA standard: “Agent Group” later Group, Nomen and Timespan”. Relationships between entities have been expanded and incorporated into the RDA Reference. Some designators changed – “Reciprocal relationship” became “Inverse” – as did some definitions and explanations.

2018 was marked by new information for translators. In addition to the inclusion of new entities and relationships in the RDA, a number of corrections were made to the records of entity relationship designators. In April 2020, an updated version was published on the RDA *Toolkit beta* website, differing in new features and functionality, as well as changes to the RDA structure. In December 2020, this *beta* version was approved as the official RDA standard website, retaining access to documents available in the previous version. This version is considered stable and no radical changes are planned. These were good news for guideline developers and translators as, in previous years, changes were regular and quite radical (Translation Policy for RDA and RDA Toolkit).

The RDA Reference is intended as a translation of RDA terms, values, and entity relationship designators, and its adaptation to local needs is important. The NLL expert working group completed its translation of the RDA Reference at the end of 2020, and it is planned to submit it to the RDA Registry for publication in Latvian by the end of 2021.

COMPATIBILITY OF RDA STANDARD TERMINOLOGY WITH THE DATA STANDARDS OF OTHER LATVIAN CULTURAL HERITAGE INSTITUTIONS

The digital environment is one of the new opportunities that ensure the existence of national identity. The timely integration of knowledge into open data systems and its rapid retrieval reinforce this. The usability and quality of digitally born and digitised resources are in line with

society's demands for rapidly accessible, efficiently presented, highly reliable, freely usable and integrated knowledge (Sporāne 2010). The aim of creating an environment for the co-creation and re-use of data is to develop cooperation between cultural heritage institutions in order to create a single knowledge network, linking it to digital objects. The interoperability of the RDA standard with the standards of other cultural heritage institutions (Table 1.) can help ensure the description of different types of resources, the identification of entities and the creation of metadata suitable for further dissemination in the linked data environment.

In 2020, the NLL, in cooperation with the Humanities Faculty of the University of Latvia, launched a research project – Latvian Memory Institution Data in the Digital Space: Connecting Cultural Heritage (Project No lzp-2019/1-0365) – which is being funded under the Latvian Council of Science 2020–2022 research programme. One of the project's tasks is to study and describe the semantic interoperability of Latvian cultural heritage institutions (libraries, archives and museums) in the field of data, and this is directly related to the terminology for data models and standards that these institutions use in data creation.

The usability of RDA standard entities in the unified modelling of cultural heritage institutions' data is to be supported, and such precedents already exist in world practice. For example, in 2014, Finnish memory institutions (libraries, archives and museums) decided to harmonise their data and include them in a unified, shared collection service FINNA (Seppälä 2016). RDA was chosen as one of the recommended standards for libraries, archives and museums. The mentioned institutions took the decision to introduce RDA rules in the creation of Agent metadata, i.e., for rendering Agent attributes, relationships, and relator codes.

The authority data created by the NLL (RDA) and the National Archives of Latvia will be the basis for the unified Reference data system of Latvian cultural heritage institutions. The authority data will be cross-mapped and uploaded into the Reference data system co-creation environment. Further data co-creation will be implemented by utilising both the data already in the system and creating new entities. In order for the outcome of this co-creation to be a homogeneous set of reference data, agreement is needed on common key entities and their names, as is harmonisation of different data creation standards and models. The following key entities – some of which are common to library, archive and museum data standards – are defined in the common Reference data system.

Table 1. Comparison of key entities relevant to the unified cultural heritage management and dissemination platform in sector conceptual models LRM, RiC CM¹² and CIDOC CRM¹³, also EDM¹⁴ (Rekomendācijas... 2021: 32)

Entity type	Libraries <i>LRM(2017)/ RDA (2020)</i>	Archive <i>(RiC CM)</i> ric-cm-0.2	Museums <i>CIDOC CRM</i> CRM_v.7	Cultural Heritage (Europeana) <i>EDM</i> v5.2.8
Agent	LRM-E6 Agent/ rdac:C10002	RiC-E07 Agent	E39 Actor	edm:Agent
Agent/ Person	LRM-E7 Per- son/rdac:C10004	RiC-E08 Person	E21 Person	edm:Agent
Agent/ Institution	LRM-E8 Collec- tive Agent/ rdac:C10005	RiC-E11 Corpo- rate Body	E74 Group	edm:Agent
Agent/ Family	LRM-E8 Collec- tive Agent/ rdac:C10008	RiC-E10 Family	E74 Group	edm:Agent
Agent/ Group	LRM-E8 Collec- tive Agent/ rdac:C10011	RiC-E09 Group	E74 Group	edm:Agent
Place	LRM-E10 Place/ rdac:C10009	RiC-E22 Place	E53 Place	edm:Place
Time Span	LRM-E11 Time- span/ rdac:C10010	RiC-E18 Date	E52 Time- Span	edm:TimeSpan
Event	Subclass of LRM-E1 Res/ rdac:C10012	RiC-E14 Event	E5 Event	edm:Event
Work	LRM-E2 Work/ rdac:C10001	RiC-E02 Record Resource + RiC-A28 Name	E89 Proposi- tional Object	edm:Informa- tionResource

Supporting users' new intuitive search habits and needs (find, identify, select, obtain, explore, i.e. discover resources through their interrelationships, contexts) in the field of library data and their hierarchy are defined by conceptual models such as IFLA FRBR (WEMI (Work, Expression,

¹² Available at: https://www.ica.org/sites/default/files/ric-cm-0.2_preview.pdf.

¹³ Available at: <http://www.cidoc-crm.org>.

¹⁴ Available at: <http://pro.europeana.eu/page/edm-documentation>.

manifestation, Item hierarchy, 1998) and IFLA LRM (including WEMI, 2017). The LRM model is a high-level conceptual model with a higher degree of generalization than previous IFLA data conceptual models. LRM is an entity-relationship model (Rekomendācijas... 2021: 23). LRM generally models the entire bibliographic universe – texts, sounds, images, moving images, sheet music, spoken words, objects, data sets, computer programs, transmedia. It does not directly model processes (museums) and activities (archives). The practical implementation of LRM takes place by introducing RDA regulations in the creation of Latvian library data, which are based on the categories defined in the LRM conceptual model and their hierarchy (Rekomendācijas... 2021: 26).

In the field of museums, key concepts are defined by the conceptual model CIDOC-CRM – ontology for information exchange in the field of cultural heritage (ISO 21127, 2006; updated 2014; still under development) harmonized with the LRM conceptual model for libraries (Rekomendācijas... 2021: 26).

The RiC CM conceptual data model for archives harmonizes and integrates key concepts from four International Council on Archives (ICA) standards: General International Standard Archival Description (ISAD (G)); International Standard Archival Authority Records Corporate Bodies, Persons, and Families (ISAAR (CPF)); International Standard Description of Functions (ISDF); International Standard Description of Institutions with Archival Holdings (ISDIAH) and ISO standard Records management standard ISO 23081-11 (Rekomendācijas... 2021: 21).

Libraries, archives and museums involved in the creation of Europeana – more than 60 participants, incl. Latvian memory institutions. Each Europeana digital object is accompanied by metadata according to the EDM (Europeana Data Model), which is an object-oriented data model. The data model ensures the interoperability of data of all member institutions. The EDM separates the cultural heritage object from its digital representation so that the corresponding metadata values are linked accordingly. EDM ensures compatibility of data from different models, requirements of specific areas, as well as prevents data loss, while maintaining data quality and coexistence with the original data (Rekomendācijas... 2021: 37–38)

In all of these standards, the entity “Agent” is a superclass of the entities “Person, Group, Institution, Family”. In all three standards, an entity denotes the responsibility of a person or group for the creation of the content, form, performance of a Work, Expression, Manifestation or Item.

The distinct term “Actor” used in the museum standard CIDOC CRM refers to essentially the same entity superclass “Agent” in the library and archive standards.

These standards differ in the degree of detail they use to describe the entity classes involved in structuring the information in their respective data models. For example, in the RDA standard, the “Collective Agent” entity is a superclass of the entities “Institution, Group and Family”. In turn, the hierarchical division of WEMI (Work, Expression, Manifestation, Item) in library data standards is characteristic only of the RDA-LRM standard, but terms from other cultural heritage institution standards can be amended to comply with it.

CONCLUSIONS

Translating the RDA Reference into Latvian has been a complex and important process. Looking back at the work done and finding out about the translating experiences of other countries, we can conclude that:

1) there were unforeseen breaks in the work process, as RDA additions and changes took place continuously over several years and took up more time than could have been foreseen;

2) translation requires a high degree of semantic accuracy, i.e., the maintenance of logical and semantic relationships in key concepts across different vocabularies;

3) the translators’ working group must have skills and knowledge in cataloguing resources for all types and formats of content, as well as being fluent in English and Latvian;

4) before starting translation work, common phrases or general terms must be separated out, creating a list of words and phrases. This should be translated first, as this will facilitate further work;

5) attention must be paid to terms that do not have exact equivalents in Latvian. There are many terms that lose their meaning in Latvian when translated directly from English. Translation requires the preservation of logic and semantic relationships.

The result of the RDA Reference translation is almost 5,000 updated and brand-new Latvian terms useful for cultural heritage institutions, which is a step forward not only in the development of the Latvian language, but, being included in the international RDA Registry, the terms will also be used internationally.

REFERENCES

- Behrens Renate 2019: *RDA – Chances and Perspectives. The European Region*. Available at: file:///C:/Teksti/RDA_materiali/projektam_raksts_RDA_2020/EDA_Europe_EURIG%20presentation%20for%20colloquium.pdf [accessed 2021-07-06].
- Ducheva Dilyana, Pennington Diane 2017: RDA in Europe: Implementations and perceptions. – *Journal of Librarianship and Information Science*. Available at: <https://doi.org/10.1177/0961000617709060> [accessed 2021-07-06].
- Dunsire Gordon 2019: *The IFLA Library Reference Model and RDA*, Santiago de Chile, 21 October, 2019. Available at: <https://slideplayer.com/slide/17727598/> [accessed 2021-07-06].
- EURIG Annual Meeting 2020: *Community reports 2020*. Available at: http://www.rda-rsc.org/sites/all/files/RDA%20in%20Europe%20May%202020_0.pdf [accessed 2021-07-06].
- Goldberga Anira, Kreislere Maira, Sauka Jogita, Stürmane Aiva, Virbule Inta 2014: RDA: From Strategy to Experiments and Implementation in Latvia (Including an Overview of the Situation in the Baltic States). – *Journal of Library Metadata* 14(3–4), 205–221.
- Rekomendācijas Atsauču datu semantiskās sadarbības veicināšanai starp Latvijas kultūras mantojuma institūcijām = Recommendations for promoting the semantic interoperability of Reference Data between Latvian cultural heritage institutions*, izstrādes darba grupa: Mārite Apenīte, Uldis Bojārs, Anita Goldberga, Maira Kreislere, Anita Rašmane, Jogita Sauka; LNB Bibliogrāfijas institūts, Rīga: LNB Bibliogrāfijas institūts, 2021. 1 tiešsaistes resurss (72 lp.): ilustrācijas, tabulas; 1,96 MB. ISBN 9789934610004 (PDF). Available at: <https://doi.org/10.52197/IBIV6839> [accessed 2021-07-20].
- Seppälä Marja-Liisa 2016: *RDA in Finland*. Available at: <https://dom.lndb.lv/data/obj/file/304137.pdf> [accessed 2021-07-06].
- Sporāne Baiba 2010: *Nacionālā identitāte un atmiņas institūcijas*. Available at: http://identitate.lnb.lv/wp-content/uploads/2010/12/Working-papers_sporane.pdf [accessed 2021-07-06].
- Translation Policy for RDA and RDA Toolkit*. Available at: https://www.rdatoolkit.org/sites/default/files/translation_policy_for_rda_current.pdf [accessed 2021-07-06].

LATVIJOS BIBLIOTEKŲ SEKTORIAUS TERMINOLOGIJOS RAIDA IR RDA STANDARTO TERMIŅŲ VERTIMO PROBLEMAS IR SPRENDIMAI

Santrauka

Nacionālās terminoloģijas vaidmuo auga visose srityse, tačiau per pastaruosius dešimtmečius didžiuliai pokyčiai įvyko būtent bibliotekų ir informacijos sektoriuose. Terminų identifikavimas ar naujųjų diegimas ne visada buvo sėkmingas.

Latvijos mokslų akademijos (LMA) Terminoloģijos komisijos įsteigimas 1946 m. buvo pagrindinis įvykis nacionalinės terminoloģijos vystymo srityje. Įsteigus LMA Terminoloģijos komisiją, prasidėjo ir bibliotekų sektoriaus terminoloģijos kūrimo procesas. 2000 m. buvo įsteigta Latvijos mokslų akademijos Terminoloģijos komisijos Bibliotekininkystės, bibliografijos, knygotyros ir informatikos terminoloģijos pakomisė, o 2011 m. Terminoloģijos komisija buvo išplėsta įsteigiant Informacijos ir dokumentų terminoloģijos pakomisę, kuri taip pat apėmė archyvistikos specialistus. 2018 m. pabaigoje prasidėjo Latvijos nacionalinės terminoloģijos svetainės kūrimo darbas, kurį atliko technologijų bendrovė „Tildē“ kartu su Valstybinės kalbos centru, Latvių kalbos agentūra ir LMA.

Išteklių aprašymas ir prieiga (angl. *Resource Description and Access*, RDA) – tai naujas standartas, skirtas bibliotekoms ir kitoms kultūros organizacijoms, tokioms kaip muziejai ir archyvai. RDA standarto diegimas kuriant duomenis Latvijos bibliotekų sistemoje taip pat svarbus ir tolimesnei terminoloģijos plėtrai. Latvijos nacionalinės

bibliotēkas Bibliografijas institūta datu ekspertai ir datu kūrima speciālisti aktīvi seka datu jaunumus, vērtina ir skatīja lietot jaunus starptautiskus meta-datu modeļus ir standartus bei sprendīja dēļ jū ieviešanas. RDA standarts – tai datu elementu, gaisu ir instrukciju rēķins, kurā galima pritaikyti ir kitose informacinē bendruomenē visame pasaulē, tokiose kaip muzieji ir arhīvi.

Vērtēšana ir īpatnēgs psiholoģisks procesis, nes katrs vērtēšanas atklēdā tautas kultūras, žēnu sāmonē ir pašmonē apraiškas. RDA norodu (angl. *Reference*) vērtēšana ī latvīu kalbā buvo sudētingas ir svarbus procesis, kurio metu buvo atsižvelgtā ī jau atliktā darbā ir kitu šaliu vērtimo patirtī. Vērtēšana reikalauja didelio semantinio tikslumo, t. y. loģinīu ir semantiniu pagrindiniu sąvoku ryšiū išlaikymo skirtinguose žodynuose.

RDA standarto suderinimas su kitais kultūros paveldo institucijų standartais gali padėti užtikrinti įvairių išteklių tipų aprašymą, entitetų (angl. *entities*) identifikavimą ir tolimesnei sklaidai bendroje datu aplinkoje tinkamų metadatu kūrimą.

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