

# Public libraries in Switzerland: RDA and the FRBRization watershed

Elisa Banfi

*Faculté des sciences de la société, Université de Genève, Geneva, Switzerland, and*

Arnaud Gaudinat

*HES-SO/HEG Geneva, Information Sciences, Geneva, Switzerland*

## Abstract

**Purpose** – The purpose of this paper is to investigate how Swiss public libraries are experiencing a normative revolution connected to new cataloging standards, such as RDA and the FRBRization of catalogs.

**Design/methodology/approach** – Thanks to semi-structured interviews, the paper analyzes the current positioning of Swiss public libraries on the “bibliographic transition” issue by using a case study of the network of municipal libraries in Geneva.

**Findings** – In Switzerland, the federal and multi-linguistic structure of the library networks increases the organizational obstacles to the adoption of new cataloging principles and formats. At the local level, the Swiss municipal libraries have to cope with this complexity to transform their structures and continue to offer competitive and effective services to their users.

**Practical implications** – The paper proposes six scenarios of technology watershed for the analyzed case study and their consequences for cataloging standards and rules.

**Social implications** – The paper shows how the adoption of technological and conceptual innovations has to be done in the face of real organizational and administrative constraints, especially in the case of public lending libraries.

**Originality/value** – The paper analyzes at the empirical and theoretical levels how, especially in Switzerland, the variety of governance levels and linguistic areas have made strategizing more complex for public lending libraries.

**Keywords** Switzerland, Public libraries, FRBR

**Paper type** Case study

## Introduction

During the last two decades, several factors – mainly due to the growing importance of the digitalization of documents and the advent of search engines such as Google – have changed the nature of library cataloging (Bermès, 2013; Chambers, 2013; Christensen, 2013).

Concerning public lending libraries, these transformations have revolutionized two main areas: the management of bibliographic records and the rules and formats used.

Traditionally, records were produced or controlled by librarians and exploited by users and professionals within libraries. Nowadays, the majority of bibliographic records and metadata are produced by external entities and subsequently imported into library catalogs. Librarians, therefore, only sporadically continue producing bibliographic data by ensuring that their bibliographic records are exportable to the web. They remain, however, intermediaries among the metadata, the physical location of documents and readers.

According to some researchers, we are witnessing a paradigm shift from “[...] document-centric data to data-centric metadata” (Alemu *et al.*, 2012). This shift is more relevant for public libraries, for which non-digital documents still play a crucial role for their services. Unlike scientific and heritage libraries, public lending libraries have a mission to ensure the



physical availability of collections for local users. Thus, public lending libraries need, on the one hand, to manage the new digital collections in accordance with bibliographic formats, encoding models and effective computer software. On the other hand, they preserve the printed documents with the associated past logics of management, classification and indexing. For this purpose, the most challenging matter is the adoption of the new cataloging formats and rules associated with the development of the internet at the global level. In this context, public lending libraries seem to be often overtaken by technological developments. Although heritage and scientific libraries have become proactive actors of the bibliographic transition, public lending libraries have assumed a passive role often justified by the lack of human and economic resources.

This paper aims to illustrate how organizational integration in local, regional, national or international networks is the major explanatory factor influencing the adoption of new bibliographic principles and formats by public lending libraries.

This study is about libraries in Switzerland and, in particular, the case of public libraries. To better understand this country case, a brief description of the Switzerland situation follows. Switzerland is a small country (41,285 km<sup>2</sup>) with three main and official languages, which are Swiss German (spoken by 64 percent of the population, according to the Federal Statistical Office), French (23 percent) and Italian (8 percent). This specificity is due to its direct neighbors aka France, Italy, Germany, Austria and Liechtenstein. Switzerland is a federal republic in Europe, organized into 26 cantons and with an estimated population of 8.5 m in 2016. The number of public libraries censused was 701 in 2015[1].

## Literature review

Scholars have only recently studied the implementations of RDA in libraries and especially in libraries' consortium at the theoretical and empirical levels. Cronin (2011) studied the participation of the University of Chicago Library in the US National Libraries RDA test by focusing on staff training on RDA and the RDA Toolkit (Wu *et al.*, 2016). The paper analyzed the influence of RDA implementation on local cataloging policies, local LIS modification and acquisitions protocol. According to Sanner (2012), the role of the staff and its training concerning RDA is the key factor that leads to a successful implementation (Wu *et al.*, 2016). According to McCutcheon (2012), the key factor of a successful implementation of RDA is related more to well-structured local policies that facilitate catalogers' implementation of new rules. This author establishes best practices for catalogers to improve record quality and regulate the flexibility of RDA records in the Kent State University Libraries (KSUL). For the same libraries' consortium, Maurer and Panchyshyn (2014) have analyzed the management of the RDA implementation. By focusing on the process of decision making concerning the adoption of RDA, Willan (2011) enlarged the analysis to the relation between best practices of enrichment of bibliographic data for the adoption of RDA. Panchyshyn and Park (2015) approached the same issues by analyzing vendors' strategies and the performance of cataloging tools that aid in the enrichment of RDA implementation. In a more systematic way, Wu *et al.* (2016) analyzed the RDA implementation planning at the University of Houston System Libraries. On the one hand, they analyzed different steps in the process of implementing RDA (ILS configuration, RDA local policies and guidelines, RDA training and communication of RDA changes). On the other hand, the authors also focused on RDA enrichment of the legacy data and post-implementation guideline. Concerning the enrichment data, Park and Panchyshyn (2016) studied how the KSUL consortium, in partnership with Backstage Library Works (Backstage), enriched their data in order to create "hybrid" bibliographic records by adding RDA elements to non-RDA bibliographic records created according to cataloging codes that existed prior to RDA (Park and Panchyshyn 2016, p. 36). On the same issue, Kalwara *et al.* (2017) displayed how the Mississippi State University Libraries implemented the RDA enrichment through the Mississippi Library

Partnership consortium. They also showed how the establishing item-specific terms for General Material Designations can be useful for implementing RDA for library' consortiums, even the multi-linguistic ones. Finally, Van Kleeck *et al.* (2016) displayed how the Cataloging and Discovery Services Department in the George A. Smathers Libraries at the University of Florida developed various quality management measures that were employed to evaluate its cataloging workflows (print and electronic resources, legacy data and both pre- and post-ingest data streams) (Van Kleeck *et al.*, 2016, p. 452).

## Methods

At the methodological level, the paper displays an analysis of the trends for new bibliographic rules and formats in Germany and in France. Both countries played a role in the adoption of RDA and in the FRBRization of catalogs for various networks of Swiss libraries. We then consider the situation in Switzerland via the analysis of semi-structured interviews of 15 key players concerning the adoption of RDA principles across national, regional and local library networks (Table AI).

The semi-structured interviews focus on six main analytical axes:

- (1) the relation between the development of the integrated library system (ISL) and the strategic planning of the library services;
- (2) the role that the reflection on the evolution of catalog formats plays on the strategic planning of library services;
- (3) the evolution of library planning in relation to the restructuring of intercantonal consortiums;
- (4) the role that the evolution of bibliographic and catalog formats plays in the strategic choices of library services;
- (5) the influence of the format change on the search portals of library services; and
- (6) the challenges and opportunities that arise from the current bibliographic transition for library services.

Next, we analyze the case study of the network of municipal libraries of the city of Geneva (*Bibliothèques Municipales* (BM)) and its strategic choice for optimizing its catalog. In total, 18 interviews with internal stakeholders were conducted between May and June 2016. Our sampling included the general director, both the unit manager of the technology and digital resources and the unit manager of the collection, the leader and members of the indexing and cataloging team, librarians in charge of audiovisual documents and young collections, and the technology support unit. All semi-structured interviews investigated how Geneva's municipal library network's choice to integrate other umbrella organizations, consortia or platforms has relevant consequences in the adoption of the RDA principles and in the FRBRization of catalogs.

## Results

At the whole, we conducted 30 interviews: 15 with external key players to the BM's library network and 15 internal ones. Only three people contacted refused the interview. However, the missing interviews did not prejudice the completeness of the data. Thanks to interviews, we analyzed the organizational positioning of the BM's library network at the cantonal and federal levels. We have summarized our research in six organizational scenarios and their respective consequences for cataloging standards and rules. In scenario 1, we display how, via a simple FRBRization of notices, the BM's library network can avoid having to integrate a larger library network. In scenario 2, we describe how the integration in a cantonal network of

libraries will be realized by the adoption of a next-generation ISL. Scenario 3 introduces an intermediate situation between the library's isolation and the cantonal integration. The BM's library network will be integrated into a new network of public libraries in the Canton of Geneva, keeping UNIMARC and adopting the French FRBRization of data. Scenario 4 analyzes the integration of the BM's library network in a French-speaking public libraries of intra-cantonal network without adopting RDA. In scenario 5, we analyze the same situation by introducing the adoption of RDA. Scenario 6 describes the integration of the cataloging services offered by federal consortium to public libraries. As we explain in the following paragraphs, each of these scenarios is highly influenced by the evolution of the RDA adoption and the FRBRization of data in France and Germany.

#### *The international influence on Switzerland: French and German neighbors*

While the French-speaking part of Switzerland is waiting for the French operationalization of the RDA principles (RDA-FR) to be accomplished, the German-speaking part of the country is already integrated in the German-speaking group of countries and has implemented a German version of RDA at the national level (Aliverti and Behrens, 2016; Behrens *et al.*, 2016; Schürmann and Aliverti, 2014).

#### *France and the FRBRization of Catalogs*

In 2014, the two French national bibliographic agencies – the BnF[2] and the ABES[3] – formalized their positions with regard to the adoption of RDA (BnF and ABES, 2014; Le Pape 2015). They triggered the process of “bibliographic transition” by adopting new standards for French bibliographic metadata that were compatible with the web. The Strategic Bibliographic Committee leads three working groups: standardization, training, and systems and data. The standardization group will publish the new cataloging standards, called RDA-FR, progressively in the next 10 years[4].

At the same time, in 2014, the team of experts in charge of the innovation of the French University Documentation System (*Catalogue des institutions de l'enseignement supérieur et de la recherche françaises* (SUDOC)) decided to experiment with a new algorithm developed by OCLC[5] that had been used by the libraries of the Netherlands to FRBRize their catalog.

Furthermore, thanks to the financing of its project “data.bnf.fr,” the BnF has also developed an algorithm capable of identifying the links between various bibliographic records of item and bibliographic authority records (Prongué, 2014)[6].

#### *The adoption of RDA in the German-speaking countries*

Germany, Austria and German-speaking Switzerland have combined their efforts to standardize their bibliographic practices through the Standardization Committee (*Standardisierungsausschuss*), founded in 2002. Thanks the Standardization Committee, the German National Library (NL) (*Deutsche Nationalbibliothek* (DNB)) has coordinated 16 partners in these three German-speaking countries. The D-A-CH[7] consortium gathers actors of different sizes and aims: national libraries, university libraries, regional networks and public libraries (Behrens *et al.*, 2016). It aims to standardize cataloging rules, formats and interfaces. The committee has four expert groups on authority data, data formats cataloging, and material indexing (Aliverti and Behrens, 2016; Arbeitsstelle für Standardisierung – DNB, 2016). Since 2013, the Swiss National Library (BN) and the Information Network of German-speaking Switzerland (*Informationsverbund Deutschschweiz* (IDS)) have been members of the Standardization Committee to represent Swiss interests (Schürmann and Aliverti, 2014). The D-A-CH German-speaking countries have adopted the ontology of the Common Authority File (*Gemeinsame Normdatei* (GND)) and the associated W3C RDF specification (DNB, 2016). The data are encoded in an MARC21[8] format.

*The bibliographic transition in Switzerland*

The ecosystem of Swiss libraries is going through a period of extraordinary revolution concerning the dissolution and creation of librarian networks and the adoption of a new generation of ISL[9] and of the bibliographic rules and formats.

In Switzerland, however, the challenge of adopting new cataloging rules – such as RDA and FRBRization – is increased by three factors: the federal structure, which gives cantons an important role in financing and regulating cultural actors, such as libraries; multilingualism, which is a founding character of the cultural identity of the country; and the gap between a system of scientific libraries, which must meet the requirements of one of the most competitive academic systems in the world, and the networks of public libraries, which do not benefit from policies of structural financing at a national level.

To understand the challenge that a network of municipal libraries – such as the city of Geneva's – has to face for optimizing standards, formats and databases, an analysis of the external environment and its transformations at the cantonal and the federal levels is crucial.

*The Swiss NL and RDA[10]*

The development of bibliographic standards at the international level is one of the tasks of the Swiss NL. The NL has decided to introduce RDA as a member of the D-A-CH network by replacing the AACR2[11] cataloging rules. Before the adoption of RDA, the management of the NL first introduced the GND. Until 2015, the NL worked with local authority files. At present, NL employees can directly seize the authority records according to the GND. To allow this procedure, synchronization takes place every night between the catalog of the DNB and that of the NL. Since 2015, access points for authors have also been created in compliance with RDA. During 2016, RDA was applied to the bibliographic description of all records (Behrens *et al.*, 2016). The NL does not require any specific training for RDA because it has participated in the D-A-CH application development group and therefore already possesses all of the knowledge necessary for its implementation. With the adoption of RDA, the NL has as a priority objective in the exchange of data with libraries in the USA and Germany. In addition, the participation of the NL in the EURIG[12] group enables Switzerland to submit proposals for amendments to RDA. Within the EURIG, the NL is building alliances to advance its interests[13].

*The IDS and the RDA network[14]*

Since 1999, the IDS network has brought together university libraries and universities in German-speaking Switzerland. More than 330 libraries are grouped into seven IDS members of the network[15]. Alongside the members are IDS partners that have signed a service contract that allows them to access the IDS catalog and to benefit from technical support (IDS, 2016a, b).

The IDS completed the project to move to RDA for IDS member libraries in 2016. The last part of the project (training for librarians) took place between October and December 2015. IDS partners, such as the St Gallen Library Network (*St Galler Bibliotheksnetz* (SGBN)) and the Ticino Library System (*Sistema bibliotecario ticinese* (SBT)), will be supported at the level of the technology implementation related to RDA as foreseen in the partnership contract[16].

The IDS has introduced RDA for four main reasons:

- (1) the possibility of sharing data nationally and internationally;
- (2) the possibility of switching from specific and local cataloging rules – the *Katalogisierungsregeln* IDS (KIDS)[17] rules – to rules that are the result of cooperative work at an international level;
- (3) the possibility of improving the quality of research carried out by users; and
- (4) the possibility of increasing the homogeneity of data over the long term.

The IDS did not encounter linguistic problems in the introduction of GND for its members and partners in German-speaking Switzerland.

The IDS is therefore the most important promoter of the RDA adoption process in German-speaking Switzerland. Some services are offered on this subject:

- the IDS translated the RDA application rules (*Anwendungsregeln*) into French, and this translation was published in August 2016 on its website (IDS, 2016c); and
- the IDS offers the RDA toolkit free of charge for IDS participants and members (IDS, 2015).

In terms of influence, the IDS is still very much oriented toward the Swiss-German-speaking players. The development of projects in cooperation with RERO[18] is not currently feasible because of the possible influence of decisions concerning the French implementation of RDA.

#### *The Ticino and RDA[19]*

In the Ticino (Switzerland's Italian-speaking part) librarian system (SBT), there are two catalogs: the cantonal catalog and the catalog of public school libraries. Because SBT is a member of IDS, the cataloging software adopted is Aleph from Ex Libris. The SBT currently uses the KIDS cataloging rules and an IDS-MARC21 format – that is, an MARC21 format simplified by IDS. With the adoption of RDA, IDS has moved to the simple MARC21 format, and the SBT has followed the same path. The adoption of RDA for SBT will be done in accordance with the IDS procedure. The SBT has prepared for this change by organizing different types of training:

- in 2015, SBT organized a training session on RDA with Professor Mauro Guerrini;
- SBT catalog managers participated in various IDS meetings for the introduction of GND and RDA; and
- the SBT is organizing a first training course on RDA with the library team, which is part of the working group for the coordination of cataloging of university, cantonal and school libraries.

For the SBT, the switch to RDA is crucial because, as a member of IDS, it will be able to continue to use the updates to Aleph ISL proposed by IDS. Additionally, the adoption of RDA will avoid isolation within the IDS network.

The changeover to RDA also includes changes that concern the linguistic specificity of SBT cataloging. For example, for material indexing, the SBT refers to the new *soggettario* in Florence[20], while for authority files, the SBT uses a local database. With the adoption of RDA, the strategy of the SBT is to adhere to the Italian variant of GND after having evaluated the cost of this change. However, following a negotiation with IDS, the SBT will not change the *soggettario*.

#### *The network of libraries in St Gallen and RDA[21]*

The SGBN consists of about 46 libraries run by the Cantonal Library of St Gallen. School libraries are also part of this network, as is the City Library of St Gallen. It has centralized the organization of the implementation of RDA, which is planned for the first part of 2017. The implementation will be done according to the IDS guidelines, given that SGBN is a member-partner of IDS. Centralization is mainly linked to changes in the data entry areas in the Aleph ISL. To introduce RDA, the MARC21 format was standardized. The network will also organize training for RDA. Within the SGBN, the cataloging rules are validated at the central level and the members of the network sign an association contract, which obliges them to follow the rules of centralized cataloging. That is why members of the SGBN network will adopt RDA automatically.

In the Canton of St Gallen, two networks of libraries coexist: the SGBN network and the municipal library network, which is a member of the Working community of public libraries (*Communauté de travail des bibliothèques de lecture publique* (CLP/SAB)). The merger of the two networks is not being considered due to diverging cataloging requirements. For this reason, public lending libraries will be excluded from the process of adoption of RDA across libraries belonging to the cantonal networks.

*The working community of public lending libraries[22]*

The CLP/SAB promotes the interests of public and school libraries and their staffs in Switzerland. Beginning in 2014, CLP/SAB developed a project for the introduction of RDA for small- and medium-sized public libraries. On November 11, 2015, in Aarau, ten librarians interested in RDA met Heike Ehrlicher and Alexandra Rietmann, the leaders of the CLP/SAB project on RDA (Ehrlicher, 2016).

As a result of this meeting, a pilot group of 12 public libraries interested in the introduction of RDA by 2017 was established in German-speaking Switzerland. At the same time, the CLP/SAB demanded that the DBN participate in the D-A-CH (*Standardisierungsausschuss*) group RDA standardization committee. The pilot group continued to meet in 2016. At the same time, members also had access to a forum on which the project leaders answered specific questions about RDA. Half-day training sessions were also offered to librarians not participating in the pilot group. Among others, Heike Ehrlicher and Alexandra Rietmann evaluated the technological developments of different suppliers of ISL in relation to RDA to be able to advise the libraries on this subject. The CLP/SAB strategy encourages a pragmatic introduction of RDA. The libraries themselves can manage the temporality of the steps of the implementation (Ehrlicher, 2016).

In Switzerland, BLPs have tended to adapt cataloging standards to internal habits and practices. The changeover to RDA thus corresponds to a management change for the BLPs. They will gradually be encouraged to integrate into larger networks and therefore reduce the uniqueness of their rules and formats of cataloging[23]. Following the adoption of RDA, the lending libraries will benefit from all the data offered by the international actors. The CLP/SAB pilot group is the only group of D-A-CH countries that is interested in the application of RDA for public libraries. The project also aims, through the adoption of RDA, to intensify the sharing of data, to reduce the time spent by librarians in cataloging and to increase the use of the skills of librarians, especially in mediation activities.

*The Swiss service platform for libraries and RDA[24]*

In February 2015, a group of ETH-led scientific libraries[25], including the Zurich Central Library, IDS, RERO and the Geneva Management School (HES-SO), presented the CUS P-2 Project (Oesterheld, 2016) to Swiss universities (ETHZ, 2015b; Oesterheld, 2016). The project aimed at structuring (from August 2015 to February 2017) and implementing (from 2017 to 2020) a centralized system for managing scientific libraries at the national level, called the Swiss Library Service Platform (Oesterheld, 2016). At the heart of the project was the awareness that the emergence of such a platform would create a normative reference across the country for bibliographic standards and library services beyond the scientific libraries initiating the project. According to the current strategic orientations of the project, school and community libraries will not be included among the SLSP clients. However, the SLSP could, after its implementation, offer its services to other non-affiliated libraries. It should be considered that among the regional library networks integrated in the project, the Francophone (RERO) and Germanophone networks (IDS) already have non-scientific libraries among their members.

The libraries of the SLSP platform will adopt the RDA rules. For this reason, an SLSP working group on standards and formats has been set up with one representative for each

linguistic region. This group aims to design the modalities of implementation of the new cataloging rules in a context of multilingualism[26]. The SLSP aims to adopt a format for cataloging rules and single authority files. However, the working group on standards is confronted with the use of RDA implemented in the German-speaking libraries and the French influence among French-speaking ones.

### *The library network of Western Switzerland (RERO) and RDA[27]*

The SLSP project is playing a considerable role in French-speaking Switzerland in reconfiguring the position of its most important network of libraries: RERO. RERO was already reconfiguring its structure at the launch of the SLSP project, but the latter accelerated the complete transformation of RERO. The first factor in the change was the departure of a major partner of RERO: the Vaud cantonal network of libraries. The second was the decision at the beginning of 2014 to adopt a next-generation ISL that is capable of managing electronic documents and, above all, integrating the management of electronic periodicals.

Before the departure of the Vaud cantonal network of libraries, RERO included the adoption of RDA among its strategic aims. RERO is closer to the position of the BnF regarding the adoption of RDA. However, RERO will probably be forced to switch to RDA when the SLSP platform is realized. In this context, it joined the SLSP Working Group on RDA, which is attempting to find a multilingual solution that can be adopted throughout the country (Oesterheld, 2016). The major impact of the SLSP project on RERO concerns RERO positioning toward public libraries. During the transitional period from 2016 to 2019, the Inter-Cantonal Education Conference of French-speaking Switzerland and Ticino (CIIP) – the supervisory body of RERO – has appointed a Steering Committee to reorganize RERO. It is tasked with finding:

A pragmatic and economically viable solution for coordination and provision of services for non-scientific libraries in French-speaking Switzerland, primarily within the perimeter or modalities of collaboration of the SLSP project (RERO, 2016).

In this regard, the RERO Steering Committee awaits the list of criteria for affiliation with the SLSP platform. At the same time, RERO is already working on an API for exploiting RERO data that it can offer to its partners. Today's data-mining and visualization tools are no longer monolithic systems but rather systems of micro-applications around a platform[28]. The RERO cataloging software, INVENIO, can export different formats in a very simple way and, above all, propose different APIs to allow the partners to access the RERO data [29]. RERO already develops additional training and consulting services for its partners, especially public lending libraries. It could also become the aggregator of a digital platform in Switzerland (Interview CR8 see Table AI). In this case, RERO would offer its partner customized INVENIO software and technical support at a lower cost. Small libraries that have no decision-making power over a platform such as the SLSP platform could retain power in governance choices by partnering with RERO[30].

### *RenouVaud in the canton of Vaud[31]*

The structural reform of the network of libraries in the canton of Vaud affiliated with RERO began in March 2014. At that time, the state councilor declared that the canton of Vaud would leave the RERO network by December 2016 due to recurring governance problems (Frey, 2016). This decision was also rooted in the professionalization process of school libraries, which the canton of Vaud had been undertaking for several years[32].

Between 2014 and 2016, the canton restructured its library network to meet the needs of scientific, heritage, public lending and school libraries[33]. Its main challenge was the ability to manage print and digital materials. The political mandate for this transition phase was to

strengthen the coordination of libraries and to improve the visibility, quality and linkage of their data (Frey, 2016).

Within the RenouVaud project, a group of experts studied the eventual adoption of RDA and the FRBRization of the catalog. They decided not to implement RDA before the end of 2016 for two main reasons:

- (1) RDA standards in the French-speaking world are not sufficiently developed; and
- (2) RDA standards are not sufficiently precise for an exact and common implementation.

The network will mainly monitor developments of the RDA-FR in France. ALMA currently allows the FRBRization of catalogs, but the possibility is still unexploited (BCU Lausanne, 2014).

#### *Documentary environment of the canton of Geneva*

In the canton of Geneva, the networks of public reading libraries are surrounded by the Geneva Heritage Library, public libraries of other municipalities, scientific libraries and the libraries of international organizations (Jacquesson, 2015; Dufaux and Muster, 2011).

In Geneva, the Coordination Service manages the organization of the libraries associated with RERO. The libraries of the University of Geneva are the most important actors in this coordination and represent RERO within the SLSP project. The University of Geneva has increasingly faced problems with using the AACR2 rules for digital resources[34]. For this reason, the libraries of the University of Geneva want to move to RDA or FRBRize their catalog. To avoid the problems posed by multilingualism, they are envisaging a partnership with German-speaking Swiss libraries by adopting the RDA profile translated into French by IDS[35].

#### *Adopting RDA at the Geneva network of public lending libraries*

At the intra-cantonal level, technological and normative contexts are jeopardized across cantonal public lending libraries, which are segmented on the basis of municipal belonging. This fragmentation prevents the adoption of common ISL or common new cataloging principles such as RDA at the municipal level (Banfi, 2016). The creation of a cantonal public-lending network in the canton of Geneva could strengthen the mutualization of IT resources between municipal libraries as well as data standardization by facilitating the adoption of RDA (Banfi, 2016).

The Geneva Municipal Network of Public Lending Libraries (BM) dreads remaining isolated from the national and international contexts. This situation will not facilitate the adoption of new formats and bibliographic rules, the possibility of importing and exporting notices from other actors, or the mutualization of costs for acquiring and updating next-generation ISL. Concerning the BMs, the BnF remains a point of reference for the cataloging practices, the implementation of RDA and the FRBRization of catalogs.

#### *Long-term scenarios*

In Switzerland, joining a cantonal or intercantonal network of libraries could have important repercussions for the public lending libraries, such as the BM, in terms of adopting new formats and bibliographic rules. To understand how the public reading libraries at the municipal level might implement RDA, we illustrate a case study of the Geneva Municipal Network of Public Reading Libraries by proposing six organizational scenarios and their consequences for cataloging standards and rules.

#### *Scenario 1: institutional isolation and FRBRization of notices*

The first scenario is similar to the situation of the libraries of the city of Lausanne, which did not integrate the new RenouVaud cantonal network of libraries and preferred to stay isolated.

They therefore adopted a new ISL and migrated their data. However, the migration required considerable efforts in terms of human resources engagement (Interview CR15 see Table A1). In the near future, the libraries of the city of Lausanne may find themselves more disadvantaged in a strong cantonal network, which could offer its users very extensive public reading collections through interlibrary loans (Interview CR15 see Table A1). Furthermore, libraries participating in the RenouVaud project could receive updates from the ISL ALMA, be supported by the network's IT competency and be comfortable in integrating innovations related to RDA or the FRBRization of their catalogs. In the case of the BMs of Geneva, institutional isolation scenarios could allow them to keep their own UNIMARC format and their own indexation as well as to move toward the French FRBRization experience while keeping the UNIMARC format. However, this scenario would isolate the network from the increasingly powerful actors using RDA principles, such as IDS and SLSP.

*Scenario 2: integration in a cantonal network of libraries adopting a next-generation ISL*

In the canton of Geneva, scientific libraries will join SLSP, the national platform of the scientific libraries and dissociate themselves from the heritage libraries of Geneva that cannot join the platform. In this case, the BM could establish a partnership with the libraries excluded from the SLSP and implement a new network by sharing a new ISL and its indexing system, rules and cataloging formats. In this case, it would be possible to adopt RDA as well as to FRBRize the catalogs by mutualizing costs and competences with other relevant actors.

*Scenario 3: a new network of public libraries in the canton of Geneva, UNIMARC and the French FRBRization*

The third scenario envisages the creation of a network of municipal public libraries that would adopt a new ISL and new cataloging rules, such as RDA. Realizing this scenario would require the political will of the municipalities and of the canton, which must authorize a redistribution of competences concerning public lending libraries.

This scenario would allow the BMs to not remain isolated and to partially mutualize the maintenance costs of the IT infrastructures. However, migration from a different non-uniform bibliographic database would require considerable effort, which a network of this type might not be able to assume in terms of human resources. This scenario would make it possible to keep UNIMARC, a format that is the same in several municipal libraries of the canton and to move toward the French experience of FRBRization of the catalog.

*Scenario 4: integration of French-speaking public libraries in an intra-cantonal network to replace RERO*

Between the departure of the Vaud libraries from the intercantonal French-speaking library network and the establishment of the SLSP platform, RERO could cease to exist in its present form and could be regenerated under another form. It would become a French-language network for municipal and heritage libraries that were formerly affiliated with RERO but excluded from the SLSP platform (Maintenance CR8 and CR10 see Table A1).

This scenario would allow the BM to take advantage of the competence and technological support of the RERO team (Maintenance CR8 see Table A1). In this case, the BM would be obliged to follow the choices of the new consortium with regard to cataloging rules and formats. The RDA or FRBRization options would depend on the consortium's collective decisions.

*Scenario 5: integration of municipal public libraries in an intercantonal network sponsored by the RDA pilot group of the CLP*

This scenario foresees the integration of the BM into the CLP's RDA Pilot Group. In this way, the BMs could adopt RDA by benefiting from the network's skills and from other

German-speaking libraries cataloging in the GND. In this case, RDA would be considered a priority strategic choice and would be adopted by exploiting the French translation of the RDA principles promoted by IDS.

*Scenario 6: use of the services offered by SLSP or RERO to public libraries*

This scenario is the least constraining in terms of governance, as it would allow the BMs to maintain a certain autonomy and to benefit from cloud services, such as by means of intercantonal actors like SLSP or RERO. This scenario would not solve the problem of institutional isolation or the mutualization of the costs of migration to a next-generation ISL. However, this scenario would allow the BMs to make a decision concerning the adoption of RDA without any external influence.

### Conclusion

The BM, like many public reading libraries, is facing a pivotal period of their institutional life. In the near future, Swiss public reading libraries will have to decide whether to integrate a platform, a consortium or a network at the cantonal or intercantonal levels. Forms of new management of hybrid collections are becoming established at a time when the bibliographic transition to RDA is being implemented in Swiss German-speaking cantons and several innovative projects are destabilizing the library networks in the French-speaking part of the country. The organizational scenarios that the BMs face show how the great revolution in the formats and the catalographic rules are closely related to governance issues, in the case of public lending libraries. For that reason, especially in Switzerland, the variety of governance levels and linguistic areas has made strategizing more complex for public lending libraries. This paper shows how technological and conceptual innovations have to be adopted in the face of real organizational and administrative constraints, especially in the case of public lending libraries.

### Notes

1. The Federal Statistical Office takes an exhaustive census of public libraries in the municipalities with more than 10,000 habitants (128 in 2015). However, it takes a census for the municipalities with less than 10,000 ones only in 12 cantons ZH, BE, LU, OW, SO, AR, SG, GR, AG, TG, VD and VS (573 libraries in 2015). See [www.bfs.admin.ch/bfs/fr/home/statistiques/culture-medias-societe-information-sport/enquetes/chbs.html](http://www.bfs.admin.ch/bfs/fr/home/statistiques/culture-medias-societe-information-sport/enquetes/chbs.html)
2. Bibliothèque nationale de France (National Library of France).
3. Agence bibliographique de l'enseignement supérieur (Bibliographic Agency for Higher Education).
4. Their publication appears at [www.transition-bibliographique.fr/rda-fr/section\\_1/](http://www.transition-bibliographique.fr/rda-fr/section_1/) in open access. The previous French cataloging standards are automatically abrogated to the publication of the various RDA-FR standards (BnF and ABES, 2014).
5. Online Computer Library Center.
6. The algorithm produced 157,661 links and integrated them into the general catalog of the BnF (2016a). The interest in this approach lies in the heterogeneity of the data processed (printed, digital and audiovisual). In addition, the project made it possible to reuse links directly in the data. bnf.fr catalog through queries in Protocol and Resource Description Framework Query Language (SPARQL) and by exporting them in RDF (BnF, 2016b).
7. The D-A-CH consortium is a representation of Germany, Austria and German-speaking Switzerland.
8. Machine Readable Cataloguing.
9. Integrated library system.

10. Interview CR1 (Table AI).
11. The second edition of the Anglo-American Cataloguing Rules.
12. European RDA Interest Group.
13. With regard to technological development, in 2017 the NL plans to launch a call for tenders to replace its LIS. The NL may decide to launch a call for tenders in coordination with the Swiss Library Service Platform.
14. Interview CR2 (Table AI).
15. IDS Basel Bern, IDS Lucerne, IDS St Gallen, IDS University of Zurich, IDS the central library of Zurich, NEBIS (Netzwerk von Bibliotheken und Informationsstellen in der Schweiz) (IDS, 2016a).
16. The training support is not included in this contract.
17. KIDS are the AACR2 adapted for the IDS network (Bibliothèque nationale de Luxembourg, 2014).
18. Réseau des bibliothèques de Suisse occidentale (Library network of western Switzerland).
19. Interview CR3 (Table AI).
20. The new system of indexation of the National central library of Florence.
21. Interview CR4 (Table AI).
22. Interview CR5 (Table AI).
23. Interview CR5 (Table AI).
24. Interviews CR6, CR7, CR9, CR11 (Table AI).
25. The libraries of the Universities of Basel, Bern, Fribourg, Geneva et Zurich (ETHZ, 2015a).
26. Interview CR7 (Table AI).
27. Interviews CR8, CR7, CR10 (Table AI).
28. Interview CR8 (Table AI).
29. Interview CR8 (Table AI).
30. Interview CR8 (Table AI).
31. Interviews CR14 and CR15 (Table AI).
32. Interviews CR14 and CR15 (Table AI).
33. In some municipalities, these also function as lending libraries.
34. Interview CR11 (Table AI).
35. Interview CR11 (Table AI).

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**Table AI.**  
Key players  
concerning the  
adoption of RDA  
principles across  
national, regional and  
local library networks

| Key players                                                                                                                                                                                      | Code compte rendu<br>Prénom Nom |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|
| Bibliothèque nationale suisse (Swiss National Library)                                                                                                                                           | CR1<br>Christian Aliverti       |
| Coordination IDS                                                                                                                                                                                 | CR2<br>Dr Esther Straub         |
| Système bibliothécaire tessinois (Tessin Librarian System)                                                                                                                                       | CR3<br>Eloisa Boehny            |
| Réseau des bibliothèques de Saint-Gall – SGBN (Network of Saint-Gall Library)                                                                                                                    | CR4<br>Brigitta Baltensweiler   |
| Groupe pilote sur RDA CLP/SAP (RDA Pilot Group)                                                                                                                                                  | CR5<br>Alexandra Rietmann       |
| HEG – Swiss Library Service Platform                                                                                                                                                             | CR6<br>Igor Milhit              |
| Lot de travaux LT3 : Processus et exigences informatiques                                                                                                                                        | CR7<br>Nicolas Prongué          |
| HEG                                                                                                                                                                                              |                                 |
| Formation RDA pour des bibliothèques de lecture publique<br>(RDA Courses for Public Libraries)                                                                                                   |                                 |
| Coordinateur RERO DOC (Coordinator for Library Network of Western Switzerland)                                                                                                                   | CR8<br>Dr Johnny Mariéthoz      |
| Bibliothèque de l'Université de Genève SLSP<br>(Librarian at SLSP for Geneva University)                                                                                                         | CR9<br>Elena Gretillat-Baila    |
| Directeur RERO (Director of the Library Network of Western Switzerland)                                                                                                                          | CR10<br>Dr Miguel Moreira       |
| Représentante du groupe de travail romand RDA-DACH/GND/Rameau à la SLSP<br>pour la Bibliothèque de l'Université de Genève<br>(Representative of the Working Group for SLSP at Geneva University) | CR11<br>Catherine Dietschi      |
| Bibliothèque de Meyrin<br>(Meyrin Library)                                                                                                                                                       | CR12<br>Cédric Pauli            |
| Responsable catalog BGE<br>(Person in charge of the catalog at Geneva City Libraries)                                                                                                            | CR13<br>Claire-Lise Vogel       |
| BCUL<br>(Lausanne University Library)                                                                                                                                                            | CR14<br>Alexandre Lopes         |
| Bibliothèques de la Ville de Lausanne<br>(Lausanne City Library)                                                                                                                                 | CR15<br>Sophie Chapuis          |

### Corresponding author

Elisa Banfi can be contacted at: [elisa.banfi@unige.ch](mailto:elisa.banfi@unige.ch)

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