Final Report to the PCC Oversight Group
From the BIBCO Mapping BSR to BIBFRAME 2.0 Group
July 2017

Introduction

This report summarizes the work of the BIBCO Mapping BSR to BIBFRAME 2.0 group and identifies issues that will require further discussion in the PCC. Please see the BIBCO BF Mapping Spreadsheet [PDF 218KB] for detailed information about the mapping of each element.

Note: Since the CONSER mapping group had completed a draft report earlier (Final Report of the CONSER BIBFRAME Mapping Task Group [PDF 328KB]), this report will reference themes in their report as a way of acknowledging support for action on similar issues.

Summary

The Mapping BSR to BIBFRAME 2.0 Group was formed in August 2016. Based on the CONSER mapping template, and informed by an early mapping of the BSR to BIBFRAME 1.0 done by NLM as well as a serials mapping currently underway as part of the Zepheira Alumni serials group, the BSR to BIBFRAME 2.0 template was created. The group divided up the mapping spreadsheet and completed a preliminary analysis of mapping the BSR elements to BF 2.0. Questions that members had were documented and discussed at the monthly meetings. In November 2016 the group participated in a training session on Turtle and some group members experimented with creating brief Turtle examples to demonstrate the mapping to BF 2.0. Following the release of the revised BF 2.0 in May, the group updated the mapping spreadsheet. In addition, members examined LC's MARC to BF conversion to provide further insight into specific elements where the mapping was not straightforward.

Description of the Spreadsheet

The mapping spreadsheet contains the following columns (with explanations):
- RDA Instructions & Elements (Name of the RDA instruction as presented in the RDA Toolkit)
- RDA no. (Instruction number)
- BSR Notes (Any specific instructions in the BSR pertaining to this element)
- MARC Coding
- RDA-RDF (rda-rdf property as defined in the RDA Registry)
- Context (Triple statements needed to properly map the element)
- LC BF 2.0 (BF 2.0 class or property used to encode the RDA element)
- Anticipated Value (Literal or another BF 2.0 class)
- TG Notes on BF 2.0 (Notes from the group members for clarification)
- Questions (Questions raised by the mapping)

Note on mapping: The BSR contains a main section followed by specific sections on required non-RDA and MARC data organized by type of resource (cartographic, rare materials, etc.). Since the mapping prepared by the Task Group is a mapping of RDA elements to BF, these sections of the BSR were not included. Many of them duplicate information already listed elsewhere in the BSR and therefore included in the mapping. The one exception that the group decided to include on the mapping was the Classification and Subject Access elements. These elements are now included in RDA and should be part of the main portion of the BSR. A request has been submitted to the PCC Standing Committee on Standards to review both the BSR and CSR and revise as appropriate.

It is recommended that another group examine the specific MARC requirements listed in the various sections of the BSR to determine if they still necessary in a non-MARC environment.

Overall, the group found that BIBFRAME accommodates the information required to describe monographic publications. Below are general issues which need broader discussion and then recommendations/questions about the recording of specific data elements in BIBFRAME. Specific questions related to geography and music were referred to experts for their consideration.

Specific Themes

Literal vs. Machine Actionable Data

The BIBCO Standard Record specifies transcription of many data elements per the RDA instructions. As is noted in the CONSER report, "representing this transcribed data using static text strings in BIBFRAME is possible, but BIBFRAME allows also for the possibility of representing much of what is now transcribed data as actionable, structured, linked data. For example, when representing production, publication, manufacture, and distribution information, RDA instructs us to transcribe the data. This kind of exact transcription is useful for identification of the manifestation or copy being described, and in the MARC environment, has been considered adequate to the needs of catalogers and users. BIBFRAME offers the potential for greater functionality by also providing a way to represent production, publication, manufacture, and distribution information as actionable entities and relationships, which would allow for manipulation, searching, and other functionality." The Task Group recommends allowing for recording publication, etc. statements either as literal statements, or as separate entities or both depending on the needs of specific communities.

Another example would be the recording of dissertation information. BIBFRAME allows for recording data in specific subproperties of grantingInstitution, degree, and dissertationIdentifier. These could all potentially be recorded as actionable entities. In addition, it may be important to transcribe the dissertation statement as it appears on the item.

The BIBCO group concurs with the CONSER group's recommendation that the PCC "should encourage the provision of actionable data in addition to the transcribed data required by current RDA instructions wherever feasible."

Another element worth noting is BIBFRAME's date property which has a recommended value of a literal. As is noted in the CONSER report, "there are mechanisms for 'typing' certain kinds of literals to make them machine actionable. Dates may be presented in linked data as 'typed literals' that are machine actionable (e.g. "1999"^^xsd:gYear or "1999"^^<http://id.loc.gov/datatypes/edtf>)." The BIBCO group agrees with the CONSER group's recommendation that this kind of typing be used for dates wherever possible.

The BIBCO group recommends investigating the usefulness of adding subproperties for starting date and ending date to the BF2.0 date property to handle items with multiple dates such as multipart monographs. Additionally, adding a subproperty of reprint date could also be considered.

Another area to be investigated is that of identifiers. Currently most of the types of identifiers for manifestation (http://id.loc.gov/ontologies/bibframe.html#c_Identifier) have a value of literal which is further discussed in the LC specification on Identifiers (http://www.loc.gov/bibframe/docs/pdf/bf2-identifiers-apr2016.pdf). In the linked data environment, where possible, these identifiers should be represented as URIs rather than literal strings.

Administrative Metadata

The BIBCO group agrees with the CONSER group that "while BIBFRAME provides an AdminMetadata class, along with several properties and subproperties to allow for recording certain types of description-level administrative metadata (e.g. descriptive conventions, language of the description, etc.), this kind of administrative metadata relating to an entire bibliographic record/description may become obsolete in a linked data environment. If there is no record structure or wrapper to package the descriptive statements about a resource together, the usefulness of indicating provenance for the whole description is questionable. A possible alternative would be to develop a method of indicating provenance for each individual assertion."

In addition, when briefly looking at the LC MARC to BF2.0 conversion, it was noted that LC created a local ontology to hold some of this data; however it was LC specific and did not account for values used by other libraries. The BIBCO group recommends another group be formed to investigate all of the issues surrounding recording administrative metadata in BIBFRAME and if, deemed necessary, create a PCC profile to handle non-LC data. The BIBCO group also concurs with the CONSER group's recommendation "that the PCC and BIBFRAME communities consult with linked data system specialists to identify necessary administrative and provenance metadata, and develop methods and best practices for easily and succinctly recording it."

Notes
BIBFRAME provides some specific note types; however based on the specifications on Notes

(), the use of external vocabulary for specific note types is encouraged. The BIBCO group agrees with the CONSER group that "where it is possible to do so, we recommend that PCC adopt a best practice to use a specific BIBFRAME property rather than the more general bf:note property" and where a specific property does not exist, "we recommend using the RDA registry vocabulary of specific note types."

Series

The BIBCO group supports the following recommendation from the CONSER group:

"We recommend that a joint CONSER/BIBCO group work on series-related issues, since they affect both monographs and serials. Some of the issues we identified which will need further discussion and work are:

1. Relating the appropriate numbering, chronology, etc. to the proper series when a resource belongs to more than one series.
2. Handling series/subseries relationships. Would it be necessary to represent relationships to both the main series and the subseries within the description for a resource, or will that relationship be carried over from the descriptions of the series and subseries?
3. The BIBFRAME 2.0 vocabulary says hasPart has subproperties: seriesOf and subseriesOf, and partOf has subproperties: hasSeries and hasSubseries; that doesn't seem to correspond to the definitions. For example the definition of subseriesOf describes the relationship of the subseries to the larger series but it's called a subproperty of hasPart which would be the relationship of the subseries to the volume."

4. Additional item for discussion – the LC MARC to BF2.0 Converter maps elements relating to the subseries (title, enumeration, ISSN) to seriesStatement and seriesEnumeration rather than subseriesStatement and subseriesEnumeration.

Creator; Other Person, Family, or Corporate Body Associated with a Work; and Contributor

The BIBCO Group agrees with CONSER group's recommendation that BIBFRAME use "role terms from the RDA Registry to avoid creating blank nodes."

BSR Terms Not Found in BF 2.0

The following BSR terms aren't established in BF 2.0: Other title information of series (for rare materials); Statement of responsibility relating to series (for rare materials) ; Other distinguishing characteristic of the work -- Legal work ; Other distinguishing characteristic of the expression -- Musical work -- Religious work ; Other details of cartographic content. In 2017 May's PCC OpCo meeting, many PCC members voiced their opinion that because the BSR is very crucial for BIBCO cataloging, all the BSR terms should be expressed in BIBFRAME. Since some of the terms are used mainly by special collection cataloging professionals, such as law, music, geography cataloging communities, the BIBCO group suggests forwarding these specific issues

to other relevant professional groups active in BIBFRAME experimentation for further discussion.

Conclusion

The RDA elements required by the BSR to create a BIBCO record can be expressed in BIBFRAME 2.0. It is therefore possible to generate bibliographic data in BIBFRAME that reflects information and would meet the BIBCO standards. However, the work of this task group as well as that of the CONSER group has raised a number of issues which require further investigation by the PCC. It is recommended that one or more groups be formed and charged to review the specific issues presented here and in the CONSER report with the goal of formulating PCC decisions and/or best practices for these areas.

In addition, the PCC should continue to consult other groups such as those involved in the various LD4P projects regarding specific issues for special formats or types of material.