

Final Report of the PCC Task Group on MARC Simplification for BIBFRAME Conversion

October 31, 2022

Group Membership

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Summary

Charged “to develop a simplified set of MARC fields [...] to support BIBFRAME conversion effectively and accurately through examining the BIBFRAME 2.0 to MARC 21 Conversion programs and related specifications,” the PCC Task Group on MARC Simplification for BIBFRAME Conversion collaborated to identify a set of MARC fields that could serve to support the conversion of bibliographic metadata created or curated in BIBFRAME. We provide a **Preliminary Repertoire of MARC Descriptive Fields from BIBFRAME**. We note the challenges we faced, in terms of the uncertain present environment and emerging technologies with respect to BIBFRAME conversion, as well as principals that we adopted to determine the shape MARC data that originated in a BIBFRAME environment. We provide questions and suggest avenues for further study and consideration by the PCC.

Overview

The PCC Task Group on MARC Simplification for BIBFRAME Conversion was charged to assemble a set of “simplified” MARC fields that could serve as a receptacle for BIBFRAME 2.0 data. Our group recognizes that the current BIBFRAME environment is not sufficiently mature to establish a stable and reliable set of MARC fields to serve as a permanent “simplified” set.

BIFRAME is still an emerging technology, as reflected in its versioning-based name (“2.0” at the present), and its active development has continued alongside the work of this group. Similarly, the conversions from BIBFRAME to MARC are embryonic and are being developed in parallel by different organizations (e.g. Sinopia members and Library of Congress). Neither BIBFRAME nor its conversion routines have achieved sufficient stability for a reliable permanent BIBFRAME-to-MARC (BF2MARC) conversion infrastructure, and it remains unclear how much of the resultant MARC from conversion is supplied directly by BIBFRAME elements or through programmed conversion routines that look at combinations of BIBFRAME elements. Finally, we recognize that MARC itself, despite its age and reliable utility, is not static: Proposals to expand the MARC standard continue; topics of some recent MARC Discussion Papers, in fact, align closely with BIBFRAME affordances and reference BIBFRAME’s capabilities.

Despite this rapidly developing environment, existing BIBFRAME allows us to generate MARC records that serve necessary descriptive functions for identification resources, even if these records do not match the conventions of records natively created in MARC or meet all system expectations imagined for them. Indeed, we see these records as derivative products that, when properly identified as such, signal to their users the level of cataloging they can expect, and those users can be empowered to enhance those records as needed. We do not see that the results of such conversions amount to a new, permanent MARC standard, but are rather ongoing adaptations that respond to developing MARC 21 standards, BIBFRAME vocabularies, and BIBFRAME editor capabilities. Therefore, this group instead sees “Simplified MARC” as a moving target, with its capabilities ever-increasing to more closely align BIBFRAME classes and properties with MARC values to the extent that supporting MARC remains a desirable goal. As derivative and data-lossy products, we do not see that MARC records created from BIBFRAME

are necessary to convert back to BIBFRAME (that is, to be round-tripped). Many MARC records have been converted into BIBFRAME already, and these do not need reconversion into MARC.

Preliminary Repertoire of MARC Descriptive Fields from BIBFRAME

The tangible result of our group's work is a limited repertoire of MARC *descriptive* fields and their BIBFRAME correspondences, provided as an attachment in Excel form (see **Appendix 1** for details). We wish to stress that this is a preliminary effort: the Repertoire does not currently include the full suite that would be necessary for viable MARC records; crucially it does not include access point fields, for reasons discussed below. Nonetheless the Task Group believes an equally valuable work product that we developed is the set of principles for how a MARC record converted from BIBFRAME should look and behave, and a working rubric for deciding which MARC fields should be included in a BIBFRAME conversion environment and which can be left behind.

Because this cannot be static work, this group recommends that the PCC formally empower a standing group (for example, but not necessarily, the Standing Committee on Applications) to ensure this task of ongoing syncing BIBFRAME and MARC changes happens efficiently, organically, and without gaps in productivity for as long as MARC needs to be supported. This group can ensure the evolving standards continue to meet PCC needs and can produce authenticated MARC products derived from BIBFRAME.

Charge and Scope of Work

The PCC Task Group on MARC Simplification for BIBFRAME Conversion was charged “to develop a simplified set of MARC fields [...] to support BIBFRAME conversion effectively and accurately through examining the BIBFRAME 2.0 to MARC 21 Conversion programs and related specifications [...] with options and a thorough assessment, based on the core elements of [PCC RDA BSR \(BIBCO Standard Record\) Metadata Application Profile](#) and [CSR \(CONSER Standard Record\) RDA Metadata Application Profile](#).”

In consultation with PCC Steering Committee members, we determined that the ultimate deliverable of this group is a repertoire of essential MARC fields and their essential subfields required for successful conversion from BIBFRAME to MARC, with an aim to create approximations of the necessary BIBCO Standard Record (BSR) and CONSER Standard Record (CSR) with available BIBFRAME values. We aimed to map, to the extent possible, required BSR/CSR values to their corresponding BIBFRAME 2.1.0 antecedents. In the process, we also examined BIBFRAME 2.1.0 and BIBFRAME LC Extension 1.2.0 classes and properties and explored in brief those MARC values which may not necessarily be required by BSR/CSR models. (BIBFRAME 2.2.0 and LC Extension 2.2.0 were not released in time for meaningful work to be done with them.) While in our working documents we created preliminary

correspondences, we do not offer an exhausting BF2MARC repertoire with fields not deemed essential to BIBCO products.

We recognize that some BIBFRAME values do not map directly to MARC bibliographic addresses, and instead represent ontological concepts (such as Works and Instances) that assist the structural underpinnings of the MARC record, a task not part of this group's work; similarly, some BIBFRAME values support the technical needs of BIBFRAME itself, including but not limited to previous conversions from MARC to BIBFRAME, and therefore do not need to be mapped to MARC.

Recognizing the limited resources available to this task group (information, current BIBFRAME affordances, and time), the scope of the group's work was limited to determining the required and desired *descriptive* fields for conversion into *MARC 21 Format for Bibliographic Data*: Other MARC standards (*MARC 21 Formats for Authority, Holdings, Classification, and Community Data*) were not considered part of our group's scope, and will be left for subsequent investigations. We deliberately note *descriptive* bibliographic fields above, as the current level of BIBFRAME development and its operability in existing editors complicate the discussion of presentation of access points in 1XX, 6XX, 7XX, and 8XX fields and how they might serialize into MARC records, given the complexity of mapping MARC subfields and the multiplicity of sources from which access points may be ingested. These fields, while essential to BSR and CSR records, are not included in our recommended descriptive repertoire.

Lastly, we understood that our task group is to be solely concerned with the BIBFRAME to MARC bibliographic conversion, and that attempting a "full circle" of MARC back to BIBFRAME is not part of our charge. Our group has worked under the assumption that the simplified MARC records resulting from BIBFRAME conversions are not expected to be "roundtripped" back into BIBFRAME, and that syncing such records over time may prove unsustainable. We rather posit that successful BIBFRAME conversions to MARC will deliver functional records that support the MARC needs of a larger library community, and we expect that user communities will proceed to enhance those MARC records to suit additional, unanticipated needs. We cannot expect that those MARC records, over time, would maintain the one-to-one compatibility with their BIBFRAME antecedents; similarly, BIBFRAME data that has previously produced simplified MARC records may too be enhanced over time, complicating any attempt at ongoing data syncing. Nevertheless, we see that the issue of keeping records interconnected through record identifiers may be of value.

Discussion on Terminology

The group recommends that the use of the term "skinny MARC" as present in the charge be abandoned, as the word "skinny" has non-neutral connotations relating to evaluations of human bodies. The group has effectively used "simplified MARC" or but recognizes that "simplification" is not a fully neutral term either. We have also considered other terms such as "essential MARC," "BF2MARC," or more undescriptive formulations such as "MARC adaptation for BIBFRAME." Finally, our group at times referenced "linky MARC," referring to a flavor of MARC

record that is populated with links, but specific recommendations over inclusion of URIs directly in records (either as substitutes for, or in addition to, human-readable strings in access points) did not reach any definite consensus, even if such URIs might pertain to descriptive data, in 33X fields for example.

As we do not see our recommendations forming the basis of a new standard, but rather an ongoing adaptation of MARC functionality to a growing and changing BIBFRAME repertoire, we do not place weight behind any particular recommendation. At the very least, we recommend that any future nomenclature assigned distinguish the MARC adapted from BIBFRAME to distinguish itself from MARC 21 LITE.

Meetings and Conduct of Business

Formally charged on February 1, the group was able to schedule an introductory session on March 2, via Zoom. Biweekly meetings were established at alternating intervals to accommodate task group members with diverse schedules across multiple time zones. Meetings lasted an hour and some asynchronous work was done in between. Some sessions were canceled due to federal holidays.

Documents have been shared in Google Drive, accessible to all members. Members of PCC are invited to browse the group's files at their leisure at the following link:

https://drive.google.com/drive/folders/1oC9ttlNH4O8an8W6u3u0GAo_pGL8Uq8Z?usp=sharing.

Tasks Accomplished

- Reviewed OCLC's bibliographic statistics ("bibstats") of current MARC usage in OCLC bibliographic records, including percentages of records in OCLC that used particular fields (e.g. 100% of records used a 245 field, while less than 1% used more specialized 3XX and 5XX fields), and explored contextual applications of fields across resource types. We did not decide that current usage of fields should inform what fields are prioritized for MARC adapted to BIBFRAME.
- Evaluated bibliographic and authority records for PCC URI project, making notes on diverse application of linked data values, sources of that linked data, opportunities for additional linkages, and appearance of data fields to MARC consumers. Records formed interesting discussion, but were not of particular utility to prioritize fields.
- Discussed the role of MARC records for diverse user communities, and the role of the LC record as a community service that comes with implicit expectations that BIBFRAME conversions to MARC may disrupt (e.g. singular vs plurality of 264 fields). These discussions led us to make required and desired lists of MARC fields that BIBFRAME conversions should support.
- Began investigation granularity levels of 5XX fields in MARC repertoire and places where divergent fields may capture similar data in community practice as informed by OCLC bibstats. These investigations led us to accept that some generic 500 fields can be acceptable over very particular MARC fields in low use in community practice.

- Began investigation of redundancies in fixed and variable fields in MARC (e.g. fixed 006/008 encoding of nature of contents vs variable 504 note on presence of bibliographical elements, or 008/041 encoding of language codes vs. 546 field). Our group understands that resulting MARC records may not include all expected redundancies that native MARC creation would allot.
- Considered MARC 21 LITE Bibliographic Format as a reference point. Ultimately, the standard was determined as better left for native MARC creators who seek low-barrier entry.
- Considered the implications of Model A and Model B for non-Latin-script data in MARC and how BIBFRAME might support either model. We recognize that Library of Congress and non-Latin-script data creators may have divergent philosophies and approaches to encoding this data.
- Generated correspondences between available BIBFRAME and LC Extension classes and properties to MARC, and from BSR/CSR required fields to BIBFRAME antecedents, to the extent that such correspondences are currently seen as achievable. We recognize that generating authenticated BSR/CSR products from BIBFRAME will require subsequent investigation.
- Considered the need for ongoing work to maintain, define, and enhance the documentation on the correspondences between BIBFRAME and MARC standards. This group recommends that PCC charge an existing body (for example, the Standing Committee on Applications) to perform this ongoing task. Specific work might entail establishing a database of known, current BF2MARC (and MARC2BF) mappings as well as recommended data entry conventions for BIBFRAME editors, etc.
- Accessed BIBFRAME editors (Sinopia and MARVA), and evaluated the available inputs and outputs to MARC given current conversion routines. Sinopia's capabilities, while currently in development, formed a useful way to look at practical information products compared to native MARC equivalents and their lossiness. There was no sufficient time to investigate MARVA's capabilities.
- Began a preliminary mapping of BIBFRAME 2.1.0 and LC Extension 1.2.0 classes and properties to MARC but halted work as new versions were clearly in development. While informative, ultimately this work was neither part of our charge nor deemed sustainable given the developing nature of BIBFRAME and its multifarious uses across current conversion routines.

Complications to Our Work

Lack of availability of LC converted records. One of the group's deliverables was to "evaluate a set of sample records converted from BIBFRAME to MARC, provided by LC in early 2022." These records were not available during the lifetime of this task group, and the ability to benefit more directly from Library of Congress's conversion routines was limited; instead, we relied on the expertise of Sally McCallum and Kirk Hess to guide us through some of the thinking behind such conversions, even though it was not possible for them to provide the granular detail that the record sets would have.

Lack of currency of peer examples. The most robust readily available conversion data came from Sinopia developers, with Jeremy Nelson as a primary liaison and expert. Conversions from Sinopia are approximations and do not fully include BIBFRAME Extensions; any such Extensions included in Sinopia lag behind those 2.2.0 values which LC has recently release publicly (e.g. Sinopia attempts to use bf:date to generate values in MARC 008 but we understand LC has been using a newly released bflc:simpleDate, not available for much of this group's duration, to perform this work).

Similarly, Sinopia conversions are working with existing MARC structures and in some cases must use incorrect mappings, such as converting romanized titles of non-Latin resources to a MARC 242 "Translation of Title by Cataloging Agency" since no other MARC field maps to this value. (Despite some early promise that the now-obsolete MARC 241 "Romanized Title" might be revived, this plan may have been revised.)

Uncertainty of the future of romanization in bibliographic records. Related to Sinopia conversion assumptions for romanized data noted above, the LD4 Non-Latin Script Materials Affinity Group conducted a 2019 [survey on romanization](#) that concluded "the absolute majority of respondents consider romanization an important aid in many library operations (acquisitions, cataloging, materials processing, ILL), development of collections in non-Latin scripts, in research and providing reference services to users." Meanwhile CC:AAM, with the partnership of Committee on Cataloging: Description & Access (CC:DA), and the Library of Congress have restarted processes to solicit, review, and approve changes in ALA/LC romanization tables.

Despite its participation in these processes, and its apparent investment in automatic romanization routines, the Library of Congress's current approach to resource description seems to favor native-script data with limited romanization, harkening back to the representation of non-Latin data on catalog cards. There remain many uncertainties over the current predominance of Model A (native script data in 880 fields and transliteration in base fields) in MARC, and a potential need to use Model B (simple multiscript records with minimal transliteration) for representing romanization in MARC records due to BIBFRAME capabilities. Additional PCC input and community conversation is needed.

Status of LC extension to BIBFRAME (bflc). As noted above, BIBFRAME is an ontology still in development. Our group encountered issues in connection with the LC extension, which supports some aspects of MARC2BF (and perhaps also BF2MARC) conversion that would not be supported by BIBFRAME alone. A notable example is the concept of main entry, which has no counterpart in BIBFRAME but is reflected in the bflc:PrimaryContribution class. It is not always clear which Extension properties and classes are considered stable and which are not. In the case of main entry, this is a concept which some members felt could be dispensed with in MARC data if it was not supported in native BIBFRAME cataloging, particularly since relators can now carry the relevant information about the nature of the contribution. But the apparent provisional status of the LC Extension makes it difficult to provide a categorical recommendation.

Insufficiency of current ontological understandings and mappings. Our group has expressed a desire to know more about how complex MARC structures that impact authority linkages will be supported by BIBFRAME. For example, we wish to have better understanding on the equivalent use of paired (but not structurally intertwined in MARC) 1XX and 240 fields. Our group expressed uncertainty over how well hubs or other intermediate linkages would approximate these in BIBFRAME, and whether MARC 758 (“Resource Identifier”) is a preferable alternative to express these in MARC. We operate with a current understanding that LC is using MARC 240 for hubs with limited subfields (\$a and \$0) and we believe this particular issue merits further discussion with PCC, LC, and RDA perspectives.

Uncertainties over serializing data in MARC. We also express uncertainty over how the serialization of MARC 1XX, 6XX, 7XX, and 8XX data will happen in MARC with a complexity of sources from which such data may come. In the MARC record such access points are composed of a MARC-formatted string which can include the preferred name (in subfield a), as well as additions to that name, which appear in separate subfield (e.g. \$d for dates, \$c for titles, \$q for fuller forms of names). Whereas BIBFRAME stores these values as either URIs or literals. The mechanism by which the more granularly subfielded data that is expected to appear in a MARC record would be generated from a BIBFRAME-native entity is unclear. One solution would be simply to not expect BIBFRAME data to be conformable to MARC in this respect: MARC records derived from native BIBFRAME would have simply the \$a (with or without the additional information that appears in other subfields included) and the URI in a \$1, and reconciling those access points with those already in a MARC environment would be a subsequent task. However, such a change could have large ramifications for authority maintenance in MARC environments, particularly where cases involving partial validation are concerned. As a group we did not feel sufficiently knowledgeable about the downstream effects of an expediency such as this to render a judgment.

On a related note to access points, we have yet to understand the role that 8XX series data will play for those organizations that choose to trace series, based on our group’s uncertainty over the ontological status of series in BIBFRAME.

Limitations on group’s expertise on specialized formats. Despite a wealth of collective expertise represented by the members of this group, we did not possess all of the required expertise and sufficient time to investigate the BIBFRAME and MARC elements corresponding to specialized formats, for example musical resources, visual resources, cartographic resources, rare materials, born-digital materials, etc. Our group’s preliminary recommendations are meant to be as broad as possible but future work from specialized communities will be required to ensure accurate deployment of BF2MARC conversions.

Open Topics for Future PCC Discussion

Below we enumerate topics that surfaced during rich discussion but which represent work that was outside of our scope, expertise, and resources. We recommend that these topics be evaluated and prioritized for future consideration by PCC.

- Anticipating how entity data and their labels are represented in a BIBFRAME/linked data universe and what implications that has for AAPs in MARC records generated from BIBFRAME. Similarly, analyzing how MARC for authority and holdings data will need adjustment in any BIBFRAME to MARC conversion process. Following this, providing insight into the future of authority control, reconciliation/validation, and management when entity data/access points are sourced from disparate linked data repositories rather than more dedicated “authority files”
- Reconciling uncertainty over the interplay of Model A and Model B for representation and prioritization of romanized data in a BIBFRAME to MARC record (e.g. the need to support 880 fields or reimagining how romanized data might be captured for those communities who require or desire its presence)
- Articulating divergences in MARC and BIBFRAME practices use across PCC cataloging (including places where PCC practice may diverge from LC practice) and non-PCC usage. Similarly, articulating LC practices, PCC practices, and community practices as they pertain to lesser used fields in BIBFRAME, including fields not currently used by LC but remain available to non-LC communities.
- Determining how MARC records derived from BIBFRAME can be BIBCO-authenticated as BSR/CSR products
- Articulating the future of complex MARC structures such as 1XX/240, their relationships to hubs and other BIBFRAME ontological concepts such as series tracing, and issues surrounding partial validation of authority data
- Investigating the necessity and feasibility of ongoing syncing or linking individual BIBFRAME descriptions and MARC records over time (for example through paired 758/884 MARC fields, as in current Sinopia transformations), and the implications of the complex syncing required of serial works whose descriptions require ongoing maintenance
- Considering the future of MARC 006/007 fields and potential replacement of those values with controlled vocabularies
- Assessing and addressing community expectations over the entry conventions of data in BIBFRAME editors, and the resultant serialization of data in MARC (e.g. coordinated or divergent use of 264\$a, \$b, and \$c values to capture diverse BIBFRAME elements as opposed to a single unparsed statement formulated to ISBD conventions; the entry conventions required to support 588 fields in MARC; or the requirements to build an accurate and useful 008 field)
- Continuing to evaluate and articulate the role of BIBFRAME and its relationship to MARC in a shifting information landscape where MARC remains a critical component in the full suite of existing library work (from acquisitions through catalog and holdings maintenance, for example), and yet MARC may one day in the future be superseded in part (if not in entirety) by BIBFRAME and linked data practices. This is an existential question that was not in our group’s charge.

Appendix 1. Preliminary Repertoire of MARC Descriptive Fields from BIBFRAME

The **Preliminary Repertoire of MARC Descriptive Fields from BIBFRAME** is submitted as an Excel workbook. For each data element we have documented an existing path from BIBFRAME to MARC, or the lack of the same. The workbook also contains in a separate sheet the list of data elements that were considered but not included. In many cases these were because of uncertainty regarding the BIBFRAME to MARC conversion path.

The original Google Sheets version of this spreadsheet is mounted here:

<https://docs.google.com/spreadsheets/d/1jsKaaErpKlsm6bMQd7Be9V2xPWq27p9hnrFB7zQO-s/edit?usp=sharing>. It, and the remainder of the group's working files, are here:

https://drive.google.com/drive/folders/1oC9ttINH4O8an8W6u3u0GAo_pGL8Uq8Z.

Appendix 2. BIBFRAME to MARC 21 (BF2MARC) Conversion Principles and Rubric

1. BF2MARC records will not look like native MARC. That is fine and in fact perhaps preferable.
 - a. BF2MARC records are born with *minimal ISBD punctuation*
 - b. BF2MARC records avoid nesting/embedded data in places where native MARC prefers it (e.g.: parallel linguistic information or parallel providers in individual fields), or linking data in places where some native MARC creators supply it (e.g. non-Latin scripts in paired fields)
 - c. BF2MARC records may omit or provide less granular data in some record areas (such as fixed fields) when that information is present elsewhere in the record
 - d. BF2MARC records may not present clear "main" and "added" entries and instead embrace relator codes
 - e. BF2MARC records should be identifiable as such (e.g. through use of codes in 040 or 884)
 - f. BF2MARC records are derivative products from BIBFRAME data, and present questions on currency of data in particular for resources that need ongoing maintenance over time, e.g.: continuing resources
2. BF2MARC records, although not necessarily replicating accustomed MARC techniques or conventions, should nonetheless *function* like traditional MARC records, supporting essential machine and human operations in the following areas:
 - a. providing *unambiguous identification* of the resource described
 - b. providing *necessary descriptive detail* of the resource described
 - c. enabling *controlled access* to bibliographic access points
 - d. providing *reasonable justification* for presence of bibliographic access points
 - e. enabling *controlled subject access* to subject access points
 - f. providing adequate *provenance of metadata* to enable trust and management
3. Conversion is necessarily a lossy process. If there are differences in granularity between BIBFRAME and MARC, the data will lose granularity in transformation from BIBFRAME to MARC.
 - a. When BIBFRAME 2.0 elements are more specifically defined than corresponding MARC 21 data elements, they will lose that specificity on transformation.
 - b. When BIBFRAME 2.0 elements are more generally defined than their corresponding MARC 21 record data elements, a more general MARC 21 location should be used.
 - c. Therefore, it is not a functional requirement of BF2MARC data that it can be algorithmically converted back into BIBFRAME, which would potentially increase lossiness.

4. Subsequent, downstream modification of BF2MARC records should be allowed and encouraged.

Rubric for inclusion. When determining what to include in the BF2MARC repertoire, the Work Group sought answers to these questions.

1. Is the data element considered essential by PCC metadata application profiles (BSR/CSR)?
2. Does the data element play an important role in known systems, workflows, etc.?
3. Does a known or likely transformation path from BIBFRAME to MARC exist?

Appendix 3. Group Charge

Charge:

The PCC Task Group on MARC Simplification for BIBFRAME Conversion is charged to develop a simplified set of MARC fields (Skinny MARC records) to support BIBFRAME conversion effectively and accurately through examining the BIBFRAME 2.0 to MARC 21 Conversion programs and related specifications. The Task Group will set up and initiate the tasks listed in the Task Group Deliverables below. The group will keep PoCo informed of the recommendations.

Task group deliverables

- Develop the criteria of creating a simplified set of MARC fields (Skinny MARC records) with options and a thorough assessment, based on the core elements of [PCC RDA BSR \(BIBCO Standard Record\) Metadata Application Profile](#) and [CSR \(CONSER Standard Record\) RDA Metadata Application Profile](#)
- Evaluate bibliographic and authority records enhanced with URIs as part of the PCC URIs in MARC Pilot as a test set of records that can serve as prototype Skinny MARC records
- Examine and test the [BIBFRAME 2.0 to MARC 21 Conversion programs and related specifications](#) with a thorough analysis of pros and cons
- Experiment with the simplified records to see how they play in the local discovery systems or ILS, including various libraries
- Identify use cases for creating and using simplified MARC
- Evaluate a set of sample records converted from BIBFRAME to MARC, provided by LC in early 2022
- Study related projects such as [Share-VDE SEI \(Sapientia Entity Identification\) Working Group](#) and Sinopia for data mapping
- Perform an environmental scan to see if other work has been done in this area.
- Include examples and perspectives for diverse types of resources such as continuing resources, audiovisual resources, rare materials, music, etc. These will need to be vetted by their communities before finalizing.
- Consult with colleagues in specialized areas to ensure viable results
- Develop a list of challenges, possible solutions and implementation plans

Time Frame:

Date charged: 1 February 2022

Date preliminary report due: 1 June 2022

Date final report due: 31 October 2022

Reports to:

PCC Policy Committee

MARC address	Conventional name	BF domain	BIBFRAME data path	Expected data	Notes
~LDR05:1	Record status	bf:Work	bf:adminMetadata < bf:AdminMetadata	code (1) [fixed field value]	Exact mechanism of converting BIBFRAME to MARC fixed field values is undetermined.
~LDR06:1	Record type	bf:Work	**no path identified	code (1) [fixed field value]	BIBFRAME has lots of type metadata included but not clear how it maps to MARC RecType
~LDR07:1	Bibliographic level	bf:Work	bf:adminMetadata < bf:AdminMetadata	code (1) [fixed field value]	
~LDR17:1	Record encoding level	bf:Work	bf:adminMetadata > bf:AdminMetadata	code (1) [fixed field value]	
~LDR18:1	Descriptive form	bf:Work	bf:adminMetadata > bf:AdminMetadata	code (1) [fixed field value]	
008-06:1	Publication status		**no path identified	code (1) [fixed field value]	
008-07:4	Date1		**no path identified	code (4) [formatted date]	
008-11:4	Date2		**no path identified	code (4) [formatted date]	
008-15:3	Place of publication code		**no path identified	code (3) [select from MARC country codes]	
008-35:3	Language code		**no path identified	code (3) [select from MARC language codes]	
008-38:1	Record modification code		**no path identified	code (1) [fixed field value]	
008-39:1	Record cataloging source		**no path identified	code (1) [fixed field value]	
008b-18:4	BKS Illustrations		**no path identified	code (1-4) [fixed field value]	
008b-24:4	BKS Nature of contents		**no path identified	code (1-4) [fixed field value]	
008s-18:1	SER Frequency		**no path identified	code (1) [fixed field value]	
008s-19:1	SER Regularity		**no path identified	code (1) [fixed field value]	
008s-21:1	SER Type of continuing resource		**no path identified	code (1) [fixed field value]	
010\$a	LCCN	bf:Instance	bf:identifiedBy > bf:Lccn > rdf:value	code (LCCN)	
020\$a	ISBN	bf:Instance	bf:identifiedBy > bf:Isbn > rdf:value	code (10 or 13-digit numeric sequence uid)	
020\$q	ISBN qualifier	bf:Instance	bf:identifiedBy > bf:Isbn > bf:qualifier	text	not valid without rdf:value
022\$a	ISSN	bf:Work	bf:identifiedBy > bf:Issn > rdf:value	code (8 digit numeric sequence uid)	
022\$l	ISSN-L	bf:Work	bf:identifiedBy > bf:IssnL > rdf:value	code (8 digit numeric sequence uid)	
024\$a	Standard identifier	bf:Work	bf:identifiedBy > bf:Identifier > rdf:valu	text	
024\$q	Standard identifier qualifier	bf:Work	bf:identifiedBy > bf:Identifier > bf:quali	text	not valid without rdf:value
027\$a	STR numbr	bf:Instance	bf:identifiedBy > bf:Strn > rdfvalue	text	
027\$q	STR number qualifier	bf:Instance	bf:identifiedBy > bf:Strn > bf:qualifier	text	not valid without rdf:value
040\$a	Cataloging agency	bf:Work	bf:adminMetadata > bf:AdminMetadata	code (3 digit agency code, e.g. OCLC)	
040\$b	Language of cataloging	bf:Work	bf:adminMetadata > bf:AdminMetadata	code (3); select from [MARC Code List for Languages]	
040\$d	Modifying agency	bf:Work	bf:adminMetadata > bf:AdminMetadata	code (3 digit agency code, e.g. OCLC)	
040\$e	Description conventions	bf:Work	bf:adminMetadata > bf:AdminMetadata	code	
041\$a	Language code of expression	bf:Work	bf:language > bf:Language rdf:about="	code (3); select from [MARC Code List for Languages]	
041\$h	Language code of original	bf:Work	bf:language > bf:Language > bf:part >	code (3); select from [MARC Code List for Languages]	
042\$a	Authentication code	bf:Work	bf:adminMetadata > bf:AdminMetadata	code (3-)	
046\$k	Work date	bf:Work	bf:date > bf:creationDate	edtf	
050\$a	Classification identifier LC	bf:Work	bf:classification > bf:ClassificationLcc	code	
050\$b	Classification item identifier LC	bf:Work	bf:classification > bf:ClassificationLcc	code	not valid without bf:classificationPortion
082\$2	Classification Dewey edition	bf:Work	bf:classification > bf:ClassificationDdc	text	
082\$a	Classification number Dewey	bf:Work	bf:classification > bf:ClassificationDdc	code	
210\$a	Title abbreviated, key title	bf:Workd	bf:title > bf:KeyTitle	text	
245\$a	Title	bf:Work	bf:title > bf>Title > bf:mainTitle	transcribed text	
245\$b	Title subtitle	bf:Work	bf:title > bf>Title > bf:subtitle	transcribed text	
245\$c	Statement of responsibility	bf:Instance	bf:responsibilityStatement	transcribed text	
245\$n	Title part number	bf:Work	bf:title > bf>Title > bf:partNumber	text	
245\$p	Title part title	bf:Work	bf:title > bf>Title > bf:partName	text	
2461#\$a	Title variant	bf:Work	bf:title > bf:VariantTitle	text	
24611\$a	Title parallel title	bf:Work	bf:title > bfParallelTitle	text	
250\$a	Edition designation	bf:Instance	bf:editionStatement	transcribed text	
264#0\$a	Production place	bf:Instance	bf:provisionActivity > bf:ProvisionActivi	text	
264#0\$c	Production date	bf:Instance	bf:provisionActivity > bf:ProvisionActivi	text (year)	
264#1\$a	Publication place	bf:Instance	bf:provisionActivity > bf:ProvisionActivi	transcribed text	
264#1\$b	Publisher	bf:Instance	bf:provisionActivity > bf:ProvisionActivi	transcribed text	
264#1\$c	Publication date	bf:Instance	bf:provisionActivity > bf:ProvisionActivi	text	
264#2\$a	Distributor place	bf:Instance	bf:provisionActivity > bf:ProvisionActivi	transcribed text	
264#2\$b	Distributor	bf:Instance	bf:provisionActivity > bf:ProvisionActivi	transcribed text	
264#2\$c	Distributor date	bf:Instance	bf:provisionActivity > bf:ProvisionActivi	text (year)	
264x3\$a	Manufacturer place	bf:Instance	bf:provisionActivity > bf:ProvisionActivi	text	

264x3\$b	Manufacturer	bf:Instance	bf:provisionActivity > bf:ProvisionActivi	text	
264x3\$c	Manufacture date	bf:Instance	bf:provisionActivity > bf:ProvisionActivi	text (year)	
264x4\$c	Copyright date	bf:Instance	bf:copyrightDate	text (copyright mark and year)	
300\$a	Extent	bf:Instance	bf:extent > bf:Extent > rdfs:label	text	
300\$b	Illustrations	bf:Instance	bf:note > bf:Note rdf:type rdf:resource=	text	
300\$b	Mount	bf:Instance	bf:mount > bf:Mount	text	
300\$c	Dimensions	bf:Instance	bf:note > bf:dimensions > \$	text	
310\$a	Frequency	bf:Work	bf:frequency > bf:Frequency	text	
336\$a	Content type term	bf:Work	bf:content > bf:Content > rdfs:label	text; select from [RDA content type terms]	
336\$b	Content type code	bf:Work	bf:content > bf:Content rdf:about="http://	code (3); select from [RDA content type codes]	
337\$a	Media type term	bf:Instance	bf:media > bf:Media > rdfs:label	text; select from [RDA Media Type Terms]	
337\$b	Media type code	bf:Instance	bf:media > bf:Media rdf:about="http://ic	code (2); select from [RDA Media Type Codes]	
338\$a	Carrier type term	bf:Instance	bf:carrier > bf:Carrier > rdfs:label	text; select from [rda carrier type terms]	
338\$b	Carrier type code	bf:Instance	bf:carrier > bf:Carrier rdf:about="http://	code (3); select from [RDA carrier type codes]	
3620#\$a	Numeric and/or alphabetic designation of f	bf:Work	bf:enumerationAndChronology > bf:En	transcribed text	
3620#\$a	Numeric and/or alphabetic designation of l	bf:Work	bf:enumerationAndChronology > bf:En	transcribed text	
3620x\$a	Chronological designation of first issue or	bf:Work	bf:enumerationAndChronology > bf:Ch	transcribed text	
3620x\$a	Chronological designation of last issue or	bf:Work	bf:enumerationAndChronology > bf:Ch	transcribed text	
490\$a	Series title	bf:Work	bf:seriesStatement	text	
490\$v	Series numbering	bf:Work	bf:seriesEnumeration	text	
490\$x	Series ISSN	bf:Work	bf:seriesStatemen > bf:Issn > \$?	code [8 number sequence UID]	
500\$a	Note	bf:Work	bf:note > bf:Note > rdfs:label	text	
502\$a	Dissertation note	bf:Work	bf:dissertation > bf:Dissertation > rdfV;	text	
502\$b	Dissertation degree type	bf:Work	bf:dissertation > bf:Dissertation > bf:de	text	
502\$c	Dissertation granting institution	bf:Work	bf:dissertation > bf:Dissertation > bf:gr	text	
502\$d	Dissertation date	bf:Work	bf:dissertation > bf:Dissertation > bf:da	text (date)	
504\$a	Note on bibliography, etc.	bf:Instance	bf:note > bf:Note rdf:about="http://id.loc.gov/vocabulary/mnotetype/biblio"		
508\$a	Note on creation/production credits	bf:Work	bf:credits	text	
511\$a	Note on participant or performers	bf:Instance	bf:credits [starts-with(text(),'Cast:']	text	
515\$a	Note on numbering peculiarities of continu	bf:Work	bf:note > bf:Note rdf:about="http://id.lo	text	
518\$d	Date of capture	bf:Work	bf:capture > bf:Capture	text (date)	
520\$a	Summary	bf:Work	bf:summary > bf:Summary	text	
532\$a	Note on accessibility features	bf:Instance	bf:contentAccessibility > bf:ContentAcr	text	
546\$a	Note on language	bf:Instance	bf:note > bf:Note rdf:about="http://id.lo	text	
546\$b	Note on script	bf:Instance	bf:notation > bf:Script	text	
550\$a	Note on issuing bodies	bf:Work	bf:note > bf:Note rdf:about="http://id.lo	text	
580\$a	Note on related entity	bf:Work	bf:note > bf:Note rdf:about="http://id.lo	text	
	Note on issue, part, or iteration used as the basis for identification of the resource				
588\$a		bf:Work	bf:note > bf:Note rdf:about="http://id.lo	text	
852\$u	URL	bf:Instance	rdf:url	url	

MARC address	Conventional name	Notes
008-38:1	Record modification code	
008b-18:4	BKS Illustrations	
008b-22:1	BKS Target audience	
008b-24:4	BKS Nature of contents	
008b-28:1	BKS Government publication	
008b-29:1	BKS Conference publication	
008b-30:1	BKS Festschrift	
008b-31:1	BKS Index	
008b-33:1	BKS Literary form	
008b-34:1	BKS Biography	
008c-22:1	COM Target audience	
008c-23:1	COM Form of item	
008c-26:1	COM Type of computer file	
008c-28:1	COM Government publication	
008d-18:4	MAP Relief	
008d-22:2	MAP Projection	
008d-25:1	MAP Type of cartographic material	
008d-28:1	MAP Government publication	
008d-29:1	MAP Form of item	
008d-31:1	MAP Index	
008d-33:2	MAP Special format characteristics	
008m-18:1	MUS Form of composition	
008m-20:1	MUS Format of music	
008m-21:1	MUS Music parts	
008m-22:1	MUS Target audience	
008m-23:1	MUS Form of item	
008m-24:6	MUS Accompanying matter	
008m-30:1	MUS Literary text for sound recordings	
008m-33:1	MUS Transposition and arrangement	
008s-22:1	SER Form of original item	
008s-23:1	SER Form of item	
008s-24:1	SER Nature of entire work	
008s-25:3	SER Nature of contents	
008s-28:1	SER Government publication	
008s-29:1	SER Conference publication	
008s-33:1	SER Original alphabet	
008s-34:1	SER Entry convention	
008v-18:2	VIS Running time	
008v-22:1	VIS Target audience	
008v-28:1	VIS Government publication	
008v-29:1	VIS Form of item	
008v-33:1	VIS Type of visual material	
008v-34:1	VIS Technique	
008z-23:1	MIX Form of item	
022\$I	Manifestation identifier Linking ISSN	
02801\$a	Manifestation identifier issue number	
02821\$a	Manifestation identifier plate number	
	Language code of summary or abstract	Marva, Sinopia - do not support subfields b-t; Is this a limitation of the editors rather than the ontology? If so, would it be better to include this in the conversion spec but note the reason it is absent from the source data? -- CCN
041\$b		
041\$d	Language code of sung or spoken text	
041\$e	Language code of librettos	
041\$f	Language code of table of contents	
041\$g	Language code of accompanying material other than librettos and transcripts	
041\$i	Language code of intertitles	
041\$j	Language code of subtitles	
041\$k	Language code of intermediate translations	
	Language code of original accompanying materials other than librettos	
041\$m		
041\$n	Language code of original libretto	
041\$p	Language code of captions	
041\$q	Language code of accessible audio	
041\$r	Language code of accessible visual language (non-textual)	
041\$t	Language code of accompanying transcripts for audiovisual materials	
045\$b	Content time period code	
055\$a	Classification identifier LC-Canada	
055\$b	Item identifier LC-Canada	
082\$b	Classification item number Dewey	

240\$a / 130\$a	Work preferred title	Falls under access points; Consider whether to continue use of 1XX/240 for work/expression AAPs -- CCN. Does LC's push on Hubs have an effect on this?-- JS
247\$a	Title former title	Only used in legacy CR records (i.e. latest title entry)
250\$a	Edition designation named revision	bf:editionEnumeration is never used by LC
250\$b	Edition statement of responsibility	
255\$a	Cartographic content scale	BF model for cartographicAttributes needs to be updated
255\$b	Cartographic content projection	BF model for cartographicAttributes needs to be updated
255\$c	Longitude and latitude	BF model for cartographicAttributes needs to be updated
300\$a	Duration statement	Part of the extent label - not mapped
300\$a	Layout	not used by LC
300\$b	Mount	
300\$e	Accompanying material	Looks like this is a note in BF. How easily does that map over to 300 \$e? How important is it to give 300 \$e? -- CCN
306\$a	Duration code	Example: <bf:duration rdf:datatype="http://www.w3.org/2001/XMLSchema#duration">004240</bf:duration>
321\$a	Former Frequency	Not available in Bibframe as a discrete element?
340\$a	Material base	
340\$c	Material applied	
340\$d	Production method	
340\$g	Color content	
340\$m	Bibliographic format	
344\$a	Recording method	
344\$b	Recording medium	
344\$c	Playing speed	
344\$d	Sound characteristics Groove characteristic	
344\$e	Sound characteristics Track configuration	not used by lc
344\$f	Sound characteristics Tape configuration	
344\$g	Sound characteristics Playback channels configuration	
344\$h	Sound characteristics Playback characteristics	
344\$i	Sound characteristics Sound content	
344\$j	Sound characteristics Original capture and storage technique	
346\$a	Video characteristics Video format	
346\$b	Video characteristics Broadcast standard	
347\$a	Digital file characteristics File type	
347\$b	Digital file characteristics Encoding format	
347\$c	Digital file characteristics File size	
347\$d	Digital file characteristics Resolution	
347\$e	Digital file characteristics Regional encoding	
347\$f	Digital file characteristics Encoded bitrate	
351\$a	Organization system	
352\$a	Cartographic data type	Not used by LC
352\$b	Cartographic object type	Not used by LC
352\$c	Object count	Not used by LC
382\$a	Medium of performance	
383\$b	Work numeric designation (Musical work)	
384\$a	Key	
490\$a	Series statement of responsibility	
490\$a	Series subtitle	
490\$a	Subseries title	
490\$v	Subseries numbering	
490\$x	Subseries ISSN	
490\$x	Series ISSN	
500\$a	Note on immediate source of acquisition of item	No notetype for acquisitions so cannot map to 541 field -- what about bf:AcquisitionSource?
502\$g	Dissertation other information	
504\$a	Note on bibliography, etc.	Doesnt quite map to BIBFRAME "SupplementaryContent". Can use 500\$a?; Does the source BF express any of the information given in 008/24-27 (for books)? -- CCN

506\$a	Use restrictions	bf:UsePolicy maps to 540; Some MARC development has been happening with access conditions, etc. Not sure what the implications are for BF2MARC mapping -- CCN.
522\$a	Note on geographic coverage	
524\$a	Preferred citation	
538\$a	System requirements	
542\$a	Note on copyright status	not mapped in BF - probably a 500\$a?
546\$b	Musical notation form	
546\$b	Script	
561\$a	Note on custodial history	Should be linked in the Instance; I believe this should be linked to item - AS
5880#\$a	Note on Source of description	Not clear how this is mapped in BF besides description note
5881#\$a	Note on Latest issue consulted	Not clear how this is mapped in BF besides description note
852\$b	Contact information	