



Expressing FRBR in UNIMARC Yes we can!

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Abstract:

The process of updating UNIMARC in order to make it hospitable to FRBRized data truly started with the alignment of UNIMARC bibliographic format with the new ISBD area 0, which was completed in 2010. That was only a beginning. At this year's PUC annual meeting (Lisbon, March 2011), a set of 20 change proposals aiming at defining UNIMARC's overall approach to FRBR was discussed, and finally accepted with very few amendments. This paper identifies the main features of the format regarding FRBR implementation and provides an overview of the proposed changes.

The main features

UNIMARC: a family of formats supporting *links*

One of UNIMARC's strong points, ever since its creation in the 1970s, lies in its ability to manage links between records. UNIMARC/B (the bibliographic format) has been endowed with a whole block (4--) that holds fields designed to link bibliographic records to other bibliographic records. And as soon as UNIMARC/A (the authority format) was created, linking facilities between controlled access points in bibliographic records and the relevant authority record were made available, as well as devices to link authority records to other authority records.

All linking fields in UNIMARC may carry an identifier for the linked record, and this particular feature is crucial when it comes to FRBRization.

UNIMARC fully supports the FRBR structure

Taking advantage of UNIMARC's linking skills, the general framework that was developed regarding FRBR was the one described in *RDA Implementation Scenarios*¹ as 'scenario 1: Relational / object-oriented database structure'. But of course UNIMARC also complies with scenarios 2 and 3.

FRBR group entities are treated in the following formats:

Work: UNIMARC/A

Expression: UNIMARC/A

Manifestation: UNIMARC/B

Item: UNIMARC/H

FRBRized vs. non-FRBRized data

One of the obvious difficulties that had to be addressed was that UNIMARC, much as all MARC formats, is heavily and deeply influenced by pre-FRBR cataloguing practices, so that quite a few fields bring together data pertaining to different FRBR group 1 entities. This is particularly the case with the uniform title fields, both in UNIMARC/A and UNIMARC/B.

The problem was bypassed by the decision to create new fields (both in UNIMARC/A and UNIMARC/B) for titles identifying Works and Expressions, and to keep the existing fields just as they are, for pre-FRBR and/or non-FRBR catalogues.

Recording creators' and contributor's names in authority records

UNIMARC/A's structure does not provide for multiple names associated with a single title. This had to be fixed, as Works may have more than one creator, and Expressions may have contributors. We decided to use UNIMARC/A's *Related access point block* (block 5--), with a development similar to UNIMARC/B's *Responsibility block* (block 7--):

| | | |
|------------------|---|-----|
| 5-0 | ↔ | 7-0 |
| 5-1 (new fields) | ↔ | 7-1 |
| 5-2 (new fields) | ↔ | 7-2 |

New coded values were created within those fields (in \$5 subfield), in order to express the creator or contributor relationship, either with the Work or the Expression. The use of relator codes (those defined for UNIMARC/B's \$4 subfield in block 7-- fields) has been allowed in those fields.

The "has subject" relationship at the Work level

This was the easy bit. We just defined UNIMARC/B's subject fields in UNIMARC/A, with no alteration, except for titles, which require new fields for the reason that has been stated above.

¹ Tom Delsey for the Joint Steering Committee for Development of RDA. *RDA Implementation Scenarios*. July 2009. Internet: <http://www.rda-jsc.org/docs/5editor2rev.pdf>

The Work level

The Work level is expressed through a *title* authority record. There are four types of title entities that are defined in UNIMARC, with corresponding coded values in the record label, pos. 9 *Type of entity*:

Preferred title (value 'f')
Collective preferred title (value 'g')
Name/title (value 'h')
Name/collective preferred title (value 'f').

The *collective preferred title* and *Name/collective preferred title* have not been addressed yet.

The *title* access points:

As has been said above, the existing fields that host the authorized title or name/title access points were defined prior to the FRBR, and consequently express a pre-FRBR state-of-the-art, with elements in each of these fields pertaining to the Work, others to the Expression, others even to the Manifestation.

This was settled by the creation of a bunch of new fields for those catalogues that will comply with the FRBR model. These new fields will coexist with the “historical” ones, so that each library will be able to choose between using one or the other data model, or even using both models together, one for the existing data, and the other for the data to be created in the future.

New fields for the *title* access points:

231 AUTHORIZED ACCESS POINT – TITLE (WORK)
431 VARIANT ACCESS POINT –TITLE (WORK)
531 RELATED ACCESS POINT –TITLE (WORK)
731 AUTHORIZED ACCESS POINT IN ANOTHER LANGUAGE AND/OR SCRIPT – TITLE (WORK)
241 AUTHORIZED ACCESS POINT – NAME / TITLE (WORK)
441 VARIANT ACCESS POINT – NAME / TITLE (WORK)
541 RELATED ACCESS POINT – NAME / TITLE (WORK)
741 AUTHORIZED ACCESS POINT IN ANOTHER LANGUAGE AND/OR SCRIPT – NAME / TITLE (WORK)

The *name/title* access points:

Some cataloguing codes make use of name/title access points, some don't. According to FRBR, *titles* are defined as attributes to both Works and Expressions, whereas *creator* and *contributor* are relationships between group 2 entities and Works or Expressions.

As a result, the “name” part of name/title authorized access points has been declared *optional* in UNIMARC. When that part is present, it is highly recommended that it include

the identifier of the relevant authority record, so that any changes or corrections made to the authorized form of the name be automatically reflected here:

241 #1 \$3 FRBNF138930724 \$a Debussy, Claude (1862-1918) \$4 230
\$t Pelléas et Mélisande \$s FL 93

Whether the name is present in the name/title authorized access point or not, it will be entered in a separate 5-0 field:

500 #1 \$3 FRBNF138930724 \$5xxxxa \$a Debussy \$b Claude \$f 1862-1918 \$4 230

The *creator* access points:

The use of fields 500, 510 and 520 in authority records describing Works has been extended, in order to record the name entry that is primarily associated with the title of the Work. New fields 501, 511 and 521 now cater for any subsequent name associated with a Work.

As said above, a new coded value position has been defined in \$5 Relationship Control subfield to identify the specific relationship between creator and title of Work. And *relator codes* are now available in these fields.

New fields, subfields and coded values for the *creator* access points:

501 ACCESS POINT FOR A INTELLECTUAL/ARTISTIC RESPONSIBILITY ON THE WORK – PERSONAL NAME

511 ACCESS POINT FOR A INTELLECTUAL/ARTISTIC RESPONSIBILITY ON THE WORK – CORPORATE BODY NAME

521 ACCESS POINT FOR A INTELLECTUAL/ARTISTIC RESPONSIBILITY ON THE WORK – FAMILY NAME

Control subfield \$5 : new position (pos. 4) Creator Relationship Code between Creators and Work

\$4 in fields 500, 510 and 520, and in fields 240 and 241.

The *subject* access points:

In the FRBR model the subject relationship is defined between group 1, 2 and 3 entities and the Work entity. It was therefore necessary that UNIMARC/B subject entry fields be implemented in UNIMARC/A too (some already were: 675, 676, 686 and 686).

Newly created 600, 601, 602, 606, 607, 610, 616 and 617 fields are similar to those bearing the same tags in UNIMARC/B, but 604 (name/title as subject) and 605 (uniform title as subject) were left aside, and replaced by 4 new fields catering for Title of a Work, Name/Title for a Work, Title of an Expression, and Name/Title for an Expression.

New fields, subfields and coded values for the *subject* access points:

- 600 SUBJECT ACCESS POINT – PERSONAL NAME
- 601 SUBJECT ACCESS POINT – CORPORATE BODY NAME
- 602 SUBJECT ACCESS POINT – FAMILY NAME
- 606 SUBJECT ACCESS POINT – TOPICAL SUBJECT
- 607 SUBJECT ACCESS POINT – GEOGRAPHICAL NAME
- 610 UNCONTROLLED SUBJECT ACCESS POINT
- 616 SUBJECT ACCESS POINT – TRADEMARK
- 617 SUBJECT ACCESS POINT – HIERARCHICAL GEOGRAPHICAL NAME
- 631 SUBJECT ACCESS POINT – TITLE (WORK)
- 632 SUBJECT ACCESS POINT – TITLE (EXPRESSION)
- 641 SUBJECT ACCESS POINT – NAME/TITLE (WORK)
- 642 SUBJECT ACCESS POINT – NAME/TITLE (EXPRESSION)

The *Expression* level

A record for an *Expression* would typically include the following data:

- A coded value indicating that the record is at the Expression level (already defined: field 154, pos. 1)
- The title identifying the Expression (i.e. an authorized entry made for the Expression). This requires new fields (232 and 242).
- The identification of the Work to which the Expression is linked: the authorized title entry identifying the Expression has been designed so as to serve also as a linking field to the authority record describing the related Work.
- The names, in access point form, of the persons/corporate bodies/families – if any – that are associated with the Expression, each of them with the statement of their relationship to the Expression. New fields have been defined for this purpose (5-2, similar to 5-1 fields), all of them with a \$4 subfield (for relator codes) and a \$r subfield (for roles in the case of interpreters of theatrical, operatic,... Works).
- Other data, such as: language of the Expression, year of the Expression, content characteristics of the Expression. This will need an extension of existing coded data fields and the creation of new ones (to be done in 2012)
- Notes pertaining to the Expression (to be done in 2012)

New fields for the *title* access points:

- 232 AUTHORIZED ACCESS POINT – TITLE (EXPRESSION)
- 432 VARIANT ACCESS POINT – TITLE (EXPRESSION)
- 532 RELATED ACCESS POINT – TITLE (EXPRESSION)
- 732 AUTHORIZED ACCESS POINT IN ANOTHER LANGUAGE AND/OR SCRIPT – TITLE (EXPRESSION)
- 242 AUTHORIZED ACCESS POINT – NAME / TITLE (EXPRESSION)
- 442 VARIANT ACCESS POINT – NAME / TITLE (EXPRESSION)
- 542 RELATED ACCESS POINT – NAME / TITLE (EXPRESSION)

742 AUTHORIZED ACCESS POINT IN ANOTHER LANGUAGE AND/OR SCRIPT – NAME / TITLE (EXPRESSION)

New fields, subfields and coded values for the *contributor* access points:

502 ACCESS POINT FOR A CONTRIBUTOR ASSOCIATED WITH THE EXPRESSION – PERSONAL NAME

512 ACCESS POINT FOR A CONTRIBUTOR ASSOCIATED WITH THE EXPRESSION – CORPORATE BODY NAME

522 ACCESS POINT FOR A CONTRIBUTOR ASSOCIATED WITH THE EXPRESSION – FAMILY NAME

The *Manifestation* level

The main need there is to provide a means of identifying the Works and the Expressions of such Works that are embodied in the Manifestation.

There again new fields address these new type of data, alongside the “historical” fields that were not declared obsolete. The main identification element for Works and Expressions being their *titles* in the FRBR model, these new fields were created in the Related title block (5—).

New fields for the identification of embodied Works and Expressions:

506 UNIFORM TITLE – IDENTIFICATION OF A WORK

576 NAME / UNIFORM TITLE – IDENTIFICATION OF A WORK

507 UNIFORM TITLE – IDENTIFICATION OF AN EXPRESSION

577 NAME / UNIFORM TITLE – IDENTIFICATION OF AN EXPRESSION

Further developments

Further developments will have to be done, especially within the coded data fields, and for Works and Expressions identified by collective titles (titles and name/titles). A second round of proposals of change is for UNIMARC /B as well as for UNIMARC /A is underway.

Hopefully, UNIMARC’s FRBRization will be completed in 2012.

Example

Work

Label/9 [Type of entity] = h [Name/title]

001 W333333333

154 ## \$a xa [Type of entity : Work]

241 #1 \$3 FRBNF138930724 \$a *Debussy, Claude (1862-1918)* \$4 230

\$t Pelléas et Mélisande \$s FL 93

500 #1 \$3 FRBNF138930724 \$5xxxxa \$a Debussy \$b Claude \$f 1862-1918 \$4 230

501 #1 \$3 FRBNF119138653 \$aMaeterlinck \$b Maurice \$f 1862-1949 \$4 480

In italics: the optional 'name' part of field 241.

Expression

Label/9 [Type of entity] = h [Name/title]

001 E666666666

154 ## \$a xb [Type of entity : Expression]

242 #1 \$3 W333333333 \$a Debussy, Claude (1862-1918) \$t Pelléas et Mélisande \$s FL 93

\$n Musique interprétée \$q Auberson \$q Suisse romande \$k 1969

502 #1 \$3 FRBNF138909534 \$a Auberson \$b Jean-Marie \$f 1920-.... \$4 250

502 #1 \$3 FRBNF139002899 \$a Tappy \$b Éric \$f 1931-.... \$4 721 \$4 vbr \$r Pelléas

[...]

512 02 \$3 FRBNF139056167 \$a Orchestre de la Suisse romande \$4 545 \$4 oun

512 02 \$3 FRBNF139037811 \$a Grand Théâtre \$c Genève \$b Chœurs \$4 721 \$4 cmi

Field 242 both links to the Work record, and serves as identification of the Expression. \$r subfield in 502 holds the name of the role (the Expression is that of an operatic Work).

A Manifestation of the Expression

001 M999999999

200 1# \$a Pelléas et Mélisande \$f Claude Debussy, comp. \$g Éric Tappy, BAR (Pelléas)

\$g Gérard Souzay, BAR-B (Golaud) \$g Erna Spoorenberg, S (Mélisande)

\$g Chœur du Grand Théâtre [de Genève] \$g Philippe Cart, chef de chœur

\$g Orchestre de la Suisse romande \$g Jean-Marie Auberson, dir.

576 01 \$3 W333333333 \$a Debussy, Claude (1862-1918) \$t Pelléas et Mélisande \$s FL 93

577 11 \$3 E666666666 \$a Debussy, Claude (1862-1918) \$t Pelléas et Mélisande \$s FL 93

\$n Musique interprétée \$q Auberson \$q Suisse romande \$k 1969

Field 577 links to the Expression, while field 576 links to the Work.