



## IFLA Cataloguing Section ISBD Review Group

### ISBD/XML Study Group

## Activity Report, August 2011-June 2012

The ISBD Review Group **ISBD/XML Study Group** is in its **fourth, extended phase of the project which was accepted by the ISBD Review Group and Cataloguing Section during 2011 IFLA meeting in San Juan, Puerto Rico**. No funding was assigned for the project for 2012.

**The re-directed project goal and main objectives**, accepted by the ISBD Review Group and Cataloguing Section during 2010 IFLA meeting in Gothenburg, Sweden, are:

(1) to build a consensus on the *raison d'être* of moving the ISBD into the web environment, and define possible uses of such a product, (2) to develop an ISBD RDF/XML schema, (3) to ensure the interoperability of the product with similar ones such as MARC/DCXML schemas, at least at the conceptual level, within the current semantic web technologies and services, (4) to liaise with relevant constituencies in the field, and (5) to propose further development of software tools and services.

The Study Group continued work in that direction:

The SG's activities for 2011-12 were defined during the [3<sup>rd</sup> meeting of the ISBD/XML Study Group](#), San Juan, Puerto Rico, 15-16 August, 2011, on the occasion of the 77<sup>th</sup> IFLA General Conference. The current document reports on the actions such as they are listed in the minutes.

- **Publication of Namespaces for the Consolidated ISBD**

The work incepted in the course of 2011 resulted in the namespaces for the Consolidated ISBD being published in the Open Metadata Registry (OMR) in January 2012. Namespaces for the consolidated edition of the International Standard Bibliographic Description (ISBD) have been published in Resource Description Framework (RDF), the basis of the Semantic Web. The namespaces can be accessed at <http://iflstandards.info/ns/isbd/>. A full de-referencing service is available for each URI. The concept vocabularies contain Croatian and Spanish translations of the preferred terms, and the element set vocabulary contains Spanish translations of element labels, definitions, and scope notes.

- **Progress Report on the Activities defined in the Work Plan for 2012**

### **6.1. Follow up any changes required in the ISBD namespace resulting from the Glasgow meeting in November 2011.**

This action depends on the outcome of the ISBD RG's work on the harmonization of the two standards, most notably the NBA Application Profile Project and the ISBD/RDA mappings.

Colleagues working on the latter have identified issues that will require some changes (see below, report on ISBD-to-RDA mapping), but so far they have neither delivered their conclusions nor made decisions approved by the ISBD RG about which changes should be made.

Work on the ISBD-to-RDA mapping corresponds to Action 24 of the Outcomes<sup>1</sup> of the Glasgow Meeting between JSC, ISBD RG, and ISSN (Joint Steering Committee for Development of RDA, IFLA ISBD Review Group and ISSN Network Harmonization Meeting, 3-4 November 2011, Glasgow, UK). The ISBD/XML SG took part in it by preparing the mapping on the basis of the RDF declarations of the two standards in the OMR. This work made it clear that the Consolidated ISBD should be modified on some points:

\*vocabulary overlapping with the OMR (meaning of “statement”)

\*ISBD definitions to be improved, as they are occasionally incomplete with regard to the rules themselves of ISBD and its applications

\*need for more precision about the relations between ISBD (Resource) and FRBR (WEMI): the term “Resource” does not always match the same FRBR entity (see also Action 6.6)

\*granularity in the definitions of elements (most notably with regard to physical description and notes).

It will then be possible to modify the RDF declaration of ISBD and make it compliant with this revision.

## **6.2. Collaborate with JSC on the development of a representation of the RDA/Onix Framework in RDF, and ensure that ISBD's interests are represented in further development of the Framework itself.**

This corresponds to Action 23 of the Outcomes<sup>2</sup> of the Glasgow Meeting.

The mapping between ISBD (Area 0) and RDA/ONIX Framework was revised and completed. A proposal was submitted to the ISBD RG for comments in February 2012, and approved with some modifications at the end of March 2012. Version 1.0 of the mapping was forwarded to the DCMI Bibliographic Metadata Task Group for comments in early April 2012, and to the JSC in July 2012 for it to examine it during its fall meeting.

The continuation of the work on the mapping and its representation in RDF now depends on the other interested parties, including notably the publication in RDF of the RDA/ONIX Framework namespaces, and the completion by JSC of the RDA-to-RDA/ONIX Framework mapping.

## **6.3. Liaise with DCMI on improving its infrastructure and support for Application Profiles, using the ISBD AP as a case study, and subsequently further develop the ISBD AP.**

The DC Application Profile still is under development by DCMI (see Singapore Framework for DCAP). ISBD is to be used by DCMI as a study case in this process.

In 2011-2012, the work was left pending, as it depends on DCMI's progress on this issue. The DCMI Architecture Forum is actively engaged in this work via email and a series of telephone meetings.

## **6.4. Continue to liaise with appropriate groups on translation issues.**

A first version of the recommendations on translating ISBD representations in RDF was drafted by Elena Escolano Rodríguez, based on the experience of the Spanish translation. This draft was revised by Gordon Dunsire in order to be extended to translations of other IFLA normative texts: *Translations of RDF representations of IFLA standards, version 1.0, 9 April 2012*. This version was forwarded for comments to the ISBD RG and the DCMI Vocabulary Management Community Task Group in April 2012. No substantive comment was received.

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<sup>1</sup> [http://www.ifla.org/files/cataloguing/isbdrg/JSC\\_ISBD\\_ISSN\\_Outcomesfinal.pdf](http://www.ifla.org/files/cataloguing/isbdrg/JSC_ISBD_ISSN_Outcomesfinal.pdf)

**24.** Mappings: JSC and ISBD agreed to set up a task group to look at Appendix D mappings between RDA and ISBD and between ISBD and RDA elements.

<sup>2</sup> [http://www.ifla.org/files/cataloguing/isbdrg/JSC\\_ISBD\\_ISSN\\_Outcomesfinal.pdf](http://www.ifla.org/files/cataloguing/isbdrg/JSC_ISBD_ISSN_Outcomesfinal.pdf)

**23.** RDA/ONIX Framework: JSC and ISBD RG agreed to check that the mappings from ISBD Area 0 vocabularies and RDA content and carrier vocabularies to the RDA/ONIX Framework are correct.

During the Zadar meeting in June 2012, it was decided that the maintenance of this document should be transferred to the Namespaces Technical Group, as its scope now goes beyond ISBD and extends to the FRBR model family and possibly UNIMARC. The need for more specific recommendations on the translation of ISBD elements and vocabularies, within the more general framework provided by this document, is still relevant, but due to lack of funding for this task, no progress was made in 2012.

**6.5. Continue to monitor and liaise with the Permanent UNIMARC Committee on the proposals to represent UNIMARC in RDF and develop mappings between the ISBD and UNIMARC namespaces.**

During its second informal meeting on the occasion of the IFLA Congress in San Juan, Puerto Rico, on August 18, 2011, the PUC (Permanent UNIMARC Committee) looked favourably on this project, as it seemed useful for maintaining consistency among IFLA standards and managing UNIMARC translations in the context of the Semantic Web. The PUC was to look for means to achieve this project.

However, the topic of UNIMARC representation in RDF was not addressed by the PUC during its annual meeting in March 2012, and both the ISBD RG and the ISBD/XML SG have had no news about the project.

This issue will have to be raised during the Helsinki Congress.

**6.6. Monitor and liaise with the FRBR Review Group on the development of mappings between the ISBD and FRBR namespaces.**

The work of mapping ISBD elements onto RDA made it clear that the relations between the Resource class (ISBD) and the Work, Expression, Manifestation, and Item classes (FRBR) should be investigated further and specified. The ISBD introduction contains a very general statement that ISBD applies to the Manifestation class (“*In the terminology of the [Functional Requirements for Bibliographic Records \(FRBR\)](#), the ISBD is applied to describe manifestations, by means of description of the item in hand as an exemplar of the entire manifestation.*”), but the ISBD definition for “Resource”, even though it actually corresponds to the Manifestation class, also refers to the description of the content of a manifestation, i.e., the Work and Expression entities (“**resource: an entity, tangible or intangible, that comprises intellectual and/or artistic content and is conceived, produced and/or issued as a unit, forming the basis of a single bibliographic description. Resources include text, music, still and moving images, graphics, maps, sound recordings and video recordings, electronic data or programs, including those issued serially (*see also whole resource*)**”). As a matter of fact, the ISBD rules refer totally implicitly to any one of the FRBR entities – whether it comes to recording a note, or an identifier for the resource, etc.

This should be clarified in order to enable an accurate mapping not only from ISBD to RDA (as a content standard based on the FRBR model), but also between ISBD and FRBR and other bibliographic descriptions standards or schemas that refer to FRBR.

But such clarification is a prerequisite for any mapping effort between ISBD and FRBR namespaces.

**6.7. Monitor development of RDF representations of ISSN elements and instance data, and develop appropriate alignments with the ISBD namespaces.**

Nothing has been done on this issue. The development of RDF representations of ISSN elements has not been achieved yet.

**6.8. Monitor developments in the release of instance data based on legacy catalogue records, especially standard identifiers that can be linked to URIs that may apply to instances of ISBD Resources. Monitor use of ISBD classes and properties in library linked data triples.**

The main uses of ISBD in Linked Data applications are those of Cambridge University, the British National Bibliography, and the National Library of Spain.

**6.9. Develop and make available guidelines on appropriate use of the ISBD namespaces by creators of instance triples. Develop and make available guidelines on refining the ISBD namespaces, for example with properties for notes at a lower level of granularity. Such guidelines will promote use of the ISBD namespaces.**

Such a task is to be performed in collaboration with the ISBD RG, one of whose duties is to develop *Guidelines for use of ISBD as Linked Data*. Due to lack of funding, this task was not carried out.

#### **6.10. Develop mappings between the ISBD and Dublin Core Terms (DCT) namespaces.**

Some test mappings have been developed. For example, the “note on use or audience”<sup>3</sup> element has been mapped to DCT’s “audience” element.

#### **6.11. Monitor developments in related namespaces such as Bibliographic Ontology (BibO), SKOS (Simple Knowledge Organization System), and Friend of a friend (FOAF), and take ad hoc action to liaise with related namespaces and develop appropriate mappings from the ISBD namespaces.**

Again, some test mappings have been developed; the “note on use or audience” has also been mapped to FRBR and MARC21 elements.

These test mappings will inform the preliminary work that has to be done by the ISBD RG, based on the experience of the ISBD-to-RDA mapping, in order to correct the granularity of elements, adjust their definition with regard to the rules, and clarify their usage; once the RDF publication of ISBD has been corrected accordingly, it will be possible to develop mappings to other namespaces fruitfully.

#### **6.12. Seek representation of ISBD's interests in the proposed W3C Library Linked Data Community which will succeed the W3C Library Linked Data Incubator Group.**

Gordon Dunsire ensures the liaison.

#### **6.13. Seek representation of ISBD's interests in a proposed expansion of the remit and membership of the current DCMI/RDA Task Group.**

The DCMI Bibliographic Metadata Group was formed in November 2011; it is co-chaired by Diane Hillman and Gordon Dunsire. Françoise Leresche, chair of the ISBD/XML SG, also is one of its members.

##### ▪ **Meetings**

In order to perform these activities, the ISBD/XML Study Group had two working meetings:

- [Ad hoc meeting, 4 November 2011, Edinburgh, UK](#), as a follow-up to the Glasgow meeting between JSC, ISBD RG, and ISSN (Joint Steering Committee for Development of RDA, IFLA ISBD Review Group and ISSN Network Harmonization Meeting, 3-4 November 2011, Glasgow, UK). **Present:** Gordon Dunsire (consultant), Elena Escolano Rodríguez, Françoise Leresche (Chair), Mirna Willer (member & ISBD RG chair).

This meeting made it possible to discuss the work plan, and to determine three priority axes:

- \* RDF representation of the Consolidated ISBD (actions 6.3 & 6.9)
- \* translations of RDF declarations of the Consolidated ISBD (action 6.4)
- \* alignments and mappings, favouring the mapping of ISBD Area 0 onto RDA/ONIX Framework (action 6.2), the mapping between ISBD and FRBR (action 6.6) at the light of the outcomes of the mapping work with RDA (action 6.1), and the mapping between ISBD and UNIMARC, if this project is accepted by IFLA (action 6.5).

These actions had to be revised, and some of them postponed, due to lack of funding for the ISBD/XML SG’s work for the year 2011-12.

- [Ad hoc meeting with ISBD RG and Namespaces Task Group, 17, 18 and 21 June 2012, Zadar, Croatia](#), on the occasion of the LIDA Conference.

**Present:** Gordon Dunsire, Namespaces Task Group chair & consultant to ISBD/XML Study Group and ISBD Review Group; Françoise Leresche, ISBD/XML Study Group chair & ISBD RG member, and Mirna Willer, ISBD Review Group chair & ISBD/XML Study Group member.

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<sup>3</sup> See blog post at <http://managemetadata.com/blog/2012/04/23/adding-marc-fruit-to-the-cornucopia/>

This meeting made it possible to provide an update on the work progress, the documents that are to be finalized, and the issues that are to be addressed on the occasion of the IFLA Conference in Helsinki and that should be handled in 2013.

The ISBD/XML SG also participated in DCMI meetings that took place in Europe:

[DC-2011, The Hague, The National Library of The Netherlands, September 21, 2011 – September 23, 2011](#)

and more particularly the [Vocabulary Management and Alignment Session](#) preconference.

Present: Gordon Dunsire (member of the organizing committee), Françoise Leresche.

G. Dunsire made an informal presentation at the DCMI Conference in The Hague in September 2011 on certain issues raised by ISBD. DCMI agreed to work with ISBD, notably on the development of the DCMI Application profile.

[JSC/DCMI Seminar: Five Years On](#) and inaugural meetings that preceded it of the new DCMI Vocabulary Management Community, and DCMI Bibliographic Metadata Task Group, London, British Library, April 26, 2012 – April 27, 2012.

Present: Gordon Dunsire (co-chair of DCMI Bibliographic Metadata Task Group), Mirna Willer, Françoise Leresche.

#### ▪ Presentations at conferences

**NISO/DCMI webinar, 24 August 2011.** *International bibliographic standards, linked data, and the impact on library cataloging*<sup>4</sup>

Gordon Dunsire, Tom Baker

**Workshop** *Libraries and the Semantic Web: the Role of International Standard Bibliographic Description (ISBD), Zagreb, Croatia, 21 November 2011*<sup>5</sup>

Mirna Willer, Gordon Dunsire, Boris Bosančić

**15th Archives, Libraries, Museum Seminar, Poreč, Croatia, 23-25 November 2011**

#### **Presentations**<sup>6</sup>

1. Gordon Dunsire, Edinburgh, UK. *From Content Standards to RDF*;
2. Mirna Willer and Ana Barbarić. *Prema novom hrvatskom kataložnom pravilniku kao standardu sadržaja podataka = Towards the New Croatian Cataloguing Code of Rules as a Content Standard*;

**Workshop:** *How to Create Linked Data*

Gordon Dunsire, Mirna Willer, with assistance from Drahomira Gavranović, Vlatka Lemić, Marijana Tomić, Goran Zlodi, and Predrag Perožić).

**Libraries In the Digital Age (LIDA) 2012, Zadar, Croatia, 18 - 22 June 2012**

**Workshop** *Library Models and Standards, and Their Availability in the Semantic Web*<sup>7</sup>

Gordon Dunsire, Françoise Leresche and Mirna Willer.

**Communication** *Semantic interoperability of library linked data: ISBD and RDA*

Gordon Dunsire, Françoise Leresche and Mirna Willer.

**Global Interoperability and Linked Data in Libraries Seminar, Florence, 18-19 June 2012**

**Presentation** *ISBD adaptation to semantic web of bibliographic data in linked data*<sup>8</sup>

Elena Escolano Rodriguez.

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<sup>4</sup> Accessible at <http://www.niso.org/news/events/2011/dcmi/linked/>

<sup>5</sup> Accessible at <http://www.gordondunsire.com/presentations.htm>

<sup>6</sup> Workshop and communication accessible at : <http://www.gordondunsire.com/presentations.htm>

<sup>7</sup> Workshop and communication accessible at : <http://www.gordondunsire.com/presentations.htm>

<sup>8</sup> Accessible at <http://leo.cilea.it/index.php/jlis/article/view/urn%3Anbn%3Ait%3Aunifi-3884>

- **Perspectives for the ISBD/XML SG**

Formed in 2008, the ISBD/XML Study Group was in charge of defining an XML Schema for ISBD; however, as early as the Milan Congress in 2009, it was decided that the work should be done directly in the RDF/XML environment in order to ensure the portability of bibliographic data in the Semantic Web. The “SG” appellation reflects the circumstances under which it was formed, not its actual activity. A name change should therefore be considered.

Besides, now that the task of publishing ISBD elements and vocabularies in RDF is completed, the SG’s role is about to change: in addition to defining an application profile (a task that is still ongoing and that depends on the DCMI work on application profiles) and maintaining ISBD namespaces as a follow-up to the revisions of the Consolidated ISBD, its activity will consist increasingly of creating mappings with other bibliographic standards, and liaising the ISBD with the Semantic Web communities.

It begs the question of whether this liaison work could not be carried out more usefully and more efficiently at the level of bibliographic standards by the Cataloguing Section (covering both ISBD and FRBR), rather than only at the level of ISBD by the ISBD RG. As a consequence, the composition (and chairing) of the SG should be reviewed so as to ensure that all relevant standards be represented. This issue must be discussed in Helsinki, within the Cataloguing Section.

The decision can depend on further development related to bibliographic standards bodies in the context of the Semantic Web – discussion is expected to start within Standards Committee meeting in Helsinki.

Respectfully submitted,

Françoise Leresche  
ISBD/XML Study Group chair, August 1st, 2012