

# Responses to world-wide review of FRBR<sub>00</sub> followed by comments on the responses

## British Library

The British Library thanks the FRBR Review Group for this opportunity to comment on FRBR<sub>00</sub> 2.2. The goal of FRBR<sub>00</sub>, to reach a common view of cultural heritage (in the broadest sense) is also important to the Library.

The objectives set for FRBR<sub>00</sub> were challenging, but have been satisfied by this draft. The conciliation of IFLA's FR family of models with CIDOC CRM and the mapping to FRBRER are valuable tools for future development and collaboration. The model is complex, but the report is clearly written and well-illustrated.

The group's work has also achieved some important insights into the murkier depths of FRBRER which will inform the development of the consolidated FR model and of RDA.

One issue of importance to our sound archive is the characterisation of "found" sounds, such as birdsong or machinery, which are not covered by FRBRER but which are in CIDOC CRM: E20 Biological Object E22 Man-Made Object.

The elaboration and formalisation of the processes by which works are created, expressed and published is of particular interest at time when technology should enable closer collaboration with creators, publishers and rights managers.

Alan Danskin

20/4/2015

>> *'Found sounds' can be modelled according to FRBR<sub>00</sub>/CIDOC CRM using either:*

*- F29 Recording Event. R65 recorded aspects of (had aspects recorded through): E18 Physical Thing (if the specific bird or machinery that was recorded is precisely identified), or*

*- F29 Recording Event. R65 recorded aspects of (had aspects recorded through): E18 Physical Thing. P2 has type: E55 Type (if the specific bird or machinery that was recorded is unknown, and the only available information is that it was 'a nightingale', or 'a train').*

*Thanks for reviewing and commenting, Alan!*

## Die Deutsche Nationalbibliothek

The following is a set of comments and questions on the FRBR<sub>00</sub> document from March 2015; I hope that you still have time to consider them even if the official due date has passed.

Given that I'm not an expert on CIDOC-CRM, nor on FRBR or FRBRoo, my view is rather that of an outside commentator than of an inside domain expert. Thus much of what I write probably is more of a question than a comment; please feel free to ignore it should you consider it nonsensical. Also note that I was not able to elaborate my comments very much due to time constraints: They are brief and might sound harsher than they are meant!

0) My introduction: This document is an extremely impressive piece of work. Particularly that you ground the design decisions on actual bibliographic data and supply examples for most of the concepts is greatly helpful and shows the thoroughness of the model's design. Please read all of my comments in the light of this statement.

1) General scope of FRBRoo: In the introduction (particularly 1.1.1) you write that the aim of FRBRoo is to create a shared conceptualization of the reality behind library practice. You give no hint, however, if this is a purely \_conceptual\_ model or something intended to be implemented verbatim and what should be the intended consequences for data exchange. In my opinion this is something you should clarify in the document.

*>> Both CIDOC CRM and its extension FRBRoo are conceptual models, and are not intended to be implemented verbatim. Any 'translation' of extant bibliographic information into an implementation of FRBRoo would require the development of specific subproperties. The following implementation issues are not covered in the model: string handling, how to represent identifiers, how to represent time... The purpose of such conceptual models is to achieve interoperability, not to propose a particular implementation. Transformation between systems is also an implementation.*

*These points will be made clearer in a subsequent version of the FRBRoo definition.*

2) Examples from actual bibliographic data: When discussing some issues, you give examples using bibliographic data in MARC 21 (or sometimes INTERMARC). While this might be helpful to (some) librarians, there is a risk of creating a disconnect with the non-librarian community, e. g. museum curators or archivists. For those communities, it would be helpful to have examples from EAD or similar data models. Further it is noticeable that you do not supply any examples in UNIMARC. Given that the FRBRoo WG is affiliated with IFLA I find this pretty alarming since it shows a severe disconnect between two major IFLA standards.

*>> There are only very few examples that are provided in a MARC format; and in all of them, the intention is not so much to show MARC structures as such, as to convey the notion that these examples are shown such as they are produced and stored in the original databases from which they were taken, and which happen to be in either the MARC21 or the INTERMARC format, as these are the only two MARC formats with which members of the WG happen to be familiar; there was no deliberate intention to exclude UNIMARC. By the way, UNIMARC was originally meant to be an exchange format, not a production format or a storage format, which, from a merely theoretical point of view, should forbid its use within examples of 'data such as it is produced and stored' (although we are aware, of course, that, in practice, many databases in the world are actually produced and stored in UNIMARC). However, a subsequent version of the FRBRoo definition can include examples in UNIMARC, and in EAC (EAC is more relevant than EAD, as all the examples in MARC formats pertain to the information that is recorded as authority data).*

*These MARC examples should not be misinterpreted as an indication that the developers of the FRBR<sub>00</sub> model consider that MARC formats should remain in use for ever and ever in libraries; once again, the only intention in providing them is to convey the notion of data such as currently produced and actually stored. In the future, the same examples could very well be provided as RDF statements (or any more advanced technique).*

3) Figures (classes vs instances): The figures showing how different parts of the model interact are very helpful to the reader. I noted, however, that they often leave it open if they show relations between the classes themselves or between instances of those classes (important distinction!); you might want to make this explicit in a note somewhere. (Figure 10 makes the distinction!).

*>> All Figures were meant to show the properties that hold between classes. The next version of the model definition will contain additional explanation about the conventions used in order to differentiate between class relationships and instance relationships.*

4) Self-contained Expression vs Expression Fragment (§1.2.2): (This is perhaps philosophical question): You say that a Self-contained Expression should convey "the whole idea of the work they realise". Is this really possible given that a sequence of signs seldom can convey the whole idea... Wouldn't something similar to the Dewey concept of "approximate-the-whole" be more accurate?

*>> A tricky question indeed. The idea is simply that the creator of a Self-Contained Expression did not feel the need (or did not fulfil that need) to add a single further sign to the extant sequence of signs. It is in that sense that a Self-Contained Expression can be said to be 'complete'.*

*How do we recognise that an expression is 'self-contained'? Either we have historical knowledge that its creator regarded it as 'finished', or that he/she was interrupted and could not continue, or we infer from the form of the received expression that it conveys a complete message.*

5) Electronic publications in FRBR<sub>00</sub>: When reading the document, I do get a feeling that it is still very much rooted in print media or at least media on physical carriers. An example is the use of F32 Carrier Production Event to represent the download of a file to a data carrier (or storage medium). While I understand that from a conceptual point of view the production of an F5 Item or an F53 Material Copy are very similar, I think there will be problems further down the chain. One example would be if I download five different files (being five carrier production events) to a flash disk and then catalogue that disk. Will the disk itself then be a carrier that contains other carriers (each downloaded file)?

*>> 'Downloaded files' are not carriers, they are the conceptual objects that are carried by each individual instance of F53 Material Copy. The disk itself is an instance of E84 Information Carrier, and the property that connects it with the five individual instances of F53 Material Copy is: P56 bears feature (is found on), since F53 Material Copy is declared as a subclass of E25 Man-Made Feature.*

*It is quite natural that the FRBR<sub>00</sub> definition is very much rooted in media on physical carriers. A medium that is not available on any physical carrier simply does not exist. 'Dematerialized information' is a very misleading phrase; it would be much better to say 'hypermaterialized information', since what is meant is the notion that the same information object is likely to be found on many physical carriers within seconds. Nothing can be on the Internet without being physically somewhere.*

6) Figure 5: (minor nitpick): Why is the class E29 in this figure grey? In all other figures the classes from CIDOC-CRM are yellow. The caption would read better as "Physical and electronic publishing" or "Physical vs electronic publishing".

*>> These inconsistencies will be corrected in a subsequent version of FRBR<sub>00</sub>. Thanks for spotting them.*

7) Use of F10 Person vs use of personas (§ 1.3): You discuss the differences between the personas-based view in FRAD and the person-based view in FRBR<sub>00</sub> when it comes to pseudonyms. It would be helpful if you could add some illustrating examples.

*>> We will strive to do so in a subsequent version of FRBR<sub>00</sub>.*

8) Modelling of subject headings in FRBR<sub>00</sub> (§ 1.3): It would be helpful to the reader if you could provide an example of what the supplied MARC data would look like in FRBR<sub>00</sub>.

*>> The FRBR<sub>00</sub> representation of the supplied MARC data is already embedded within the textual explanation provided in the paragraph. A Figure would only add to the confusion we introduced between class-to-class and instance-to-instance relations.*

9) Formatting of comments on figures (particularly Figg. 6-10): In some cases you supply lists with the items identified through letters (Fig. 6), sometimes you use dashes (Fig. 7) and sometimes no item identifiers at all (Fig. 9). It would increase the readability if you kept this consistent.

*>> This inconsistency will be fixed in a subsequent version of FRBR<sub>00</sub>.*

10) § 2.1.3: Here you describe the processes for "how products of the mind are communicated among human beings through physical carriers". Is there a similar section where you discuss those processes for digital media? Given that those media types will continue to rise in the foreseeable future, such a section would be very important.

*>> Digital media are just as physical as any other media. A server is physical, a USB key is physical, a PC is physical, a smartphone is physical, a storage disc is physical. There is nothing 'immaterial' about the digital world, on the contrary. When a human being A reads on his/her smartphone a Facebook post written by a human being B on his/her PC, a 'product of the mind' is being 'communicated among human beings through physical carriers'. Digital media fit perfectly well in the definition.*

*Perhaps the confusion arises from the fact that we tend to implicitly interpret the phrase 'physical carrier' as covering only 'permanent physical carriers' (such as: printed books, DVDs, CDs, etc.). A piece of information may quite well be found on a physical carrier for a very short time only (e.g., lines scribbled on a wax tablet or a chalkboard, or an issue of an electronic periodical displayed on a library computer screen for a library patron to check a reference), but this does not make the 'physical carrier' less physical, nor does it cease to be a carrier. The notion of the accuracy of copying also adds to the confusion.*

11) F4 Manifestation Singleton vs F5 Item: My reading of the definitions of F4 and F5 is that instances of F4 are unique objects while instances of F5 are "produced by an industrial process". In the Later Middle Ages, some monasteries (or other institutions) mass-produced manuscripts (often by letting

different copyists write different parts of the manuscript). Is that considered an industrial process and could you supply a definition of that term?

*>> Even in the case of 'mass-produced manuscripts', each manuscript is unique, in that each copyist may have unwillingly introduced variant readings that his fellows have not. Manuscript specialists would never regard such manuscripts as 'copies'.*

12) § 2.1.4: Here a figure showing the dynamic view of the process would help understanding the concepts, as would some examples of the use of the class properties.

*>> The dynamic view is provided in Section 2.1.3.*

*Examples will be added, using specific conventions in order to differentiate between class relationships and instance relationships.*

13) Rights statements: As I read the model, you only model rights on manifestations (by using F3.CLP104.E30). Are other rights statements out of scope?

*>> No, they are not, but they are addressed in CIDOC CRM through the E72 Legal Object class and the P104 is subject to (applies to) and P105 right held by (has right on) properties. E72 is declared as a superclass of both E18 Physical Thing and E90 Symbolic Object, and therefore both F2 Expression and F54 Utilized Information Carrier are indirect subclasses of E72 Legal Object, since F2 Expression is a subclass of E90 Symbolic Object, and F54 Utilized Information Carrier is a subclass of E18 Physical Thing. Only F1 Work is not a subclass of E72 Legal Object, as we found no evidence that the law regards mere concepts as a legal object; this view might change, however, if such evidence happened to be produced in the future.*

*An updated version of the model definition will explicitly mention rights statements.*

14) Figure 10 (minor nitpicks): The red text on red background is hard to read. Is there a reason that there is a red frame around the F1 at the top right? The date "25/12/07" is ambiguous, it would be better to use ISO formats throughout.

*>> All this will be fixed in an updated version of the model definition.*

15) Controlled access points (CAP): I have some issues with this topic. One is that CAPs are highly community specific, which you allude to by referring to F43 Identifier Rule and also by saying that the selection of a CAP has a certain moment of arbitrariness (p 27) and that they are used for consistent reference "in a given bibliographic database" (p 26). More important, though, in my view CAPs are *\*not\** identifiers. Ontologically, F50 is a subclass of F13 and in the description of F13 is stated that instances of F13 are used to "identify [...] uniquely and permanently". I'm not deep enough into the cataloguing rules to say how the uniqueness can be ensured, but a CAP can not be ensured to be permanent. As an example: the CAP for "Harry Potter and the Goblet of Fire" by would be (similar to) "Rowling, J. K. (1965-). Harry Potter and the Goblet of Fire". This, however, is only true as long as Rowling is still alive. The moment she dies, the CAP will change to accommodate the year of death. Thus, it's not permanent and violates one of the criteria for F13 Identifier. Can you please elaborate on this?

*>> You're absolutely right. CAPs definitely do need more thinking. We'll strive to fix that in an updated version of the model definition.*

16) Equivalent classes and properties in CIDOC-CRM and FRBRoo (out of curiosity): Why does FRBRoo declare classes and properties that are equal to those in CIDOC-CRM instead of just re-using them (e. g. F40)?

*>> In order to show that FRBR<sub>oo</sub> deals with all the entities mentioned in FRBR, FRAD, and FRASAD, and did not leave any of them out of its scope. But entities that are redundant with CIDOC CRM might well be dropped in a subsequent version of FRBR<sub>oo</sub>.*

17) Superclass of F4 Manifestation Singleton: I notice that the superclass of F4 is E24 Physical Man-Made Thing. Does this imply that Manifestation Singletons are not instances of F42 Utilized Information Carrier? The definition of F33 (p 62) says that F4 is subclass of E84 but I cannot find that in the class hierarchy. That definition also says that it is possible to account for private copying without saying what kind of event to use for that activity.

*>> Strictly speaking, an instance of F4 Manifestation Singleton can be any kind of physical stuff on which a human being infixed an expression: it can be a napkin or a window pane. Napkins or window panes were not designed to serve as information carriers, and this is the reason why the superclass of F4 is just E24 Physical Man-Made Thing rather than F42 Utilized Information Carrier. The range of the R29 reproduced (was reproduced by) should probably be relaxed to E24 Physical Man-Made Thing, or perhaps even just E18 Physical Thing. We'll consider this in a subsequent version of FRBR<sub>oo</sub>.*

*Private copying is modelled through F33 Reproduction Event, as opposed to F32 Carrier Production Event, which is supposed to model the notion of 'mass production for the purpose of dissemination'. In the context of traditional publishing, F32 Carrier Production Event conveys the notion of mechanical means of production that guarantee a high level of fidelity or likeness or accuracy in likeness (it results in copies that are regarded as 'identical'). But in the case of digital publishing, an instance of F32 Carrier Production Event results in just one instance of F54 Utilized Information Carrier being produced at a time: the notion of 'mass production' resides here in the homogeneity of carriers along time rather than in the number of simultaneously produced carriers.*

18) Examples of instances of classes (here for F16): In many of the examples for instances of classes you give examples that are really instances of subclasses (e. g. F16). Does that imply that F16 is more similar to the concept of an abstract class in OOP and that we should not expect any instances of that class?

*>> The declared subclasses of F16 Container Work cover all the relevant cases we have found so far; there is therefore no need to give an example of their common superclass.*

19) F34 KOS: The advent of electronic publishing means that the notion of releases is increasingly becoming obsolete (Pat will remember the discussion at EDUG in Naples). Is it intended that I need to create a new expression of the KOS every time I publish a change to a class or a subject heading (implying that there can be many expressions per day)? (This question also draws from the definition of R34 has validity period).

*>> If modifications in a KOS are instantaneously made available on the Web, without having to wait for a batch and a new release, then, yes, any change, no matter how slight, results, strictly speaking, in a new KOS. As a consequence, the validity period for a given instance of F34 KOS can be less than a second. This may sound impractical; but since F34 KOS is declared as a subclass of*

*F2 Expression (perhaps it should be F22 Self-Contained Expression, this might have to be fixed in a subsequent version of FRBR<sub>oo</sub>, we have to think again about it), it is always possible to refer to the instance of F1 Work of which it is an expression, leaving the specific instance of F34 KOS as a blank node: F35 Nomen Use Statement R35 is specified by (specifies) F34 KOS{instance unspecified; is also an instance of F22 Self-Contained Expression} R3i realises (is realised in) F1 Work. In an implementation, it would be quite possible to declare a specific subclass of F1 Work, e.g. F1.1 KOS Work, i.e., a work that can only be realized through instances of F34 KOS.*

*It is important to identify the version of the KOS that was used, and the model accounts for that; it does not have to cope with the difficulty of identifying the various versions of a KOS.*

20) F38 Character: Does this class also apply for fictitious families (e. g. the Wesleys from Harry Potter) or do those go into F39 Family (I guess not)?

*>> The scope note says that F38 Character 'comprises fictional or iconographic individuals or groups of individual[s]' (the typo will have to be fixed in a subsequent version of FRBR<sub>oo</sub>); groups are implicitly understood as covering families as well, but this point can be made explicit through a statement such as 'including families' in a subsequent version of FRBR<sub>oo</sub>.*

21) R3 is realised in: Is this a shortcut for F1.R19i.F28.R17.F2?

*>> Technically, no, because the range of R3 is realised in (realises) is F22 Self-Contained Expression, and the range of R17 created (was created by) is F2 Expression, which is the superclass for both F22 Self-Contained Expression and F23 Expression Fragment. But R3 could be defined as a subproperty of that shortcut.*

22) Relation naming (present vs past tense): Some relations have name in present tense (R6 carries / is carried by) while others are in past tense (R17 created / was created by). Is there a particular naming convention here?

*>> Yes. The same naming convention is used as in CIDOC CRM; see version 6.0, January 2015, p. xiv: 'Properties with the character of states are named in the present tense, such as "has type", whereas properties related to events are named in past tense, such as "carried out"'. This sentence will be repeated from CIDOC CRM in a subsequent version of FRBR<sub>oo</sub>.*

23) MARC dialects in examples: In the definitions of R36-R39 you don't specify which MARC dialect you use for your examples.

*>> True. Once again, it does not really matter, as the point in such examples is not so much to show MARC statements as such, as to show data such as it was produced and is stored. It could as well be EAC or Dublin Core, for that matter, or (hopefully in the future) an RDF ontology based on FRBR<sub>oo</sub>. However, this piece of information can be added in a subsequent version of FRBR<sub>oo</sub>.*

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*>> Thanks for reviewing and commenting, Lars!*

## Joint Steering Committee for Development of RDA

The Joint Steering Committee for Development of RDA (JSC) welcomes the opportunity to comment on version 2.2 of FRBROO.

In general, the JSC finds the FRBROO model to be an elegant, well thought-out extension to the CIDOC CRM model which will support the description of and access to bibliographic and related resources. This represents a significant development of the FRBRer models on which RDA is based, and the JSC expects that version 2.2 of FRBROO will be a useful tool for the future development of RDA.

The JSC has a number of specific comments on the text:

The figures have their local folder path as a "tool tip" which appears when the mouse hovers over the figure. This is distracting and should be removed if possible (a PDF artefact?).

*>> We'll strive to fix that in a subsequent version of FRBROO.*

The "comments" lists after some figures have inconsistent layouts, using dashes or indents to delineate individual items.

*>> We'll strive to fix that in a subsequent version of FRBROO.*

The arrows indicating "sub-class" links in the figures use inconsistent graphics, some solid black, some hatched.

*>> We'll strive to fix that in a subsequent version of FRBROO.*

p.18, section 1.3, 2nd paragraph: The meaning of "KOS" is not explained. The only place in FRBROO where it is defined is in the scope note of F34. We think this should be defined here, at its first use.

p.19, section 1.3, final paragraph: The use of the Latin plural "themata" is less reader-friendly than "themas" and we suggest the English form of plural is used instead. The plural form appears only one other time in the text, on p.131.

*>> We'll strive to fix that in a subsequent version of FRBROO.*

p.20, section 2.1.1, comment e):The latter relationship "F1 Work R2.1 has type E55 Type [of derivation]" is missing from Figure 6.

*>> We'll strive to fix that in a subsequent version of FRBROO.*

p.21, section 2.1.1, comment h), fourth bullet : The relationship "F19 Publication Work R3 is realised in F24 Publication expression" is missing from Figure 6.

*>> We'll strive to fix that in a subsequent version of FRBROO.*

p.23, section 2.1.3, "Editorial product", first bullet: The reference should be to Figure 5 (not Figure 2)?

*>> Yes.*



p.23, section 2.1.3, "Editorial product", second bullet: The relationship is in this figure, but without the P165 label.

*>> Actually, the relationship is completely missing in the figure. The (double) arrow is simply an indication that F24 Publication Expression is a subclass of F2 Expression. A (simple) arrow should be added to the figure in order to show the P165 property from E24 to E2.*

p.27, 2.1.7.: "Works realised using the photographic medium are particular, in that their essence mostly resides ..." - words missing after "particular"?

*>> Actually no word is missing, it's just poor English, as written by a non-native speaker. Would the following rephrasing make more sense to a native English-speaker? 'Works realised using the photographic medium have a particularity: their essence mostly resides...'*

p.30, section 2.5: second paragraph, fifth bullet says: "Classes that appear in more than one position in the class hierarchy as a result of multiple inheritance are shown in an italic typeface." However, the first occurrences are not shown in italics. Shouldn't italics be applied for every occurrence?

*>> The convention used here is exactly the same as in the CIDOC CRM Definition, although the explanation is unclear. The first occurrence of a class is in roman typeface, only the subsequent ones are in italics. The explanation will be reworded in both FRBR<sub>00</sub> and CIDOC CRM.*

p.33-36, section 2.5.2: Different fonts and font sizes seem to have been used, with no explanation. They appear to represent the different sources of the classes (FRBR vs. CIDOC CRM), but because the numbering is different and the FRBR classes are in bold, it does not seem to be necessary to also use multiple fonts and sizes. The overall effect is distracting.

*>> An introductory text will be added in a subsequent version of FRBR<sub>00</sub>.*

p.37, section 2.5.3: It is a bit confusing that the same label (without the numbering) is used for different properties. We note that the FRBR<sub>00</sub> namespace labels are disambiguated, and suggest using similar labels in the FRBR<sub>00</sub> text would be clearer.

*>> The actual identification of each property lies in its number rather than its label. Identical labels, both in CIDOC CRM and FRBR<sub>00</sub>, are actually a deliberate feature, whenever we do not perceive any restriction in meaning.*

p.40-42, section 2.5.4: As with section 2.5.2, the use of multiple fonts and font sizes is distracting.

p.43, sixth bullet: This explains that the "Examples" section contains "a bulleted list", but the actual examples listed are not bulleted. (They are bulleted in section 4.3, however.)

*>> This sentence was repeated from CIDOC CRM such as it stands there. It will be reworded.*

p.49, F9 Place: The reasons why this is scoped "in particular on the surface of the Earth", and the relationship with E27 Site, are unclear.

*>> Both remarks have more to do with CIDOC CRM than FRBR<sub>00</sub>, they will therefore be transmitted to the CIDOC CRM SIG. E27 is not a FRBR<sub>00</sub> class.*

p.50, F12 Nomen, first "Murders in the rue Morgue" example: "(to put the image of the formula)" should be deleted?.

*>> Yes, it was only meant as an internal reminder of what was to be done after a meeting. Thanks for spotting it.*

p.51, F13 Identifier: The "Rite of spring example" has no explanation of what rules are used to formulate the Nomen. Note that, as of April 2015, this example does not conform to RDA; the rules for the example are AACR2.

*>> This piece of information will be introduced in a subsequent version of FRBR<sub>oo</sub>.*

p.52, F15 Complex Work, 3rd paragraph of the scope note: "Thus, derivations such as translations are regarded as belonging to the same Complex Work, even though in addition they constitute an Individual Work themselves." We find this confusing, as the model generally treats translations as Expressions.

*>> No, it is the FRBR<sub>ER</sub> model that treats translations as Expressions (or, to be more rigorous, that allows librarians to continue to regard translations as Expressions; FRBR<sub>ER</sub> simply defines empty shells, such as 'Work' and 'Expression', for rule-makers to pour into those empty shells whatever they deem appropriate). FRBR<sub>oo</sub> introduces a distinction between the text of a translation (a collection of signs, therefore an instance of F22 Self-Contained Expression) and the collection of concepts expressed in a translation (an instance of F14 Individual Work). Any translation implies an individual work, but you need not declare it explicitly. Ideally, the collection of concepts conveyed by a translation should be rigorously identical with the collection of concepts conveyed by the original text; but anyone who has ever tried to produce a translation of even the simplest text knows that this is impossible. Rights societies regard translations as works in their own right, and this has sometimes led to misunderstandings between our two communities; the FRBR<sub>oo</sub> model makes it possible for the library community to dialogue with the rights community, which was impossible with FRBR<sub>ER</sub>. The notion that a French rendition of Hamlet is 'just' an expression of a merely-conceptual-not-even-English 'Hamlet work' is modelled in FRBR<sub>oo</sub> through the following chain of properties: F15 Complex Work{the concept of Shakespeare's play Hamlet} R10 has member (is member of) F14 Individual Work{the collection of concepts in a given French rendition of Shakespeare's play Hamlet} R9 is realised in (realises) F22 Self-Contained Expression{the text of a given French rendition of Shakespeare's play Hamlet}.*

p.52, F16 Container Work: The scope note includes "instrumentation to music scores". The act of "arrangement" with respect to music may result in an alteration to an existing work, or even a new work. The scope note should make it clear that use of this Class is restricted to instrumentation that does not alter the score, or perhaps the example should be removed or replaced.

*>> Yes, this wording is admittedly ambiguous. What was meant is actually the notion of performing a musical work. This scope note will be reworded in a subsequent version of FRBR<sub>oo</sub>.*

p.56, F22 Self-Contained Expression: Would an example for musical sketches be useful? Perhaps OCLC #78680701 could be used as the basis for an example:

100 1 Schoenberg, Arnold, †d 1874-1951.  
240 10 Quartets, †m strings †n (1926 Mar.) †k (Sketches)  
245 00 [Sketches and rows for a fragment of a string quartet / †c by Arnold Schoenberg].

260 ꞛ [1926].

300 2 leaves of ms. music ; ꞛ 25.8 x 34.7 cm.

500 Holograph sketches and rows.

500 The sketches are written in black ink on paper with 15 printed staves. None of the sketches are to be found in the 1st draft.

*>> This example can be considered for a subsequent version of FRBR<sub>00</sub>.*

p.64, F40 Identifier Assignment: Here, and elsewhere in FRBR<sub>00</sub>, the term "uniform title" is used without a definition. There are brief explanations of "uniform" title and heading in FRBRer. Is this terminology to be retained in the consolidated FR model? The Goethe example says that an "author-title heading" is a uniform title; is this correct? The relationships between "controlled access point", "uniform title", "author-title heading", etc. are unclear; cf R8 consists of (forms part of).

*>> An updated version of the model definition will only use the phrase 'controlled access points'.*

p.67, F50 Controlled Access Point: The spacing artefacts arising from right-justification of the examples are particularly bad, and very distracting. It might be better to avoid using justification in any of the examples; there are distracting instances in other sections.

*>> This will be fixed.*

p.69, fifth bullet: Indicates the use of the phrase "Is covered by shortcut" in the following text. However, the phrase is used only once, although shortcuts are noted in several scope statements. It would be better to put all shortcut references in separate, labelled sections. Also, the terminology is inconsistent in the text as a whole: "shortcut" in the main, but also "short cut" and "short-cut". See also comment for p.94.

*>> There is an important ontological difference between the shortcuts that are mentioned in the scope notes and the shortcuts mentioned at the same level as 'Equal to' and 'Subproperty of'. The purpose of the latter is to show how FRBR<sub>00</sub> as a model relates to CIDOC CRM; FRBR<sub>00</sub> is an extension of CIDOC CRM because any single class of it is related in some way to at least a CIDOC CRM class, and any single property of it is related in some way to at least a CIDOC CRM property. Shortcuts mentioned in scope notes are more 'accidental' and less 'essential'.*

*As to the spelling of 'shortcut', of course it will be standardised throughout the document.*

p.69, tenth bullet: refers to examples in bulleted lists, but bullets are not used in the examples lists.

*>> This was reproduced from the CIDOC CRM document. It will be fixed.*

p.92, R52 used rule (was the rule used in): It seems strange to refer to AACR2 examples (here and elsewhere in the text), but to have no RDA examples, especially given the relationship between RDA and FRBR. For this property, the last example (currently a second AACR2 example) could be changed to:

Assigning the controlled access point 'Guillaume, de Machaut, approximately 1300-1377' (F40) R52 used rule RDA 9.19 (F43)

>> *This portion of the model was developed even before RDA existed, and has not been updated since then. The RAK-Musik example will also become obsolete very soon. The RDA example will be introduced in a subsequent version of FRBR<sub>00</sub>.*

p.94, R57 is based on (is basis for): This property, and several on p.95, uses the phrase "Shortcut of" instead of "Is covered by shortcut" as indicated on p.69.

>> *The phrase 'Shortcut of:' is correct here; but we agree that it is missing on p. 69. This omission will be fixed, thanks for spotting it.*

p.98: CLP2 should have type (should be type of): This has a heading for "Subproperty of", but with no content. We assume that content should be added, or this line removed.

>> *As a matter of fact, all 'CLP' properties on p. 98-101, and the one and only 'CLR' property on p. 101, have that same feature. Originally, there had been an intention to record how these categorical properties relate to non-categorical properties in CIDOC CRM (or FRBR<sub>00</sub>, in the case of the 'CLR' property), but eventually these spaces were left blank. This will be fixed.*

p.103-121, Section 3.3: Entries in the Mapping column containing F50 Controlled Access Point sometimes have a Condition "used as part of an identifier", and sometimes not. This seems to be inconsistent.

>> *No, it is not. The idea is that, both in cataloguing rules and the original FBRR<sub>ER</sub> model, there is a certain amount of ambiguity as to whether a given piece of information is to be provided per se and exploited for itself, independently of the language in which it can be expressed, or just as text (in a given language) to be used as a segment within a controlled access point. For instance, 'medium of performance' is an interesting information that can be requested as such by users (e.g., 'I'd like to see all the scores you have for English horn'); but the appellation for a given medium of performance is to be used as part of the controlled access point for musical works with a generic title (e.g., in a French catalogue, 'Concertos. Cor anglais, orchestre'). In practice, these two aspects of the same information element are not dealt with in the same way: we use language-independent codes (e.g., 'wf') to allow users to request for a given medium of performance in their own language (which can be different from the language of cataloguing), and language-biased statements, in the language of cataloguing (e.g., 'cor anglais', 'corno inglese', 'Englischhorn'), within controlled access points for musical works. Therefore, the same FBRR<sub>ER</sub> attribute cannot be mapped the same way if it is intended to be used as the 'thing' itself, or as a linguistic segment that refers to that 'thing' within a standardised title.*

*However, it is true that the condition 'used as part of an identifier' is missing for the second occurrence of '4.6.3 Person: Title of Person' on p. 119, and this will be fixed. As to '4.6.4 Person: Other designation associated with the person', there is no need to add the condition statement 'used as part of an identifier', since the only purpose for that information element is to be used as part of a controlled access point; it is not an information element that has any value per se.*

p.104, entries for 4.2.5: The Condition includes the Mapping; this is inconsistent with other Conditions.

>> *This will be fixed.*

p.104, first entry for 4.2.8: The Mapping should be F1 Work P2 has type E55 Type {Medium of performance}?

*>> Perhaps this first entry should be dropped. It is useless and might even prove misleading. At any rate, it requires more thinking.*

p.106, entry for 4.3.17: The convention of using "N ..." at the end of a E55 Type mapping is not explained, here or elsewhere (see p.115 for more examples).

*>> We believe it can be easily understood. If it is really a problem, we can consider replacing 'N ...' with 'so and so'.*

p.106, first entry for 4.3.20: The Mapping should be "F2 Expression P2 has type E55 Type {Presentation technique}"?

*>> Yes. This will be fixed. The original idea was to be as generic as possible.*

p.106, entry for 4.3.21: The mapping should be "F2 Expression P2 has type E55Type {Representation of relief}"?

*>> Yes. This will be fixed. The original idea was to be as generic as possible.*

p.122, entry for 5.3.1.2: "SKOS" is not defined anywhere in FRBROO.

*>> We don't believe it has to. Anyone knows what SKOS is.*

p.122, entry for 4.2.2.: The Comment includes symbols that are not explained anywhere, and the box character also indicates an encoding problem. Logic symbols also appear elsewhere, for example p.130 entry for 3.4.

*>> They were used as some kind of shorthand, in order to avoid too lengthy an explanation in such a tight table. We don't understand what you mean by 'box character'.*

p.123-142: Variations in font size, and the arbitrary splitting of words, without hyphenation, over two lines is distracting.

*>> We cannot afford to hire a graphic designer. We'll strive to do our best to improve the layout of this Section.*

p.125, entry for Person: Profession/occupation: The Mapping text has an extraneous blank line between the two items.

*>> OK.*

p.126, first and second entries: The Mapping refers to "as above". This is ambiguous, and would be improved by a specific reference to the Pseudonymous relationship".

*>> OK.*

p.128: Contains an extraneous blank row.

*>> OK.*

p.130, entry for Work: Place of origin of the work: The Comment that the Place of origin of a cinematographic work is tied to the place of citizenship of the producer seems inappropriate. Such a work does not have a single creator, so why is producer singled out? The FRAD definition "The

country or other territorial jurisdiction or cultural area from which the work originated" does not seem to justify this: the Work may "originate" in the mind of the film director or producer, for example.

*>> The nationality of cinematographic works has been the topic for many debates, especially since there have been more and more international co-productions. Depending on the legal environment, various answers are given. But we agree that this sentence has more to do with cataloguing rules than with a high-level conceptual model.*

p.133, entry for 4.13: The Comment uses the acronym CAP, but the expansion is not given here or anywhere else in the text. CAP is then used frequently in subsequent entries.

*>> This will be fixed.*

p.133, last entry: The Comment seems to be missing text following the word "Includes". The final part of the Comment on the following page seems to be an editorial note.

*>> Yes. Actually this portion of the Table was left unfinished. This will be fixed.*

p.135, last two entries, and following: There are vertical alignment problems which can be very confusing.

*>> This will be fixed.*

p.145-146: Again, variations in font and font size are distracting, and appear to be redundant when bold is used to make distinctions.

p.155, E24 Physical Man-Made Thing: Some text is grayed-out. It seems to indicate that FRBRoo does not contain this definition, which comes from CIDOC CRM, but this is not explained.

*>> This will be fixed.*

p.173, E77 Persistent Item, third paragraph of scope note: There is a stray dash before the semicolon on the first line.

*>> The same flaw is to be found in the original CIDOC CRM text. Your remark will be passed on to the CIDOC CRM SIG for them to fix that point.*

p.174, E84 Information Carrier: There is a Properties section but nothing is listed.

*>> This will be fixed.*

p.198, Bibliography: The first three citations are out of alphabetic sequence with the others. Is there a reason why these are cited first?

*>> The first two citations will be moved to where they belong in alphabetic order. The third one will be cited first, as it is the main, and constantly updated, source of information for anyone interested in the model.*

p.209: There is yellow highlighting on this page.

*>> This reflects an actual state of the text in the past. The very point of this Section is to show obsolete states of the text, with all their flaws and imperfections.*

The JSC hopes that IFLA and the FRBR Review Group will find these comments helpful.

Gordon Dunsire

Chair, Joint Steering Committee for Development of RDA

*>> Thanks for reviewing and commenting, Gordon!*