



International Federation of
Library Associations and Institutions

Transition Mappings

User Tasks, Entities, Attributes, and Relationships
in FRBR, FRAD, and FRSAD mapped to their
equivalents in the FRBR-Library Reference Model

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Transition Mappings

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Overview of differences between FRBR-LRM and the FRBR-FRAD-FRSAD models

1. User Tasks

FRBR-LRM is focused around five generic user tasks: *find*, *identify*, *select*, *obtain*, *explore*. As with FRBR and FRSAD, the FRBR-LRM model is primarily concerned with the data and functionality required by end-users (and intermediaries working on behalf of end-users) to meet their information needs. The point-of-view of the FRAD model differed somewhat, as FRAD considered both end-user needs and library staff administrative uses in its definition of user tasks; this is reflected in the FRAD user tasks *contextualize* and *justify*.

The first four FRBR-LRM tasks (*find*, *identify*, *select*, *obtain*) are defined as generalizations of the four FRBR tasks of the same names. The tasks *find* and *identify* are also generalized to cover the FRAD and FRSAD tasks of the same names; *select* is generalized so as to include the FRSAD *select* task as well. The *explore* task is drawn from FRSAD, but is defined in FRBR-LRM so as to include aspects drawn from the FRAD task *contextualize*. The other aspects of the FRAD task *contextualize* are considered out of scope in FRBR-LRM. The final task from FRAD (*justify*), as it is a task relating to the work of library staff, is out of scope in FRBR-LRM.

2. Entities

FRBR-LRM defines only 11 entities in total. Unlike the previous “flat” entity structures, in FRBR-LRM entities are in a superclass/subclass structure which permits the transfer of attributes and relationships from the superclass to its subclasses. The FRSAD entity *thema* is generalized and renamed *res* (Latin for “thing”) to serve as the top entity in the hierarchy, the superclass of all other entities. Entities that are not declared in the superclass/subclass structure are all disjoint.

The FRBR group 1 entities (*work*, *expression*, *manifestation*, *item*) are retained, although the definitions are reworked to avoid using one entity in the definition of another, to avoid the term “alpha-numeric” in the definition of *expression* (viewed as not including ideographic writing systems), to clarify the nature of the *manifestation* as a set. A new superclass entity *agent* is defined to encompass the FRBR group 2 entities (*person*, *corporate body*) and the FRAD entity *family*. The entity *person* is retained using a rewording of the FRBR definition (not the FRAD definition). The new entity *collective agent* encompasses the *family* and *corporate body* entities from FRAD (and FRBR). These former entities are deprecated, but may be viewed as “types”. The FRBR group 3 entities (*concept*, *object*, *event*, *place*) are deprecated. The term *place* is reused for a new general *place* entity, and a new time-span *entity* is defined.

The FRAD entity *name* and the FRSAD entity *nomen* are merged, into a single entity under the term *nomen* with a generalized definition. The distinction between a *res* and its *nomen* is implemented to its full potential. The FRAD entities *identifier* and *controlled access point* are deprecated, but may be viewed as “types” of *nomen*.

The final two FRAD entities, *agency* and *rules*, served in the modelling of library-internal processes for the assignment of controlled access points and are deemed outside of the functional scope of the FRBR-LRM model.

3. Attributes

FRBR-LRM includes 37 attributes, relating to 10 entities (the entity *collective agent* has no attributes). Properties are declared as attributes only when the target of the property is not an instance of any of the entities in the model. Thus all attributes (generally named *Place of* or *Date of*) that could be recast as relationships involving the FRBR-LRM entities *place* and *time-span* are replaced by the mechanism of creating subtypes of the generic relationships (LRM-R15 and LRM-R16) to these entities. Similarly, the appellation relationship is preferred in all cases which involve linking a specific subtype of the entity *nomen* to any other entity. The result is that FRBR attributes such as Title of *work*, Manifestation identifier, Name of *person*, Term for the *concept*, and FRAD attributes such as Name of agency, Agency identifier are all modelled as instances of the appellation relationship (LRM-R13). FRBR-LRM models the subject of *works* as a relationship (LRM-R12), replacing the FRAD *work* attribute Subject of the *work* and the FRBR *work* attributes Coordinates and Equinox (Cartographic Work). Additionally, the FRAD Affiliation of a *person* attribute implies membership and so is modelled using the membership relationship (LRM-R28).

Two attributes are declared for the FRBR-LRM entity *res*: Category (LRM-A1) and Note (LRM-A2) which generalize the FRSAD attributes Type of *thema* and Scope note defined for the entity *thema*. As *res* is a superclass of all other entities in FRBR-LRM, most *Type of* and note-like attributes for other entities are merged into these general attributes.

FRBR attributes for group 1 entities (*work*, *expression*, *manifestation*, *item*) are considerably reduced in FRBR-LRM (to 18 attributes, LRM-A3 through LRM-A20) through the application of the mechanism of preferring relationships, and through generalization to the attributes of the *res* entity. Additionally, only the most essential, commonly-found attributes are explicitly declared in FRBR-LRM. A number of highly-specialized or class-of-material-specific attributes, particularly for *expression* and *manifestation*, are omitted; their definition is relegated to those implementations that find these attributes relevant. Only the attribute Category (LRM-A3) is defined in FRBR-LRM for the entity *work*; it subsumes a number of FRBR *work* attributes whose essence is to provide subtyping mechanisms for *works* (such as Form of *work*, Intended termination). Similarly, the Category attribute is defined for the entity *expression* (LRM-A4), subsuming such FRBR *expression* attributes as Form of *expression*, Extensibility, and Revisability. The FRBR *expression* attribute Extent is retained (LRM-A6), as is Use restrictions (renamed Rights, LRM-A8).

FRBR-LRM adopts a new mechanism involving the new *expression* attribute Representativity (LRM-A5) and its linkage to several expression attributes (Intended audience, Language, Key, Medium of performance, Scale, LRM-A7 and LRM-A9 through LRM-A12) whose values for the *expression* deemed representative are significant for the identification of *works*. In FRBR these attributes were declared for *works* or *expressions*, and in some cases for both of these entities.

The essence of a great many of the FRBR attributes for the *manifestation* entity is that they consist of statements transcribed from a self-describing *manifestation*. In FRBR-LRM a single Manifestation statement attribute (LRM-A16) is declared which subsumes all these attributes, which would most likely be implemented as subtypes of this attribute. Other attributes serve to categorize *manifestations* in different ways; in FRBR-LRM the Category of carrier attribute (LRM-A13) incorporates FRBR *manifestation* attributes such as Form of carrier, Physical medium, and Capture mode. The Extent attribute (LRM-A14) is retained and merged with Dimensions. Several FRBR attributes are merged

into the Access conditions (LRM-A17) attribute, while Access restrictions is renamed Rights (LRM-A18). Intended audience, defined only for *works* in FRBR, is also defined (LRM-A15) for the entity *manifestation*.

The *item* attribute Location (LRM-A19) is retained, as is Access restrictions which is renamed Rights (LRM-A20). Provenance and ownership attributes are modelled through the ownership relationship to *agents* (LRM-R10). Certain FRBR and FRAD item attributes (Exhibition history, Treatment history, Scheduled treatment) concern library administrative metadata and are deemed out of scope for FRBR-LRM.

Due to the superclass/subclass structure of the entities in FRBR-LRM, an attribute defined for a superclass entity (such as *agent*) can automatically be applied to the subclass entities (in this case *person*, *collective agent*) without requiring separate declaration in the model. This permits the merger of the FRAD attributes Contact information, Language, Field of activity for *person*, *family*, and *corporate body* into attributes defined for the entity *agent* (LRM-A21 through LRM-A23). However, the attribute Profession / Occupation (LRM-A24) remains defined for the entity *person* as it cannot logically apply to *collective agents*. The FRAD attribute Gender of person, although correctly placed with the entity *person*, is not defined in FRBR-LRM as it is not seen as an essential attribute for most implementations.

The FRSAD attributes for the entity *nomen* are merged, when possible, with the FRAD attributes for the entities *name*, *identifier*, and *controlled access point*, resulting in nine FRBR-LRM attributes for the entity *nomen* (LRM-A25 through LRM-A33).

Finally, new attributes are defined for the FRBR-LRM entities *place* (LRM-A34 and LRM-A35) and *time-span* (LRM-A36 and LRM-A37).

4. Relationships

FRBR-LRM declares 34 relationships (which explicitly have both forwards and reverse names, when relevant). Unlike the previous “flat” relationship structure, FRBR-LRM defines a new “top” relationship, *res* is associated with *res* (LRM-R1); all other relationships are sub-types of this relationship. Relationships are streamlined by declaring the domains and ranges at the highest superclass possible, rather than repeating the same relationships for multiple entities. This applies particularly to relationships involving the FRBR group 2 entities, which in FRBR-LRM are subclasses of the new entity *agent*.

The basic FRBR relationship structure is retained, including the three group 1 primary relationships (LRM-R2 to LRM-R4), the group 2 *agent* relationships (LRM-R5 through LRM-R11), and the *work* has-subject relationship (LRM-R12). However, the subject relationship is declared by using the entity *res*, and the group 2 responsibility relationships are declared using the entity *agent*. FRBR-LRM provides new relationships for responsibility for the creation (LRM-R7) and distribution (LRM-R8) of *manifestations*, and the modification (LRM-R11) of *items*, which can be used to account for *item* reconfiguration as well as other modifications.

The FRAD and FRSAD appellation relationship is retained using entities *res* and *nomen* (LRM-R13), while the *nomen* assignment relationship (LRM-R14) generalizes several FRAD relationships

concerning the creating or assignment of FRAD entities *controlled access point* and *identifier*. The FRAD is-basis-for relationships are merged into a general *nomen* derivation relationship (LRM-R19).

The FRBR additional WEMI relationships are retained, although in most cases renamed, merged or generalized (LRM-R20 through LRM-R27, LRM-R31 and LRM-R32). In FRBR certain relationships are declared multiple times (those appearing in tables 5.1 (Work-to-Work), and 5.4 (Expression-to-Expression, different Works), and 5.6 (Expression-to-Work)); in FRBR-LRM their equivalents are declared only once (between *works*), as the link to specific *expressions* can be made with a path that also uses LRM-R2 (*expression* realizes *work*), and an implementation can declare a shortcut if desired. Similarly, the reproduction relationship (LRM-R26) is declared only between *manifestations*, as the link to a specific *item* used as the source of a reproduction can be made using LRM-R4 (*item* exemplifies *manifestation*), and it is considered that the process of reproduction always creates a new *manifestation*, even when that *manifestation* consists only of a single *item*.

FRAD relationships between *persons* were analyzed into those relating to the *nomens* of *persons* (all these are subtypes of the appellation relationship, LRM-R13) and those between *persons* in the FRBR-LRM definition. FRAD relationships between *names* and between *controlled access points* are all modelled as specific subtypes of the *nomen* equivalence relationship (LRM-R17) retained from FRSAD. The *nomen* whole-part relationship (LRM-R18) is also retained from FRSAD.

FRBR-LRM declares three relationships among the entities *agent* and its subclasses *person* and *collective agent*. The membership relationship (LRM-R28) links an *agent* to a *collective agent*, and includes the membership of a *person* in a family (a type of *collective agent*) or corporate body (another type of *collective agent*) as declared in FRAD. Whole-part (LRM-R29) and successor (LRM-R30) relationships are declared between *collective agents*, covering the FRAD *corporate body* hierarchical and sequential relationships and the *family* genealogical relationships. FRAD additionally defined founding and ownership relationships specifically between entities *family* and *corporate body*; neither of these are declared in FRBR-LRM.

Finally, new relationships are declared involving the new entities *place* and *time-span*: whole-part relationships (LRM-R33 and LRM-R34), and the general association to *res* relationships (LRM-R15 and LRM-R16) which are designed to be subtyped for specific types of associations and subsume many former *Date of* and *Place of* attributes.

Transition mapping

User Tasks in FRBR, FRAD, FRSAD and their equivalent in FRBR-LRM

FRBR	definition	FRAD	definition	FRSAD	definition	FRBR-LRM	definition
Find	to find entities that correspond to the user's stated search criteria (i.e., to locate either a single entity or a set of entities in a file or database as the result of a search using an attribute or relationship of the entity)	Find	Find an entity or set of entities corresponding to stated criteria (i.e., to find either a single entity or a set of entities using an attribute or combination of attributes or a relationship of the entity as the search criteria); or to explore the universe of bibliographic entities using those attributes and relationships.	Find	one or more subjects and/or their appellations, that correspond(s) to the user's stated criteria, using attributes and relationships	Find	To search on any relevant criteria in order to bring together information about one or more resources of interest
Identify	to identify an entity (i.e., to confirm that the entity described corresponds to the entity sought, or to distinguish between two or more entities with similar characteristics)	Identify	Identify an entity (i.e., to confirm that the entity represented corresponds to the entity sought, to distinguish between two or more entities with similar characteristics) or to validate the form of name to be used for a controlled access point.	Identify	a subject and/or its appellation based on their attributes or relationships (i.e., to distinguish between two or more subjects or appellations with similar characteristics and to confirm that the appropriate subject or appellation has been found)	Identify	To clearly understand the nature of the resources found and to distinguish between similar resources
Select	to select an entity that is appropriate to the user's needs (i.e., to choose an entity that meets the user's			Select	a subject and/or its appellation appropriate to the user's needs (i.e., to choose or reject	Select	To determine the suitability of the resources found and to choose (by accepting or

FRBR	definition	FRAD	definition	FRSAD	definition	FRBR-LRM	definition
	requirements with respect to content, physical format, etc., or to reject an entity as being inappropriate to the user's needs)				based on the user's requirements and needs)		by rejecting) specific resources
Obtain	to acquire or obtain access to the entity described (i.e., to acquire an entity through purchase, loan, etc., or to access an entity electronically through an online connection to a remote computer)					Obtain	To access the content of the resource
		Contextualize	Place a person, corporate body, work, etc., in context; clarify the relationship between two or more persons, corporate bodies, works, etc.; or clarify the relationship between a person, corporate body, etc., and a name by which that person, corporate body, etc., is known (e.g., name used in religion versus secular name).	Explore	relationships between subjects and/or their appellations (e.g., to explore relationships in order to understand the structure of a subject domain and its terminology)	Explore	To use the relationships between one resource and another to place them in a context
		Justify	Document the authority data creator's reason for choosing the name or form of name on which a controlled access point is based.			<i>(out of scope)</i>	(The FRAD: <i>Justify</i> task is not an end-user task)

Transition mapping

Entities in FRBR, FRAD, FRSAD and their equivalent in FRBR-LRM

- In the FRBR, FRAD, FRSAD columns, the IFLA Namespace ID follows the name of the entity
- Classes frad:C1010 (Bibliographic Entity) and frad:C1011 to frad:C1013 (Name of a Corporate Body, Person, Family, Work) defined in the FRAD namespace are not represented in this table as these are not officially entities in the FRAD model and are to be considered deprecated
- In the FRBR-LRM column, the name of the entity is followed by its number within the model

FRBR	FRAD	FRSAD	Result	FRBR-LRM
<p>Work (frbrer:C1001)</p> <p>A distinct intellectual or artistic creation</p>	<p>Work</p> <p>A distinct intellectual or artistic creation (i.e., the intellectual or artistic content)</p>	<p>Work (as FRBR)</p>	Retained	<p>Work (LRM-E2)</p> <p>The intellectual or artistic content of a distinct creation</p>
<p>Expression (frbrer:C1002)</p> <p>The intellectual or artistic realization of a <i>work</i> in the form of alpha-numeric, musical, or choreographic notation, sound, image, object, movement, etc., or any combination of such forms</p>	<p>Expression (as FRBR)</p>	--	Retained	<p>Expression (LRM-E3)</p> <p>A distinct constellation of signs conveying intellectual or artistic content</p>
<p>Manifestation (frbrer:C1003)</p> <p>The physical embodiment of an <i>expression</i> of a <i>work</i></p>	<p>Manifestation (as FRBR)</p>	--	Retained	<p>Manifestation (LRM-E4)</p> <p>A set of all carriers that are assumed to share the same characteristics as to intellectual or artistic content and aspects</p>

FRBR	FRAD	FRSAD	Result	FRBR-LRM
				of physical form. That set is defined by both the overall content and the production plan for its carrier or carriers
Item (frbrer:C1004) A single exemplar of a <i>manifestation</i>	Item (as FRBR)	--	Retained	Item (LRM-E5) A physical object carrying signs resulting from a production process and intended to convey intellectual or artistic content
--	--	--	New	Agent (LRM-E6) An entity capable of exercising responsibility relationships relating to <i>works, expressions, manifestations</i> or <i>items</i>
Person (frbrer:C1005) An individual	Person An individual or a persona or identity established or adopted by an individual or group	--	Retained (as in FRBR)	Person (LRM-E7) An individual human being
--	--	--	New	Collective Agent (LRM-E8) A gathering or organization of <i>persons</i> bearing a particular name and acting as a unit
--	Family (frad:C1003) Two or more persons related by birth, marriage, adoption, civil	--	Deprecated as an entity, may be used as a type of <i>collective</i>	--

FRBR	FRAD	FRSAD	Result	FRBR-LRM
	union, or similar legal status, or who otherwise present themselves as a family		<i>agent</i>	
Corporate Body (frbrer:C1006) An organization or group of individuals and/or organizations acting as a unit	Corporate Body (frad:C1003) An organization or group of persons and/or organizations identified by a particular name acting as a unit	--	Deprecated as an entity, may be used as a type of <i>collective agent</i>	--
--	--	Thema (frsad:C1001) Any entity used as a subject of a <i>work</i>	Generalized	Res (LRM-E1) Any entity in the universe of discourse
Concept (frbrer:C1007) An abstract notion or idea	Concept (as FRBR)	--	Deprecated	--
Object (frbrer:C1008) A material thing	Object (as FRBR)	--	Deprecated	--
Event (frbrer:C1009) An action or occurrence	Event (as FRBR)	--	Deprecated	--
Place (frbrer:C1010) A location	Place (as FRBR)	--	Redefined (Deprecated, term repurposed)	Place (LRM-E10) A given extent of space

FRBR	FRAD	FRSAD	Result	FRBR-LRM
--	--	--	New	Time-span (LRM-E11) A temporal extent having a beginning, an end and a duration
--	Name (frad:C1006) A character, word, or group of words and/or characters by which an entity is known	Nomen (frsad:C1002) any sign or sequence of signs (alphanumeric characters, symbols, sound, etc.) that a <i>thema</i> is known by, referred to, or addressed as	Merged	Nomen (LRM-E9) A designation by which an entity is known
--	Identifier (frad:C1009) A number, code, word, phrase, logo, device, etc., that is associated with an entity, and serves to differentiate that entity from other entities within the domain in which the <i>identifier</i> is assigned	--	Deprecated as an entity, may be used as a type of <i>nomen</i>	--
--	Controlled Access Point (frad:C1001) A name, term, code, etc., under which a bibliographic or authority record or reference will be found	--	Deprecated as an entity, may be used as a type of <i>nomen</i>	--

FRBR	FRAD	FRSAD	Result	FRBR-LRM
--	<p>Rules (frad:C1007)</p> <p>A set of instructions relating to the formulation and/or recording of <i>controlled access points</i> (authorized forms, variant forms or references, etc.)</p>	--	Out of scope	--
--	<p>Agency (frad:C1008)</p> <p>An organization responsible for creating or modifying a <i>controlled access point</i></p>	--	<p>Out of scope</p> <p>Any <i>agent</i> can fill this role for some <i>nomens</i></p>	--

Transition mapping
 Attributes in FRBR, FRAD and their equivalent in FRBR-LRM

Section 1 : Attributes of Works, Expressions, Manifestations, and Items

FRBR Attribute name (Section number) / Namespace ID / Definition	FRAD Attribute name / Namespace ID / Definition	Result	FRBR-LRM Attribute name / Definition / or Other mapping
WORK (4.2)	WORK (4.4)		WORK
Title of the work (4.2.1) (frbrer:P3001) The word, phrase, or group of characters naming the <i>work</i>	(not an attribute, appellation relationship)	Replaced by relationship	appellation relationship (LRM-R13)
Form of work (4.2.2) (frbrer:P3002) The class to which the <i>work</i> belongs	Form of work (=frbrer:P3002) A class to which the <i>work</i> belongs	Renamed	Category (LRM-A3) A type to which the <i>work</i> belongs
Date of the work (4.2.3) (frbrer:P3003) The date (normally the year) the <i>work</i> was originally created	Date of the work (=frbrer:P3003) The first date (normally the year) associated with the <i>work</i>	Replaced by relationship	<i>time-span</i> associated-with relationship (LRM-R16) sub-typed for a specific event related to the <i>work</i> (such as work creation)
Other distinguishing characteristic (4.2.4) (frbrer:P3004) Any characteristic that serves to differentiate the <i>work</i> from another <i>work</i> with the same title	Other distinguishing characteristic (=frbrer:P3004) Any characteristic that serves to differentiate the <i>work</i> from another <i>work</i> with the same title	Removed (an aspect of certain <i>nomens</i> for the <i>work</i> , not an attribute)	--
Intended termination (4.2.5) (frbrer:P3005)	--	Merged	Category (LRM-A3)

FRBR Attribute name (Section number) / Namespace ID / Definition	FRAD Attribute name / Namespace ID / Definition	Result	FRBR-LRM Attribute name / Definition / or Other mapping
A reflection of whether the <i>work</i> has been conceived as having a finite end or whether it is intended to continue indefinitely			(Termination intention is one possible categorization of a <i>work</i>)
Intended audience (4.2.6) (frbrer:P3006) The class of users for which the <i>Work</i> is intended	--	Relocated (linked to representative <i>expression</i>)	See Intended audience (LRM-A7), under <i>expression</i>
Context for the work (4.2.7) (frbrer:P3007) The historical, social, intellectual, artistic, or other context within which the <i>work</i> was originally conceived	--	Replaced by relationships <i>OR</i> Category attribute <i>OR</i> Note attribute	<i>place</i> associated-with relationship (LRM-R15) <i>OR</i> <i>time-span</i> associated-with relationship (LRM-R16) <i>OR</i> Category (LRM-A3), for an appropriate categorization <i>OR</i> Note (LRM-A2)
Medium of performance (Musical work) (4.2.8) (frbrer:P3059) The instrumental, vocal, and/or other medium of performance for which a musical <i>work</i> was originally intended	Medium of performance (=frbrer:P3059) The instrumental, vocal, and/or other medium of performance for which a musical <i>work</i> was originally conceived	Relocated (linked to representative <i>expression</i>)	See Medium of performance (LRM-A11), under <i>expression</i>
Numeric designation (Musical work) (4.2.9) (frbrer:P3060) A serial number, opus number, or thematic	Numeric designation (frad:P3051) A number assigned to the <i>work</i>	Replaced by relationship	appellation relationship (LRM-R13) (which may be of sub-type identifier)

FRBR Attribute name (Section number) / Namespace ID / Definition	FRAD Attribute name / Namespace ID / Definition	Result	FRBR-LRM Attribute name / Definition / or Other mapping
index number assigned to a musical <i>work</i> by the composer, publisher, or a musicologist			
Key (Musical work) (4.2.10) (frbrer:P3061) In tonal music, the set of pitch relationships that establishes a single pitch class as a tonal centre (e.g., D major). The key for a musical <i>work</i> is the key in which the <i>work</i> is originally composed	Key (=frbrer:P3061) The set of pitch relationships that establishes a single pitch class as a tonal centre for a musical <i>work</i>	Relocated (linked to representative <i>expression</i>)	See Key (LRM-A10), under <i>expression</i>
Coordinates (Cartographic work) (4.2.11) (frbrer:P3062) The degrees, minutes, and seconds of longitude and latitude, or the angles of declination and ascension that form the outer boundaries for the area represented in the cartographic image or object	--	Replaced by relationship	subject relationship (LRM-R12) The <i>place</i> that is the subject of the cartographic <i>work</i> has the attribute Location (LRM-A35)
Equinox (Cartographic work) (4.2.12) (frbrer:P3063) The year that serves as the point of reference for a celestial chart or model	--	Replaced by relationship	<i>time-span</i> associated-with relationship (LRM-R16)
(not an attribute, subject relationship)	Subject of the work (frad:P3050) The subject aspects of the <i>work</i> and its content	Replaced by relationship	subject relationship (LRM-R12)

FRBR Attribute name (Section number) / Namespace ID / Definition	FRAD Attribute name / Namespace ID / Definition	Result	FRBR-LRM Attribute name / Definition / or Other mapping
--	Place of origin of the work (frad:P3045) The country or other territorial jurisdiction or cultural area from which the <i>work</i> originated	Replaced by relationship	<i>place</i> associated-with relationship (LRM-R15) sub-typed for a specific event related to the <i>work</i> (<i>place</i> of origin)
--	History (frad:P3046) Information pertaining to the history of the <i>work</i> . Including title changes for continuing resources	Replaced by relationships <i>OR</i> Note attribute	<i>place</i> associated-with relationship (LRM-R15) <i>OR</i> <i>time-span</i> associated-with relationship (LRM-R16) <i>OR</i> relationships between <i>works</i> (such as successor relationship (LRM-R21) or transformation relationship (LRM- R24)) <i>OR</i> Note (LRM-A2)
EXPRESSION (4.3)	EXPRESSION (4.5)		EXPRESSION
Title of the expression (4.3.1) (frbrer:P3008) A word, phrase, or group of characters naming the <i>expression</i>	(not an attribute, appellation relationship)	Replaced by relationship	appellation relationship (LRM-R13)
Form of expression (4.3.2) (frbrer:P3009) The means by which the <i>work</i> is realized	Form of expression (=frbrer:P3009) The means by which the <i>work</i> is realized	Renamed and generalized	Category (LRM-A4) A type to which the <i>expression</i> belongs

FRBR Attribute name (Section number) / Namespace ID / Definition	FRAD Attribute name / Namespace ID / Definition	Result	FRBR-LRM Attribute name / Definition / or Other mapping
Date of expression (4.3.3) (frbrer:P3010) The date the <i>expression</i> was created	Date of expression (=frbrer:P3010) The date the <i>expression</i> was created	Replaced by relationship	<i>time-span</i> associated-with relationship (LRM-R16) sub-typed for a specific event related to the <i>expression</i> (expression creation)
--	--	New	Representativity (LRM-A5) A statement of whether the <i>expression</i> is regarded as representative for the <i>work</i> it realizes or not
Language of expression (4.3.4) (frbrer:P3011) The language in which the <i>work</i> is expressed	Language of expression (=frbrer:P3011) A language in which the <i>work</i> is expressed	Retained (linked to representative <i>expression</i>)	*Language (LRM-A9) A language used in the <i>expression</i>
Other distinguishing characteristic (4.3.5) (frbrer:P3012) Any characteristic of the <i>expression</i> that serves to differentiate the <i>expression</i> from another <i>expression</i> of the same <i>work</i>	Other distinguishing characteristic (=frbrer:P3012) Any characteristic of the <i>expression</i> that serves to differentiate the <i>expression</i> from another <i>expression</i> of the same <i>work</i>	Deprecated (an aspect of certain <i>nomens</i> for the <i>expression</i> , not an attribute)	--
Extensibility of expression (4.3.6) (frbrer:P3013) The expectation that the <i>expression</i> will have additional intellectual or artistic content added to it	--	Merged	Category (LRM-A4) (Intended extensibility is one possible categorization of an <i>expression</i>)

FRBR Attribute name (Section number) / Namespace ID / Definition	FRAD Attribute name / Namespace ID / Definition	Result	FRBR-LRM Attribute name / Definition / or Other mapping
Revisability of expression (4.3.7) (frbrer:P3014) The expectation that the intellectual or artistic content of the <i>expression</i> will be revised	--	Merged	Category (LRM-A4) (Intended revisability is one possible categorization of an <i>expression</i>)
Extent of the expression (4.3.8) (frbrer:P3015) A quantification of the intellectual content of the <i>expression</i>	--	Retained	Extent (LRM-A6) A quantification of the extent of the <i>Expression</i>
--	--	Relocated from work (linked to representative <i>expression</i>)	*Intended audience (LRM-A7) A class of users for which the <i>expression</i> is intended
Summarization of content (4.3.9) (frbrer:P3016) A summarization of the content of an <i>expression</i> is an abstract, summary, synopsis, etc., or a list of chapter headings, songs, parts, etc. included in the <i>expression</i>	--	Replaced by relationships <i>OR</i> Note attribute	subject relationship (LRM-R12) <i>OR</i> expression-derivation relationship (LRM-R25) (sub-typed abridgement) <i>OR</i> Note (LRM-A2)
Context for the expression (4.3.10) (frbrer:P3017) The historical, social, intellectual, artistic, or other context within which the <i>expression</i> was realized	--	Replaced by relationships <i>OR</i> Category attribute <i>OR</i>	<i>place</i> associated-with relationship (LRM-R15) <i>OR</i> <i>time-span</i> associated-with relationship (LRM-R16) <i>OR</i>

FRBR Attribute name (Section number) / Namespace ID / Definition	FRAD Attribute name / Namespace ID / Definition	Result	FRBR-LRM Attribute name / Definition / or Other mapping
		Note attribute	Category (LRM-A4), for an appropriate categorization <i>OR</i> Note (LRM-A2)
Critical response to the expression (4.3.11) (frbrer:P3018) The reception given to the <i>expression</i> by reviewers, critics, etc., as encapsulated in an annotation	--	Replaced by relationship <i>OR</i> Note attribute	subject relationship (LRM-R12) <i>OR</i> Note (LRM-A2)
Use restrictions on the expression (4.3.12) (frbrer:P3019) Restrictions on access to and use of an <i>expression</i>	--	Renamed	Rights (LRM-A8) A class of use restrictions to which the <i>expression</i> is submitted
Sequencing pattern (serial) (4.3.13) (frbrer:P3064) The form anticipated to be used in designating volumes/issues, etc. and/or dates for the individual units of the serial	--	Not included, class-of-material specific	Modelled in PRESSoo <i>All the serial attributes are related to the publication plan for the serial and can change over time</i>
Expected regularity of issue (serial) (4.3.14) (frbrer:P3065) The anticipated regularity of release of individual issues	--	Not included, class-of-material specific	Modelled in PRESSoo <i>All the serial attributes are related to the publication plan for the serial and can change over time</i>
Expected frequency of issue (serial) (4.3.15) (frbrer:P3066)	--	Not included, class-of-	Modelled in PRESSoo <i>All the serial attributes are related to</i>

FRBR Attribute name (Section number) / Namespace ID / Definition	FRAD Attribute name / Namespace ID / Definition	Result	FRBR-LRM Attribute name / Definition / or Other mapping
The interval at which individual issues of the serial are anticipated to be released		material specific	<i>the publication plan for the serial and can change over time</i>
Type of score (musical notation) (4.3.16) (frbrer:P3067) The format used to represent a musical composition	--	Merged	Category (LRM-A4) (Categorization of score presentation is one possible categorization of an <i>expression</i>)
--	--	Relocated from work (linked to representative <i>expression</i>)	*Key (LRM-A10) A pitch structure (musical scale, ecclesiastic mode, raga, maqam, etc.), that characterizes the <i>expression</i>
Medium of performance (musical notation or recorded sound) (4.3.17) (frbrer:P3068) The instrumental and/or vocal medium of performance represented in the <i>expression</i> of a musical <i>work</i>	Medium of performance of expression (=frbrer:P3068) The instrumental, vocal and/or other medium of performance represented in the <i>expression</i> of a musical <i>work</i>	Retained, merged from <i>work</i> (linked to representative <i>expression</i>)	*Medium of performance (LRM-A11) A medium of performance stated, intended, or actually used in the <i>expression</i>
Scale (cartographic image / object) (4.3.18) (frbrer:P3097) The ratio of distances in a cartographic <i>expression</i> to the actual distances they represent	--	Retained (linked to representative <i>expression</i>)	*Scale (LRM-A12) A ratio of distances in a cartographic <i>expression</i> to the actual distances they represent
Projection (cartographic image / object) (4.3.19) (frbrer:P3098)	--	Not included, class-of-	(Out of scope for a general model, may be defined in specific applications)

FRBR Attribute name (Section number) / Namespace ID / Definition	FRAD Attribute name / Namespace ID / Definition	Result	FRBR-LRM Attribute name / Definition / or Other mapping
<p>The method or system used to represent the surface of the Earth or of a celestial sphere on a plane</p>		<p>material specific</p>	
<p>Presentation technique (cartographic image / object) (4.3.20) (frbrer:P3099)</p> <p>The method used to represent geographic or other features in a cartographic image</p>	<p>--</p>	<p>Not included, class-of-material specific</p>	<p>(Out of scope for a general model, may be defined in specific applications)</p>
<p>Representation of relief (cartographic image / object) (4.3.21) (frbrer:P3100)</p> <p>The technique used to depict the elevations or the inequalities of a land surface or of the bed of a body of water in a cartographic image</p>	<p>--</p>	<p>Not included, class-of-material specific</p>	<p>(Out of scope for a general model, may be defined in specific applications)</p>
<p>Geodetic, grid, and vertical measurement (cartographic image / object) (4.3.22) (frbrer:P3101)</p> <p>Information on the spheroid used to construct the cartographic image, the grid or referencing systems used in the image, horizontal datum, vertical datum, mathematical data on contour intervals, bathymetric intervals, etc.</p>	<p>--</p>	<p>Not included, class-of-material specific</p>	<p>(Out of scope for a general model, may be defined in specific applications)</p>
<p>Recording technique (remote sensing image) (4.3.23) (frbrer:P3070)</p>	<p>--</p>	<p>Not included, class-of-material</p>	<p>(Out of scope for a general model, may be defined in specific applications)</p>

FRBR Attribute name (Section number) / Namespace ID / Definition	FRAD Attribute name / Namespace ID / Definition	Result	FRBR-LRM Attribute name / Definition / or Other mapping
The technique used to capture an image through remote sensing		specific	
Special characteristic (remote sensing image) (4.3.24) (frbrer:P3071) The altitude and attitude of the sensor, the position of the platform, the category and name of the satellite, the number of spectral bands involved, the quality of the image, the extent of cloud cover, or the mean value of the ground resolution	--	Not included, class-of-material specific	(Out of scope for a general model, may be defined in specific applications)
Technique (graphic or projected image) (4.3.25) (frbrer:P3072) The method used to create a graphic image (e.g., engraving, etc.) or to realize motion in a projected image	Technique The method used to visualize a graphic image (e.g., engraving) or to realize motion in a projected image	Not included, class-of-material specific	(Out of scope for a general model, may be defined in specific applications)
MANIFESTATION (4.4)	MANIFESTATION (4.6)		MANIFESTATION
--	--	New	Manifestation statement (LRM-A16) A statement appearing in the <i>manifestation</i> and deemed to be significant for users to understand how the resource represents itself
Title of the manifestation (4.4.1) (frbrer:P3020)	(not an attribute, appellation relationship)	Merged <i>OR</i> Replaced by	transcribed title statements are subtypes of Manifestation statement (LRM-A16)

FRBR Attribute name (Section number) / Namespace ID / Definition	FRAD Attribute name / Namespace ID / Definition	Result	FRBR-LRM Attribute name / Definition / or Other mapping
The word, phrase, or group of characters naming the <i>manifestation</i>		relationship	OR appellation relationship (LRM-R13)
Statement of responsibility (4.4.2) (frbrer:P3021) A statement appearing in the <i>manifestation</i> (normally in conjunction with the title) that names one or more individuals or groups responsible for the creation or realization of the intellectual or artistic content embodied in the <i>manifestation</i>	--	Merged	sub-type of Manifestation statement (LRM-A16)
Edition / issue designation (4.4.3) (frbrer:P3058) A word or phrase appearing in the <i>manifestation</i> that normally indicates a difference in either content or form between the <i>manifestation</i> and a related <i>manifestation</i>	Edition / issue designation (=frbrer:P3058) An information element appearing in the <i>manifestation</i> that normally indicates a difference either in content or in form between the <i>manifestation</i> and a related <i>manifestation</i>	Merged	sub-type of Manifestation statement (LRM-A16)
Place of publication / distribution (4.4.4) (frbrer:P3057) The city, town, or other locality associated in the <i>manifestation</i> with the name of the publisher/distributor	Place of publication / distribution (=frbrer:P3057) A city, town, or other locality associated in the <i>manifestation</i> with the name of the publisher/distributor	Merged OR Replaced by relationships	sub-types of Manifestation statement (LRM-A16) OR relationship paths: <i>manifestation</i> was created by <i>agent</i> (LRM-R7) <u>or</u> <i>manifestation</i> is distributed by <i>agent</i> (LRM-R8) + <i>place</i> associated-with relationship

FRBR Attribute name (Section number) / Namespace ID / Definition	FRAD Attribute name / Namespace ID / Definition	Result	FRBR-LRM Attribute name / Definition / or Other mapping
			(LRM-R15) to the <i>agent</i>
Publisher / distributor (4.4.5) (frbrer:P3056) The individual, group, or organization named in the <i>manifestation</i> as being responsible for the publication, distribution, issuing, or release of the <i>manifestation</i>	Publisher / distributor (=frbrer:P3056) An individual, group, or organization named in the <i>manifestation</i> as being responsible for the publication, manufacturing, distribution, issuing, or release of the <i>manifestation</i>	Merged <i>OR</i> Replaced by relationships	sub-type of Manifestation statement (LRM-A16) <i>OR</i> <i>manifestation</i> was created by <i>agent</i> (LRM-R7) <i>OR</i> <i>manifestation</i> is distributed by <i>agent</i> (LRM-R8)
Date of publication / distribution (4.4.6) (frbrer:P3055) The date (normally a year) of public release of the <i>manifestation</i>	Date of publication / distribution (=frbrer:P3055) The date (normally a year) of public release of the <i>manifestation</i>	Merged <i>OR</i> Replaced by relationship	sub-type of Manifestation statement (LRM-A16) <i>OR</i> <i>time-span</i> associated-with relationship (LRM-R16)
Fabricator / Manufacturer (4.4.7) (frbrer:P3054) The individual, group, or organization named in the <i>manifestation</i> as being responsible for the fabrication or manufacture of the <i>manifestation</i>	--	Merged <i>OR</i> Replaced by relationship	sub-type of Manifestation statement (LRM-A16) <i>OR</i> <i>manifestation</i> was produced by <i>agent</i> (LRM-R9)
Series statement (4.4.8) (frbrer:P3022) The word, phrase, or group of characters appearing in the <i>manifestation</i> naming the series to which the <i>manifestation</i> belongs	--	Merged <i>OR</i> Replaced by relationships	sub-type of Manifestation statement (LRM-A16) <i>OR</i> <i>work</i> whole-part relationship (LRM-R20) to the series as the larger work <i>OR</i> <i>manifestation</i> whole-part relationship (LRM-R32) to the series as an aggregate

FRBR Attribute name (Section number) / Namespace ID / Definition	FRAD Attribute name / Namespace ID / Definition	Result	FRBR-LRM Attribute name / Definition / or Other mapping
			<i>manifestation</i>
Form of carrier (4.4.9) (frbrer:P3023) The specific class of material to which the physical carrier of the <i>manifestation</i> belongs	Form of carrier (=frbrer:P3023) The specific class of material to which the physical carrier of the <i>manifestation</i> belongs	Renamed	Category of carrier (LRM-A13) A type of material to which all physical carriers of the <i>manifestation</i> are assumed to belong
Extent of the carrier (4.4.10) (frbrer:P3024) A quantification of the number of physical units making up the carrier	--	Retained	Extent (LRM-A14) A quantification of the extent observed on a physical carrier of the <i>manifestation</i> and assumed to be observable on all other physical carriers of the <i>manifestation</i> as well
Physical medium (4.4.11) (frbrer:P3025) The type of material from which the carrier is produced	--	Merged	Category of carrier (LRM-A13)
Capture mode (4.4.12) (frbrer:P3026) The means used to record notation, sound, or images in the production of a <i>manifestation</i>	--	Merged	Category of carrier (LRM-A13)
Dimensions of the carrier (4.4.13) (frbrer:P3027)	--	Merged	Extent (LRM-A14)

FRBR Attribute name (Section number) / Namespace ID / Definition	FRAD Attribute name / Namespace ID / Definition	Result	FRBR-LRM Attribute name / Definition / or Other mapping
The measurements of the physical components and/or the container of the <i>manifestation</i>			
Manifestation identifier (4.4.14) (frbrer:P3028) A number or code uniquely associated with the <i>manifestation</i> that serves to differentiate that <i>manifestation</i> from any other <i>manifestation</i>	(not an attribute, appellation relationship to <i>identifier</i> entity)	Merged <i>OR</i> Replaced by relationship	sub-type of Manifestation statement (LRM-A16) <i>OR</i> appellation relationship (LRM-R13) <i>nomen</i> of sub-type identifier
Source for acquisition / access authorization (4.4.15) (frbrer:P3053) The name of a publisher, distributor, etc. indicated in the <i>manifestation</i> as the source from which the <i>manifestation</i> may be acquired or through whom access may be authorized	--	Merged	Access conditions (LRM-A17)
Terms of availability (4.4.16) (frbrer:P3029) The terms indicated in the <i>manifestation</i> under which the supplier (i.e., the source for acquisition/access authorization) will normally make the <i>manifestation</i> available (e.g., free to members of a particular association), or the price for which the <i>manifestation</i> sells	--	Renamed and generalized	Access conditions (LRM-A17) Information as to how any of the physical carriers of the <i>manifestation</i> are likely to be obtained

FRBR Attribute name (Section number) / Namespace ID / Definition	FRAD Attribute name / Namespace ID / Definition	Result	FRBR-LRM Attribute name / Definition / or Other mapping
Access restrictions on the manifestation (4.4.17) (frbrer:P3030) Restrictions on access to and use of a <i>manifestation</i>	--	Renamed	Rights (LRM-A18) A class of use and/or access restrictions to which all physical carriers of the <i>manifestation</i> are assumed to be submitted
--	--	New	Intended audience (LRM-A17) A class of users for which the physical carriers of the <i>manifestation</i> are intended
Typeface (printed book) (4.4.18) (frbrer:P3074) The style of type used to print a book	--	Not included, class-of-material specific	(Out of scope for a general model, may be defined in specific applications)
Type size (printed book) (4.4.19) (frbrer:P3075) The size of the characters in a printed book	--	Merged	Intended audience (LRM-A15) (Large print is recorded to indicate that the <i>manifestation</i> is appropriate for certain categories of users)
Foliation (hand-printed book) (4.4.20) (frbrer:P3076) The number of folds made in a printed sheet to form a gathering of leaves	--	Not included, class-of-material specific	(Out of scope for a general model, may be defined in specific applications)

FRBR Attribute name (Section number) / Namespace ID / Definition	FRAD Attribute name / Namespace ID / Definition	Result	FRBR-LRM Attribute name / Definition / or Other mapping
Collation (hand-printed book) (4.4.21) (frbrer:P3077) The sequence of gatherings in a book as indicated by signatures on each gathering	--	Merged	sub-type of Manifestation statement (LRM-A16)
Publication status (serial) (4.4.22) (frbrer:P3078) The status of the serial with respect to its continuing publication	--	Not included, class-of-material specific	Modelled in PRESSoo <i>All the serial attributes are related to the publication plan for the serial and can change over time</i>
Numbering (serial) (4.4.23) (frbrer:P3079) The designation of volume/issue, etc. and/or date appearing in the <i>manifestation</i>	Numbering (=frbrer:P3079) The designation of volume/issue, etc. and/or date appearing in a serial	Merged	sub-type of Manifestation statement (LRM-A16)
Playing speed (sound recording) (4.4.24) (frbrer:P3080) The speed at which the carrier must be operated to produce the sound intended (e.g., 33 1/3 rpm, 19 cm/s, etc.)	--	Not included, class-of-material specific	(Out of scope for a general model, may be defined in specific applications)
Groove width (sound recording) (4.4.25) (frbrer:P3081) The number of grooves per inch cut on a disc or cylinder (e.g., microgroove--i.e., 200 grooves per inch)	--	Not included, class-of-material specific	(Out of scope for a general model, may be defined in specific applications)

FRBR Attribute name (Section number) / Namespace ID / Definition	FRAD Attribute name / Namespace ID / Definition	Result	FRBR-LRM Attribute name / Definition / or Other mapping
Kind of cutting (Sound recording) (4.4.26) (frbrer:P3082) The direction in which the grooves are cut on a disc or cylinder (e.g., lateral, vertical, etc.)	--	Not included, class-of-material specific	(Out of scope for a general model, may be defined in specific applications)
Tape configuration (sound recording) (4.4.27) (frbrer:P3083) The number of tracks on a sound tape (e.g., eight track, twelve track)	--	Not included, class-of-material specific	(Out of scope for a general model, may be defined in specific applications)
Kind of sound (sound recording) (4.4.28) (frbrer:P3084) The number of sound channels used to make the recording (monaural, stereophonic, quadrasonic, etc.)	--	Not included, class-of-material specific	(Out of scope for a general model, may be defined in specific applications)
Special reproduction characteristics (sound recording) (4.4.29) (frbrer:P3085) The equalization system, noise reduction system, etc. used in making the recording (e.g., NAB, DBX, Dolby, etc.)	--	Not included, class-of-material specific	(Out of scope for a general model, may be defined in specific applications)
Colour (image) (4.4.30) (frbrer:P3086) The colour(s), tone(s), etc. (including black and white) used in the production of an image	--	Not included, class-of-material specific	(Out of scope for a general model, may be defined in specific applications)

FRBR Attribute name (Section number) / Namespace ID / Definition	FRAD Attribute name / Namespace ID / Definition	Result	FRBR-LRM Attribute name / Definition / or Other mapping
Reduction ratio (microform) (4.4.31) (frbrer:P3087) The degree to which a text or image has been reduced in the process of microfilming (e.g., 42x, etc.)	--	Not included, class-of-material specific	(Out of scope for a general model, may be defined in specific applications)
Polarity (microform or visual projection) (4.4.32) (frbrer:P3088) The relationship of the colours and tones in an image on film to the colours and tones of the object filmed	--	Not included, class-of-material specific	(Out of scope for a general model, may be defined in specific applications)
Generation (microform or visual projection) (4.4.33) (frbrer:P3089) A reflection of the number of times an image on film has been transferred from one carrier to another (e.g., a first generation camera master, a second generation printing master, a third generation service copy, etc.)	--	Not included, class-of-material specific	(Out of scope for a general model, may be defined in specific applications)
Presentation format (visual projection) (4.4.34) (frbrer:P3090) The format used in the production of a projected image (e.g., wide screen, Beta, VHS, etc.)	--	Not included, class-of-material specific	(Out of scope for a general model, may be defined in specific applications)
System requirements (electronic resource) (4.4.35) (frbrer:P3093)	--	Merged	Access conditions (LRM-A17)

FRBR Attribute name (Section number) / Namespace ID / Definition	FRAD Attribute name / Namespace ID / Definition	Result	FRBR-LRM Attribute name / Definition / or Other mapping
<p>The requirements related to hardware (e.g. machine make and model, RAM capacity, etc.), software (e.g., operating systems, programming language, supporting software, etc.), and peripherals (monitor, printer, mouse, etc.)</p>			
<p>File characteristics (electronic resource) (4.4.36) (frbrer:P3094)</p> <p>The standards or schemes used to encode the file (e.g., ASCII, SGML, etc.), physical characteristics of the file (e.g., recording density, parity, blocking, etc.), and other characteristics that have a bearing on how the file can be processed</p>	--	Not included, class-of-material specific	(Out of scope for a general model, may be defined in specific applications)
<p>Mode of access (remote-access electronic resource) (4.4.37) (frbrer:P3095)</p> <p>The means of accessing a remote electronic resource</p>	--	Merged	Access conditions (LRM-A17)
<p>Access address (remote-access electronic resource) (4.4.38) (frbrer:P3096)</p> <p>An alpha-numeric code (e.g., universal resource locator - URL) used to facilitate remote access to an electronic resource</p>	--	Merged	Access conditions (LRM-A17)

FRBR Attribute name (Section number) / Namespace ID / Definition	FRAD Attribute name / Namespace ID / Definition	Result	FRBR-LRM Attribute name / Definition / or Other mapping
ITEM (4.5)	ITEM (4.7)		ITEM
Item identifier (4.5.1) (frbrer:P3031) A number or code that is uniquely associated with the <i>item</i> , and serves to differentiate that <i>item</i> from any other <i>item</i> in the same collection and/or institution	(not an attribute, appellation relationship to <i>identifier</i> entity)	Replaced by relationship	appellation relationship (LRM-R13) <i>nomen</i> of sub-type identifier
Fingerprint (4.5.2) (frbrer:P3032) An identifier constructed by combining groups of characters transcribed from specified pages of a printed <i>item</i>	(not an attribute, appellation relationship to <i>identifier</i> entity)	Replaced by relationship	appellation relationship (LRM-R13) <i>nomen</i> of sub-type identifier NB: fingerprint is an identifier for a state (a group of identical <i>items</i> within a <i>manifestation</i>), it only identifies a specific <i>item</i> if the state consists of a single <i>item</i>
Provenance of the item (4.5.3) (frbrer:P3033) A record of previous ownership or custodianship of the <i>item</i>	Custodial history of item (frad:P3048) The record of previous ownership of the <i>item</i>	Merged OR Replaced by relationship	Note (LRM-A2) OR ownership relationship (LRM-R10)
Marks / inscriptions (4.5.4) (frbrer:P3052) Any signatures, numbering, annotations, etc. that have been applied uniquely to the <i>item</i> by the artist, fabricator, owner, etc.	--	Generalized	Note (LRM-A2)

FRBR Attribute name (Section number) / Namespace ID / Definition	FRAD Attribute name / Namespace ID / Definition	Result	FRBR-LRM Attribute name / Definition / or Other mapping
Exhibition history (4.5.5) (frbrer:P3034) A record of public exhibitions of an <i>item</i> , including dates, venues, etc.	--	Out of scope , administrative metadata	--
Condition of the item (4.5.6) (frbrer:P3035) The physical condition of the <i>item</i> , particularly any variances between the physical makeup of the <i>item</i> and that of the <i>manifestation</i> it exemplifies	--	Merged	Note (LRM-A2)
Treatment history (4.5.7) (frbrer:P3036) A record of the treatment the <i>item</i> has undergone	--	Out of scope , administrative metadata	--
Scheduled treatment (4.5.8) (frbrer:P3037) A plan for future treatment of the <i>item</i>	--	Out of scope , administrative metadata	--
Access restrictions on the item (4.5.9) (frbrer:P3038) Any limitations placed on physical access to the <i>item</i>	--	Renamed and generalized	Rights (LRM-A20) A class of use and/or access restrictions to which the <i>item</i> is submitted

FRBR Attribute name (Section number) / Namespace ID / Definition	FRAD Attribute name / Namespace ID / Definition	Result	FRBR-LRM Attribute name / Definition / or Other mapping
--	Location of item (frad:P3047) The collection and/or institution in which the <i>item</i> is held, stored, or made available for access	Retained	Location (LRM-A19) The collection and/or institution in which the <i>item</i> is held, stored, or made available for access
--	Immediate source of acquisition of item (frad:P3049) The source from which an <i>item</i> was directly acquired and the circumstances under which it was acquired	Merged <i>OR</i> Replaced by relationship	Note (LRM-A2) <i>OR</i> ownership relationship (LRM-R10)

Transition mapping

Attributes in FRBR, FRAD and their equivalent in FRBR-LRM

Section 2 : Attributes of Person, Family, Corporate Body, and Agent

FRBR Attribute name (Section number) / Namespace ID / Definition	FRAD Attribute name / Namespace ID / Definition	Result	FRBR-LRM Attribute name / Definition / or Other mapping
PERSON (4.6)	PERSON (4.1)		PERSON
Name of person (4.6.1) (frbrer:P3039) The word, character, or group of words and/or characters by which the <i>person</i> is known	(not an attribute, appellation relationship)	Replaced by relationship	appellation relationship (LRM-R13)
Dates of person (4.6.2) (frbrer:P3040) The dates associated with a <i>person</i> may include the precise or approximate date of the <i>person</i> 's birth and/or death, or dates indicating the period in which the <i>person</i> was known to be active in a given field of endeavour	Dates associated with the person (=frbrer:P3040) A date or dates associated with the <i>person</i>	Replaced by relationship	<i>time-span</i> associated-with relationship (LRM-R16) may be sub-typed for a specific event related to the <i>person</i> to the appropriate level of granularity: - birth - death - activity - etc.
Title of person (4.6.3) (frbrer:P3041) A word or phrase indicative of rank, office, nobility, honour, etc. (e.g., Major, Premier, Duke, etc.), or a term of address (Sir, Mrs., etc.) associated with the <i>person</i>	Title of person (=frbrer:P3041) Rank, office, nobility, honour, etc., associated with the <i>person</i>	Replaced by relationships	membership relationship (LRM-R28) <i>agent (person)</i> to <i>collective agent</i> (group of office holders, such as the Prime Ministers of a particular country) OR <i>nomen</i> whole-part relationship (LRM-R18) for a component of a <i>nomen</i>

FRBR Attribute name (Section number) / Namespace ID / Definition	FRAD Attribute name / Namespace ID / Definition	Result	FRBR-LRM Attribute name / Definition / or Other mapping
			indicating a value of the Profession / Occupation (LRM-A24) attribute
Other designation associated with the person (4.6.4) (frbrer:P3042) A numeral, word, or abbreviation indicating succession within a family or dynasty (e.g., III, Jr., etc.), or an epithet or other word or phrase associated with the <i>person</i> (e.g., the Brave, Professional Engineer, etc.)	Other information associated with the person (=frbrer:P3042) Information elements other than title by which a <i>person</i> is known or identified	Deprecated (an aspect or component of certain <i>nomens</i> for the <i>person</i> , not an attribute)	--
--	Gender (frad:P3029) A gender by which the <i>person</i> is identified	Deprecated (not an essential attribute)	--
--	Place of birth (frad:P3030) The town, city, province, state, and/or country in which the <i>person</i> was born	Replaced by relationship	<i>place</i> associated-with relationship (LRM-R15) sub-typed for a specific event related to the <i>person</i> (birth)
--	Place of death (frad:P3031) The town, city, province, state, and/or country in which the <i>person</i> died	Replaced by relationship	<i>place</i> associated-with relationship (LRM-R15) sub-typed for a specific event related to the <i>person</i> (death)
--	Country (frad:P3032)	Replaced by relationship	<i>place</i> associated-with relationship (LRM-R15)

FRBR Attribute name (Section number) / Namespace ID / Definition	FRAD Attribute name / Namespace ID / Definition	Result	FRBR-LRM Attribute name / Definition / or Other mapping
	A country with which the <i>person</i> is identified		sub-typed for an association of a specific type (associated country)
--	Place of residence (frad:P3033) A country, state/province, city, etc., in which the <i>person</i> resides or has resided	Replaced by relationship	<i>place</i> associated-with relationship (LRM-R15) sub-typed for a specific event related to the <i>person</i> (residence)
--	Affiliation (frad:P3034) A group with which the <i>person</i> is affiliated or has been affiliated through employment, membership, cultural identity, etc.	Replaced by relationship	membership relationship (LRM-R28) <i>agent (person)</i> to <i>collective agent</i> <i>OR</i> <i>res</i> associated-with (LRM-R1) for cultural identity
--	Address (frad:P3035) The current or former address of the <i>person's</i> place of residence, business, or employer	Retained and generalized, see under <i>agent</i>	Contact information (LRM-A21)
--	Language of person (frad:P3036) A language the <i>person</i> uses when creating an expression for publication, broadcasting, etc.	Retained and generalized, see under <i>agent</i>	Language (LRM-A23)
--	Field of activity (frad:P3037) A field of endeavour, area of expertise, etc., in which the <i>person</i> is engaged or was engaged	Retained and generalized, see under <i>agent</i>	Field of activity (LRM-A22)

FRBR Attribute name (Section number) / Namespace ID / Definition	FRAD Attribute name / Namespace ID / Definition	Result	FRBR-LRM Attribute name / Definition / or Other mapping
--	Profession / occupation (frad:P3038) A profession or occupation in which the <i>person</i> works or worked	Retained	Profession / Occupation (LRM-A24) A profession or occupation in which the <i>Person</i> works or worked
--	Biography / history (frad:P3039) Information pertaining to the life or history of the <i>person</i>	Retained and generalized, see under <i>res</i>	Note (LRM-A2)
--	FAMILY (4.2)		COLLECTIVE AGENT
--	Type of family (frad:P3001) A categorization or generic descriptor for the type of <i>family</i>	Retained and generalized, see under <i>res</i>	Category (LRM-A1)
--	Dates of family (frad:P3002) Dates associated with the <i>family</i>	Replaced by relationship	<i>time-span</i> associated-with relationship (LRM-R16) may be sub-typed for a specific event related to the family
--	Places associated with family (frad:P3003) Information pertaining to places where the <i>family</i> resides or resided or had some connection	Replaced by relationship	<i>place</i> associated-with relationship (LRM-R15) may be sub-typed for a specific event related to the family (such as residence)
--	Language of family (frad:P3052)	Retained and generalized, see under	Language (LRM-A23)

FRBR Attribute name (Section number) / Namespace ID / Definition	FRAD Attribute name / Namespace ID / Definition	Result	FRBR-LRM Attribute name / Definition / or Other mapping
	A language associated with the <i>family</i>	<i>agent</i>	
--	Field of activity (frad:P3004) A field of endeavour, area of expertise, etc., in which the <i>family</i> is engaged or was engaged	Retained and generalized, see under <i>agent</i>	Field of activity (LRM-A22)
--	History of family (frad:P3005) Information pertaining to the history of the <i>family</i>	Retained and generalized, see under <i>res</i>	Note (LRM-A2)
CORPORATE BODY (4.7)	CORPORATE BODY (4.3)		COLLECTIVE AGENT
Name of the corporate body (4.7.1) (frbrer:P3043) The word, phrase, character, or group of words and/or characters by which the body is known	(not an attribute, appellation relationship)	Replaced by relationship	appellation relationship (LRM-R13)
Number associated with the corporate body (4.7.2) (frbrer:P3044) The numerical designation sequencing a meeting, conference, exhibition, fair, etc. that constitutes one of a series of related meetings, conferences, exhibitions, fairs, etc., or any other numerical designation associated with a <i>corporate body</i>	--	Deprecated (component of the <i>nomen</i> for certain types of corporate body, not an attribute)	--

FRBR Attribute name (Section number) / Namespace ID / Definition	FRAD Attribute name / Namespace ID / Definition	Result	FRBR-LRM Attribute name / Definition / or Other mapping
<p>Place associated with the corporate body (4.7.3) (frbrer:P3045)</p> <p>The city, town, or other designation of location in which a meeting, conference, exhibition, fair, etc. was held, or the location with which the <i>corporate body</i> is otherwise associated</p>	<p>Place associated with the corporate body (=frbrer:P3045)</p> <p>A geographic place at any level associated with the <i>corporate body</i></p>	<p>Replaced by relationship</p>	<p><i>place</i> associated-with relationship (LRM-R15) may be sub-typed for a specific type of relationship to the corporate body (such as Place conference was held, Place where headquarters are located)</p>
<p>Date associated with the corporate body (4.7.4) (frbrer:P3046)</p> <p>The date or range of dates on which a meeting, conference, exhibition, fair, etc. was held, or a date with which the <i>corporate body</i> is otherwise associated (e.g., the date of its incorporation)</p>	<p>Dates associated with the corporate body (=frbrer:P3046)</p> <p>A date or range of dates on which a meeting, conference, exhibition, fair, etc. is held, or a date with which the <i>corporate body</i> is otherwise associated</p>	<p>Replaced by relationship</p>	<p><i>time-span</i> associated-with relationship (LRM-R16) may be sub-typed for a specific event related to the corporate body (such as activity, establishment, cesation, Date conference was held)</p>
<p>Other designation associated with the corporate body (4.7.5) (frbrer:P3047)</p> <p>A word, phrase, or abbreviation indicating incorporation or legal status of the body (e.g., Inc., Ltd., etc.), or any term serving to differentiate the body from other <i>corporate bodies</i>, <i>persons</i>, etc. (e.g., firm, musical group, etc.).</p>	<p>Other information associated with the corporate body (=frbrer:P3047)</p> <p>Information as to incorporation or legal status of the body, or any term serving to differentiate the body from other <i>corporate bodies</i>, <i>persons</i>, etc.</p>	<p>Deprecated</p> <p>(an aspect of certain <i>nomens</i> for the corporate body, not an attribute)</p>	<p>--</p>

FRBR Attribute name (Section number) / Namespace ID / Definition	FRAD Attribute name / Namespace ID / Definition	Result	FRBR-LRM Attribute name / Definition / or Other mapping
--	Language of the corporate body (frad:P3040) A language that the <i>corporate body</i> uses in its communications	Retained and generalized, see under <i>agent</i>	Language (LRM-A23)
--	Address (frad:P3041) The current or former address of the <i>corporate body's</i> office(s)	Retained and generalized, see under <i>agent</i>	Contact information (LRM-A21)
--	Field of activity (frad:P3042) A field of business in which the <i>corporate body</i> is engaged, its area of competence, responsibility, jurisdiction, etc.	Retained and generalized, see under <i>agent</i>	Field of activity (LRM-A22)
--	History (frad:P3043) Information pertaining to the history of the <i>corporate body</i>	Retained and generalized, see under <i>res</i>	Note (LRM-A2)
AGENT	AGENT		AGENT
--	Address (of Person) (frad:P3035) The current or former address of the <i>person's</i> place of residence, business, or employer	Renamed and generalized	Contact information (LRM-A21) Information useful for communicating with or getting in contact with the <i>agent</i>

FRBR Attribute name (Section number) / Namespace ID / Definition	FRAD Attribute name / Namespace ID / Definition	Result	FRBR-LRM Attribute name / Definition / or Other mapping
	<hr/> <p>Address (of Corporate Body) (frad:P3041)</p> <p>The current or former address of the <i>corporate body's</i> office(s)</p>		
--	<p>Field of activity (of Person) (frad:P3037)</p> <p>A field of endeavour, area of expertise, etc., in which the <i>person</i> is engaged or was engaged</p> <hr/> <p>Field of activity (of Family) (frad:P3004)</p> <p>A field of endeavour, area of expertise, etc., in which the <i>family</i> is engaged or was engaged</p> <hr/> <p>Field of activity (of Corporate Body) (frad:P3042)</p> <p>A field of business in which the <i>corporate body</i> is engaged, its area of competence, responsibility, jurisdiction, etc.</p>	Retained and generalized	<p>Field of activity (LRM-A22)</p> <p>A field of endeavour, area of expertise, etc., in which the <i>agent</i> is engaged or was engaged</p>

FRBR Attribute name (Section number) / Namespace ID / Definition	FRAD Attribute name / Namespace ID / Definition	Result	FRBR-LRM Attribute name / Definition / or Other mapping
--	<p>Language of person (frad:P3036)</p> <p>A language the <i>person</i> uses when creating an <i>expression</i> for publication, broadcasting, etc.</p> <hr/> <p>Language of family (frad:P3052)</p> <p>A language associated with the <i>family</i></p> <hr/> <p>Language of the corporate body (frad:P3040)</p> <p>A language that the <i>corporate body</i> uses in its communications</p>	Retained and generalized	<p>Language (LRM-A23)</p> <p>A language used by the <i>agent</i> when creating an <i>expression</i></p>

Transition mapping

Attributes in FRAD, FRSAD and their equivalent in FRBR-LRM

Section 3 : Attributes of Name, Identifier, Controlled Access Point, Thema/Res, Nomen

FRAD Attribute name / Namespace ID / Definition	FRAD Attribute name / Namespace ID / Definition	FRAD Attribute name / Namespace ID / Definition	FRSAD Attribute name (Section number) / Namespace ID / Definition	Result	FRBR-LRM Attribute name / Definition / or Other mapping
NAME (4.12)	IDENTIFIER (4.13)	CONTROLLED ACCESS POINT (4.14)	THEMA		RES
Type of name (frad:P3022) The category of a <i>name</i> Includes personal names, corporate names, names of families, trade names, and titles of works and manifestations Includes names of concepts, objects, events, and places	--	Type of controlled access point (frad:P3006) A categorization or generic descriptor for the controlled access point Includes terms and/or codes designating the type of access point (e.g., personal name access point, family name access point, corporate name access point, meeting name access point, territorial name access point, title access point, collective title access point or access points consisting of a combination of names, such as creator/title access points)	Type of thema (4.1.1) (frsad:P3001) The category to which a <i>thema</i> belongs in the context of a particular knowledge organization system	Merged, renamed and generalized	Category (LRM-A1) A type to which the <i>res</i> belongs
--	--	--	Scope note (4.1.2) (frsad:P3002) A text describing and/or	Renamed and generalized	Note (LRM-A2) Textual material

FRAD Attribute name / Namespace ID / Definition	FRAD Attribute name / Namespace ID / Definition	FRAD Attribute name / Namespace ID / Definition	FRSAD Attribute name (Section number) / Namespace ID / Definition	Result	FRBR-LRM Attribute name / Definition / or Other mapping
			defining the theme or specifying its scope within the particular knowledge organization system		providing any kind of information about the <i>res</i> that is not recorded through the use of specific attributes and/or relationships
NAME (4.12)	IDENTIFIER (4.13)	CONTROLLED ACCESS POINT (4.14)	NOMEN		NOMEN
Name string (frad:P3023) A sequence of numeric and/or alphabetic characters or symbols that represents the name of an entity	--	Base access point (frad:P3017) All elements in a controlled access point that are integral to the name or identifier that forms the basis for the access point	--	Deprecated <i>OR</i> replaced by relationship	If the base access point is itself a <i>nomen</i> , then related via <i>nomen</i> whole-part relationship (LRM-R18) as a component of the larger <i>nomen</i> (of type controlled access point)
--	--	Addition (frad:P3018) A name, title, date, place, number, or other designation added to the base access point	--	Deprecated <i>OR</i> replaced by relationship	If the addition is itself a <i>nomen</i> , then related via <i>nomen</i> whole-part relationship (LRM-R18) as a component of the larger <i>nomen</i> (of type controlled access point)
Scope of usage (frad:P3024)	--	--	--	Renamed and generalized	Context of use (LRM-A28)

FRAD Attribute name / Namespace ID / Definition	FRAD Attribute name / Namespace ID / Definition	FRAD Attribute name / Namespace ID / Definition	FRSAD Attribute name (Section number) / Namespace ID / Definition	Result	FRBR-LRM Attribute name / Definition / or Other mapping
The form of work associated with a particular name for a persona					Information as to the context of use of the <i>nomen</i> of an <i>agent</i> which is also referred to through other, distinct <i>nomens</i>
--	--	<p>Designated usage of controlled access point (frad:P3008)</p> <p>An indication of whether the rules under which the controlled access point was constructed designate it as an authorized (or preferred) form (i.e., authorized access point) or as a variant (or non-preferred) form (i.e., variant access points)</p>	<p>Type of <i>nomen</i> (4.2.1) (frsad:P3003)</p> <p>Category to which the <i>nomen</i> belongs</p>	Merged, renamed and generalized	<p>Category (LRM-A25)</p> <p>A type to which the <i>nomen</i> belongs</p>
--	<p>Type of identifier (frad:P3021)</p> <p>A code or other designation indicating the type of identifier (i.e., the domain in which the identifier is assigned)</p>	--	<p>Scheme (4.2.2) (frsad:P3004)</p> <p>The scheme in which the <i>nomen</i> is established, including value encoding schemes (subject heading lists, thesauri, classification systems, name authority lists, etc.) and syntax encoding schemes (standards for encoding dates, etc.)</p>	Retained	<p>Scheme (LRM-A26)</p> <p>The scheme in which the <i>nomen</i> is established</p>

FRAD Attribute name / Namespace ID / Definition	FRAD Attribute name / Namespace ID / Definition	FRAD Attribute name / Namespace ID / Definition	FRSAD Attribute name (Section number) / Namespace ID / Definition	Result	FRBR-LRM Attribute name / Definition / or Other mapping
--	--	Source of controlled access point (frad:P3016) The publication or reference source used in establishing the form of name or title on which the controlled access point is based	Reference Source of nomen (4.2.3) (frsad:P3005) The source in which the <i>nomen</i> is found	Retained	Reference source (LRM-A29) A source in which there is evidence for the use of the <i>nomen</i>
--	--	--	Representation of nomen (4.2.4) (frsad:P3006) The data type in which the <i>nomen</i> is expressed	Not included	-- (Specialized technical attribute, may be used if needed in a specific implementation)
Language of name (frad:P3026) The language in which the name is expressed	--	Language of base access point (frad:P3010) The language in which the base access point is recorded <hr/> Language of cataloguing (frad:P3011) The language in which additions to the base access point are recorded	Language of nomen (4.2.5) (frsad:P3007) The language in which the <i>nomen</i> is expressed	Retained	Language (LRM-A30) The language in which the <i>nomen</i> is expressed
Script of name (frad:P3027)	--	Script of base access point (frad:P3012)	Script of nomen (4.2.6) (frsad:P3008)	Retained	Script (LRM-A31)

FRAD Attribute name / Namespace ID / Definition	FRAD Attribute name / Namespace ID / Definition	FRAD Attribute name / Namespace ID / Definition	FRSAD Attribute name (Section number) / Namespace ID / Definition	Result	FRBR-LRM Attribute name / Definition / or Other mapping
The script in which the name is rendered		<p>The form of graphic characters in which the data in the base access point are recorded</p> <hr/> <p>Script of cataloguing (frad:P3013)</p> <p>The form of graphic characters in which any additions to the base access point are recorded</p>	The script in which the <i>nomen</i> is expressed		The script in which the <i>nomen</i> is expressed
<p>Transliteration scheme of name (frad:P3028)</p> <p>The scheme used to produce the transliterated form of the name</p>	--	<p>Transliteration scheme of base access point (frad:P3014)</p> <p>An indication of the scheme used in transliterating the base access point</p> <hr/> <p>Transliteration scheme of cataloguing (frad:P3015)</p> <p>An indication of the scheme used in transliterating any additions to the base access point</p>	<p>Script conversion (4.2.7) (frsad:P3009)</p> <p>The rule, system, or standard used to render the <i>nomen</i> in a different representation</p>	Retained	<p>Script conversion (LRM-A32)</p> <p>The rule, system, or standard that was used to render the <i>nomen</i></p>
--	--	--	<p>Form of <i>nomen</i> (4.2.8) (frsad:P3010)</p> <p>Any additional</p>	Merged	See Category (LRM-A25)

FRAD Attribute name / Namespace ID / Definition	FRAD Attribute name / Namespace ID / Definition	FRAD Attribute name / Namespace ID / Definition	FRSAD Attribute name (Section number) / Namespace ID / Definition	Result	FRBR-LRM Attribute name / Definition / or Other mapping
			information that helps to interpret the <i>nomen</i>		
<p>Dates of usage (frad:P3025)</p> <p>Dates associated with the use of a particular name established by a person, corporate body, or family</p>	--	--	<p>Time of validity of nomen (4.2.9) (frsad:P3011)</p> <p>The time period, in which the <i>nomen</i> is/was used or is/was valid within a subject vocabulary system</p>	Replaced by relationship	<i>time-span</i> associated with relationship (LRM-R16)
--	--	--	<p>Audience (4.2.10) (frsad:P3012)</p> <p>The community or user group for which the <i>nomen</i> is the preferred form</p>	Retained	<p>Intended audience (LRM-A27)</p> <p>A class of users for which the <i>nomen</i> is considered appropriate</p>
--	--	<p>Status of controlled access point (frad:P3007)</p> <p>An indication of the level of establishment of the authorized access point for the entity (e.g., provisional)</p> <hr/> <p>Undifferentiated access point (frad:P3009)</p>	<p>Status of nomen (4.2.11) (frsad:P3013)</p> <p>The status of the <i>nomen</i> in a subject authority system</p>	Merged, renamed and generalized	<p>Status (LRM-A33)</p> <p>The status of the <i>nomen</i> in the scheme in which the <i>nomen</i> is established</p>

FRAD Attribute name / Namespace ID / Definition	FRAD Attribute name / Namespace ID / Definition	FRAD Attribute name / Namespace ID / Definition	FRSAD Attribute name (Section number) / Namespace ID / Definition	Result	FRBR-LRM Attribute name / Definition / or Other mapping
		An indication that the controlled access point for the authorized form of name (i.e., authorized access point) is insufficiently precise to differentiate between two or more entities identified by the same name			

Transition mapping
Attributes in FRAD and their equivalent in FRBR-LRM

Section 4 : Attributes of Rules and Agency

FRAD Namespace ID	FRAD Attribute name for entity	FRAD Definition	Result	FRBR-LRM Other mapping
	RULES (4.15)		(entity out of scope)	All rules are <i>works</i>
frad:P3019	Citation for rules	A citation for the cataloguing code, set of rules, instructions, etc.	Replaced by relationship	appellation relationship (LRM-R13) for the <i>work</i> (or <i>expression</i> of the <i>work</i>) that is the rules
frad:P3020	Rules identifier	An acronym or initials or alphanumeric code identifying the rules	Replaced by relationship	appellation relationship (LRM-R13) for the <i>work</i> (or <i>expression</i> of the <i>work</i>) that is the rules
	AGENCY (4.16)		(entity out of scope)	All agencies are <i>agents</i>
(not defined)	Name of agency	The name by which the agency is commonly known	Replaced by relationship	appellation relationship (LRM-R13)
(not defined)	Agency identifier	An alphanumeric code identifying the agency	Replaced by relationship	appellation relationship (LRM-R13)
(not defined)	Location of agency	The country, state / province, city, etc., in which the agency is located or headquartered, or the agency's address	Replaced by relationship <i>OR</i> Contact information attribute (of <i>agent</i>)	<i>place</i> associated-with relationship (LRM-R15) associated with the <i>agent</i> that is the agency <i>OR</i> Contact information (LRM-A21)

Transition mapping

Attributes in FRBR and their equivalent in FRBR-LRM

Section 5 : Attributes of Concept, Object, Event, Place and Time-span

IFLA Namespace ID	FRBR Attribute name for entity	FRBR Definition	Result	FRBR-LRM Attribute name / or Other mapping	FRBR-LRM Definition
	CONCEPT (4.8)		(entity deprecated)		
frbrer:P3048	Term for the concept	The word, phrase, or group of characters used to name or designate the <i>concept</i>	Replaced by relationship	appellation relationship (LRM-R13)	
	OBJECT (4.9)		(entity deprecated)		
frbrer:P3049	Term for the object	The word, phrase, or group of characters used to name or designate the <i>object</i>	Replaced by relationship	appellation relationship (LRM-R13)	
	EVENT (4.10)		(entity deprecated)		
frbrer:P3050	Term for the event	The word, phrase, or group of characters used to name or designate the <i>event</i>	Replaced by relationship	appellation relationship (LRM-R13)	
	PLACE (4.11)		(entity redefined)	PLACE	
frbrer:P3051	Term for the place	The word, phrase, or group of characters used to name or designate the <i>place</i>	Replaced by relationship	appellation relationship (LRM-R13)	
	--	--	New	Category (LRM-A34)	A type to which the <i>place</i> belongs
	--	--	New	Location (LRM-A35)	A delimitation of the physical territory included within the <i>place</i>

IFLA Namespace ID	FRBR Attribute name for entity	FRBR Definition	Result	FRBR-LRM Attribute name / or Other mapping	FRBR-LRM Definition
	TIME-SPAN		(new entity)	TIME-SPAN	
	--	--	New	Beginning (LRM-A36)	A value for the time at which the <i>time-span</i> started, expressed in a precise way in an authoritative external system to allow temporal positioning of events
	--	--	New	Ending (LRM-A37)	A value for the time at which the <i>time-span</i> ended, expressed in a precise way in an authoritative external system to allow temporal positioning of events

Transition mapping

Relationships in FRBR, FRAD, FRSAD and their equivalent in FRBR-LRM

Section 1 : Basic or Primary Relationships

- Reverse names for FRBR relationships (given in bold) are taken from the OMR, not given in FRBR
- Relationships from FRAD with domain or range *family* are listed with like relationships from FRBR in the sub-sections marked with an asterisk (*)
- In FRAD the phrase “Bibliographic entities” is a short-hand for the 10 FRBR entities plus *family*, although not officially an entity or super-class in the FRAD model, it is defined in the OMR as the domain/range of two relationships, those relationships are not expanded in this table

IFLA Namespace ID	Domain	Relationship Forwards name	Reverse name	Range	Result	FRBR-LRM
FRBR Fig. 3.1						Core WEMI relationships
frbrer:P2001 / frbrer:P2002	WORK	is realized through	is realization of	EXPRESSION	Retained, reverse name assigned	WORK is realized through / realizes EXPRESSION (LRM-R2)
frbrer:P2003 / frbrer:P2004	EXPRESSION	is embodied in	is embodiment of	MANIFESTATION	Retained, reverse name assigned	EXPRESSION is embodied in / embodies MANIFESTATION (LRM-R3)
frbrer:P2005 / frbrer:P2006	MANIFESTATION	is exemplified by	is exemplar of	ITEM	Retained, reverse name assigned	MANIFESTATION is exemplified by / exemplifies ITEM (LRM-R4)
* FRBR Fig. 3.2						WEMI-AGENT relationships
frbrer:P2009 / frbrer:P2010	WORK	is created by	is creator of	PERSON	Retained, merged into range AGENT, modified name to past tense (to model outcome of the creation process), reverse name assigned	WORK was created by / created AGENT (LRM-R5)
frad:P2020 / frad:P2021	WORK	is created by	is creator of	FAMILY	Retained, merged into range AGENT, modified name to past tense (to model outcome of the creation process), reverse name assigned	WORK was created by / created AGENT (LRM-R5)
frbrer:P2007 / frbrer:P2008	WORK	is created by	is creator of	CORPORATE BODY	Retained, merged into range AGENT, modified name to past tense (to model outcome of the creation process),	WORK was created by / created AGENT (LRM-R5)

IFLA Namespace ID	Domain	Relationship Forwards name	Reverse name	Range	Result	FRBR-LRM
					reverse name assigned	
frbrer:P2013 / frbrer:P2014	EXPRESSION	is realized by	is realizer of	PERSON	Retained, merged into range AGENT, modified name and used past tense (to model outcome of the creation process), reverse name assigned	EXPRESSION was created by / created AGENT (LRM-R6)
frad:P2026 / frad:P2027	EXPRESSION	is realized by	is realizer of	FAMILY	Retained, merged into range AGENT, modified name and used past tense (to model outcome of the creation process), reverse name assigned	EXPRESSION was created by / created AGENT (LRM-R6)
frbrer:P2011 / frbrer:P2012	EXPRESSION	is realized by	is realizer of	CORPORATE BODY	Retained, merged into range AGENT, modified name and used past tense (to model outcome of the creation process), reverse name assigned	EXPRESSION was created by / created AGENT (LRM-R6)
frbrer:P2017 / frbrer:P2018	MANIFESTATION	is produced by	is producer of	PERSON	Retained and split, merged into range AGENT, modified name to past tense (to model outcome of the production process), reverse name assigned	MANIFESTATION was produced by / produced AGENT (LRM-R9)
frad:P2024 / frad:P2025	MANIFESTATION	is produced by	is producer of	FAMILY	Retained and split, merged into range AGENT, modified name to past tense (to model outcome of the production process), reverse name assigned	MANIFESTATION was produced by / produced AGENT (LRM-R9)
frbrer:P2015 / frbrer:P2016	MANIFESTATION	is produced by	is producer of	CORPORATE BODY	Retained and split, merged into range AGENT, modified name to past tense (to model outcome of the production process), reverse name assigned	MANIFESTATION was produced by / produced AGENT (LRM-R9)
New	MANIFESTATION	was created by	created	AGENT	New, split from manifestation-production	Manifestation-creation (LRM-R7), distinct from physical production
New	MANIFESTATION	is distributed by	distributes	AGENT	New, split from manifestation-production	Distribution of a <i>manifestation</i> (LRM-R8) is distinct from its creation or production

IFLA Namespace ID	Domain	Relationship Forwards name	Reverse name	Range	Result	FRBR-LRM
frbrer:P2021 / frbrer:P2022	ITEM	is owned by	is owner of	PERSON	Retained, merged into range AGENT, reverse name assigned	ITEM is owned by / owns AGENT (LRM-R10)
frad:P2022 / frad:P2023	ITEM	is owned by	is owner of	FAMILY	Retained, merged into range AGENT, reverse name assigned	ITEM is owned by / owns AGENT (LRM-R10)
frbrer:P2019 / frbrer:P2020	ITEM	is owned by	is owner of	CORPORATE BODY	Retained, merged into range AGENT, reverse name assigned	ITEM is owned by / owns AGENT (LRM-R10)
New	ITEM	was modified by	modified	AGENT	New	Modification of a specific <i>item</i> (LRM-R11) without creation of a new <i>manifestation</i>
* FRBR Fig. 3.3 / FRSAD 3.4						Subject relationship
frbrer:P2023 / frbrer:P2024	WORK	has as subject	is subject of	CONCEPT	Retained, merged into range RES, reverse name from FRSAD	WORK has as subject / is subject of RES (LRM-R12)
frbrer:P2025 / frbrer:P2026	WORK	has as subject	is subject of	OBJECT	Retained, merged into range RES, reverse name from FRSAD	WORK has as subject / is subject of RES (LRM-R12)
frbrer:P2027 / frbrer:P2028	WORK	has as subject	is subject of	EVENT	Retained, merged into range RES, reverse name from FRSAD	WORK has as subject / is subject of RES (LRM-R12)
frbrer:P2029 / frbrer:P2030	WORK	has as subject	is subject of	PLACE	Retained, merged into range RES, reverse name from FRSAD	WORK has as subject / is subject of RES (LRM-R12)
frbrer:P2033 / frbrer:P2034	WORK	has as subject	is subject of	PERSON	Retained, merged into range RES, reverse name from FRSAD	WORK has as subject / is subject of RES (LRM-R12)
frad:P4046 (not in FRAD)	WORK	has as subject	is subject of	FAMILY	Retained, merged into range RES, reverse name from FRSAD	WORK has as subject / is subject of RES (LRM-R12)
frbrer:P2031 / frbrer:P2032	WORK	has as subject	is subject of	CORPORATE BODY	Retained, merged into range RES, reverse name from FRSAD	WORK has as subject / is subject of RES (LRM-R12)
frbrer:P2035 / frbrer:P2036	WORK	has as subject	is subject of	WORK	Retained, merged into range RES, reverse name from FRSAD	WORK has as subject / is subject of RES (LRM-R12)
frbrer:P2037 /	WORK	has as subject	is subject of	EXPRESSION	Retained, merged into range RES,	WORK has as subject / is subject of

IFLA Namespace ID	Domain	Relationship Forwards name	Reverse name	Range	Result	FRBR-LRM
frbrer:P2038					reverse name from FRSAD	RES (LRM-R12)
frbrer:P2039 / frbrer:P2040	WORK	has as subject	is subject of	MANIFESTATION	Retained, merged into range RES, reverse name from FRSAD	WORK has as subject / is subject of RES (LRM-R12)
frbrer:P2041 / frbrer:P2042	WORK	has as subject	is subject of	ITEM	Retained, merged into range RES, reverse name from FRSAD	WORK has as subject / is subject of RES (LRM-R12)
frsad:P2001 / frsad:P2002	WORK	has as subject	is subject of	THEMA	Retained, merged into range RES	WORK has as subject / is subject of RES (LRM-R12)
FRSAD 3.5 / FRAD Fig. 2						Core NOMEN relationships
frsad:P2003 / frsad:P2004	THEMA	has appellation	is appellation of	NOMEN	Retained, merged into domain RES	RES has appellation / is appellation of NOMEN (LRM-R13)
frad:P2013 / frad:P2014	Bibliographic entities	has appellation	is appellation of	NAME	Retained, merged into domain RES, range NOMEN	RES has appellation / is appellation of NOMEN (LRM-R13)
frad:P2015 / frad:P2016	Bibliographic entities	is assigned	is assigned to	IDENTIFIER	Merged with appellation relationship	RES has appellation / is appellation of NOMEN (LRM-R13)
frad:P2009 / frad:P2010	NAME	is basis for	is based on	CONTROLLED ACCESS POINT	Merged with general nomen-derivation relationship	NOMEN is derivation of / has derivation NOMEN (LRM-R19)
frad:P2011 / frad:P2012	IDENTIFIER	is basis for	is based on	CONTROLLED ACCESS POINT	Merged with general nomen-derivation relationship	NOMEN is derivation of / has derivation NOMEN (LRM-R19)
frad:P2005 / frad:P2006	CONTROLLED ACCESS POINT	is created by	creates	AGENCY	Retained and generalized, assignment relationship	AGENT assigned / was assigned by NOMEN (LRM-R14)
frad:P2007 / frad:P2008	CONTROLLED ACCESS POINT	is modified by	modifies	AGENCY	Merged with assignment relationship, as the modified CAP is a new <i>nomen</i>	AGENT assigned / was assigned by NOMEN (LRM-R14)
frad:P2003 / frad:P2004	CONTROLLED ACCESS POINT	is governed by	govern	RULES	Out of scope	--
frad:P2001 / frad:P2002	RULES	are applied by	applies	AGENCY	Out of scope	--

Transition mapping

Relationships in FRBR, FRAD and their equivalent in FRBR-LRM

Section 2 : WEMI Additional Relationships

- Forwards and reverse names for FRAD relationships (given in bold) are taken from the OMR, only relationship name given in FRAD
- Definitions for FRBR relationships follow the wording used in the OMR description for the forwards relationship, sometimes abridged
- FRBR relationships from tables 5.1 (Work-to-Work), 5.4 (Expression-to-Expression, different Works), 5.6 (Expression-to-Work) are listed only once (as Work-to-Work), but all three pairs of namespace IDs are given

IFLA Namespace ID	FRBR Table or FRAD Section	Domain	Relationship Name	Forwards / Reverse Name	Range	Definition	Result	FRBR-LRM
frad:P2029	FRAD 5.3.7	WORK	sequential relationship	has sequential relationship (reciprocal)	WORK	The relationship between one work and another of different content that is a successor or a predecessor of that work	Retained and renamed, merged with FRBR successor	WORK precedes / succeeds WORK (LRM-R21)
frbrer:P2043 / frbrer:P2044 frbrer:P2067 / frbrer:P2068 frbrer:P2095 / frbrer:P2096	5.1 5.4 5.6	WORK	successor	has a successor / is a successor to	WORK	Relates a prior work to another work, the content of which represents a linear progression from that of the prior work	Retained and renamed	WORK precedes / succeeds WORK (LRM-R21)
frad:P2030	FRAD 5.3.7	WORK	accompanying relationship (part-to-part)	has accompanying relationship (reciprocal)	WORK	The relationship between one work and another that is a supplement to that work or intended to complement or be a companion to another work	Retained, merged with FRBR supplement and complement	WORK accompanies/complements / is accompanied/complemented by WORK (LRM-R22)
frbrer:P2045 / frbrer:P2046 frbrer:P2109 / frbrer:P2110	5.1 5.4	WORK	supplement	has a supplement / supplements	WORK	Relates a prior work to another work that is intended to be used in conjunction with the prior work	Retained, merged with complement relationship	WORK accompanies/complements / is accompanied/complemented

IFLA Namespace ID	FRBR Table or FRAD Section	Domain	Relationship Name	Forwards / Reverse Name	Range	Definition	Result	FRBR-LRM
frbrer:P2097 / frbrer:P2098	5.6							by WORK (LRM-R22) (no consistent distinction found in the meanings of accompanying, complementary, or supplementary)
frbrer:P2047 / frbrer:P2048 frbrer:P2069 / frbrer:P2070 frbrer:P2099 / frbrer:P2100	5.1 5.4 5.6	WORK	complement	has a complement / complements	WORK	Relates a prior work to another work that is intended to be combined with or inserted into the prior work, but was not part of the original conception of the prior work	Retained, merged with supplement relationship	WORK accompanies/complements / is accompanied/complemented by WORK (LRM-R22) (no consistent distinction found in the meanings of accompanying, complementary, or supplementary)
frad:P2035 / frad:P2036	FRAD 5.3.7	WORK	descriptive relationship	has descriptive work / is descriptive work of	WORK	The relationship between a target work or expression or manifestation or item and a new work that refers to that target as its subject (e.g., criticism, commentary, review, casebook, etc., and the object of that analysis)	Retained, merged with subject relationship	WORK has as subject / is subject of RES (LRM-R12)
frbrer:P2049 / frbrer:P2050 frbrer:P2071 / frbrer:P2072 frbrer:P2101 /	5.1 5.4 5.6	WORK	summarization	has a summary / is a summary of	WORK	Relates a prior work to another work that represents a brief recapitulation of the content of the prior work. The modification of the content of the prior work must be	Retained, merged with subject relationship	WORK has as subject / is subject of RES (LRM-R12)

IFLA Namespace ID	FRBR Table or FRAD Section	Domain	Relationship Name	Forwards / Reverse Name	Range	Definition	Result	FRBR-LRM
frbrer:P2102						sufficient in degree to warrant the summary work being considered as a new work autonomous with respect to the prior work		
frad:P2017 / frad:P2018	FRAD 5.3.7	WORK	derivative relationship	has derivative / is derivative of	WORK	The relationship comprises two types. It includes relationships between an original work and a broad range of modifications from the original, including variations or versions of that work, such as editions, revisions, translations, summaries, abstracts, and digests. It also includes new works that are adaptations or modifications that become new works but are based on an earlier work (improvisations, etc.); new works that are changes of genre (transformations, dramatizations, novelizations, etc.); and, new works based on the style or thematic content of other works (free translations, paraphrases, imitations, parodies, etc.).	Merged with transformation AND source for expression-derivation relationship	WORK is a transformation of / was transformed into WORK (LRM-R24) <i>OR</i> EXPRESSION was derived into / was derived from EXPRESSION (LRM-R25) (While FRAD table 1, section 5.3.7, lists the relationship as entirely WORK-WORK, the description includes a sub-type of derivations that operate between <i>expressions</i> of the same <i>work</i>)
frbrer:P2051 / frbrer:P2052 / frbrer:P2073 / frbrer:P2074 / frbrer:P2103 / frbrer:P2104	5.1 5.4 5.6	WORK	adaptation	has an adaptation / is a adaptation of	WORK	Relates a prior work to another work that represents a modification of the content of the prior work for a purpose, use, or medium other than that for which it was originally intended. The modification of the content of the prior work must be	Merged with transformation relationship	WORK is a transformation of / was transformed into WORK (LRM-R24)

IFLA Namespace ID	FRBR Table or FRAD Section	Domain	Relationship Name	Forwards / Reverse Name	Range	Definition	Result	FRBR-LRM
						sufficient in degree to warrant the adaptation work being considered as a new work autonomous with respect to the prior work		
frbrer:P2053 / frbrer:P2054 frbrer:P2075 / frbrer:P2076 frbrer:P2105 / frbrer:P2106	5.1 5.4 5.6	WORK	transformation	has a transformation / is a transformation of	WORK	Relates a prior work to another work that represents a transformation of the content of the prior work in a different genre	Retained, modified reverse name to past tense	WORK is a transformation of / was transformed into WORK (LRM-R24)
frbrer:P2055 / frbrer:P2056 frbrer:P2077 / frbrer:P2078 frbrer:P2107 / frbrer:P2108	5.1 5.4 5.6	WORK	imitation	has a imitation / is an imitation of	WORK	Relates a prior work to another work that that copies the style of the content of the prior work	Merged with transformation relationship	WORK is a transformation of / was transformed into WORK (LRM-R24)
	New	WORK	inspiration	is inspiration for / is inspired by	WORK	This is the relationship between two <i>works</i> where the content of the first served as the source of ideas for the second	New (LRM-R23)	Distinct from transformation as the new <i>work</i> may not use any actual part of the original <i>work</i>
	New	EXPRESSION	derivation	was derived into / was derived from	EXPRESSION	This relationship indicates that of two <i>expressions</i> of the same <i>work</i> , the first was used as the source for the other	New (LRM-R25) Generalization of several relationships, from FRAD derivative relationship	Can be sub-typed for significant specific modes of derivation among <i>expressions</i> of the same <i>work</i> (such as, abridgement, revision, translation, arrangement)
frbrer:P2059 /	5.3	EXPRESSION	abridgement	has an	EXPRESSION	Relates an expression to another	Merged into	EXPRESSION was derived

IFLA Namespace ID	FRBR Table or FRAD Section	Domain	Relationship Name	Forwards / Reverse Name	Range	Definition	Result	FRBR-LRM
frbrer:P2060				abridgement / is an abridgement of		expression of the same work that represents an abridgement, in which some content of the prior expression is removed, but the result does not alter the content to the extent that it becomes a new work	general expression derivation relationship	into / was derived from EXPRESSION (LRM-R25) (sub-typed abridgement)
frbrer:P2061 / frbrer:P2062	5.3	EXPRESSION	revision	has a revision / is a revision of	EXPRESSION	Relates an expression to another expression of the same work that represents a revision, in which the intent is to alter or update the content of the prior expression, but without changing the content so much that it becomes a new work	Merged into general expression derivation relationship	EXPRESSION was derived into / was derived from EXPRESSION (LRM-R25) (sub-typed revision)
frbrer:P2063 / frbrer:P2064	5.3	EXPRESSION	translation	has a translation / is a translation of	EXPRESSION	Relates an expression to another expression of the same work that represents a literal translation, in which the intent is to render the intellectual content of the previous expression as accurately as possible	Merged into general expression derivation relationship	EXPRESSION was derived into / was derived from EXPRESSION (LRM-R25) (sub-typed translation)
frbrer:P2065 / frbrer:P2066	5.3	EXPRESSION	arrangement (music)	has an arrangement / is an arrangement of	EXPRESSION	Relates an expression to another expression that represents an arrangement of the same musical composition work	Merged into general expression derivation relationship	EXPRESSION was derived into / was derived from EXPRESSION (LRM-R25) (sub-typed musical arrangement)
frad:P2019	FRAD 5.3.7	MANIFESTATION	equivalence relationship	has equivalence relationship (reciprocal)	MANIFESTATION	Relationship between one manifestation and another that embodies the same intellectual or artistic content (work or work /	Modelled via relationships to common <i>expression</i> , not	EXPRESSION is embodied in / embodies MANIFESTATION (LRM-R3)

IFLA Namespace ID	FRBR Table or FRAD Section	Domain	Relationship Name	Forwards / Reverse Name	Range	Definition	Result	FRBR-LRM
						expression), but are packaged or presented in different ways	directly	(While FRAD table 1, section 5.3.7, lists the relationship as WORK-WORK, definition is for <i>manifestation</i> or <i>item</i> equivalence)
frbrer:P2081 / frbrer:P2082	5.7	MANIFESTATION	reproduction	has a reproduction / is a reproduction of	MANIFESTATION	Relates a manifestation to another manifestation, usually of the same expression, that represents the same intellectual or artistic content as the prior manifestation. The reproduction manifestation may or may not replicate the look and feel or other physical characteristics of the prior manifestation	Retained	MANIFESTATION has reproduction / is reproduction of MANIFESTATION (LRM-R26)
frbrer:P2083 (reciprocal)	5.7	MANIFESTATION	alternate	has an alternate / is an alternate of	MANIFESTATION	Relates a manifestation to another manifestation, usually of the same expression, that effectively serves as an alternate manifestation	Retained, made reciprocal	MANIFESTATION has alternate MANIFESTATION (reciprocal) (LRM-R27)
frbrer:P2093 / frbrer:P2094	5.9	ITEM	reproduction	has a reproduction / is a reproduction of	MANIFESTATION	Relates an item to a manifestation that has been derived in some way from the prior item. There can be varying levels of fidelity of the reproduction manifestation to the prior item	Retained only reproductions between <i>manifestations</i>	MANIFESTATION has reproduction / is reproduction of MANIFESTATION (LRM-R26) (Generally when a reproduction is based on an <i>item</i> , it is as a representative of a <i>manifestation</i>)

IFLA Namespace ID	FRBR Table or FRAD Section	Domain	Relationship Name	Forwards / Reverse Name	Range	Definition	Result	FRBR-LRM
frad:P2037	FRAD 5.3.7	ITEM	equivalence relationship	has equivalence relationship (reciprocal)	ITEM	Relationship between one item and another that embodies the same intellectual or artistic content (work or work/expression), but are packaged or presented in different ways	Modelled via relationships to common <i>manifestation</i> , not directly	MANIFESTATION is exemplified by / exemplifies ITEM (LRM-R4) (While FRAD table 1, section 5.3.7, lists the relationship as WORK-WORK, definition is for <i>manifestation</i> or <i>item</i> equivalence)
frbrer:P2089 / frbrer:P2090	5.10	ITEM	reproduction	has a reproduction / is a reproduction of	ITEM	Relates an item to another item that has been derived in some way from the prior item. There can be varying levels of fidelity of the reproduction item to the prior item. The reproduction item must replicate the type of carrier and other physical characteristics of the prior item	Removed, reproduction always creates a new <i>manifestation</i> , even when that consists of a single <i>item</i>	--
frbrer:P2087 / frbrer:P2088	5.10	ITEM	reconfiguration	has reconfiguration / is a reconfiguration of	ITEM	Relates an item to another item that is the result of a change to the prior item. The reconfiguration item may be the result of changes to more than one prior item	Modelled through the <i>agent</i> whose action changes the <i>item(s)</i>	ITEM was modified by / modified AGENT (LRM-R11) (A single <i>item</i> exists with before and after states)
(not declared)	FRAD 5.3.7	WORK	whole/part relationship	has part / is part of	WORK	The relationship between a work and one or more works that form part of that larger work	Retained, merged with FRBR	WORK is part of / has part WORK (LRM-R20)
frbrer:P2057 / frbrer:P2058	5.2	WORK	whole/part	has part / is part of	WORK	Relates a work to another work that is a component of the work	Retained, merged with	WORK is part of / has part WORK (LRM-R20)

IFLA Namespace ID	FRBR Table or FRAD Section	Domain	Relationship Name	Forwards / Reverse Name	Range	Definition	Result	FRBR-LRM
							FRAD	
frbrer:P2079 / frbrer:P2080	5.5	EXPRESSION	whole/part	has part / is part of	EXPRESSION	Relates an expression to another expression that is a component of the expression	Retained	EXPRESSION has part / is part of EXPRESSION (LRM-R31)
frbrer:P2085 / frbrer:P2086	5.8	MANIFESTATION	whole/part	has part / is part of	MANIFESTATION	Relates a manifestation to another manifestation that is a component of the manifestation	Retained	MANIFESTATION has part / is part of MANIFESTATION (LRM-R32)
frbrer:P2091 / frbrer:P2092	5.11	ITEM	whole/part	has part / is part of	ITEM	Relates an item to another item that is a component of the item	Removed, prefer longer path through <i>manifestation</i> whole-part	--
frad:P2031	FRAD 5.3.7	WORK	shared characteristic relationship	has shared characteristic (reciprocal)	WORK	The relationship between two works that have some characteristic in common, apart from any of the other relationships	Removed, not modelled directly	The direct (short-cut) relationship is not needed, collocation is modelled by common values for any attribute, else any relationship involving the same instance of an entity
frad:P2032	FRAD 5.3.7	EXPRESSION	shared characteristic relationship	has shared characteristic (reciprocal)	EXPRESSION	The relationship between two expressions that have some characteristic in common, apart from any of the other relationships	Removed, not modelled directly	The direct (short-cut) relationship is not needed, collocation is modelled by common values for any attribute, else any relationship involving the same instance of an entity
frad:P2033	FRAD 5.3.7	MANIFESTATION	shared characteristic	has shared characteristic	MANIFESTATION	The relationship between two manifestations that have some	Removed, not modelled	The direct (short-cut) relationship is not needed,

IFLA Namespace ID	FRBR Table or FRAD Section	Domain	Relationship Name	Forwards / Reverse Name	Range	Definition	Result	FRBR-LRM
			relationship	(reciprocal)		characteristic in common, apart from any of the other relationships	directly	collocation is modelled by common values for any attribute, else any relationship involving the same instance of an entity
frad:P2034	FRAD 5.3.7	ITEM	shared characteristic relationship	has shared characteristic (reciprocal)	ITEM	The relationship between two items that have some characteristic in common, apart from any of the other relationships	Removed, not modelled directly	The direct (short-cut) relationship is not needed, collocation is modelled by common values for any attribute, else any relationship involving the same instance of an entity

Transition mapping

Relationships in FRAD, FRSAD and their equivalent in FRBR-LRM

Section 3 : Additional Relationships

- Forwards and reverse names for FRAD relationships (given in bold) are taken from the OMR, only relationship name given in FRAD
- FRSAD additional relationships are not declared in the OMR, forwards and reverse names are not official

IFLA Namespace ID	FRAD or FRSAD Section	Domain	Relationship Name	Forwards / Reverse Name	Range	Definition	Result	FRBR-LRM
	FRAD 5.3 (Table 1)							
frad:P4035 / frad:P4036	5.3.1	PERSON	pseudonymous	has pseudonymous persona / is pseudonymous persona of	PERSON	The relationship between a “real” person (i.e., an individual) and a persona(ae) or identity adopted by that individual through the use of one or more pseudonyms.	Given the FRBR-LRM definition of <i>person</i> , between a <i>person</i> and <i>nomen(s)</i>	RES has appellation / is appellation of NOMEN (LRM-R13) (several <i>nomens</i> for same <i>person</i>), with distinct values for the Context of use attribute of the <i>nomen</i>
frad:P4037 / frad:P4038	5.3.1	PERSON	secular	has secular identity / is secular identity of	PERSON	The relationship between a person and an identity that person assumes in a secular capacity.	Given the FRBR-LRM definition of <i>person</i> , between a <i>person</i> and <i>nomen(s)</i>	RES has appellation / is appellation of NOMEN (LRM-R13) (several <i>nomens</i> for same <i>person</i>), with distinct values for the Context of use attribute of the <i>nomen</i>
frad:P4039 / frad:P4040	5.3.1	PERSON	religious	has religious identity / is religious identity of	PERSON	The relationship between a person and an identity that person assumes in a religious capacity.	Given the FRBR-LRM definition of <i>person</i> , between a <i>person</i> and <i>nomen(s)</i>	RES has appellation / is appellation of NOMEN (LRM-R13) (several <i>nomens</i> for same <i>person</i>), with distinct values for the Context of use attribute of the <i>nomen</i>

IFLA Namespace ID	FRAD or FRSAD Section	Domain	Relationship Name	Forwards / Reverse Name	Range	Definition	Result	FRBR-LRM
frad:P4041 / frad:P4042	5.3.1	PERSON	official	has official identity / is official identity of	PERSON	The relationship between a person and an identity that person assumes in an official capacity.	membership relationship OR appellation relationship	membership relationship (LRM-R28) between <i>person</i> and a <i>collective agent</i> consisting of office holders of the specific official role <i>OR</i> RES has appellation / is appellation of NOMEN (LRM-R13) (when the role results in a distinct name), with distinct values for the Context of use attribute of the <i>nomen</i>
frad:P4043 / frad:P4044	5.3.1	PERSON	attributive	has works attributed to / has attributed works from	PERSON	The relationship between one person and another person (either a “real” individual or a persona) or identity to whom one or more works by the former have been attributed, either erroneously or falsely.	Modelled via creation relationship to a <i>work</i> , not directly as a person-person relationship	two <i>created by</i> relationships between <i>persons</i> and a given <i>work</i> , one which is with an actual creator and the other which is an error (or the best information available at one time). No actual relationship is created between the <i>persons</i> or the <i>nomens</i>
frad:P4045	5.3.1	PERSON	collaborative	has collaborative relationship (reciprocal)	PERSON	The relationship between two or more persons (i.e., one or more individuals) who collaborate in intellectual or artistic endeavours.	Modelled via creation relationship to a <i>work</i> , not directly as a person-person relationship	The direct (short-cut) relationship between the <i>persons</i> is not needed, collocation of the <i>persons</i> is modelled by relating each of them to the co-

IFLA Namespace ID	FRAD or FRSAD Section	Domain	Relationship Name	Forwards / Reverse Name	Range	Definition	Result	FRBR-LRM
								created <i>work</i> . NB: The special case of a joint pseudonym is modelled using the appellation relationship (LRM-R13), 2+ <i>persons</i> with the same <i>nomen</i> (with same value for Context of use attribute)
frad:P4050	5.3.1	PERSON	sibling	has sibling (reciprocal)	PERSON	The relationship between two persons who have the same “parent(s)” (in an actual family or within a group).	Removed, direct (short-cut) relationship between the <i>persons</i> is not needed. Retained only agent-membership relationship	AGENT (<i>Person</i>) is member of / has member COLLECTIVE AGENT (of type <i>Family</i>) (LRM-R28) (if bibliographically relevant, sub-type membership by type of relationship)
frad:P4051 / frad:P4049	5.3.1	PERSON	parent / child	has parent / has child	PERSON	The relationship between two persons, one of whom is a “parent” or “child” of the other.	Removed, direct (short-cut) relationship between the <i>persons</i> is not needed. Retained only agent-membership relationship	AGENT (<i>Person</i>) is member of / has member COLLECTIVE AGENT (of type <i>Family</i>) (LRM-R28) (if bibliographically relevant, sub-type membership by type of relationship)
frad:P4005 / frad:P4004	5.3.2	PERSON	membership	is member of / has member	FAMILY	The relationship between a person and a family of which the person is a member.	Retained, merged into domain AGENT, range COLLECTIVE	AGENT (<i>Person</i>) is member of / has member COLLECTIVE AGENT (of type <i>Family</i>) (LRM-R28)

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							AGENT	
frad:P4007 / frad:P4006	5.3.3	PERSON	membership	is member of / has member	CORPORATE BODY	The relationship between a person and a corporate body in which the person is a member or with which the person is affiliated.	Retained, merged into domain AGENT, range COLLECTIVE AGENT	AGENT (<i>Person</i>) is member of / has member COLLECTIVE AGENT (of type <i>Corporate Body</i>) (LRM-R28)
frad:P4008 / frad:P4009	5.3.4	FAMILY	genealogical	has (descendent) genealogical relationship / has (predecessor) genealogical relationship	FAMILY	The relationship between one family and another that descended from the first or is the predecessor to the other.	Merged with sequential relationship for entity <i>collective agent</i>	COLLECTIVE AGENT precedes / succeeds COLLECTIVE AGENT (LRM-R30)
frad:P4010 / frad:P4011	5.3.5	FAMILY	founding	is founder of / has founder	CORPORATE BODY	The relationship between a family and a corporate body which the family created.	Not included. An application can declare a general <i>Agent</i> is founder of <i>Collective Agent</i> relationship, if deemed significant	--
frad:P4012 / frad:P4013	5.3.5	FAMILY	ownership	is owner of / has owner	CORPORATE BODY	The relationship between a family and a corporate body which the family owns.	Not included. An application can declare a general <i>Agent</i> is owner of <i>Collective Agent</i> (of type <i>Corporate Body</i>) relationship, if deemed significant	--
frad:P4014 / frad:P4015	5.3.6	CORPORATE BODY	hierarchical	has subordinate / is subordinate of	CORPORATE BODY	The relationship between two corporate bodies, one	Retained and generalized to	COLLECTIVE AGENT has part / is part of

IFLA Namespace ID	FRAD or FRSAD Section	Domain	Relationship Name	Forwards / Reverse Name	Range	Definition	Result	FRBR-LRM
						of which is subordinate to the other (within a corporate hierarchy, etc.)	whole-part, domain and range COLLECTIVE AGENT	COLLECTIVE AGENT (LRM-R29)
frad:P4016 / frad:P4017	5.3.6	CORPORATE BODY	sequential	is predecessor of / is predecessor of	CORPORATE BODY	The relationship between two or more corporate bodies that follow the first in order or time (e.g., predecessor / successor, splits, mergers, subsequent meetings / conferences, etc.).	Retained and generalized to domain and range COLLECTIVE AGENT	COLLECTIVE AGENT precedes / succeeds COLLECTIVE AGENT (LRM-R30)
	FRAD 5.4 (Table 2)							
frad:P4021	5.4.1	NAME (of person)	earlier name	has earlier name	NAME (of person)	The relationship between a name of a person and a name that person used at an earlier stage in life.	Merged with nomen-equivalence relationship	NOMEN is equivalent to NOMEN (LRM-R17) (each <i>nomen</i> related to a different <i>time-span</i>)
frad:P4022	5.4.1	NAME (of person)	later name	has later name	NAME (of person)	The relationship between a name of a person and a name that person used at a later stage in life.	Merged with nomen-equivalence relationship	NOMEN is equivalent to NOMEN (LRM-R17) (each <i>nomen</i> related to a different <i>time-span</i>)
frad:P4034	5.4.1	NAME (of person)	alternative linguistic form	has alternative linguistic form (reciprocal)	NAME (of person)	The relationship between a name of a person and an alternative linguistic form of name by which that person is known. This includes translations of a name into other languages.	Merged with nomen-equivalence relationship	NOMEN is equivalent to NOMEN (LRM-R17) may be sub-typed for specific kinds of equivalence (different language)
frad:P4031	5.4.1	NAME	other variant name	has other variant	NAME	The relationship between a	Merged with	NOMEN is equivalent to

IFLA Namespace ID	FRAD or FRSAD Section	Domain	Relationship Name	Forwards / Reverse Name	Range	Definition	Result	FRBR-LRM
		(of person)		name (reciprocal)	(of person)	name of a person and several other variations on a name, such as orthographic relationships, word order relationships (inversions, permutations), alternative name / synonym relationships (bynames, nicknames, courtesy names).	nomen-equivalence relationship	NOMEN (LRM-R17) no specific sub-type
frad:P4024	5.4.2	NAME (of family)	alternative linguistic form	has alternative linguistic form (reciprocal)	NAME (of family)	The relationship between a name of a family and an alternative linguistic form of name by which that family is known.	Merged with nomen-equivalence relationship	NOMEN is equivalent to NOMEN (LRM-R17) may be sub-typed for specific kinds of equivalence (different language)
frad:P4026	5.4.3	NAME (of corporate body)	expanded name	has expanded name	NAME (of corporate body)	The relationship between a name of a corporate body and the expanded form of name by which that body is known.	Merged with nomen-equivalence relationship	NOMEN is equivalent to NOMEN (LRM-R17) may be sub-typed for specific kinds of equivalence (expanded form)
frad:P4027	5.4.3	NAME (of corporate body)	acronym / initials / abbreviations	has acronym or initials or abbreviation	NAME (of corporate body)	The relationship between a name of a corporate body and an acronym or initials or an abbreviation by which that body is known.	Merged with nomen-equivalence relationship	NOMEN is equivalent to NOMEN (LRM-R17) may be sub-typed for specific kinds of equivalence (reduced form)
frad:P4025	5.4.3	NAME (of corporate body)	alternative linguistic form	has alternative linguistic form (reciprocal)	NAME (of corporate body)	The relationship between a name of a corporate body and an alternative	Merged with nomen-equivalence relationship	NOMEN is equivalent to NOMEN (LRM-R17) may be sub-typed for

IFLA Namespace ID	FRAD or FRSAD Section	Domain	Relationship Name	Forwards / Reverse Name	Range	Definition	Result	FRBR-LRM
						linguistic form of name by which that body is known. This includes translations of the name for the corporate body.		specific kinds of equivalence (different language)
frad:P4032	5.4.3	NAME (of corporate body)	other variant name	has other variant name (reciprocal)	NAME (of corporate body)	The relationship between a name of a corporate body and a name by which that body is known, such as orthographic relationships, word order relationships (inversions, permutations).	Merged with nomen-equivalence relationship	NOMEN is equivalent to NOMEN (LRM-R17) no specific sub-type
frad:P4028	5.4.4	NAME (of work)	alternative linguistic form	has alternative linguistic form (reciprocal)	NAME (of work)	The relationship between a name of a work and an alternative linguistic form of name by which that work is known.	Merged with nomen-equivalence relationship	NOMEN is equivalent to NOMEN (LRM-R17) may be sub-typed for specific kinds of equivalence (different language)
frad:P4029 / frad:P4030	5.4.4	NAME (of work)	conventional name	has conventional name / is conventional name of	NAME (of work)	The relationship between a name of a work and a conventional name by which that work is known.	Merged with nomen-equivalence relationship	NOMEN is equivalent to NOMEN (LRM-R17) may be sub-typed for specific kinds of equivalence (conventional name)
frad:P4033	5.4.4	NAME (of work)	other variant name	has other variant name (reciprocal)	NAME (of work)	The relationship between a name of a work and a name by which that work is known, such as orthographic relationships, word order relationships	Merged with nomen-equivalence relationship	NOMEN is equivalent to NOMEN (LRM-R17) no specific sub-type

IFLA Namespace ID	FRAD or FRSAD Section	Domain	Relationship Name	Forwards / Reverse Name	Range	Definition	Result	FRBR-LRM
						(inversions, permutations), variant title relationships.		
	FRAD 5.5 (Table 3)							
frad:P4001	5.5	CONTROLLED ACCESS POINT	parallel language	has parallel language form (reciprocal)	CONTROLLED ACCESS POINT	The relationship between two or more controlled access points that are established as parallel language forms of access point for the authorized forms of name for the same entity.	Merged with nomen-equivalence relationship	NOMEN is equivalent to NOMEN (LRM-R17) may be sub-typed for specific kinds of equivalence (different language)
frad:P4002	5.5	CONTROLLED ACCESS POINT	alternate script	has alternate script form (reciprocal)	CONTROLLED ACCESS POINT	The relationship between two or more controlled access points that are established as alternate script forms of the access point for the authorized forms of name for the same entity.	Merged with nomen-equivalence relationship	NOMEN is equivalent to NOMEN (LRM-R17) may be sub-typed for specific kinds of equivalence (alternate script)
frad:P4003	5.5	CONTROLLED ACCESS POINT	different rules	has different rules form (reciprocal)	CONTROLLED ACCESS POINT	The relationship between two or more controlled access points for the authorized forms of name for the same entity that have been established according to different sets of rules.	Merged with nomen-equivalence relationship	NOMEN is equivalent to NOMEN (LRM-R17) may be sub-typed for specific kinds of equivalence (different rules)
frad:P4018	5.5	CONTROLLED ACCESS	controlled access point / corresponding	has corresponding subject term or	CONTROLLED ACCESS	The relationship between the controlled access point	Merged with nomen-equivalence	NOMEN is equivalent to NOMEN (LRM-R17)

IFLA Namespace ID	FRAD or FRSAD Section	Domain	Relationship Name	Forwards / Reverse Name	Range	Definition	Result	FRBR-LRM
		POINT	subject term or classification number	classification number (no reverse defined)	POINT	for the name of an entity and a subject term in a controlled vocabulary, and/or a classification number for that entity. Here the subject term and the classification number may also be viewed as parallel names / identifiers for the name of the same entity.	relationship	may be sub-typed for specific kinds of equivalence (different rules / scheme)
frad:P4019	5.5	CONTROLLED ACCESS POINT	controlled access point / identifier	has related identifier (no reverse defined)	CONTROLLED ACCESS POINT (NB: should be IDENTIFIER)	The relationship between the controlled access point for an entity expressed as an access point based on the authorized or variant form of name of the entity as related to an identifier for the entity.	Merged with nomen-equivalence relationship	NOMEN is equivalent to NOMEN (LRM-R17) may be sub-typed for specific kinds of equivalence
	FRSAD							
	5.3.1	THEMA	hierarchical		THEMA	Hierarchical relationships reveal degrees or levels of superordination and subordination, where the superordinate term represents a class or a whole, and subordinate terms refer to its members or parts.	Removed, not an explicitly declared relationship in FRSAD	In FRSAD, generic, whole-part, instance are specific sub-types of hierarchical. "Other hierarchical" (5.3.1.5) indicates that these three are not an exhaustive sub-typing of hierarchical relationships
	5.3.1.1	THEMA	generic		THEMA	The generic relationship is	Removed, not an	--

IFLA Namespace ID	FRAD or FRSAD Section	Domain	Relationship Name	Forwards / Reverse Name	Range	Definition	Result	FRBR-LRM
						the logical relationship of inclusion. The primary function of the hierarchical relationship is to convey the same concept, but at different levels of specificity	explicitly declared relationship in FRSAD	
	5.3.1.2	THEMA	whole-part		THEMA	The whole-part relationship covers situations where one concept is inherently included in another, regardless of context, so that concepts can be organized into hierarchies (with the “whole” treated as a broader term).	Removed, not an explicitly declared relationship in FRSAD	--
	5.3.1.3	THEMA	instance		THEMA	The instance relationship identifies the link between a general class of things or events, expressed by a common noun, and an individual instance of that category, expressed by a proper noun.	Removed, not an explicitly declared relationship in FRSAD	--
	5.3.2	THEMA	associative	is associated with (reciprocal)	THEMA	Associative relationships cover affiliations between pairs of themas that are not related hierarchically yet are semantically or	Retained and generalized to domain and range RES	RES is associated with RES (LRM-R1)

IFLA Namespace ID	FRAD or FRSAD Section	Domain	Relationship Name	Forwards / Reverse Name	Range	Definition	Result	FRBR-LRM
						conceptually connected and co-occurring.		
	New	RES	associative	is associated with (reciprocal)	RES	This relationship links two <i>res</i> that have an association of any kind	New (LRM-R1)	High-level relationship between <i>res</i> , would be typed according to the needs of the specific implementation
	New	RES	associative	has association with / is associated with	PLACE	This relationship links any entity with a geographic location	New (LRM-15)	Sub-relationship of RES-RES associative, which should in turn be specialized with sub-types
	New	RES	associative	has association with / is associated with	TIME-SPAN	This relationship links any entity with a time interval	New (LRM-16)	Sub-relationship of RES-RES associative, which should in turn be specialized with sub-types
	New	PLACE	whole-part	has part / is part of	PLACE	This is a relationship between two <i>places</i> where one is a component of the other	New (LRM-33)	
	New	TIME-SPAN	whole-part	has part / is part of	TIME-SPAN	This is a relationship between two <i>time-spans</i> where one is a component of the other	New (LRM-34)	
	5.4.1	NOMEN	equivalence	is equivalent to (reciprocal)	NOMEN	Two nomens are equivalent if they are appellations of the same thema.	Retained, forwards and reverse names assigned	NOMEN is equivalent to NOMEN (LRM-R17) (a short-cut for two appellation relationships, may be sub-typed for specific reasons for equivalence)

IFLA Namespace ID	FRAD or FRSAD Section	Domain	Relationship Name	Forwards / Reverse Name	Range	Definition	Result	FRBR-LRM
	5.4.2	NOMEN	whole-part	is part of / has part	NOMEN	A nomen may have components (parts). The composition of such a nomen may be governed by rules, for example, the citation order in a faceted classification scheme or the order of subdivisions in a subject heading system. The components may be nomens on their own. In such cases this is a whole-part relationship between nomens.	Retained, forwards and reverse names assigned	NOMEN is part of / has part NOMEN (LRM-R18) (Applies when a <i>nomen</i> is constructed using a component or components that are themselves <i>nomens</i>)