

5JSC/Chair/10
3 August 2006

TO: Joint Steering Committee for Revision of AACR
FROM: Deirdre Kiorgaard, Chair, JSC
SUBJECT: RDA/ONIX Framework for Resource Categorization

Related documents:

5JSC/Chair/6/Chair follow-up and responses

Attached is Version 1.0 of the RDA/ONIX Framework for Resource Categorization. The RDA Editor will use both the Framework, and the recommendations of the GMD/SMD Working Group, in preparing draft text for RDA sections 3.2 (Media category), 3.3 (Type of carrier) and 4.2 (Content category).

No constituency responses to this document are required. The recommendations in section 3 of the Framework will be discussed at the JSC meeting in October 2006.

**RDA/ONIX Framework
for Resource Categorization**

Version 1.0

Released August 1, 2006

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RDA/ONIX Framework for Resource Categorization

1. Background

In the course of discussions held in October 2005 between the Joint Steering Committee for Revision of AACR and representatives of the publishing industry in the UK, the two groups identified resource categorization as an area of mutual interest and one in which there is substantial potential benefit to be gained through cooperation. A proposal for a joint initiative was subsequently approved and funded by the organizations sponsoring the development of RDA and ONIX, with additional support from the British Library.

The objective is to develop a framework for categorizing resources in all media that will support the needs of both libraries and the publishing industry and will facilitate the transfer and use of resource description data across the two communities.

The first step in developing the framework was taken at a workshop held in London on March 27-28, 2006. The participants in the workshop were Tom Delsey (RDA Editor), David Martin (consultant to EDItEUR), and Godfrey Rust (Rightscom/Ontologyx, consultant to EDItEUR and, in this instance, to the British Library). Gordon Dunsire, who is a member of the CILIP/BL Committee on AACR, acted as facilitator. In the course of the workshop, the participants produced an outline of the proposed framework that identifies various attributes of content and carrier that are implicit in the terms typically used by libraries and the publishing industry to categorize resources; defines primary values for key attributes; and sets out a methodology for using those primary values to construct base resource categories on a common and interoperable basis.

The outline produced at the workshop was subsequently extended and refined to incorporate additional input and feedback both from the workshop participants and from the communities they represent.

This document represents the first formal publication of the RDA/ONIX Framework. It is being submitted to the organizations responsible for RDA and ONIX to be used wherever possible as a common framework for developing resource categories appropriate to their respective communities.

2. Overview

The RDA/ONIX Framework comprises the following:

- a) sets of defined attributes of resource content and resource carriers
- b) specified primary values for a subset of the defined attributes of resource content and resource carriers
- c) a methodology for constructing resource categories
- d) recommendations on the application of resource categories.

2.1. Attributes and values of resource content and resource carriers

The RDA/ONIX Framework defines two sets of attributes used to categorize resources: the first set includes attributes of resource content; the second set includes attributes of resource carriers.

Content refers to the intellectual or artistic content of a resource. *Carrier* refers to the means and methods by which content is conveyed.

The RDA/ONIX Framework specifies primary values¹ for certain key attributes. For other attributes, value sets are designated as “open” (i.e., the value sets may be user-defined, or may be derived from a recognized namespace).

Two tables summarizing the Framework attributes for resource content and resource carriers, and their primary values, are presented below. More detailed tables containing definitions for the attributes and primary values for resource content and resource carriers are given in Appendices A and B, respectively. The four attributes of resource content, and the three attributes of resource carrier, that are shaded in the summary tables have been targeted for particular attention in this stage of the work – see the discussion of BaseCategories in section 2.2.

Specified primary values for attributes of resource content

Attribute	Specified values
Character	<i>language music image other</i>
SensoryMode	<i>sight hearing touch taste smell none</i>
ImageDimensionality	<i>two-dimensional three-dimensional not applicable</i>
ImageMovement	<i>still moving not applicable</i>
Interactivity	<i>interactive non-interactive</i>
CaptureMethod	<i>(open value set)</i>
ExtensionMode	<i>succession integration not applicable</i>
ExtensionTermination	<i>determinate indeterminate not applicable</i>
ExtensionRequirement	<i>essential inessential not applicable</i>
RevisionMode	<i>correction substitution transformation not applicable</i>

¹ A *primary value* is a value specified at the first level of hierarchy within a value set.

Attribute	Specified values
RevisionTermination	<i>determinate</i> <i>indeterminate</i> <i>not applicable</i>
RevisionRequirement	<i>essential</i> <i>inessential</i> <i>not applicable</i>
Purpose	<i>(open value set)</i>
Subject	<i>(open value set)</i>
Form/Genre	<i>(open value set)</i>

Specified primary values for attributes of resource carriers

Attribute	Specified values
StorageMediumFormat	<i>sheet</i> <i>strip</i> <i>roll</i> <i>disc</i> <i>sphere</i> <i>cylinder</i> <i>chip</i> <i>file server</i>
HousingFormat	<i>binding</i> <i>flipchart</i> <i>reel</i> <i>cartridge</i> <i>cassette</i> <i>not applicable</i>
BaseMaterial	<i>(open value set)</i>
AppliedMaterial	<i>(open value set)</i>
FixationMethod	<i>(open value set)</i>
FixationTool	<i>(open value set)</i>
EncodingFormat	<i>(open value set)</i>
Generation	<i>first</i> <i>reproduction</i>
IntermediationMethod	<i>(open value set)</i>
IntermediationTool	<i>microform reader</i> <i>microscope</i> <i>projector</i> <i>stereoscope</i> <i>audio player</i> <i>audiovisual player</i> <i>computer</i> <i>not required</i>

Additional attributes may be defined for inclusion in the Framework at a later stage, if required.

2.2. Constructing resource categories

A resource category is a class of resources defined in terms of specific values for one or more attributes (e.g., all resources for which the value for Character is *language*).

The RDA/ONIX Framework provides a methodology for constructing BaseCategories as well as QualifiedCategories for resource content and resource carriers:

A **BaseCategory** is a resource category that is wholly defined in terms of primary values that are specified in the RDA/ONIX Framework.

Note: A BaseCategory may be classified as either a BaseContentCategory (i.e., a BaseCategory defined only in terms of an attribute or attributes of the content of a resource) or a BaseCarrierCategory (i.e., a BaseCategory defined only in terms of an attribute or attributes of the carrier of a resource).

There is, logically, a finite number of possible BaseCategories, reflecting all the possible combinations of primary values specified in the Framework. Not all of these possible BaseCategories will be useful in practice.

A **QualifiedCategory** is a category that qualifies a BaseCategory by the addition of a value or values that are not specified in the RDA/ONIX Framework. The additional values may be sub-values² of primary values specified in the RDA/ONIX Framework, or they may be values of attributes for which there are no primary values specified in the RDA/ONIX Framework. (See Appendices A and B for examples of primary values and sub-values that might be derived from user-defined value sets to construct a QualifiedCategory).

Note: A QualifiedCategory may be further classified as either a QualifiedContentCategory (i.e., a resource category that qualifies a BaseContentCategory) or a QualifiedCarrierCategory (i.e., a resource category that qualifies a BaseCarrierCategory).

In its first release, the Framework targets four particular attributes of resource content (Character, SensoryMode, ImageDimensionality, and ImageMovement) and three attributes of resource carrier (StorageMediumFormat, HousingFormat, and IntermediationTool) for constructing BaseContentCategories and BaseCarrierCategories, respectively. The choice of categories targeted in the first release of the Framework is exemplary, and particularly appropriate to physical resources.

Appendices C and D illustrate how the specified primary values for the targeted attributes of resource content and resource carriers may be used to construct BaseContentCategories and BaseCarrierCategories, respectively, for use in both RDA and ONIX resource descriptions.

The examples shown in Appendix C illustrate BaseContentCategories constructed by concatenating specified primary values for all four of the targeted attributes of resource content, and those shown in Appendix D illustrate BaseCarrierCategories constructed by concatenating specified primary values for all three of the targeted attributes of resource carriers. However, valid BaseCategories can be constructed using specified primary values for a single attribute, or concatenating specified primary values for any two or more attributes of resource content or resource carriers for which RDA/ONIX primary values have been specified.

The examples shown in Appendices C and D illustrate combinations of specified primary values used to construct BaseCategories that currently have a counterpart in either AACR

² A *sub-value* is a more specific instance of a primary value.

or ONIX, or both, supplemented by a few categories derived from other sources. However, the BaseCategories shown in the appendices are intended to be illustrative only, and do not exhaust the possibilities for producing valid BaseCategories using the specified primary values for the targeted attributes.

If a BaseCategory defined in an implementation of the Framework concatenates values for two or more attributes, the category must be defined in such a way as to map unambiguously to the specified primary values for each attribute in the Framework that is reflected in the concatenated category. For example, if a BaseCategory for “audiotape cartridge” is constructed by concatenating specified primary values for StorageMediumFormat, HousingFormat, and IntermediationTool, any formal definition or ontology for the category must be consistent with, and support a mapping to *roll* as the Framework value for StorageMediumFormat, *cartridge* as the value for HousingFormat, and *audio player* as the value for IntermediationTool.

The sample category labels shown in Appendices C and D are illustrative only. Each BaseCategory shown is defined by the primary values for the attributes used to construct the category. In implementing the RDA/ONIX Framework, a user community is free to establish its own category labels. Those labels may be generated from coded values for the BaseCategories, and the label for a specific BaseCategory may be changed over time, if necessary, to reflect changes in terminological preferences within the user community.

2.3. Application of resource categories

For any particular resource, one or more content categories and one or more carrier categories may be applicable (i.e., the resource may contain one or more categories of content and may be conveyed on one or more categories of carrier). For example, the content of the resource may include both language and image, or the resource may be conveyed on carriers that require both a projector and an audio player.

The RDA/ONIX Framework makes provision for recording either a single resource category or multiple resource categories for a resource.

To indicate the extent of applicability of a resource category to a particular resource, the Framework defines a covering set of five values:

Applicability value	Description
All	Indicates that the category applies to all of the content or carrier(s) of the resource.
Predominant	Indicates that the category applies to the predominant part of the content or carrier of the resource.
Substantial	Indicates that the category applies to a substantial part of the content or carrier of the resource.
Some	Indicates that the category applies to some part of the content or carrier of the resource.
None	Indicates that the category does not apply to any part of the resource

Although the Framework supports the recording of all categories of content and carrier applicable to a resource, it does not require the categorization of the resource content and carrier to be exhaustive.

If more than one category is applicable to either the content of the resource or the carrier of the resource, the RDA/ONIX Framework makes allowance for recording only one

content category and/or one carrier category if that category applies to the predominant content or carrier. If no single category of content or carrier is predominant, the Framework makes allowance for recording only those content categories and/or those carrier categories that apply to extensive parts of the content or carrier.

The Framework also makes allowance for the incomplete or partial assignment of categories to individual resources. For example, an implementation of the Framework may define a data element corresponding to an attribute defined in the Framework, but may not require that a specified value for that attribute be recorded for all resources. In that case, the implementation would need to establish a convention for indicating that the value for an attribute is “unspecified”. Similarly, an implementation may need to establish a convention to indicate that applicability values have been assigned only partially or incompletely.

2.4. Completeness of the RDA/ONIX Framework

An important aim of the Framework is to provide high level attributes and values to which categorizations of content and carrier defined by a user community may be mapped (e.g. ONIX codes for product form, etc., and elements for categories and types of content and carrier defined in RDA). Every effort has been made in the initial release of the Framework to create a set of attributes and values that will support this aim, but it may be necessary from time to time to add further attributes and/or values.³ This will require a mechanism by which the RDA/ONIX communities, together with any other future stakeholders, can manage the development and maintenance of the Framework.

3. Recommendations

1. That the Framework for resource categorization set out in this document be tested by mapping RDA, ONIX, and other namespace-controlled value/code lists to it, and that the mapping be used to identify the need for any additional attributes or specified values.
2. That, subject to the outcome of such testing and any further revision found necessary, the Framework be adopted as the basis for defining relevant categories and values in both RDA and ONIX.
3. That consideration be given to defining a subset of agreed values for Form/Genre to be used by both RDA and ONIX to construct QualifiedContentCategories for cartographic resources (e.g., cartographic image, cartographic object) and computer resources (e.g., computer data, computer program).
4. That consideration be given to defining subsets of agreed values for other attributes of content and carrier defined in the Framework with “open” value sets, for the purpose of constructing common QualifiedCategories that will facilitate the extension of crosswalks between RDA and ONIX category values beyond those that are covered by BaseCategories.
5. That a methodology be put in place for the future refinement and extension of the RDA/ONIX Framework.

³ One issue identified for future consideration is whether an attribute or attributes may need to be added to reflect the distinction between single-part and multipart resources, and whether that distinction needs to be made with respect to logical units of content or physical units of carrier, or both.

Appendix A: Attributes of Resource Content

In the value set lists in the tables below:

- a *controlled* set is a value set for which RDA/ONIX primary values have been specified;
- a *covering* set is a value set for which the specified RDA/ONIX primary values are exhaustive with respect to the attribute that they cover; and
- an *open* value set is one for which all values (i.e., primary values as well as sub-values) may be user-defined.

A controlled set that is not exhaustive in its coverage (i.e., one that is not both a *controlled* and a *covering* set) may be extended, if necessary, through the formal incorporation of additional specified primary values into the RDA/ONIX Framework.

Attribute	Value set
<p>*Character A fundamental form of communication in which the content of a resource is expressed.</p>	<p><i>Controlled, covering set of primary values; user-defined sub-values permitted</i></p> <p>Four primary RDA/ONIX values are specified:</p> <p>language Content expressed in human or machine-readable language.</p> <p>music Content expressed in musical form.</p> <p>image Content expressed in line, shape, mass and/or other visually-realized forms</p> <p>other Content expressed in a form other than language, music, or image.</p> <p><i>Note: "Other" includes other forms of communicating phenomena, qualities, etc., perceived directly through the human senses—e.g., natural or machine-generated sounds, aromas, textures, etc.—as well as those that cannot be perceived directly through the human senses—e.g., electromagnetic waves.¹</i></p>

¹ The definition of specific primary values for certain subsets of the phenomena included under "*other*" will be considered for inclusion in future releases of the Framework if required.

*An asterisk indicates an attribute that can be used to construct a BaseContentCategory (i.e., an attribute of content for which RDA/ONIX primary values are specified).

Attribute	Value set
<p>*SensoryMode A human sense through which the content of a resource is intended to be perceived.</p> <p><i>Note: This attribute refers to a human sense through which the content of a resource is intended to be perceived, as distinct from a sense through which it might be perceived either incidentally or with the aid of an intermediating tool other than one which would normally be expected to be used (e.g., a device for transforming digitally encoded alphabetic characters into simulated voice).</i></p>	<p><i>Controlled, covering set of primary values</i> Six primary RDA/ONIX values are specified:</p> <p>sight Content that is intended to be perceived through sight.</p> <p>hearing Content that is intended to be perceived through hearing.</p> <p>touch Content that is intended to be perceived through touch.</p> <p>taste Content that is intended to be perceived through taste.</p> <p>smell Content that is intended to be perceived through smell.</p> <p>none Content that is not intended to be perceived through the human senses.</p>
<p>*ImageDimensionality The number of spatial dimensions in which the <i>image</i> content of a resource is intended to be perceived.</p> <p><i>Note: Applies only to content with a Character value image.</i></p>	<p><i>Controlled, covering set of primary values</i> Three primary RDA/ONIX values are specified:</p> <p>two-dimensional Image content that is intended to be perceived in two-dimensions.</p> <p>three-dimensional Image content that is intended to be perceived in three-dimensions.</p> <p>not applicable Content that is not of Character <i>image</i>.</p>
<p>*ImageMovement The perceived presence or absence of movement in the <i>image</i> content of a resource.</p> <p><i>Note: Applies only to content with a Character value image.</i></p>	<p><i>Controlled, covering set of primary values; user-defined sub-values permitted</i> Three primary RDA/ONIX values are specified:</p> <p>still Image content that is perceived to be static.</p> <p>moving Image content that is perceived to be moving.</p> <p>not applicable Content that is not of Character <i>image</i>.</p>

Attribute	Value set
<p>*Interaction A capacity to respond to actions performed by the user in relation to the content of the resource.</p> <p><i>Note: CaptureMethod is the method used in the initial capturing the content, not the method used to fix the content onto the carrier (c.f., FixationMethod).</i></p>	<p><i>Controlled, covering set of primary values; user-defined sub-values permitted</i></p> <p>Two RDA/ONIX primary values are specified:</p> <p><i>interactive</i> The content responds to actions performed by the user (e.g., searches, commands, selections).</p> <p><i>non-interactive</i> The content does not respond to actions performed by the user.</p>
<p>CaptureMethod A process used to capture the content of a resource.</p> <p><i>Note: CaptureMethod is the method used in the initial capturing the content, not the method used to fix the content onto the carrier (c.f., FixationMethod).</i></p>	<p><i>Open value set</i></p> <p>No RDA/ONIX values are specified.</p> <p>Examples of user-defined primary values: <i>photography</i> <i>radiography</i> <i>remote sensing</i></p> <p>Examples of user-defined sub-values: <i>still photography</i> <i>cinematography</i></p>
<p>*ExtensionMode A means by which the content of the resource is expected to be extended after initial release.</p>	<p><i>Controlled set of primary values; user-defined sub-values permitted</i></p> <p>Three RDA/ONIX primary values are specified:</p> <p><i>succession</i> Extension through the successive release of discrete segments, parts, issues, volumes, supplements, etc.</p> <p><i>integration</i> Extension through the integration of added content.</p> <p><i>not applicable</i> The content is not expected to be extended after initial release.</p>

Attribute	Value set
<p>*ExtensionTermination An expectation as to the period of extension of the content of the resource after initial release.</p>	<p><i>Controlled, covering set of primary values</i> Three RDA/ONIX primary values are specified: determinate The period of extension of the content has a predetermined end. indeterminate The period of extension of the content has no predetermined end. not applicable The content is not expected to be extended.</p>
<p>*ExtensionRequirement An assessment of the necessity of extension of the content of the resource after initial release for its integrity.</p>	<p><i>Controlled, covering set of primary values; user-defined sub-values permitted</i> Three RDA/ONIX primary values are specified: essential Extension of the content after initial release is essential for its integrity. inessential Extension of the content after initial release is not essential for its integrity. not applicable The content is not expected to be extended.</p>
<p>*RevisionMode A means by which the content of the resource is expected to be revised after initial release.</p>	<p><i>Controlled set of primary values; user-defined sub-values permitted</i> Four RDA/ONIX primary values are specified: correction Revision through the release of notices of errors, corrections, addenda, etc. substitution Revision through the release of pages, chapters, parts, volumes, etc., directly to replace previously released counterparts, including the replacement of the entire resource with a new version. transformation Revision through the incorporation of changes (including deletions) directly into the previously released content. not applicable The content is not expected to be revised after initial release.</p>

Attribute	Value set
<p>*RevisionTermination An expectation as to the period of revision of the content of the resource after initial release.</p>	<p><i>Controlled, covering set of primary values</i> Three RDA/ONIX primary values are specified: determinate The period of revision of the content has a predetermined end. indeterminate The period of revision of the content has no predetermined end. not applicable The content is not expected to be revised.</p>
<p>*RevisionRequirement An assessment of the necessity of revision of the content of the resource after initial release for its integrity.</p>	<p><i>Controlled, covering set of primary values; user-defined sub-values permitted</i> Three RDA/ONIX primary values are specified: essential Revision of the content after initial release is essential for its integrity. inessential Revision of the content after initial release is not essential for its integrity. not applicable The content is not expected to be revised.</p>
<p>Purpose A use for which the content of a resource is intended.</p>	<p><i>Open value set</i> No RDA/ONIX values are specified. Examples of user-defined primary values: <i>instruction</i> <i>recreation</i> <i>navigation</i> <i>education</i> Examples of user-defined sub-values: <i>primary education</i> <i>secondary education</i></p>

Attribute	Value set
Subject A topic, discipline, place, event, person, etc., associated with the content of a resource; what the content is about.	<i>Open value set</i> No RDA/ONIX values are specified; use of a recognized namespace is recommended.
Form/Genre A literary, musical, artistic, etc., form or genre associated with the content of a resource.	<i>Open value set</i> No RDA/ONIX values are specified; use of a recognized namespace is recommended. <i>Note: See Recommendations, #3.</i>

Appendix B: Attributes of Resource Carriers

In the Value set lists in the tables below:

- a *controlled* set is a set of primary terms with defined labels and meanings;
- a *covering* set is a set of terms which taken together are exhaustive for the attribute; and
- an *open* value set is one where all labels and meanings may be user-defined.

Attribute	Value set
<p>*StorageMediumFormat The physical form of the material on which the content of the resource is stored.</p>	<p><i>Controlled set of primary values and sub-values; additional user-defined sub-values permitted</i> Eight RDA/ONIX primary values, and three RDA/ONIX sub-values are specified:</p> <p>sheet A flat piece of thin material (paper, plastic, etc.), usually rectangular in shape.</p> <p>strip A short length of material (paper, film, tape, etc.).</p> <p>roll A wound length of material (paper, film, tape, etc.).</p> <p>disc A flat, circular piece of material (plastic, metal, etc.).</p> <p>sphere A round, ball-shaped form.</p> <p>cylinder A roller-shaped form.</p> <p>chip A small wafer of semiconductor silicon.</p> <p>file server A computer storage device with hardware and software connections to a communications network.</p>

*An asterisk indicates an attribute that can be used to construct a BaseCarrierCategory (i.e., an attribute of carrier for which RDA/ONIX primary values are specified).

Attribute	Value set
<p>*HousingFormat The physical format of the encasing for the storage medium.</p> <p><i>Note: Applies to resources conveying content on a physical carrier. Resources conveying content by means of broadcasting or online transmission will have a HousingFormat value not applicable.</i></p>	<p><i>Controlled set of primary values; user-defined sub-values permitted</i></p> <p>These primary RDA/ONIX values are specified:</p> <p>binding An outer cover affixed to a gathering of one or more <i>sheets</i>.</p> <p>flipchart A hinging device holding two or more <i>sheets</i> designed for use on an easel.</p> <p>reel A flanged spool for holding a <i>roll</i>.</p> <p>cartridge A rectangular casing fitted with a single reel holding a <i>roll</i>.</p> <p>cassette A rectangular casing fitted with two reels holding a <i>roll</i>.</p> <p>not applicable The storage medium is not encased in a housing.</p> <p><i>Note: The values specified for HousingFormat apply to housings that are affixed to the storage medium. Sleeves, cases, containers, etc., used simply for purposes of packaging or storage are excluded.</i></p>
<p>BaseMaterial An underlying physical material on or in which the content of a resource is stored.</p> <p><i>Note: Applies to resources conveying content on a physical carrier. Resources conveying content by means of broadcasting or online transmission will have a BaseMaterial value not applicable.</i></p>	<p><i>Open value set</i></p> <p>No RDA/ONIX values are specified.</p> <p>Examples of possible user-defined primary values:</p> <p><i>paper</i> <i>plastic</i> <i>wood</i> <i>stone</i></p> <p>Examples of possible user-defined sub-values:</p> <p><i>vinyl</i> <i>acetate</i></p>

Attribute	Value set
<p>AppliedMaterial A material applied to the base material for purposes of infixing the content of the resource.</p> <p><i>Note: Applies to resources conveying content on a physical carrier. Resources conveying content by means of broadcasting or online transmission will have an AppliedMaterial value not applicable.</i></p>	<p><i>Open value set</i> No RDA/ONIX values are specified. Examples of possible user-defined primary values: <i>paint</i> <i>ink</i> <i>photo-sensitive emulsion</i> <i>magnetic coating</i></p> <p>Examples of possible user-defined sub-values: <i>oil paint</i> <i>acrylic paint</i> <i>watercolour paint</i> <i>silver halide emulsion</i> <i>diazo emulsion</i></p>
<p>FixationMethod A method or process by which the content of a resource is infixed or embedded in the carrier.</p>	<p><i>Open value set</i> No RDA/ONIX values specified. Examples of possible user-defined primary values: <i>impression</i> <i>embossing</i> <i>magnetic recording</i> <i>optical recording</i> <i>handwriting</i> <i>photocopying</i> <i>typing</i></p>
<p>FixationTool A tool used to infix the content of a resource.</p>	<p><i>Open value set</i> No RDA/ONIX values are specified. Examples of possible user-defined primary values: <i>pencil</i> <i>litho press</i></p> <p><i>Note: Values for FixationTool may be either generic or specific (i.e., they may identify either a general type or a specific brand, model, release, etc., of tool).</i></p>

Attribute	Value set
<p>EncodingFormat A schema, standard, etc., used to encode the content of a resource.</p>	<p><i>Open value set</i> No RDA/ONIX values are specified. Examples of possible user-defined values: <i>ASCII</i> <i>HTML</i> <i>PDF</i> <i>XML</i> <i>JPEG</i> <i>MP3</i> <i>NTSC</i> <i>PAL</i> <i>SECAM</i> <i>VHS</i></p>
<p>IntermediationMethod A method intended to be applied to the carrier to allow the content of the resource to be perceived.</p>	<p><i>Open value set</i> No RDA/ONIX values are specified. Examples of possible user-defined values: <i>illumination</i> <i>magnification</i> <i>projection</i> <i>amplification</i></p>

Attribute	Value set
<p>*IntermediationTool A tool intended to be applied to the carrier to enable the content of the resource to be perceived.</p> <p><i>Note: IntermediationTool identifies any physical or digital tool required to enable the resource content to be perceived as intended, including tools required to decode, decrypt or otherwise circumvent security measures.</i></p>	<p><i>Controlled set of primary values; user-defined sub-values permitted</i> Eight primary RDA/ONIX values are specified:</p> <p>microform reader A device that magnifies microforms for reading with the unaided eye.</p> <p>microscope An instrument that magnifies objects by means of a lens or lenses so as to reveal details invisible to the naked eye.</p> <p>projector An optical device consisting of a light source, lens system, and image holder for projecting an image on a screen or other surface.</p> <p>stereoscope An optical device with two lenses enabling each eye to see a separate image of essentially the same content to give the effect of three-dimensions.</p> <p>audio player A device designed to play audio recordings.</p> <p>audiovisual player A device designed to play audiovisual recordings.</p> <p>computer A device designed to perform prescribed sequences of operations on electronic data.</p> <p>not required No intermediation tool is required (i.e., the content of the resource is directly and adequately perceivable through one or more of the human senses).</p> <p><i>Note: User defined sub-values may be used to identify a specific type, brand, model, release, etc., of an intermediation tool).</i></p>

Appendix C: Examples of Base Content Categories

Note: The table below illustrates combinations of specified primary values used to construct BaseContentCategories that currently have a counterpart in AACR, MARC 21, and/or ONIX. The categories shown are illustrative only; they are not intended to exhaust the possibilities for producing valid BaseContentCategories using the specified primary values for the targeted attributes in the Framework. Similarly, the sample category labels are intended simply to illustrate the kinds of labels that might be used to identify a category for a particular community.

BaseContentCategory	Character				SensoryMode						Image Dimensionality			Image Movement			Sample Category Label
	language	music	image	other	sight	hearing	touch	taste	smell	none	two-dimensional	three-dimensional	not applicable	still	moving	not applicable	
											1	2	3	1	2	3	
BaseContentCategory 1:1:3:3	■				■								■			■	text
BaseContentCategory 1:2:3:3	■					■							■			■	spoken word
BaseContentCategory 1:3:3:3	■						■						■			■	tactile text
BaseContentCategory 2:1:3:3		■			■								■			■	music notation
BaseContentCategory 2:2:3:3		■				■							■			■	performed music
BaseContentCategory 2:3:3:3		■					■						■			■	tactile music
BaseContentCategory 3:1:1:1			■		■						■			■			still image
BaseContentCategory 3:1:1:2			■		■						■				■		moving image
BaseContentCategory 3:1:2:1			■		■							■		■			three-dimensional object
BaseContentCategory 3:3:2:1			■				■					■		■			tactile image

Appendix D: Examples of Base Carrier Categories

Note: The table below illustrates combinations of specified primary values used to construct BaseCarrierCategories that currently have a counterpart in AACR, MARC 21, and/or ONIX. The categories shown are illustrative only; they are not intended to exhaust the possibilities for producing valid BaseCarrierCategories using the specified primary values for the targeted attributes in the Framework. Similarly, the sample category labels are intended simply to illustrate the kinds of labels that might be used to identify a category for a particular community.

BaseCarrierCategory	StorageMediumFormat								HousingFormat						IntermediationTool								Sample Category Label	
	sheet	strip	roll	disc	sphere	cylinder	chip	file server	binding	flipchart	reel	cartridge	cassette	not applicable	microform reader	microscope	projector	stereoscope	audio player	audiovisual player	computer	not required		
	1	2	3	4	5	6	7	8	1	2	3	4	5	6	1	2	3	4	5	6	7	8		
BaseCarrierCategory 1:1:8	■								■														■	book
BaseCarrierCategory 1:2:8	■									■													■	flipchart
BaseCarrierCategory 1:6:8	■													■									■	sheet
BaseCarrierCategory 2:6:3		■												■			■							filmstrip
BaseCarrierCategory 3:3:1				■							■				■									microfilm reel
BaseCarrierCategory 3:3:3				■							■						■							film reel
BaseCarrierCategory 3:3:5				■							■								■					audiotape reel
BaseCarrierCategory 3:3:6				■							■									■				videotape reel
BaseCarrierCategory 3:3:7				■							■											■		computer tape reel
BaseCarrierCategory 3:4:1				■								■			■									microfilm cartridge
BaseCarrierCategory 3:4:3				■								■					■							film cartridge
BaseCarrierCategory 3:4:5				■								■							■					audiotape cartridge
BaseCarrierCategory 3:4:6				■								■								■				videotape cartridge
BaseCarrierCategory 3:4:7				■								■										■		computer tape cartridge

Appendix D: Examples of Base Carrier Categories

BaseCarrierCategory	StorageMediumFormat								HousingFormat						IntermediationTool								Sample Category Label
	sheet	strip	roll	disc	sphere	cylinder	chip	file server	binding	flipchart	reel	cartridge	cassette	not applicable	microform reader	microscope	projector	stereoscope	audio player	audiovisual player	computer	not required	
	1	2	3	4	5	6	7	8	1	2	3	4	5	6	1	2	3	4	5	6	7	8	
BaseCarrierCategory 3:5:1			■									■		■									microform cassette
BaseCarrierCategory 3:5:3			■									■					■						film cassette
BaseCarrierCategory 3:5:5			■									■							■				audiocassette
BaseCarrierCategory 3:5:6			■									■								■			videocassette
BaseCarrierCategory 3:5:7			■									■									■		computer cassette
BaseCarrierCategory 3:6:3			■										■				■						filmstrip
BaseCarrierCategory 3:6:5			■										■						■				audio roll
BaseCarrierCategory 4:4:7				■							■										■		computer disc cartridge
BaseCarrierCategory 4:6:4				■									■					■					stereograph reel
BaseCarrierCategory 4:6:5				■									■						■				audiodisc
BaseCarrierCategory 4:6:6				■									■						■				videodisc
BaseCarrierCategory 4:6:7				■									■									■	computer disc
BaseCarrierCategory 7:6:7													■									■	computer chip
BaseCarrierCategory 8:6:7													■									■	online resource