

**RBMS-ARLIS/NA-SAA Joint Task Force on Development of the
Art and Rare Materials BIBFRAME Ontology Extension (ARM)**

Interim Report

2020-03-03

Charge:

The task force will publish and refine a BIBFRAME ontology extension for the description of special collections materials. The work will build upon the Art and Rare Materials BIBFRAME Ontology Extension (ARM) established as part of the first phase of the Linked Data for Production (LD4P) project, 2016-2018.

Members:

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Overview of work undertaken:

The ARM group began meeting April 2019 and has met for one-hour every-other week since that time. While progress has been relatively slow, the group has addressed a considerable amount of modeling, detailed below, and the leads anticipate that we will publish the next version of the ARM ontology for our respective standards groups to review during 2020.

Work conducted:

The following overview reflects a sampling of the work conducted by the task force; not all investigations, discussions or decisions are reflected below:

Use Cases review: To begin, the task force reviewed use cases developed by the previous working groups; these use cases were subsequently ranked for priority by

members of the three communities represented on the task force. The purpose of this exercise was tri-fold: 1. understand the context in which the previous group developed the existing ontology; 2. prioritize the group's work moving forward and; 3. document archival use cases. ACRL-RBMS and ARLIS/NA engaged in the previous development whereas SAA did not; to ensure that the modeling met the archival community's needs, SAA colleagues added use cases.

Landscape investigation(s): the group reviews complementary work from aligned communities whenever modeling work is undertaken. This includes but is not limited to review and discussion of PREMIS modeling as well as linked.art modeling. The group will continue to investigate additional modeling as warranted.

Activities & Contributions modeling: In the previous round of ARM development, the ACRL-RBMS and ARLIS/NA group decided to deviate from the bf:Contribution model and define the arm:Activity model for the association between agents and other types of resources; at that time, definitions and restrictions on bf:Contribution limited its reuse in certain contexts important to special collections description. Since that time, the BIBFRAME modeling has changed as has the group's viewpoint on deviation in a core area of description. As such, the group assessed the two models and determined that the arm:Activity model will be deprecated. This decision had significant follow-thru across many of the ARM models, as mentioned below, and signifies better alignment of the BIBFRAME and ARM models, which will simplify implementations.

Agent Roles review: As follow-thru of the decision to use the bf:Contribution, the ARM group began to identify and document which roles are reusable from Library of Congress' list of relator terms and other vocabularies, such as RBMS Relationship Designators and the Art & Architecture Thesaurus; these were cross-referenced against the arm:Activities subclasses created as part of the previous ARM development to identify coverage for existing modeling. The group had extensive discussions around vocabulary selection alongside vocabulary term typing and concluded that this is an implementation decision. A standing subgroup for vocabulary terms was established.

Measurements modeling: Following review, the measurements model created during the previous development round was generally perceived well. That said, a number of changes were determined necessary, including using arm:physicalPresentation to address the concept of, for instance, "folded/unfolded" or "rolled/unrolled"; in the previous modeling, bf:arrangement/bf:Arrangement was employed for this concept. arm:physicalPresentation was decided after an exhaustive analysis of potential terms for reuse. Further, the group addressed the question of measurement ranges, which will be addressed in soon-to-be-written implementation recommendations.

Custodial History modeling: The group reviewed the ARM Custodial History model with a number of questions, including but not limited to: 1. Should another model, such

as linked.art, be reused rather than propagating an ARM-specific model? 2. Is a Custodial History class required or are a series of CustodialEvents sufficient? 3. How can this model better related to other models in ARM, such as the Physical Condition and Conservation Activities modeling? To assess these questions, a member from each of the representative groups modeled examples of custodial histories. The group determined a need for an ARM-specific Custodial History model, with updates to reflect the move from arm:Activity to bf:Contribution. Further, this discussion yielded the generic events modeling discussed below.

Events modeling: Through discussion of the Custodial History model, Physical Condition/Conservation model and Exhibitions model, the group considered whether a generic events model would better serve a ARM implementations. As of 3/2, the group has made considerable progress to defining a generic Events model but has not finalized a decision as to whether this approach will be approved; a decision is anticipated at our 3/9 meeting.

Exhibitions model: While all of the terms in this model have not been assessed at-present, the model has come under relatively-extensive review to align with decisions regarding Activity/Contribution as well as discussions around Events modeling.

Physical Condition / Conservation model: While all of the terms in this model have not been assessed at-present, the model has come under relatively-extensive review to align with decisions regarding Activity/Contribution as well as discussions around Events modeling.

Planned work:

"Core" Ontology review: Beginning March 2020, the group will review terms defined in the ARM Core ontology. This represents the models for which there were not a sufficient number of terms to justify a separate OWL file. Side note: the group has discussed eliminating the separation of ARM into multiple files; a decision regarding this organization will be made prior to submitting work to our respective groups.

Implementation / Usage Recommendations: The task force recognizes that ontologies can be difficult to assess without context and understanding of how the developers envision implementation; this is particularly complicated when the modeling uses terms from a number of ontologies. To accompany the ontology, the development team plans to write a brief implementation/usage recommendation document. Note: this is not intended as a content standard or cataloging guideline.

Outreach:

Work of this group was presented at the 3rd Annual BIBFRAME workshop in Europe (Stockholm, Sweden), September 2019

A lightning talk has been accepted for the LD4 Conference (College Station, TX), May 2020