**Brokering Framework Working Group**

Proposers:  Wim Hugo, Michael Diepenbroek, Jay Pearlman, Stefano Nativi

Date Received by TAB: 2016-4-12 (date KF linked to review page following no response to community comments)

Date Review Completed:  2016-4-21 (AT)

TAB Reviewers:  Andrew Treloar and Simon Cox

Completeness of Case Statement:

*(Does it include the six requisite components: (1) WG Charter; (2) Value Proposition: (3) Engagement with Existing Work in the Area; (4) Work Plan; (5) Adoption Plan; (6) Initial Membership?):*

*Comments:*

**Comment:** The Case Statement includes all of these elements, with one caveat. The Existing Work section lists a large number of activities in the brokering domain (though it is notable that no other RDA activities are included) but the description of engagement appears to be uni-directional. That is, the Brokering WG will draw from some existing work but doesn't appear to be planning to reach out to these groups to see how it might modify what it does on the basis of closer engagement with them.

**Response:** The Broker Interest Group recognizes the importance and benefit of reaching out to other RDA groups through engaging in collaborative activities. There are a number of interactions that have been occurring. At the upcoming plenary, there is a joint session with the Data Fabric group. There have been discussions with Esther Dzalé Yeumo about collaboration with the Wheat Data Interoperability WG and with Paul Uhlir of the Legal Interoperability IG. Presentations have been given to groups such as Marine Data Harmonization. The two lead co-chairs have had leadership positions with the WDS and have been interactive with additional groups. Other members of the broker group are/have been leaders in other WGs and IGs. This activity may not have been made obvious enough in the WG description and the description has been modified to address the point made by the reviewers.

Focus and Fit:

 (Are the Working Group objectives and deliverables aligned with the RDA mission ?  Is the scope too large for effective progress, too small for an RDA effort, or not appropriate for the RDA?  Overall, is this a worthwhile effort for the RDA to take on?  Is this an effort that adds value over and above what is currently being done within the community?)

**Comment**: The proposal suggests that the resulting test bed would support data discovery and access, content transformation, and content enhancement. The proposal talks about how the test bed will be implemented, but not how these functions will be demonstrated. This section should be strengthened to demonstrate how the outcomes from implementing this pure infrastructure approach will actually support the goals of the RDA.

With respect to the question of adding value, it isn't clear how this activity will do anything that isn't already underway in the groups listed in the existing work section (with the possible exception of a "new standard [that] will likely be needed to describe a component within the typical research data infrastructure in a standardised manner". The document has a flavour of Not Invented Here about it. The Evidence of Need section only demonstrates the need in the most general of terms.

Furthermore, there are a number of existing activities in RDA that are not mentioned. The Brokering group proposes to establish a new 'prototype registry' with no mention of a number of other RDA groups that have 'registry' in their name. In particular, the DTR work (on registering descriptions of data structures) would appear to be highly relevant. The biosharing and agriculture groups have very mature registries that would appear to cover a significant common area, so these must be brought into consideration.

**Response**: The test bed is to assess interoperability of mediation software (broker middleware). Thus the test bed does not itself support discovery, but is providing a test and evaluation environment for software instances that perform these functions. The objective of brokers or middleware to facilitate interoperability across disciplines. Many of the disciplines have already addressed their own internal interoperability through metadata formats, registries and other means as you mention above about agriculture groups. The broker does not need to replicate these capabilities. Thus, the testbed must access data and associated formats (e.g. metadata) from a variety of disciplines. The test bed formalization will identify exemplars of different disciplines between which operable interfaces will be tested. This is similar to what has been happening with the GEODAB in GEOSS, but with a variety of middleware instances mentioned in table listing the existing work cited in the WG proposal.

It is not clear what a “pure infrastructure approach” is in your above comments. If a test bed is a pure infrastructure and the outcome is to test interoperability in various middleware instances to define where such instances provide strong interoperability, this is absolutely consistent with the RDA definition in the most recent nutshell, which states: “RDA is an international organization focused on the development of infrastructure and community activities that reduce barriers to data sharing and exchange, and the acceleration of data driven innovation worldwide.” See [RDA\_in\_a\_nutshell\_August2016.pptx](https://rd-alliance.org/sites/default/files/attachment/RDA_in_a_nutshell_August2016.pptx).

With respect to the comment that “it isn't clear how this activity will do anything that isn't already underway in the groups listed in the existing work section”, we point out that there are two missions of the working group that add significant benefit beyond what is currently being done. These are:

1. Community consensus on the way in which mediation and brokering components are described and invoked, based on real use cases – “Brokering Framework” – leading to a formal way for description and invocation. The formalisation of a standard in this area is an external process and may involve participants in the working group, but is not a task for the working group;
2. Demonstrating the value of the framework by developing, testing, and commissioning a reference implementation of a mediation registry.

There are no formal content and service standards for mediation software at the present time. This is an important step. There is also no test environment to look at framework options for “operational” comparison of alternative functions within a framework. In addition, it would be useful to have a registration of components for brokering frameworks. Working with the DTR would be a valuable collaboration between two RDA groups. Recent telecons with Larry Lannom and Peter Wittenberg have initiated such discussions. The current WG proposal has been changed to reflect this.

Work Plan, Deliverables, and Outcomes:

(Are there measurable, practical deliverables and outcomes?  Can the proposed work, outcomes/deliverables, and Work Plan described in the Case Statement be accomplished in 12-18 months?)

**Comment:** The Work Plan documents reasonable outcomes (although see the comments above on whether these are needed). The timeline looks challenging but doable.

Capacity:

(Does the initial membership list include sufficient expertise, and disciplinary and international representation?  Are the right people involved in the Working Group to adopt and implement?  What individuals or organizations are missing?)

**Comment:** The initial membership is largely from Europe, with one from the US and one from South Africa. It would be good to broaden this out a bit to the Asia-Pacific. The range of kinds of organizations is good.

**Response:** The range of geographic coverage could be expanded to include more Asia Pacific. Given that the two reviewers are currently from Australia, they are most welcome to work with us in identifying specific people. We can also work through WDS to broaden participation. The Broker IG will be used as a resource for further invitations. This should be done after approval of the WG so that concrete dialogs will occur.

Impact and Engagement:

(Is it likely that the outcome(s) of the Working Group will be taken up by the intended community?  Is there evidence that the research community wants this?  Will the outcome(s) of the Working Group foster data sharing and/or exchange?)

**Comment:** Unclear whether research community wants this, but as it is basically plumbing this is not surprising. The value of this to researchers will be in systems that build upon this work, and it is at this level that the outcomes will foster data sharing.

Aspects of the proposed solution (registries of 'metadata') are clearly already in view in the community, and running instances are already established in some disciplines. The Brokering Group needs to explain how their activity will leverage these.

**Response:** The comment above on the position and use of middleware is appropriate. Not many modern houses would be of interest without plumbing. The broker uses registries and metadata and it is good that there is other work focused on that. The registry in the proposal is related to mediation and adaption components. This complements developments in registries and types and could well be integrated into other RDA WG outcomes (that discussion has been part of the Broker interest group since the RDA Paris Plenary with the understanding that complementary developments should be leveraged). The proposal is revised to make this clearer.

Recommendation:

Case Statement is Sufficient \_\_; Case Statement Requires Revision X; Case Statement is Rejected \_\_

Comment: With the revisions of the proposal and the comments above, we believe the current document addresses the reviewer comments and is now sufficient for approval. We thank the reviewers for their comments.