DDI Alliance Executive Board Meeting 18 September 2025

Present: Alina Danciu, Jon Johnson, Maggie Levenstein, Jared Lyle, Johan Fihn Marberg, Steve McEachern, Katja Moilanen, Bonnie Wolff-Boenisch

W3C Partnership

The Scientific Board has requested a formal partnership with the W3C. Darren Bell prepared a document (see Attachment 1) outlining the purpose, ambition, and resource commitments for the proposed W3C collaboration. In August, the Executive Board reviewed the document by email and unanimously approved it.

Membership Engagement and Benefits

The meeting focused on discussing membership strategies, including ways to balance financial constraints with increased organizational engagement and participation. Key points discussed:

- Clarifying what "membership" means for DDI, including whether open participation in working groups reduces incentives to join.
- Balancing associate and full memberships: associate status can be a pathway but may also weaken incentives to upgrade.
- Recognizing many active participants are not from member organizations.
- Distinguishing financial requirements from membership value.
- Ensuring organizational buy-in and continuity, as participation often depends on individual advocates who may retire or move on.
- Recognizing and rewarding individual contributions as a way to strengthen both engagement and organizational membership.

The group discussed various approaches to associate membership, individual contributions, and working group participation, while considering how to better align individual and organizational benefits.

Action Items:

Two working groups were established to prepare proposals for Executive Board discussion at its January 2026 meeting:

- Membership Benefits and Requirements: Alina, Jon, and Johan to review membership benefits and requirements, including identifying how many working group participants belong to full versus associate member organizations.
- **Revenue Generation**: Steve to lead a group exploring alternative revenue options beyond membership fees.

Attachment 1

Scientific Board Proposal to DDI Executive Board to progress and formalise W3C Collaboration

24 July 2025 - Darren Bell (DDI Alliance W3C contact) For decision at EB-SB Joint meeting 28 July 2025

Context

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Appendix A - Draft agreement text with W3C

Context

The genesis of a possible W3C & DDI Alliance collaboration can be traced back to a DDI-CDI workshop in Dagstuhl 2023 when Pierre-Antoine Champin, as a senior figure in W3C, suggested to a number of other attendees that there could be fruitful opportunities for closer cooperation. A number of key prerequisites were identified, principally and foremost the establishment of an agreement between the DDI Alliance (the legal entity being the University of Michigan) and the W3C, which codified the W3C's totemic principle that any recommendations, artefacts or products emerging from such a collaboration, would not be exclusively 'owned' by any party. In that sense, IP cannot, by definition, be asserted by the DDI Alliance over any collaboration outputs.

W3C procedures can be complex and it seems that the easiest way to materialise such a proposed collaboration, once such a formal agreement has been reached, is to extend the life of an existing W3C group, namely the currently dormant Data Exchange Working Group (DXWG), rather than creating a brand new group from scratch. This 'extension' is achieved by re-drafting a new 'charter', which outlines the scope of the new group, but at a relatively high level such that it doesn't inhibit innovation or more granular decision making. Once the charter draft is approved, a joint W3C-DDI Alliance working group, as an extension of DXWG, will be formally established and begin its work.

As at July 2025, procedurally we are between a draft UMich/W3C agreement and the drafting of a W3C charter. During the first half of 2025, Jared Lyle facilitated the drafting of a UMich/W3C <u>agreement</u> (as referenced in the first paragraph), which has the University of Michigan's approval. That said, University of Michigan have qualified this approval thus:

"[From Jared Lyle 21 May 2025] I met today with a lawyer from the UM legal team. He reviewed the text I'm pasting directly below, which includes the W3C Patent Policy, Patent Disclosures, and

¹ See current charter at https://www.w3.org/2022/06/dx-wg-charter.html which expires 30 June 2025

License, which Pierre-Antoine indicated was a good starting text. The UM lawyer said it's permissible text to use it but that it's ultimately a business decision whether to agree to the W3C Patent Policy and the Software and Document License. In Chur, we discussed needing the Executive Board to ultimately review, since they have legal responsibility for the Alliance. My recommendation is for them to make this business decision about use of the patent policy and licence, after which we can send the text to Pierre-Antoine. I've copied Jon as Chair of the Executive Board."

Procedurally, the next step is now for the Executive Board (EB) to make a "business decision" about this agreement text. In order to facilitate this, EB have requested that a statement be prepared for EB thus:

"[Jon Johnson 28 May 2025] SB to ask CDI group to formulate a 2 page proposal that outlines the purpose, ambition and expected costs and other commitments that would be agreed by the SB before submitting to the EB."

The remainder of this document is intended to fulfil that rubric and be presented to the Executive Board for their consideration, and for a decision that would formally permit moving to the next stage, drafting a revised W3C DXWG charter.

Purpose

The intended goal of this work is to develop a W3C DDI recommendation for an RDF variable description vocabulary which encompasses a granular description of variables that ultimately stimulates the reuse of metadata. This vocabulary will be developed and described in conjunction with existing W3C RDF vocabularies such as the Data Catalog Vocabulary (DCAT), the Data Cube Vocabulary, the Semantic Sensor Network (SSN) ontology, CSV on the web (CSV-W), and potentially others. The variable description vocabulary will rely heavily on approaches to variable description in DDI Cross-Domain Integration (DDI-CDI) but will also consider practice in both DDI Codebook and DDI Lifecycle as appropriate and/or necessary.

A W3C recommendation that complements the existing DCAT standard and also references the existing DDI-CDI model, and other DDI models as appropriate, would quickly gain high visibility and credibility among a diverse set of communities. The impact of this is expected to be much more significant for the long-term profile of the DDI Alliance than merely publishing and maintaining the DDI-CDI model without any kind of W3C collaboration.

National and international Open Data Acts or directives, for example the <u>US Open</u>
<u>Government Data Act</u>, prescribe the use of DCAT as a metadata standard for open data, but also point to the necessity of providing at least some documentation of variables. When the joint effort has been established, more focus is expected to be put on the variable description part globally. The new variable description vocabulary is expected to result in a large increase in the uptake of granular variable level metadata, which will increase the FAIRness of data when it comes to interoperability and reuse.

A new RDF variable description vocabulary would have multiple benefits:

- The family of existing W3C data description vocabularies would be supplemented and augmented by a variable description vocabulary. Collaboration with the W3C would ensure that this vocabulary aligns well with other relevant W3C data description vocabularies.
- The input of the DDI Alliance ensures that the variable description vocabulary
 contains all relevant parts based on the variable descriptions of DDI-CDI, and other
 DDI standards as appropriate and necessary. The coordinated set of RDF data
 description vocabularies would be of significant benefit for the linked open data
 community.
- 3. The impact of the intellectual concepts underpinning the DDI-CDI variable description in the planned W3C RDF variable description vocabulary would be much higher in comparison to the existing RDF representation of DDI-CDI.

Similar Activities

The W3C and the Open Geospatial Consortium (OGC) <u>announced 2015 a collaboration</u> to improve interoperability and integration of spatial data on the Web. The result is an ongoing joint working group, the <u>Spatial Data on the Web Working Group</u>. One of the results is the published vocabulary <u>'Semantic Sensor Network Ontology'</u>. Please notice that these web pages have the names and logos of both organizations to document the joint effort.

The W3C <u>RDF Data Cube Vocabulary</u> was published in 2014. The model underpinning the Data Cube vocabulary is compatible with the cube model that underlies SDMX (Statistical Data and Metadata eXchange). The RDF Data Cube Vocabulary has proved hugely successful and there have been a wide variety of implementations of Data Cube including publishing statistical, environment and observational measures.

Ambition

Advocacy for a W3C collaboration is strongly implicit in the Executive Board's <u>Strategic Plan</u> <u>2024-2027</u> (Expansion point #3), and explicit in the <u>Scientific Work Plan 2024-2026</u> (item #1.3).

The outcome should be a new variable description vocabulary which aligns with, and is interoperable with, DCAT and other W3C models. Note that this new vocabulary is categorically not intended to be a replacement for or a new version of the existing W3C DCAT standard.

Expected Costs and Commitments

Commitment from one or more persons from the DDI-CDI group is needed to create the charter draft in collaboration with the W3C group (Darren Bell is currently the nominated contact). Subject to approval to proceed from the EB, we would estimate this work to last no more than a few months. There are already multiple volunteers for this work within the DDI Alliance and we have ongoing engagement from Pierre-Antoine Champin as the W3C contact for this work. Some modest commitment (say, a few hours) from the DDI SB and EB would be needed to provide oversight and to review any documents and recommend

changes prior to approval, as well as TC being required to fulfill its normal technical oversight and compliance role.

Travel costs for face-to-face meetings may also arise but these would be modest and would be assessed on a case-by-case basis by the Executive Board.

Risks

Some legitimate concerns have been raised anecdotally, and while slightly paraphrasing these, the two key ones appear to be: "Why would we give away sections of the standard to W3C?" and "Is this clearly delineated enough from the ISO work - is there a risk of confusing the community?"

Assuming success of a new joint W3C/DDI Alliance working group in publishing a new Variable Description Vocabulary which complements DCAT, a perceived risk could be that citation and references to this work will be only given to the W3C group. DDI Alliance input would then be credited only as input to this. The SB recommends that the risk be accepted on the basis that DDI-CDI has already been published, already has visibility, and it will be evident to the data community that the DDI Alliance's input to the working group has been very influential.

Regarding the differentiator between the ISO and W3C activity: the ISO proposal includes common elements from all of the DDI standards and products. It addresses the general ideas rather than detailed models for variables. The W3C proposal should concentrate on the DDI-CDI subset model for the variable level standards with detailed specification (with due consideration where appropriate for design and practice in DDI Codebook and DDI Lifecycle).

As with all efforts in which people with different points of view work together, there is a risk that the working group will not reach an agreement quickly. On the other hand, this approach ensures a sound result. While there is no mandatory upper limit for the group's work, SB envisages that following the completion of the W3C Charter, we would expect to see published outcomes with a 2 to 3 year maximum timeframe.

Overall, the perceived risk of "giving away" [sic] DDI intellectual concepts is not considered by the SB to be an actual risk *per se*. Foundationally, all DDI specifications are freely available for use by all interested parties. This will be a joint working group with a joint outcome and both organizations are always credited (see also the example of the collaboration between OGC and W3C above). Secondly, this approach has the added value of ensuring that DDI intellectual concepts are not inappropriately misframed within the RDF community. A more tangible potential risk is that the DDI Alliance is not involved and not seen to be involved in the effort to establish an RDF variable description vocabulary.

Appendix A - Draft agreement text with W3C

Goal of the W3C-DDI Working Group

The goal of this work is a W3C-DDI Recommendation on an RDF Variable Description Vocabulary. This vocabulary will be developed and described in connection with existing W3C RDF vocabularies like Data Catalog Vocabulary (DCAT), Data Cube Vocabulary, Semantic Sensor Network (SSN) ontology, and others. The Variable Description Vocabulary will rely heavily on the variable description in DDI Cross-Domain Integration (DDI-CDI). This includes a granular description that increases the reuse of metadata.

Legal

(From the W3C charter template (https://w3c.github.io/charter-drafts/charter-template.html), which aligns with previous joint agreements like the 2015 OGC-W3C agreement:)

Patent Policy

This Working Group operates under the <u>W3C Patent Policy</u> (Version of 15 May 2025). To promote the widest adoption of Web standards, W3C seeks to issue Web specifications that can be implemented, according to this policy, on a Royalty-Free basis. For more information about disclosure obligations for this group, please see the licensing information.

Patent Disclosures

The Interest Group provides an opportunity to share perspectives on the topic addressed by this charter. W3C reminds Interest Group participants of their obligation to comply with patent disclosure obligations as set out in Section 6 of the W3C Patent Policy. While the Interest Group does not produce Recommendation-track documents, when Interest Group participants review Recommendation-track specifications from Working Groups, the patent disclosure obligations do apply. For more information about disclosure obligations for this group, please see the licensing information.

Licensing

This Working Group will use the <u>W3C Software and Document license</u> for all its deliverables.