DDI Alliance Annual Meeting of Members June 22, 2021, 13:00-15:00 UTC

Join Zoom Meeting: <u>https://umich.zoom.us/j/98025859815</u> Meeting ID: 980 2585 9815 Find your local number: <u>https://umich.zoom.us/u/adYadTCRE4</u>

Collaborative notes: <u>https://bit.ly/3vNJx55</u>

| Agenda Meeting of Members | | | |
|---------------------------|---|--|--|
| Time | Subject | Detail | Lead |
| 13:00-13:05 | Welcome | | Steve McEachern, Executive Board Chair |
| 13:05-13:20 | State of the Alliance FY2021 [<u>slides]</u> | -Update about last year's work -Framing priorities for the next year | Steve McEachern Bill Block, Executive Board Vice Chair, facilitator |
| 13:20-13.30 | Executive Board Elections [<u>slides]</u> | -Discuss candidates -Encourage nominations | Steve McEachern <i>Bill Block, facilitator</i> |
| 13:30-13:40 | Scientific Board Report [<u>slides]</u> | -Report on activities -Draft <u>DDI Scientific Plan</u> (2021-22) | Ingo Barkow, <i>Scientific Board Chair</i> Hilde Orten, <i>Scientific Board Vice Chair</i> <i>Steve McEachern, facilitator</i> |
| 13:40-13:55 | Group Reports | -Marketing & Partnerships (<u>Report</u>) -Training (<u>Report</u>) -Technical Committee (<u>Report</u> & <u>2021-22 Work Plan</u>) | Barry Radler, <i>Marketing & Partnership Chair</i> Jane Fry, <i>Training Group Co-Chair</i> Wendy Thomas, <i>Technical Committee Chair</i> <i>Bill Block, facilitator</i> |
| 13:55-14:15 | Alliance Budget [<u>slides]</u> | -FY21 <u>Financial Report</u> -FY22 <u>approved budget</u> | Jared Lyle, <i>Executive Director</i> Steve McEachern |
| 14:15-15:00 | Planning | -Focus for the next year -Vote on <u>2021-2023 Strategic Plan</u> | Steve McEachern <i>Bill Block, facilitator</i> |

State of the DDI Alliance 2020-21

State of the Alliance - 2021

- The Alliance has had an unusual but productive year in 2021
- The core of our activities has been around marketing and support for our 2020 product releases (LifeCycle 3.3, DDI-CDI Public Release, and DDI Training)
- Alongside this, the various DDI working groups have been hard at work on the
 Most notably, the establishment and ramp-up of the revitalised Scientific Board
- For the Executive, the key activities have oriented around the revision and finalisation of the Strategic Plan

- Presentations from our working groups are going to provide an overview of the activities in each of these domains
- Then we will be looking to the future in the discussion of our 2021-23 Strategic Plan

DDI Executive Board Elections

2021-2025 term

This is an election year for the DDI Executive Board.

Four board seats are up for election (terms are four years).

According to the Alliance <u>Bylaws</u>: "In election years, nominations for At-Large members will be solicited in April and a slate will be prepared by the Executive Director for discussion at the annual meeting with the election occurring in June. In the event that there are more candidates than positions, the election will be decided on the basis of those candidates getting the most votes."

Responsibilities of the Executive Board:

- Setting overall policy and budget for the Alliance
- Providing strategic guidance and review of the Alliance's activities
- Overseeing the management of the financial affairs of the Alliance on behalf of the Members

Nominees (2021-2025 terms):



Cory Chobanik Senior Director, Centre for Statistical and Data Standards Statistics Canada



Cathy Fitch ISRDI Associate Director MnRDC Executive Director Minnesota Population Center



Steve McEachern Director and Manager Australian Data Archive



Barry Radler Distinguished Researcher University of Wisconsin-Madison

Next steps...

Designated Member Representatives will receive an election ballot by June 28th.

Votes should be submitted by July 9th.

Scientific Board Report 2020 / 2021

Prof. Dr. Ingo Barkow, Chair of the DDI Alliance Scientific Board Hilde Orten, Vice-Chair of the DDI Alliance Scientific Board

DDI Alliance Annual Meeting of Members 2021-06-22

Activities July 2020 – December 2020

- Temporary working group on new Scientific Board
- DDI-CDI ongoing public review
 - Improvement work based on raised issues (working group MRT/CDI)
 - Meetings with other experts regarding possible use of DDI-CDI
 - Release planned for August 2021
- CODATA and DDI Alliance Collaboration

CODATA and DDI Alliance Collaboration

- Letter of collaboration between the <u>DDI Alliance</u> and <u>CODATA</u> and mutual membership in Dec 2020
- <u>CODATA</u> is the Committee on Data of the <u>International Science Council</u>, "... mission is to connect data and people to advance science and improve our world."
- CODATA Decadal Programme: <u>Making data work for cross-domain grand challenges</u>
- Jointly organized two week-long "cross-domain" workshops on metadata standards, hosted at Schloss Dagstuhl – Leibniz Center for Informatics (2018, 2019).
 - Two workshops planned for September 2021: CDI and "cross-domain" III
- CODATA has supported the DDI-CDI public review, <u>helping to promote and conduct a</u> series of webinars since May 2020 with an attendance of over 400 people across a wide range of domains.
- CODATA's EOSC co-creation project <u>"The Role of DDI-CDI in EOSC</u>"
 - Including links to the report, and slides and recording of the launch meeting

Recommendations for change of Scientific Board structure

- Motivation: experience shows that the previous set up a Scientific Board of approx. 40 member representatives has limited impact regarding the role of the Scientific Board in the bylaws
- After the Scientific Board Meeting in 2019 a temporary working group was setup for this purpose
- Goal: Proposal of a new Scientific Board structure
- Result: After vote of the membership the DDI Alliance bylaws were changed resulting in a new SB structure

Members of the temporary working group

- Ingo Barkow (Chair)
- Jane Fry
- Dan Gillman
- Jon Johnson
- Jared Lyle
- Steve McEachern
- Ron Nakao
- Hilde Orten
- Nicolas Sauger
- Wendy Thomas
- Joachim Wackerow

End of the temporary working group

- The temporary working group was dissolved in summer 2020 after finishing the draft for the bylaw changes
- As the changes were passed as is the result can be considered to be successful
- Thanks to all members of the temporary working group for investing their time and insights

Structure of the «new» Scientific Board

- The «new» Scientific Board
 - Comprised of 7 scientific experts
 - Elected by the Designated Member Representatives of the Alliance
 - The Director and Chair of the Technical Committee serve on the Scientific Board as ex officio members
 - External experts may be appointed by the Scientific Board for limited terms (none at the moment)
 - Members will be elected following an Annual Meeting and serve for a term of four years except for the initial election where three will be elected for two-year terms and four for four-year terms.
 - The Chair and Vice Chair of the Scientific Board were elected by the Scientific Board soon after the regular biennial member elections for a term of two years.

Current Members of Scientific Board

- Chair (2021-2022)
 - Ingo Barkow, University of Applied Sciences of the Grisons, 2021-2025
- Vice Chair (2021-2022)
 - Hilde Orten, Norwegian Centre for Research Data, 2021-2025

• Members

- Darren Bell, UK Data Service, 2021-2023
- Simon Hodson, CODATA, 2021-2025
- Flavio Rizzolo, Statistics Canada, 2021-2025
- Carsten Thiel, CESSDA, 2021-2023
- Joachim Wackerow, GESIS Leibniz Institute for the Social Sciences, 2021-2023
- Jared Lyle, ICPSR, DDI Alliance Executive Director, ex officio, 2021-present
- Wendy Thomas, Minnesota Population Center, Technical Committee Chair, ex officio, 2021-present

The role of the Scientific Committee

- The SC consist of all scientic representatives (it replaces the «old» Scientific Board).
- The SB reports to the SC during the annual meeting about proceedings of the past year and presents the Scientific Plan for the next years for feedback.
- The SB will invite SC to virtual meetings during the year to seek more input and engagement.
- The Scientific Plan of each term defines the boundaries in which the SB can act on its own
- The SC does not vote on the Scientific Plan. This can only be done by the member representative.
- The member representative can shift the voting right for the Scientific Plan to the scientific representative.

Scientific Plan prerequisites

- Two years plan covering the period from beginning of 2021 to end of 2022
- Based on working plans for the different working groups
- Based on a draft of the DDI Alliance Strategic Plan
- Extended by feedback from different working groups
- Extended by feedback and discussion within the Scientific Board
- Proposal for membership to be voted on after annual meeting

Structure of the Scientific Plan

- I. Proceedings and Workflow of the new Scientific Board internally and externally
- II. Reachable Short-Term Goals for 2021 and 2022
- III. Preparations of issues to be covered within the next Scientific Plan for 2023
- IV. Long Term Vision for DDI products and processes

The Scientific Committee meeting in 2022 will only contain results from chapters II. and III.

I. Workflow of the new Scientific Board

- Internal proceedings and operational guidelines, e.g.
 - Number and timeline of physical and virtual meetings of the Scientific Board
 - Engagement of the Scientific Community
 - Voting procedure for Chair and Vice-Chair
 - Voting procedures on decisions (e.g. possibility of remote votes between meetings)
- Collaboration of Scientific Board members between the meetings
- Working relationships between and among the Scientific Board, Technical Committee and all Working Groups
- Working relationship with the Executive Board
- The establishment and promotion of new working groups (short and longterm groups) to accomplish the work of the Scientific Plan

II. Reachable Short-Term Goals

- Define a first draft of a roadmap for portability between versions. This action item has to be further developed as a medium- and long-term goal.
- Promote more collaboration between the Working Groups, e.g. to achieve better documentation. This action item has to be further developed as a medium- and longterm goal.
- Plan a new laboratory environment to explore new features and technical platforms.
- Plan the creation of a new software development group similar to the DDI Developers group in the past to promote DDI Tool development.
- Provide guidance for the community on which DDI specification and which parts of DDI are the preferred solution for specific use cases.

II. Reachable Short-Term Goals (cont.)

- Promote the development of technical DDI services, especially resolution of DDI URNs to the physical location of DDI resources (identified by URLs).
- Promote the role of DDI in external projects like e.g. European Open Science Cloud (EOSC) and FAIR.
- Explore a base architecture for existing and growing DDI metadata repositories.
- To initiate establishing of organization-level relationships with external standards bodies where needed/appropriate. This action item has to be further developed as a mediumand long-term goal.
- Review DDI Alliance communication on e.g. web pages on current products, the learn pages and development products.
- Support and facilitate the following action items provided by the different working groups (see next slides for details).

The role of the Membership in the Scientific Plan process

- The membership is supposed to review and vote on the Scientific Plan. It consists of the designated member representatives of the member organizations.
- The Scientific Community (SC) on the other hand consist of all scientic representatives (it replaces the «old» Scientific Board (SB)).
- The SB reports to the SC during the annual meeting about proceedings of the past year and presents the Scientific Plan for the next years for feedback.
- The Scientific Plan of each term defines the boundaries in which the SB can act on its own
- The SC does not vote on the Scientific Plan. This can only be done by the member representative.
- The member representative can shift the voting right for the Scientific Plan to the scientific representative.

DDI Scientific Plan DRAFT (2021 – 2022)

Preface

The Scientific Board of the DDI Alliance was reorganized by a change in the Bylaws as approved by the membership in 2020. The reorganization was based on the proposal of a temporary working group to create a more proactive and larger entity with a clearer oversight and administrative role. The members of the new Scientific Board were elected in 2020 and serve 4-year terms (January 2021 – December 2024). Note that for the initial board half the members will serve 2-year terms so that in the future the terms of board members will be staggered with elections taking place every 2 years. The Scientific Board has elected a chair and vice-chair from within its membership and these positions will serve 2 year terms.

The first DDI Scientific Plan covers a 2-year period, January 2021 through December 2022. The initial 2-year plan reflects the fact that the Scientific Board only became fully operational in spring of 2021. The Scientific Plan for this initial planning period focuses on the need for the board to establish its internal process as well as provide oversight to the on-going scientific work of the DDI Alliance. This will include clarifying relationships with the Executive Board and its relationship to the Technical Committee and other Working Groups of the Scientific Board.

The Scientific Work Plan is therefore divided into four sections

- I. Proceedings and Workflow of the new Scientific Board internally and externally
- II. Reachable Short-Term Goals for 2021 and 2022
- III. Preparations of issues to be covered within the next Scientific Plan for 2023
- IV. Long Term Vision for DDI products and processes

Sections I and II are the actual work plan for 2021 and 2022 as they contain measurable goals which should be reachable within this timeframe. Section III contains goals we consider to be viable for the next Scientific Plan beginning in 2023. The intent of this section is to identify areas for preparation and planning for future work. Section IV contains long term visions for DDI products which can be reached in timeframes of three to five years. The current Scientific Board will not be able to initiate those processes in the near term, but provide this information to provide context for current activities and clarify longer term goals.

This iteration of the Scientific Work Plan incorporates large parts of the DDI Alliance Strategic Plan as it existed at the time this document was created. The Scientific Board accepted the Strategic Plan in its general outline. The internal planning discussions of the Scientific Board as well as the work plans submitted by the different Working Groups fit within the Strategic Plan. In the future, the scientific section of the Strategic Plan should arise out of the long-term goals of the Scientific Plan as reviewed by the Scientific Representatives and approved by the membership of the DDI Alliance.

I. Proceedings and Workflow of the new Scientific Board internally and externally

As stated, the Scientific Board is a new entity for which the new roles and responsibilities have to be clarified. The focus of this first year will be to clarify the internal roles, processes, and operating rules, as well as establishing relations with other existing groups. These will be specified in a procedures document which can be modified periodically to meet changes in the operating environment. This document will serve as a set of clear guidelines for the operations of the Scientific Board.

Therefore, the Scientific Board will have to clarify the following issues:

- 1. Internal proceedings and operational guidelines, e.g.
 - a. Number and timeline of physical and virtual meetings of the Scientific Board
 - b. Engagement of the Scientific Community
 - c. Voting procedure for Chair and Vice-Chair
 - d. Voting procedures on decisions (e.g. possibility of remote votes between meetings)
- 2. Collaboration of Scientific Board members between the meetings
- 3. Working relationships between and among the Scientific Board, Technical Committee and all Working Groups
- 4. Working relationship with the Executive Board
- 5. The establishment and promotion of new working groups (short and long-term groups) to accomplish the work of the Scientific Plan

II. Reachable Short-Term Goals for 2021 and 2022

These action items are issues we evaluated to be short term enough to be covered within the next 1.5 years.

- 1.) Define a first draft of a roadmap for portability between versions. This action item has to be further developed as a medium- and long-term goal.
- 2.) Promote more collaboration between the Working Groups, e.g. to achieve better documentation. This action item has to be further developed as a medium- and long-term goal.
- 3.) Plan a new laboratory environment to explore new features and technical platforms.
- 4.) Plan the creation of a new software development group similar to the DDI Developers group in the past to promote DDI Tool development.
- 5.) Provide guidance for the community on which DDI specification and which parts of DDI are the preferred solution for specific use cases.
- 6.) Promote the development of technical DDI services, especially resolution of DDI URNs to the physical location of DDI resources (identified by URLs).
- 7.) Promote the role of DDI in external projects like e.g. European Open Science Cloud (EOSC) and FAIR.
- 8.) Explore a base architecture for existing and growing DDI metadata repositories.
- 9.) Initiate the establishment of organization-level relationships with external standards bodies where needed/appropriate. This action item has to be further developed as a medium- and long-term goal.
- 10.) Review DDI Alliance communication on e.g. web pages on current products, the learn pages and development products.
- 11.) Support and facilitate the following action items provided by the different working groups:
 - a. CDI
- Finalize the first production version of the Cross Domain Integration specification.
- Collaborate on activities to implement and get feedback on the specification, in particular with data providers, RIs, EOSC and cross-domain case studies.
- Provide more complete mappings to other DDI specifications (Codebook and Lifecycle), and some mappings to external standards which were not included in the review package, notably to SDMX and DCAT.
- Create a modular architecture for the specification.

- b. TC
- Review, vote for publication, and publication of approved specifications (CDI 1.0, Codebook 2.6) and add support for new products (XKOS, SDTL).
- Create content model for overall DDI coverage, product coverage, and mapping, and define roles of individual products.
- XKOS support work with group managing XKOS maintenance and development and ensure clear expression of the role of XKOS in DDI Suite.
- Setting up the publication process for CVs.
- DDI resolution support (e.g. CV, XKOS).
- Setting up an automated production system.
- c. Training
 - Continue the development of online training resources.
 - Conduct training outreach activities as regular webinars, facilitate training on request, organize training sessions at workshop and conferences, and explore alternative outreach possibilities.
 - Increase/continue collaboration with CODATA to reach out to new communities of users.
 - Establish training collaborations with FAIR related organizations (FAIRsFAIR, GO FAIR, RDA, EOSC etc.).
 - Coordinate all of these activities with the Marketing Group.
- d. Controlled Vocabularies
 - Identify DDI elements that are good candidates for creating CVs.
 - Create, and publish new Controlled Vocabularies for DDI elements, with a focus on DDI Lifecycle CodeValueType elements.
 - Review and revise existing Controlled Vocabularies and publish new versions as appropriate.
 - Work with Technical Committee and ICPSR to set up the process for publishing CVs on the DDI Alliance site, including resolution support.
 - Coordinate the publication of CVs in SKOS with TC and CESSDA.
- e. SDTL
- Perform minor adjustments
- Initiate project to work to cover statistical analyses in SDTL, if accepted.
- f. Paradata
 - Form group and discuss work plans with the Scientific Board.
- g. XKOS
 - Form group and discuss work plans with the Scientific Board.

III. Preparations of issues to be covered within the next Scientific Plan for 2023

The following action items are also out of scope for the upcoming work period. The Scientific Board will discuss and begin to frame these issues in preparation for the next Scientific Plan beginning in January 2023:

- 1. Discuss and advise processes for product lifecycle management in collaboration with the Technical Committee and other Working Groups.
- 2. Support the further development of implementation guides to help software architects and developers i.e. recommending the appropriate subset of a specification. Ideally, implementation guidelines should include code snippets or examples and have a consistent presentation across the product line
- 3. Discuss and define a policy for testing of specifications and instances.
- 4. Promote standardized query and exchange protocols which enable building repositories and reuse of DDI metadata in the web.
- 5. Identify and plan building blocks for establishing portals for supporting existing and growing DDI metadata repositories.

IV. Long Term Vision for DDI products and processes

The issues included in this paragraph reflect guidelines for addressing the development of long-term goals for the Scientific Board:

- 1. The Scientific Board will evaluate the development work undertaken in the past 7-10 years to both clearly document that work and determine what aspects should be incorporated into one or more products within the DDI Suite of Products
- 2. The Scientific Board will establish guidelines and strategies to improve interoperability and modularity between the different versions
- 3. The Scientific Board will monitor and provide support for the ongoing maintenance of the different products
- 4. The Scientific Board will promote interoperability and collaboration with other metadata standards
- 5. The Scientific Board will re-ignite the discussion of certifying DDI as an official ISO or similar standard
- 6. The Scientific Board will establish organization-level relationships with external standards bodies where needed/appropriate

DDI Marketing and Partnerships Group

Report and Plan 2021

Team: Barry Radler Jared Lyle Steve McEachern Ron Nakao Dan Smith Wendy Thomas



Original Mission Statement

- Create new materials explaining value of DDI
- Improve DDI website
- Assess current state of DDI usage, community needs, and resources.
- Build partnerships and strategic alliances
- Goal:
 - Promote DDI
 - Increase size of the DDI user community
 - Increase DDI Alliance membership



Activities during the past year

- Coordinating releases/reviews
 - Training, TC, MRT
 - Year-end summary Press Release
- Promoting DDI suite
 - DDI Lifecycle (3.3)
 - SDTL
 - CDI
- Rebranding suite as FAIR data management products
 - Product Logos
- Communication channels
 - Website, Twitter, Listserve, and Slack
 - Monitoring web traffic


Audience Overview



Behavior by pages viewed

| Page | Pageviews % Pageviews | | | |
|---|-----------------------|--------------------------------------|-----------------------|---------|
| | | 6. /explore-documentation | | |
| May 8, 2020 - May 6, 2021 | 20,652 23.42% | May 8, 2020 - May 6, 2021 | 2,541 | 2.88% |
| May 8, 2019 - May 8, 2020 | 19,823 🚺 23.33% | May 8, 2019 - May 8, 2020 | 5,934 | 6.98% |
| % Change | 4.18% 0.38% | % Change | -57.18% | -58.74% |
| /controlled-vocabularies | | 7. /training/getting-started | | |
| May 8, 2020 - May 6, 2021 | 3,278 3.72% | May 8, 2020 - May 6, 2021 | 2,389 | 2.71% |
| May 8, 2019 - May 8, 2020 | 3,462 4.07% | May 8, 2019 - May 8, 2020 | 1,618 | 1.90% |
| % Change | -5.31% -8.77% | % Change | 47.6 <mark>5</mark> % | 42.27% |
| . /training/why-use-ddi | | 8. /specification/ddi-codebook/2.5/ | | |
| May 8, 2020 - May 6, 2021 | 3,186 3.61% | May 8, 2020 - May 6, 2021 | 2,125 | 2.41% |
| May 8, 2019 - May 8, 2020 | 2,411 2.84% | May 8, 2019 - May 8, 2020 | 1,279 | 1.51% |
| % Change | 32.14% 27.33% | % Change | 66.15% | 60.09% |
| /resources/tools | | 9. /specification/ddi-lifecycle/3.3/ | | |
| May 8, 2020 - May 6, 2021 | 2,866 3.25% | May 8, 2020 - May 6, 2021 | 1,724 | 1.95% |
| May 8, 2019 - May 8, 2020 | 4,453 5.24% | May 8, 2019 - May 8, 2020 | 283 | 0.33% |
| % Change | -35.64% -37.99% | % Change | 509.19% | 486.98% |
| /training/getting-started-new-content/create-a-codebook | | 10. /resources/ddi-profiles | | |
| May 8, 2020 - May 6, 2021 | 2,553 2.89% | May 8, 2020 - May 6, 2021 | 1,345 | 1.53% |
| May 8, 2019 - May 8, 2020 | 3,313 3.90% | May 8, 2019 - May 8, 2020 | 1,178 | 1.39% |
| % Change | -22.94% -25.75% | % Change | 14.18% | 10.01% |



Activities during the past year

- Membership feedback research
 - Pilot project with 5 organizations
 - Data collection complete last year
 - Summary report soon



Plans for next 12 months

Promote

- Coordinating efforts of all working groups.
 - New releases and updates
 - Push Lifecycle (3.3) release
 - CDI review
 - Continued website improvements and maintenance
 - Video production
- Return to active presence at conferences



DDI Training Working Group

Annual Report (2020-2021) Budget Request for FY2022 (July 2021 through June 2022)

Submitted by: Jane Fry (co-Chair) and Anja Perry (co-Chair) Submitted on: June 19, 2021

Some Highlights from the past year

The DDI Training Group consists of 13 active members and meets the first Tuesday of each month. We have had three new members join us, four members are currently on leave, and one member left the group due to a change in her job. Having new members join us helps to invigorate the group and bring in new perspectives.

In the past year, two sub-Working groups have achieved their goals and, therefore, have disbanded. They are the Training Webpages Update and the Gap Analysis sub-working groups. The members of these sub-groups chose which of the other 2 sub-groups they wished to join, that is, either the Slide Decks Review or the Training Opportunities sub-groups. These two remaining sub-groups continue to meet on a regular basis and to work towards completing their goals.

The goal of the Training Webpages Update sub-group was to review all of the DDI pages related to Training and this review has led to the composition of four new webpages directed at the potential user who has no previous knowledge of DDI. This sub-group found these types of webpages to be a gap on the website. After many drafts and reviews, the pages are ready to be finalized. Stay tuned!

DDI outreach from different individuals has resulted in presentations for new groups, including CODATA, FAIRsFAIR and the Dublin Core Metadata Group. We are pleased that we have formed an excellent working relationship with CODATA and they are helping us with our webinars by marketing them for us (allowing us to reach greater potential participants), and allowing us to use their webinar software. This latter item is of great help to us as they are also the hosts (and deal with all technical issues), and there is no cost to us, resulting in a savings in our budget.

We have set up two Zenodo Communities: <u>DDI Training Material</u> (formerly the DDI Training Library) and the <u>DDI Training Group</u> (to share slides used in workshops and training events). The latter Community had done six presentations as of the end of May 2021. The first set of slides of Training Material is currently under review by the Scientific Board and will be published soon.

Training Plan for 2021-2022

Our overarching goal is to offer a continuum of online training resources, from basic to more advanced, to encourage DDI use. These training resources will be offered in a variety of

mediums, from prepared self-selected slide presentations, to webinars, to in-person training.

There are a number of goals we hope to accomplish in the next year.

- Slide decks: To complete the rest of the slide decks that were started at the last Dagstuhl Workshops. These slide decks are intended to be used by anyone, either in a presentation of their own, or in learning about DDI themselves. This set of slide decks will also form the core of the DDI Training Material. As other topics are determined, new slide decks will be put together, e.g., one for Metadata.
- **Training opportunities:** To continue to identify different DDI training opportunities, eg.,webinars; conferences. To take advantage of these opportunities by putting together a schedule of upcoming webinars. To continue to monitor the training requests which are sent in and to keep a spreadsheet with the basic information from the requests for tracking purposes.
- To update the *Events webpages* by making the information consistent and by depositing the existing presentations into the appropriate Zenodo DDI community. This latter task will be coordinated with the Marketing Group.
- To update the Terms of Reference and Mission for the Training Group. These were written almost 2 years ago and it is time to update them. This includes solidifying the name of this group, i.e., Group, Working Group, Committee.

Discussion

The co-Chairs have met with the Chair of the DDI Marketing WG, Barry Radler, a number of times to continue co-ordinating activities, e.g., videos. As well, they have met with the Chair of the Technical Committee, Wendy Thomas, to co-ordinate the revision of the Training web pages. These meetings will continue as needed.

The members of the DDI Training WG are quite encouraged to see the fruits of their labours for the past year. And we have more ideas for the future once our initial goals have been completed. We welcome any feedback or comments.

Budget Request

We are including the budget request in our Annual Report to be transparent in our goals for the next year. The Training Working Group requested \$12,600 for FY2022. This request was granted.

| Training Group Activity | Purpose / Goal | Audience | Cost (USD \$) |
|----------------------------|---------------------------------|------------------------|---------------|
| Videos (to share on social | 4 short videos (to increase our | new and advanced users | 1,100 |

FY2022 (July 1, 2021 - June 30, 2022)

| media) | number of short videos) to be produced by Kristi Winters. Will co-ordinate with Marketing. | | |
|---|---|---|-----------------------|
| Funding for workshops (travels and fees) | DDI will be promoted by submitting workshops to about 5 conferences. Travel costs and conference fees are covered for the instructor. | new users | 10,000 |
| Discount / waiver workshop fees (for DDI members) | We will offer a workshop fee waiver for DDI members and a conference fee discount for instructors at two conferences (EDDI and IASSIST). | new and advanced users | 1,500 |
| Web page update | Members of the Training Group continue to update and make changes to training-related content on the DDI website. | new and advanced users, DDI Trainers | In-kind contributions |
| Translation | Start with the translation of the basic introductory slide decks. | new and advanced users | In-kind contributions |
| Training Material update | Members of the Training Group continue to produce Training Material (including exercises) on Zenodo and the DDI website (with the help of the DDI assistant). | new and advanced users, DDI Trainers | In-kind contributions |
| Teaching in webinars or at conferences | Members of the Training Group engage in teaching activities to increase DDI knowledge in the research community. | new and advanced users | In-kind contributions |
| TOTAL | | | 12,600 |

Active Members of the DDI Training Working Group

Alina Danciu Adrian Dusa (joined March 2021) Jane Fry co-Chair Dan Gillman Arofan Gregory Kaia Kulla Kathryn Lavender (joined March 2021) Marta Limmert Jared Lyle Hayley Mills Laura Molloy (joined March 2021) Hilde Orten Anja Perry co-Chair

Technical Committee

Report to Member Meeting

June 2021

Role of Technical Committee

- Publication of DDI products
- Ensuring long-term maintenance of DDI products
- Provide support materials for DDI Product
- Coordinate with other working groups to support on-going development of individual products, provide technical content for publication and training purposes
- Provide information on the coverage and content of the DDI Product Suite
- Continue to work towards a more modular structure of DDI Products to support ease of use and interoperability within the suite and with other standards

Highlights of 2020/21

- Publication of the new DDI product SDTL on 2020-12-01
 - Provision of a web presentation to voting membership improved voter response and clarified the role of SDTL in the DDI Product Suite
- Solicited participation of over 20 members interested in addressing issues for Codebook and improving its interaction with DataVerse and the CESSDA network
 - 27 of 40 issues have been resolved
- DDI Alliance web pages
 - Initial revision of all pages under Products; update of the Metadata Examples; review of Tools, Profiles, and Relationship to other standards
 - Preliminary work on high level coverage model of DDI
- Review of COGS system for development work
 - Validating input and output and identifying required changes

Product review and publication

• CDI

- 2021/22 Final review and publication process
- Codebook
 - 2021/22 Review and publication of Codebook 2.6
 - Long term review of design rules and simplification of Codebook structure
- XKOS
 - Possible revision work, creation of Best Practices document
 - Work to expand use of XKOS within the UNSD for describing statistical classifications
- SDTL support maintenance work as required
- Lifecycle
 - 2021/22 Production process; complete serialization of content
 - Addition of multiple bindings to product production

Product development

- Production process continued development
 - Continue work to automate production of Lifecycle and Codebook
 - Work with product groups to exchange production techniques
- Resolution of RDF product content such as CVs and XKOS
 - Addition of content negotiation for these products
- DDI Product Suite
 - Differentiation of products in terms of application/use
 - Definition of the overall coverage of DDI and how each product relates to content coverage
 - Content model as basis for specifying product coverage and relationships
 - Interaction between products including translation of content between products

Technical Committee Work Plan

2021-05-13 revised

The purpose of the Technical Committee is to model, render, maintain, and update the DDI specifications to meet community needs and align with Alliance strategic goals. The TC receives input from substantive working groups of the Scientific Board, DDI users and developers, and other interested parties. This includes the development of conceptual models, implementation of models in various technical forms, monitoring the metadata landscape and related developments, and initiate and plan possible future directions for the standard.

Work Plan 2021/22

Continue work identified in DDI Roadmap as approved in 2019 within minor 2020 updates

Roadmap document: https://ddi-

alliance.atlassian.net/wiki/spaces/DDI4/pages/491555/Technical+Committee?preview=/491555/199825 8178/DDI_Roadmap_2021-02-25_update.docx

Product Maintenance and Development:

- DDI-CDI review, vote for publication, and publication if approved. CURRENT STATUS: This has been shifted from the last quarter of the current fiscal year due to adjustments in the DDI-CDI workplan following feedback from presentations/review.
- Codebook 2.6 review, vote for publication, and publication if approved CURRENT STATUS: Group has been working on outstanding issues since June 2020 and has addressed approximately 65% of 2.6 issues
- Long term discussion on the Codebook future structures
- XKOS support work with group managing XKOS maintenance and development and ensure clear expression of the role of XKOS in DDI Suite
- SDTL support work with SDTL group to ensure effective use of SDTL with other products as appropriate

Technical Processes:

- Lifecycle 3.4 Complete the move of Lifecycle to the COGS modeling base, testing of input and output for coverage and consistency. This will include testing multiple outputs (XML schema, RDF, JSON, UMI to begin with). CURRENT STATUS: Evaluated input issues and are currently correcting that script. Output scripts accurately reflect stored content.
 - COGS as a processing tool has advantages for Lifecycle as noted when agreed on in 2019 including; auto generation of output structures based on translation rules from object descriptions stored in structured CSV file; ability to add new output formats as needed; ability to generate output and test new content as created;
 - Review implications of multiple outputs on modeling, incorporating discussions and approaches from the Moving Forward work where appropriate; this may require minor remodeling of some choice or sequence usage

- Complete work with CV and ICPSR in setting up the publication process for CVs to DDI space including resolution support
- Resolution process for DDI URNs Continue Include sentence or two about HTTP based resolution process in our work plan for next year (see agenda from meeting in Minneapolis for additional points) CURRENT STATUS: Discussed requirements

DDI Product Suite:

- Comparison and mapping work continue work from 2020/21 creating a content model for overall DDI coverage, product coverage, and mapping. Includes exploring means of expressing mapping for various needs. CURRENT STATUS: Created a content model as a basis for comparison. Working on specific areas of comparison; Classifications, Variable Cascade
- Continue revision work on DDI Alliance web pages under Products and resource pages under Learn (Metadata Examples, Tools, Profiles, and Relationships to Other Standards
- Integrate update of assigned DDI Alliance web pages into standard publication processes

2021 through 2023

- Defining roles of individual products
 - How products work together
 - How advances/changes in one product affect other product development
 - o Role of products needs to be clear use case driven rather than content coverage
 - CDI has a goal of integration to other standards (a hub for integration) how does this impact current standards and their development - Relatively urgent question in terms of funders - is it a stand alone thing, an integration thing
 - Get feedback from people using CDI to see exactly where and how it's being used and who that community is
- Inclusion of common functionality
 - where to integrate from CDI
 - Review of Moving Forward work to identify areas of improvement (Questionnaire, data description, geographic description, separation of logical and physical clarification and simplify, descriptive content for codebook)
 - Clarify how products work together
- Mapping between products
 - Moving content across products Identify content that should and can move between products or subsets of products
 - The needs to be a unified approach with expressions of mapping appropriate to needs of target audiences
- Recruitment of new additional members both on TC part and SB part
 - more people, more use cases,
 - o integration of technical contacts
- Review Moving Forward content and organize for easy mining of content and discussion

General Goals from TC perspective:

- We need to have a discussion of how products work with each other to meet overall goals
- The TC perspective regarding each product is presented on
 - Overview of Current Products | Data Documentation Initiative (ddialliance.org)
 - <u>Developing Products of the Alliance | Data Documentation Initiative (ddialliance.org)</u>
- Mapping is a TC level activity which should involve the groups supporting existing and new products
- Recover the discussion of issues over time and layout points and decisions over time
- Align different product implementations over time how does that work and what does it look like

FY2021 Financial Report



| | Actual FY2021* | Budget FY2021 |
|----------------------------------|----------------|---------------|
| Total Revenue | \$100,500.00 | \$105,500.00 |
| Expenses | | |
| Staff Salaries | \$43,279.91 | \$50,931.00 |
| Consultants | | |
| Data Processing | | |
| General Expenses | \$325.00 | \$18,850.00 |
| Marketing | -\$2,900.17 | \$9,000.00 |
| Research Supplies & Services | \$401.58 | \$1,281.00 |
| Scientific Board | \$0.00 | \$19,000.00 |
| Technical Committee | \$0.00 | \$0.00 |
| Training | \$5,000.00 | \$5,550.00 |
| Travel and Hosting for Alliance | \$0.00 | \$1,000.00 |
| Transfer | | |
| Total Expenses | \$46,106.32 | \$105,612.00 |
| Revenue Over/(Under) Expenses | \$54,393.68 | -\$112.00 |
| Ending Fund Balance | \$335,947.79 | \$281,442.11 |
| Reserves from NADDI | \$21,076.03 | \$21,076.03 |
| Reserves from general operations | \$314,871.76 | \$260,366.08 |

Currency in USD

*Last updated: June 17, 2021

FY2022 Approved Budget



FY2022 budget process

- Anyone from the DDI community could submit a funding request.
- New this year: the DDI Scientific Board evaluated requests related to scientific or technical activities from the perspective of the Alliance Scientific Plan and provided feedback to the Executive Board.

FY2022 approved budget

- The budget for FY2022 (July 2021 June 2022) was finalized and unanimously approved by the Executive Board on June 9, 2021.
- <u>https://docs.google.com/spreadsheets/d/178vQhiB1IzrrsszQI_zxrpcNys9LW0</u>
 <u>Ch2XcI08IGIsE/edit#gid=0</u>
- All requests were approved:
 - Total expenses = \$152,071
 - Projected revenue = \$97,500
 - Expected loss = \$54,571
 - Forecast reserves (30 June 2022) = \$260,301



DDI Alliance Financial Report Annual Meeting of Member Representatives 22 June 2021 Jared Lyle, Executive Director

Financial Report

This document summarizes the overall financial position of the DDI Alliance at the close of FY2021 (July 2020 - June 2021) and includes an approved budget for FY2022.

According to the Alliance bylaws:

"The Executive Board sets the overall budget....[and] shall establish a budget that provides financial support for the successful operation of the Alliance that may include support for some portion of the time of the Executive Director, Alliance duties and functions as determined by the Executive Director and the Secretariat, expert consultation, meetings, training, and funds for innovation and testing."

Overview of FY2021 Budget

<u>Appendix A</u> provides an overview of the FY2021 budget: the Budget FY2021 column lists what was budgeted for the Alliance at the start of FY2021, and the Actual FY2021 column lists all expenses that have been processed by the Alliance fiscal year-to-date.

Below are details for each of the main FY2021 budget categories, as well as a summary of the FY2021 budget.

Revenue

Membership fees

- <u>Membership fees</u> are based on organization size and membership benefits. The basic membership fee for OECD countries is \$3,000 USD.
- The expected income for FY2020 was \$105,500, but actual income is \$100,500. The negative variance is due to one dropped membership by Eurostat.

Expenditures

Staff Salaries

• Staff salaries are expected to be \$5,000 under what was budgeted. This is due to the newly funded marketing position starting several months after the beginning of the fiscal year. Staff salaries cover secretariat staff and computing services at ICPSR, including 10 percent of the Executive Director, 20 percent of a marketing assistant, 5 percent of an accountant, and 6 percent of a Web developer. With the exception of the added marketing assistant, salary and data expenses have remained the same for the last 7 years even though ICPSR salaries have increased by an average of three percent each year.

General Expenses

• The general expenses were solely legal fees for DDI collective mark renewals. Expenses were much lower than anticipated since the DDI libraries development (jointly funded with Statistics Canada) has not begun.

Research Supplies & Services

 Expenses covered Google Cloud fees and one Zoom virtual meeting subscription. Anticipated additional expenses include hosting fees for the DDI Registry, a hosted DNS SRV record-based resolution service for DDI agency identifiers.

Marketing

 Marketing spent just a fraction (\$396.44 for promotional stickers) of its allocated budget (\$9,000). They also received a refund of \$3,296.61 from the University of Michigan Survey Research Operations for unspent funds from the 2020 pilot membership feedback project.

Scientific Board

• The Scientific Board did not spend any of its allocated funds, including for training tutorials or for DDI URN registration at IANA.

Training

• Training spent almost all of its allocated funds (\$5,000), which funded a consultant to edit training slides. Funds for Webinar software (\$550) were not spent.

Travel and Hosting

• The Alliance did not spend any funds on travel or hosting.

Summary

- The overall FY2021 income exceeds expenses by \$54,393.68.
- The overall FY2021 expenses are less than half (\$46,106.32) of what was budgeted (\$105,612) for the fiscal year.
- The fund balance for the Alliance is \$335,947.79 as of June 17, 2021. Of this, \$21,076.03 is committed to North American DDI (NADDI) reserves. The uncommitted fund balance (i.e., funds that are unencumbered by previously allocated expenses) is currently at \$314,871.76.

Overview of FY2022 Budget

The budget for FY2022 (July 2021 - June 2022) was finalized and unanimously approved by the Executive Board on June 9, 2021. Two months prior to this meeting, each major Alliance committee or group was asked to submit a funding request. Additionally, a message was sent to the entire DDI community soliciting funding requests; anyone could submit a funding request. All requests were compiled into the FY22 budget planning document. The DDI Scientific Board evaluated requests related to scientific or technical activities from the perspective of the Alliance Scientific Plan. They provided feedback about requests related to scientific or technical activities to the Executive Board.

All community funding requests received by the Executive Board were approved, with total expenses in FY22 projected to be \$152,071, estimated revenue of \$97,500, and an overall expected loss of \$54,571.

These are the recurring and requested expenses for FY2022 (July 1, 2021 through June 30, 2022). The FY2022 budget was finalized and unanimously approved by the Executive Board on June 9, 2021. All funding requests were approved. Funding requests represent all funding requests submitted by Alliance members as of June 8, 2021. Each major Alliance committee or group was asked to submit a funding request. Additionally, a message was sent to the entire DDI community soliciting funding requests. All submitted funding requests are listed below. The DDI Scientific Board evaluated requests related to scientific or technical activities from the perspective of the Alliance Scientific Plan. They provided feedback about requests related to scientific or technical activities to the Executive Board. A link to the full funding request description is also provided.

| | ITEMNO | Reviewed by Scientific Board? | | Activity | Approved |
|-----------------------|--------|-------------------------------|------------------------------|---|-----------|
| Recurring Expenses | | Colonano Boara. | | | , pp/orea |
| J | | | Staff Salaries | | |
| | 1 | No | | Salaries | \$45,000 |
| | | | | Total | |
| | | | Research Supplies & Services | | |
| | 2 | No | | DDI Registry web hosting | \$900 |
| | 3 | No | | Zoom virtual meetings | \$150 |
| | 4 | No | | Wire fees (estimate) | \$100 |
| | | | | Total | \$1,150 |
| | | | Alliance Travel & Hosting | | |
| | 5 | No | | Annual meeting hosting | \$1,000 |
| | 6 | No | | Meeting attendance (e.g., UNECE) | \$2,000 |
| | | | | Total | \$3,000 |
| unding Requests | | | | | |
| Committee/WG Requests | | | | | |
| | | | Marketing & Partnerships WG | | |
| | 7 | No | | "Conference sponsorships and marketing materials (which we are low on)." | \$5,000 |
| | | | | Total | \$5,000 |
| | | | Scientific Board | | |
| | 8 | Yes | | Face-to-face meeting of the Scientific Board | \$7,000 |
| | | | | Total | \$7,000 |
| | | | Technical Committee | | |
| | 9 | Yes | | DDI Registry Resolution Enhancements | \$4,637 |
| | 10 | Yes | | Technical Committee Face-to-Face Meeting focused on the production system | \$14,540 |
| | 11 | Yes | | Content resolution system to support RDF Vocabularies (XKOS) and CVs | \$2,000 |
| | | | | Total | \$21,177 |
| | | | Training WG | | |
| | 12 | | | Videos (to share on social media) | \$1,100 |
| | 13 | Yes | | Funding for workshops (travel and fees) | \$10,000 |
| | 14 | Yes | | Discount/waiver workshop fees (for DDI members) | \$1,500 |
| | | | | Total | \$12,600 |
| | | | DDI-CDI WG | | |

These are the recurring and requested expenses for FY2022 (July 1, 2021 through June 30, 2022). The FY2022 budget was finalized and unanimously approved by the Executive Board on June 9, 2021. All funding requests were approved. Funding requests represent all funding requests submitted by Alliance members as of June 8, 2021. Each major Alliance committee or group was asked to submit a funding request. Additionally, a message was sent to the entire DDI community soliciting funding requests. All submitted funding requests are listed below. The DDI Scientific Board evaluated requests related to scientific or technical activities from the perspective of the Alliance Scientific Plan. They provided feedback about requests related to scientific or technical activities to the Executive Board. A link to the full funding request description is also provided.

| | ITEMNO | Reviewed by Scientific Board? | | Activity | Approved |
|-----------------------------|--------|----------------------------------|------------------------------|--|-----------|
| | 15 | Yes | | Face-to-face meetings | \$12,880 |
| | 16 | Yes | | RDF Syntax Representation Mapping | \$4,500 |
| | 17 | Yes | | RDF Syntax Representation Implementation | \$8,000 |
| | | | | Total | \$25,380 |
| | 18 | No | DDI URN registration at IANA | | |
| | | | | Total | \$4,000 |
| Community Requests | | | | | |
| | 19 | Yes | DDI Webinar Series Extension | Proposal | \$7,040 |
| | 20 | Yes | Statistics Canada | | \$20,724 |
| | | | | Total | \$27,764 |
| | | | | Total Expenses | \$152,071 |
| | | | | ESTIMATED REVENUE (per 2021-2022 revenue) | \$97,500 |
| | | | | SURPLUS / (LOSS) if all recurring expenses and funding requests are approved | -\$54,571 |
| | | | | FORECAST FUND BALANCE (30 JUNE 2021) | \$314,872 |
| | | | | PLUS SURPLUS/LOSS | -\$54,571 |
| | | | | FORECAST FUND BALANCE (30 JUNE 2022) | \$260,301 |
| *Currency in USD | | | | | |
| *Last updated June 21, 2021 | | | | | |

DDI Alliance Strategic Plan, 2021-2023

Introduction

As the <u>DDI Alliance</u> moves into the next phase of its development, three overarching priorities need to be addressed:

- 1. DDI user community: how do we engage with the DDI community and understand the community's needs?
- 2. Organisational needs: what structures and systems does the Alliance need in order to meet those needs, and how will it maintain those structures and systems in the long term?
- 3. Standards and work products: what standards and products does the Alliance provide and maintain, and how do those meet the needs of the Alliance and the broader community?

The DDI Alliance budget and work program are intended to align with these overarching priorities. This will include the need to identify resources (including money, time, and in-kind contributions) and responsibilities (e.g., party/organization/team) for each part of the strategic plan. Similarly, the resource constraints within the Alliance will by necessity limit the extent to which we can achieve the goals set out in this plan.

Working Principles

The specific strategic activities proposed in this plan have been established with the following principles in mind:

- Don't leave anyone behind -- no dead end with any prior DDI track
- Lower barriers to entry/use
- Respond primarily to user demands/requests
- Market, market, market
- Simpler is always better
- Let user requests drive development

Strategic Priority Area One: The DDI User Community

DDI's success is directly related to its ability to attract, develop, and retain archives and data producers that use DDI in data production and dissemination. DDI advances the FAIRness of data to the extent that there is broad adoption. Our overall strategic priority is to build the DDI user community. We will encourage membership in the DDI Alliance *and* use of the standard, so that DDI products become the basis for comparability and interoperability for research and statistical data worldwide.

STRATEGIC ACTIONS:

1. Understand current DDI users and promote existing DDI products

- a. Determine who uses DDI.
 - i. Who are they?
 - ii. Why do they use DDI?
 - iii. What do they like or not like about DDI?
- b. Produce and disseminate marketing materials that explain DDI Codebook and DDI Lifecycle to data producers and archives.

2. Support current DDI users

- a. Create brochures, videos, and training activities for current users.
- b. Engage with third-party tool developers or identify resources to undertake DDI software tool development.
- c. Centralize and standardize training and support resources ("Training Library").

3. Engagement with global digital research infrastructure

- a. Develop best practices to map and translate DDI for DataCite, schema.org and other key metadata repository services.
- b. Find common ground and leverage efforts of other research data organizations.

Strategic Priority Area Two: The DDI Alliance as an Organisation

The Alliance has a broadening set of both member and user needs. One impact of this broadening reach is the need to become more "professional" in the way the Alliance operates. This professionalisation includes the maintenance and development of our core organisational infrastructure (such as websites, marketing, and project management). At the same time, we want to retain the core volunteer culture that formed the foundation of the Alliance and continues to drive participation in the Alliance. We are facing a period of volunteer and staff renewal, requiring the need to expand our core development base and volunteer community.

STRATEGIC ACTIONS:

1. Generational renewal

- a. Recruit the next generation of knowledgeable and skilled core technical developers.
- b. Expand the skilled marketing team that is connected to relevant communities (archives, software producers, data producers, statistical agencies, individual researchers, other standards).
- c. Renew active and engaged membership at the institutional level in the DDI community (strengthening the commitment).
- d. Plan for the changing roles of long-standing contributors to the Alliance effort.
 - i. Transition of roles (e.g. head of Technical Committee)
 - ii. Transition of activities (different roles for such contributors)
 - iii. Transition of their institutions (does the institution continue to support the Alliance once the specific member has moved on)

2. Training: Enabling trainers to do what they need to do

- a. Recruit human resources (paid and/or volunteer) to offer multifaceted DDI training.
 - i. Develop a role for a membership appointed DDI Alliance designated "Trainer"
 - 1. The official DDI Trainer will work with the DDI Alliance Training Working Group and offer dedicated support for training in all formats and types; as needed and in close collaboration with the various working groups and Executive Board requirements for at least a one year period.
 - 2. The DDI Trainer will provide support for in-person training at conferences, workshops, seminars, as requested and as funding permits.
- b. Build an online training presence to expand the current training offerings.

- i. Extend the current offering of online training materials to support self-driven, passive training through online and web-based training delivery.
- ii. Develop web-based video tutorials, such as "What is DDI?", "How to get started with DDI?", "Building reusable questionnaires with DDI", etc.
- c. Support new trainers and users with easy-to-understand and reusable tools for DDI Training.
 - i. Develop reusable checklists for getting started with DDI.
 - ii. Develop and maintain a listing of organizational DDI user profiles, licensed openly for reuse.
 - iii. Develop, gather and share reusable training materials (e.g. training toolkits for different audiences and use cases).

3. Business structure

- a. Establish a periodic review of the organizational structure.
- b. Develop formalised roles and succession planning for certain Alliance activities.
 - i. Roles: marketing, website support, "member services", training support
 - ii. Paid staffing of some roles
 - iii. An organizational succession plan for both paid and volunteer roles1. (see also 1 d above)
- c. Develop a sustainable business model for the Alliance.
 - Establish a DDI "Finance Committee" to develop a revenue and expenditure planning model for the Alliance -- particularly focused on revenue models for supporting key development activities of the Alliance.

Priority area Three: Standards and Work Products

Overview of Current Products

The Data Documentation Initiative (DDI) is a suite of products that describes metadata about both quantitative and qualitative research data in the social, behavioral, economic, and health sciences. The DDI suite is a set of free standards that document and manage different stages of the research data lifecycle, including conceptualization, collection, process, distribution, discovery, and archiving.

The content areas of DDI cover the following areas:

- Conceptual objects: concept, unit, unit type, universe, population, geographic structures, and representation
- Methodological objects: approaches to sample selection, data capture, weighting, quality control, and process management
- Processing: data capture, data processing, analysis, and data management

- Quantitative and qualitative data objects: concept, universe, representation, usage, data type, record, record relationships, storage, access, and descriptive statistics
- Data management: ownership, access, rights management, restrictions, quality standards, organization, agent management, relationship between products, versioning, and provenance

Products within the DDI suite differ in terms of their area of coverage within DDI, supported activities, and required level of infrastructure. From simple descriptive content for human understanding to structures that support metadata-driven statistics production and analysis, DDI addresses a broad area of data management needs. As a suite of standards, DDI provides a common means of identification for information objects, support for common cross-product content, and an informed means of transforming content between products.

Current DDI Products

- DDI Codebook Structured, descriptive documentation of the content, meaning, provenance, and access for a single data set.
- DDI Lifecycle Lifecycle expands on the idea of Codebook in terms of content coverage, depth, metadata management over time, reusable metadata, and support for the planning, capture, processing, storage, discovery, and dissemination of data. It allows grouping and comparing related studies or series of studies.
- Controlled Vocabularies A set of controlled vocabularies commonly used in social science and other disciplines to support systems designed to identify, locate, and access data for research purposes.
- XKOS Extended Knowledge Organization System (XKOS) leverages the Simple Knowledge Organization System (SKOS) for managing statistical classifications and concept management systems. XKOS adds the extensions that are needed to meet the requirements of the statistical community.
- SDTL: Structured Data Transformation Language (SDTL) is an independent intermediate language for representing data transformation commands

Products under development

 DDI-Cross Domain Integration (DDI-CDI) - It is designed to be a model which can be used to connect disparate forms of data with each other. It can be used as a way of integrating new forms of data with more traditional, existing data, or with each other. Ultimately, the diverse types of data must be seen as an integrated whole, complete with a description of the structure, meaning, and provenance of each part. DDI-CDI is intended to meet this need.

Strategic actions on DDI Standards are intended to provide orientation on which standards and work products to develop and maintain, and why. There is a need to be able to maintain the existing standards to ensure that we can continue to support small scale users such as academic libraries and research centers, while continuing to develop model-based standards

and associated work products to support the expanding user base in communities such as statistical agencies and data producers.

STRATEGIC ACTIONS:

1. High-level goals

- a. Make DDI specifications ready for being building blocks in a global research data infrastructure (together with other specifications)
- b. Cooperate with other standardization groups to build an efficient network of specifications
- c. Align with FAIR principles and FAIR ecosystem
- d. Provide means for efficient use of DDI specifications which comprehends robust specifications using state-of-the art technologies, good documentation including implementation and usage guides, support for a framework around the specifications including protocols and services

2. Maintaining multiple lines of specifications and controlled vocabularies

- a. Offering stable specifications and controlled vocabularies (reference Work Products)
- Ensuring portability of DDI metadata between specifications and to outside specifications (i.e., mapping between specifications, re-use of elements of other specifications)
- c. Enable DDI specifications to adapt to changes in information technologies and languages (XML Schema, OWL/RDF-S, Schema.org, etc.)
- d. Improve modular approach of specifications to enable the use of functional parts of specifications (from monolithic to modular design). Enable use of parts of specifications together with third party specifications.
- e. Production testing/validation for quality assurance
- f. Improve documentation. Integrate with examples and best practices guidelines. Make documentation usable from a training and self-teaching perspective
- g. Providing test cases and an automated test framework for ensuring quality and robustness of main purposes of specifications
- h. Maintaining a development and research project (like DDI Moving Forward) to explore new features and technical platforms. All specifications might benefit from such a laboratory environment. The idea is to separate concerns of development/research from the concerns of creating stable specifications.
- 3. Improvement of interoperable and distributed DDI infrastructure for use and reuse of DDI resources. Adding useful components around the specifications for users.
 - a. Guidance on which DDI specification and which parts of DDI for specific use cases

- b. Introduce validation rules and related tools, testing support, and mechanisms for using specific subsets of specifications for the purpose of interoperability
- c. Implementation guides to help software architects and developers -- i.e., choosing the appropriate subset of a specification
- d. Maintaining a platform for specific subsets of specifications for main usage purposes
- e. Technical DDI services, especially resolution of DDI URNs to the physical location of DDI resources (identified by URLs)
- f. Standardized query/exchange protocol enables building repositories and reuse of DDI metadata on the web
- g. Best practices for using all components together

4. Registries/repositories

- a. Specify DDI's vision of building DDI into Common Data Element registries.
- b. Identify ways for establishing portals for supporting existing and growing DDI metadata repositories.
- c. Leveraging technologies of topic 2 above, especially standard query and exchange protocols/interfaces.