DDI Alliance Meeting
Monday, May 22, 2017, 08:30-17:00
University of Kansas Memorial Union
Big 12 Room -- Map

Agenda -- Meeting of Members				
Time	**Subject**	**Detail**	**Lead**	**Purpose**
08:30-09:00	Light Breakfast			
09:00-09:10	Welcome		Steve	Introductions
09:10-09:30	State of the Alliance 2017		Steve	Update group on last year's work
09:30-10:30	Panel Discussion	Updates from the following groups: Marketing, Training, Technical Committee, and Moving Forward	Amber Barry Wendy Achim	Review activities and get buy-in on future direction
10:30-10:45	Alliance Budget	- Current status and future projections - Member Forms	Jared	
10:45-11:00	Break			
11:00-12:15	DDI Vision and Strategic Plan	Detailed discussion of vision with the membership - Including the Infrastructure Manifesto	Steve	Get input and feedback
12:15-12:25	Executive Board Election	Discuss available positions and upcoming election (including Scientific Board vice-chair)	Steve	Inform about the upcoming election
12:25-12:30	Proposed Date for Next Meeting		Steve	Agree on best day to meet
12:30-13:30	Lunch			

Agenda -- Meeting of Scientific Board				
Time	**Subject**	**Detail**	**Lead**	**Purpose**
13:30-14:00	Scientific Board direction and goals for the year	-Reflecting on the DDI Vision -Specific activities for the Alliance (e.g. URN resolution, REST protocol, publications and best practices)	Chair	Set goals for what to accomplish
14:00-15:00	Work products and Moving Forward program	-Review the DDI Alliance work products -Overview of the DDI 4 timeline -Update on past reviews -Preparation for the codebook functional view	Steve Wendy Achim	In-depth discussion of DDI4 development
15:00-15:15	Administrative matters	Vice-chair election		
15:15 - 15:30	Coffee break			
15:30 - 16:00	Technical Committee report	Update of the Technical Committee on recent activity DDI Lifecycle and DDI Codebook updates	Wendy	Update group on progress
16:00 - 16:15	Related Initiatives	Report on related initiatives (SDMX and GSIM)	Steve	Update group on progress
Reports for Information (Discussion by Exception)				
16:15-17:00	EDDI Report NADDI Report Working group reports -Vocabularies -ADMP -DDI Dataverse	Brief (five-minutes each) reports Future activities and “where to next” for each group	Various	Update group on progress

18:30 - Informal DDI group dinner at Free State Brewing Company

20:00 - Informal IASSIST pub crawl

Vision for DDI Long-Term Infrastructure and the DDI Alliance

Vision for DDI Long-Term Infrastructure

- DDI-based infrastructure for the support of empirical sciences in the social, behavioral, economic, and health domains
- Describing data in a structural and standardised way
- Based on a central element registry and distributed metadata/data repositories

Purpose

Providing the basis for a reliable framework in a global network in order to support …

- Exchange and long-term preservation of metadata
- Re-using metadata in a single data collection, across waves of longitudinal data, across data collections, and across institutions
- Metadata-driven data collection
- Transparent research
- Research reproducibility

Mutual Benefits

- An institution realizing a part of the infrastructure framework benefits from …
  - a larger plan with well-defined interfaces
  - existing components
  - referencing both in proposals for funding agencies
    - Such a proposal would be a part of a bigger picture and no isolated development
- The empirical SBE sciences benefit from a growing distributed infrastructure framework
- The DDI Alliance benefits from third-party contributions
  - The Alliance wouldn‘t have the resources (nor it is their objective) to realize all components of the infrastructure

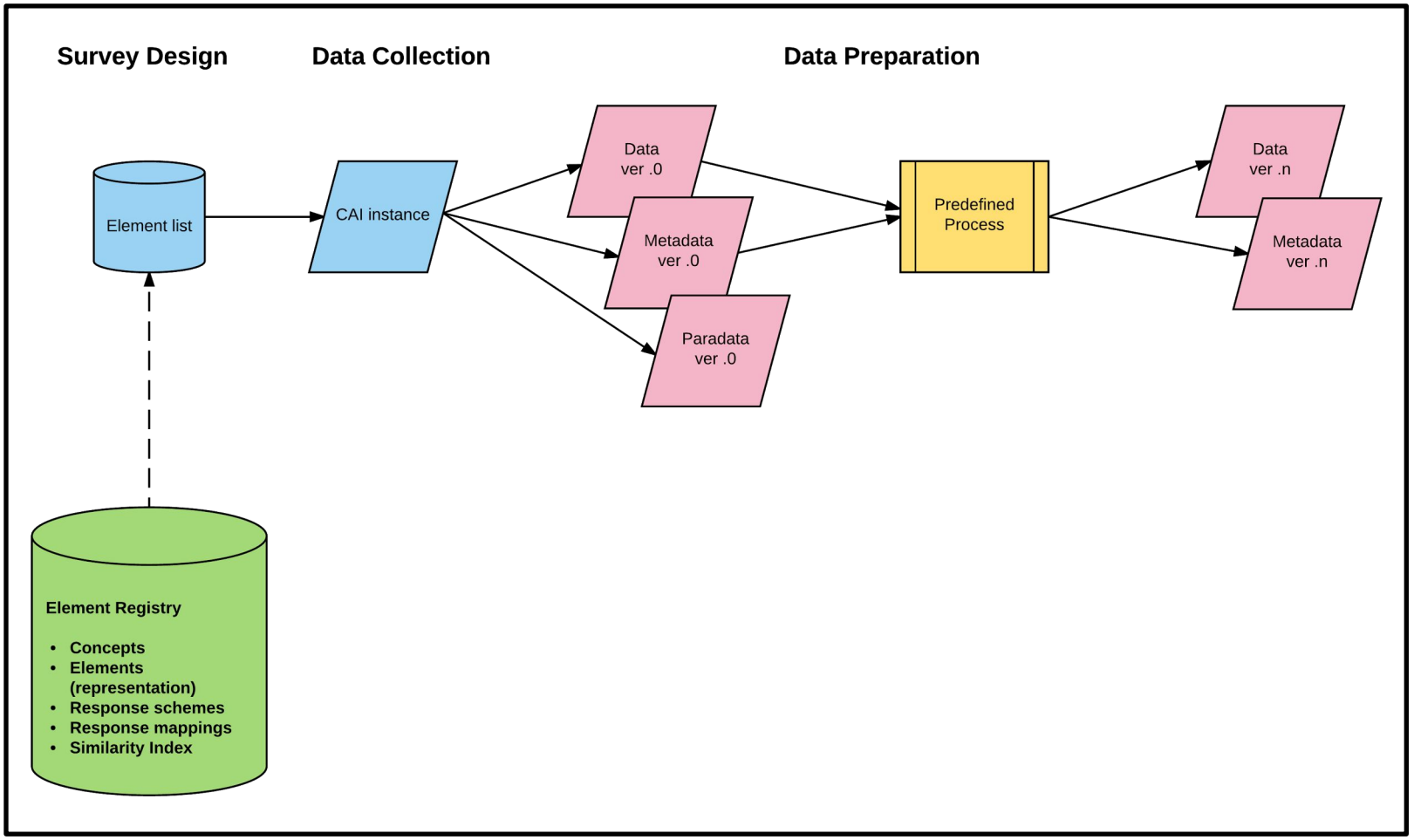
Limitations

- All components of the infrastructure framework …
  - would need a license which allows the public use of them
  - need to be compliant with the related rules
- Data and metadata elements could be provided with access restrictions if necessary

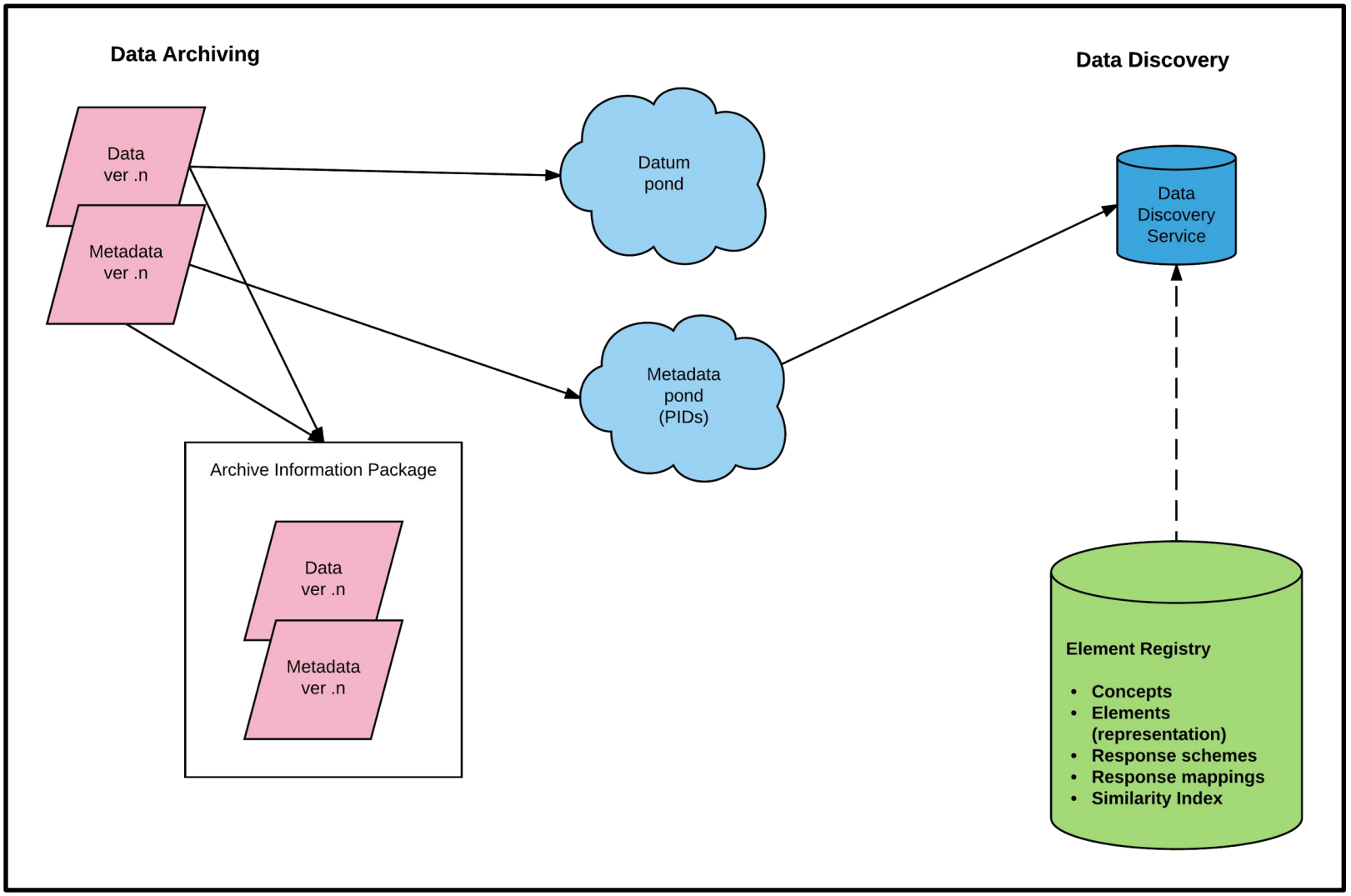
Background

- The idea of a long-term infrastructure plan is borrowed from areas in sciences, astronomy and particle physics
  - There research depends on expensive infrastructure and related work

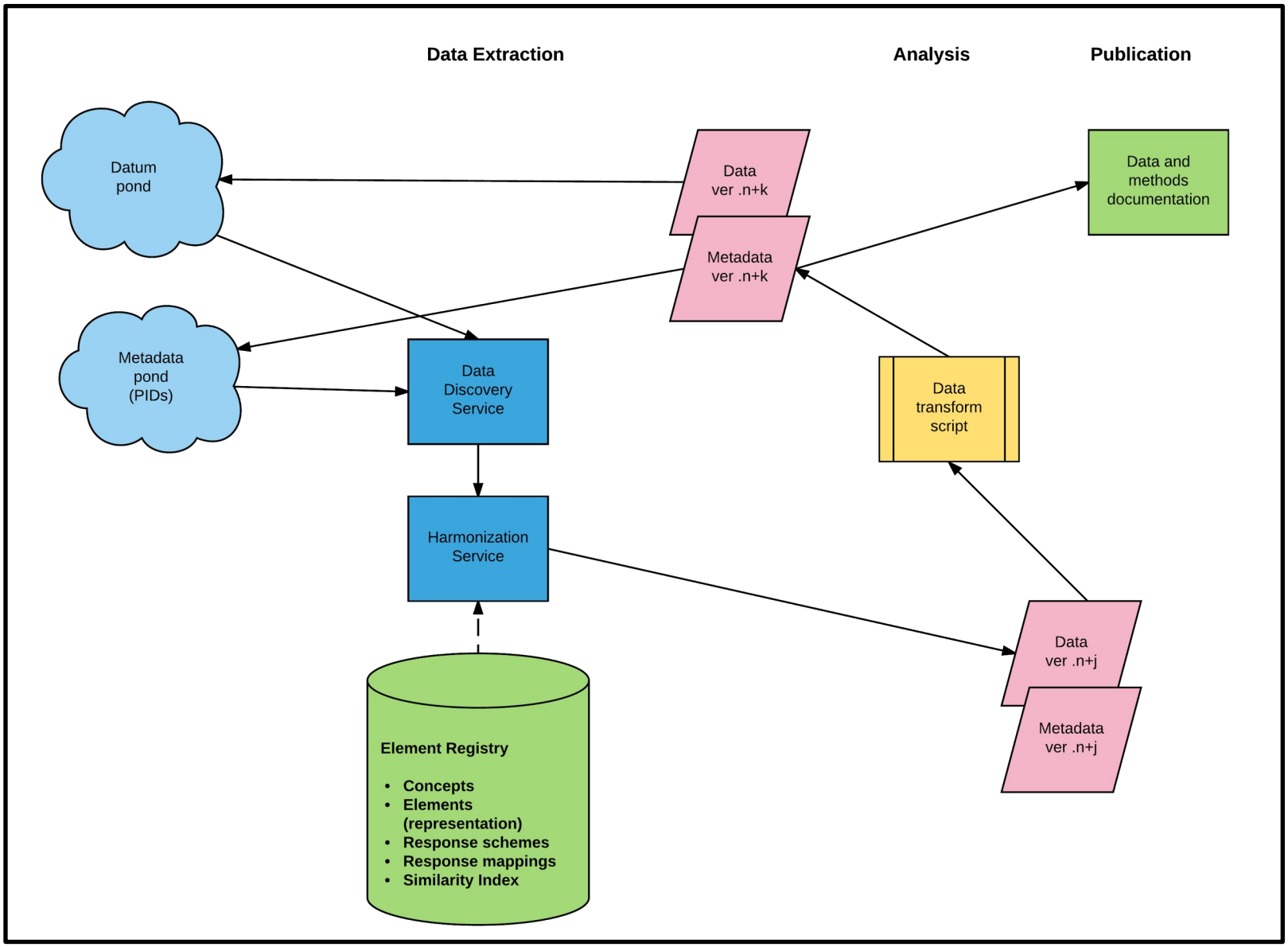
Element Registry and Survey Design



Element Registry and Data Discovery



Element Registry and Data Extraction



Pillars of DDI Long-Term Infrastructure

- DDI Specification
  - Definition by formal language and English documentation
  - Supporting material
    - Test cases – for the technical use
      - Technical instances to show the use of specific parts of the specification (i.e. in XML) for detailed purposes
    - Use cases – for the business use
      - Descriptions to show the application of the specification for business scenarios (not necessarily as technical instance)
    - Best Practices for achieving best results in using DDI
- Identification, query, and resolution of DDI objects
  - Definition of DDI URN
  - Definition of DDI query protocol (i.e. REST)
  - Prototype software components for query and resolution
- Rules and software for metadata registry
- Metadata repositories
  - Software for building and querying repositories
  - Content of repositories

Who is Doing What?

	DDI Alliance	DDI Community
Specifications including formal documentation	x	
Test cases	x	
Use cases		
Documentation structure	x	
Description	Prototype	x
Best Practices for achieving best results in using DDI		
Documentation structure	x	
Description	Prototype	x
Identification, query, and resolution of DDI objects		
Definition of DDI URN (persistent, location-independent identifier)	x	
Definition of DDI query protocol (i.e. REST)	x	
Software components for query and resolution	Prototype	x
Rules and software for metadata registry	x	
Software for building and querying metadata repositories		x
Content of metadata repositories		x

Complementary Core Documents

- Vision for DDI Long-Term Infrastructure
  - For the DDI community and the DDI Alliance
  - Purpose is to provide a reliable long-term planning framework
  - Parts are already realized or will be realized by the DDI Alliance
  - Other parts can be used by the DDI community
- Strategic plan of the DDI Alliance for 3-4 years
  - Translating the DDI Alliance parts of the vision into broadly defined goals and a sequence of steps to achieve them
- Mission and Principles of the DDI Alliance - unchanged over time
  - Mission: declaration of the core purpose and focus
    - Based on the Objectives of the DDI Alliance Charter
  - Guiding principles: Fundamental norms, rules, or values that represent what is desirable and positive in terms of developing DDI specifications for a global network
    - Broad audience: DDI specification developers, DDI users, other organizations in the field

Steps for Developing the Documents

- Discussion at DDI Alliance Annual Meeting 2017
- Panel session at IASSIST conference 2017
- Working group initiated by the Executive Board
- Development of mature versions of the documents at Dagstuhl workshop in October 2017
- Distribution to members and improvement of documents
- Approval of documents at DDI Alliance Annual Meeting 2018

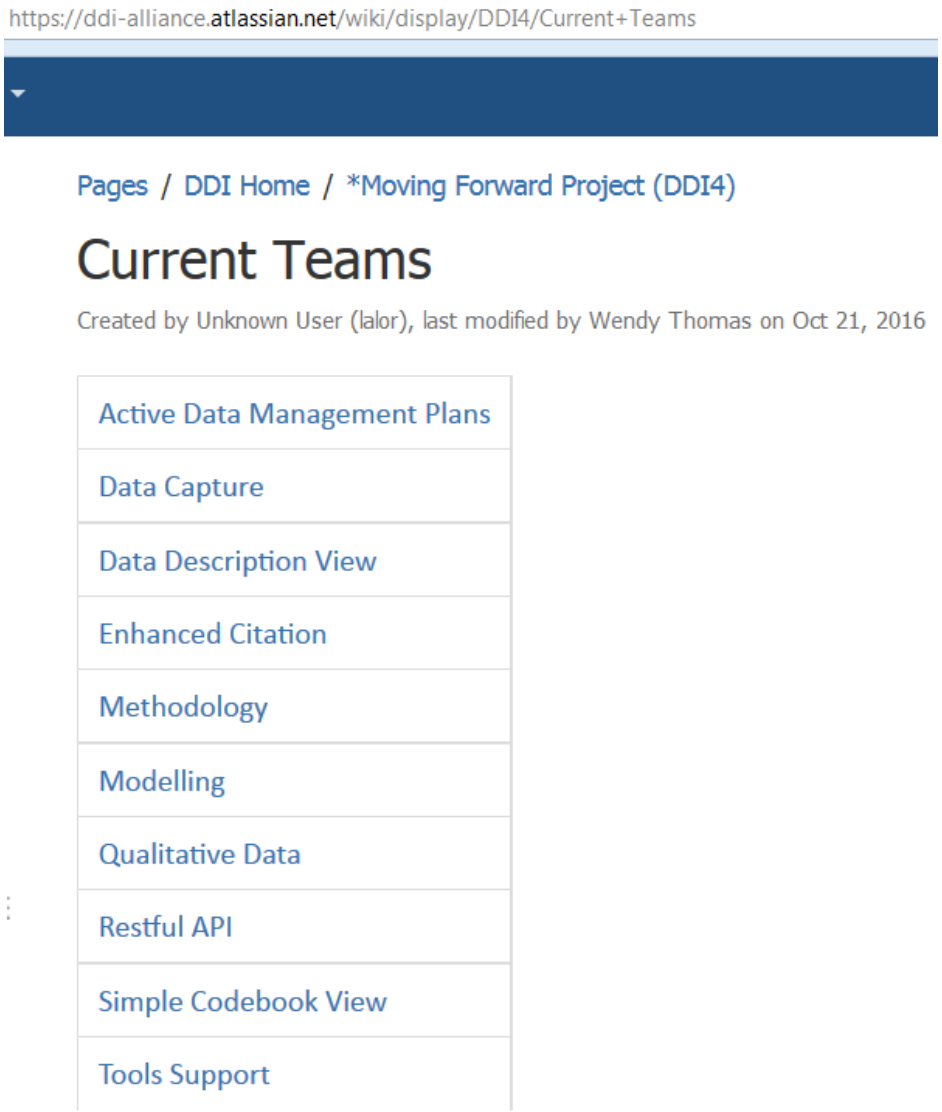
Basis Documents

- Discussion paper „DDI Long-term Infrastructure Manifesto”
  - Started at Dagstuhl workshop in October 2016
- DDI Alliance Strategic Plan, 2014-2017
- Moving Forward Design Principles
- DDI Mission and Guiding Principles, draft from 2012
- Principles for developing metadata specifications
  - Started at Dagstuhl workshop in October 2016

DDI Moving Forward Project

Status and Outlook May 2017

Group Work in Virtual Meetings and Sprints



Virtual Meetings

- Frequent meetings
  - Data Description View
  - Modelling
  - Simple Codebook View
- Meetings when needed
  - Active Data Management Plans
  - Tools Support
- Temporary inactive
  - Enhanced Citation (major work is already done)
  - Methodology (active thru Dec 2016)
  - Qualitative Data (open task: integration of model parts into DDI 4)
  - Restful API (not started yet)

Three Sprints / Workshops since June 2016

Venue: Schloss Dagstuhl – Leibniz Center for Informatics in Wadern, Germany

- DDI Moving Forward: Facilitating Interoperability and Collaboration with Other Metadata Standards
  - October 17 – 21, 2016
  - 21 participants, 9 from other metadata specifications and groups
- DDI Moving Forward: Improvement and Refinement of Selected Areas
  - October 24 – 28, 2016
  - 24 participants

Cologne after EDDI16

- December 12-16, 2016
- 6 participants

DDI Moving Forward: Facilitating Inter-operability and Collaboration with Other Metadata Standards

Specifications

- DDI – Data Documentation Initiative
- CDISC – Clinical Data Interchange Standards Consortium
- HL7/FHIR – Health Level Seven / Fast Healthcare Interoperability Resources
- SDMX – Statistical Data and Metadata eXchange
- GSIM – Generic Statistical Information Model
- W3C CSV on the Web (Comma-Separated Values)

DDI Moving Forward: Facilitating Inter-operability and Collaboration with Other Metadata Standards

Topics

- Across multiple metadata specifications
  - **Data Description Commonalities**
  - **Manifesto (Design Principles)**
  - Bindings
  - Protocols
  - Business Scenarios/Use Cases
- **Provenance**
- Design Patterns in DDI-Views (Version 4)

DDI Moving Forward: Improvement and Refinement of Selected Areas

Further development of DDI-Views (Version 4)

- Validation of Data Description
- Integration of Data Capture into full model
- Controlled vocabularies
- Re-usable structured documentation
- Long-term metadata infrastructure plan

Cologne Meeting

Work on

- Document on RDF task list (intended for external expert)
- Document on development tasks for model capturing environment (Lion server)
- Migration of integration server for the production framework
- First steps of migration of Lion server into the cloud, better separation of distinct tasks

Upcoming Sprint after IASSIST

- 5-days in Lawrence
- 8 participants
- Topics include
  - Codebook Functional View
  - Document for DDI 4 providing a common understanding of the goals of DDI 4 from current perspective
  - Review of package integration
  - coverage and gap review between DDI 4 and DDI-Lifecycle (DDI 3), and DDI 4 and GSIM

Current High-Level Status

- Past work focused on broad development on different levels
  - New content
  - New architecture
  - Structural modeling
  - Production system
  - Interoperability with other metadata specifications

Outlook

- Future focus should be on
  - Publication of core Functional Views
    - Codebook and related basic data description and data capture
  - Necessary tasks for the purpose above
    - Selection of mature elements
    - Filling in gaps and integration
  - New developments should have minor priority
  - Continuation and improvement of selected approaches of
    - Production framework
    - Structured documentation
  - Intensification of the creation of
    - Technical test cases
    - Business use cases

Possible Future Workshops

- Dagstuhl, October 2017
  - One or two workshops along the lines mentioned before, currently in planning state
- Chur, December 2017 (week before EDDI17)
  - Subject tbd

Technical Committee

Members Meeting

May 2017

TO DO ITEM	6/16/2016	6/23/2016	6/30/2016	7/7/2016	7/14/2016	7/21/2016	7/28/2016	8/4/2016	8/11/2016	8/18/2016	8/25/2016	9/1/2016	9/8/2016	9/15/2016	9/22/2016	9/29/2016	10/6/2016
Finalize RDF for review																	
RDF Vocabulary page set up																	
RDF Vocabulary public review																	
Q2 set up pages/JIRA																	
Q2 request issues																	
3.3 question structure resolution																	
Q2 pre-announce																	
Q2 development release																	
Codebook request issues																	
3.3 schemas																	
3.2 documentation																	
3.3 documentation																	
3.3 review																	
Codebook set up pages/JIRA																	
Codebook pre-announce																	
Codebook development release																	

2016-2017

- RDF Vocabularies
  - Due to time constraints final modifications to DISCO have not been completed and are required for release.
  - XKOS underwent public review in January 2017
- DDI 4 Q2 Development Review
  - Completed Build was not received from MT until September 30
  - TC had all preparations for development review completed by October 8 and was presented for review on October 17
- DDI 3.3
  - Issues have been discussion with some decisions remaining
  - Four members of the TC will be meeting in Minneapolis in June to complete entry work
- Codebook Functional View
  - Has not been released by Modeling Team. Anticipated September 2017

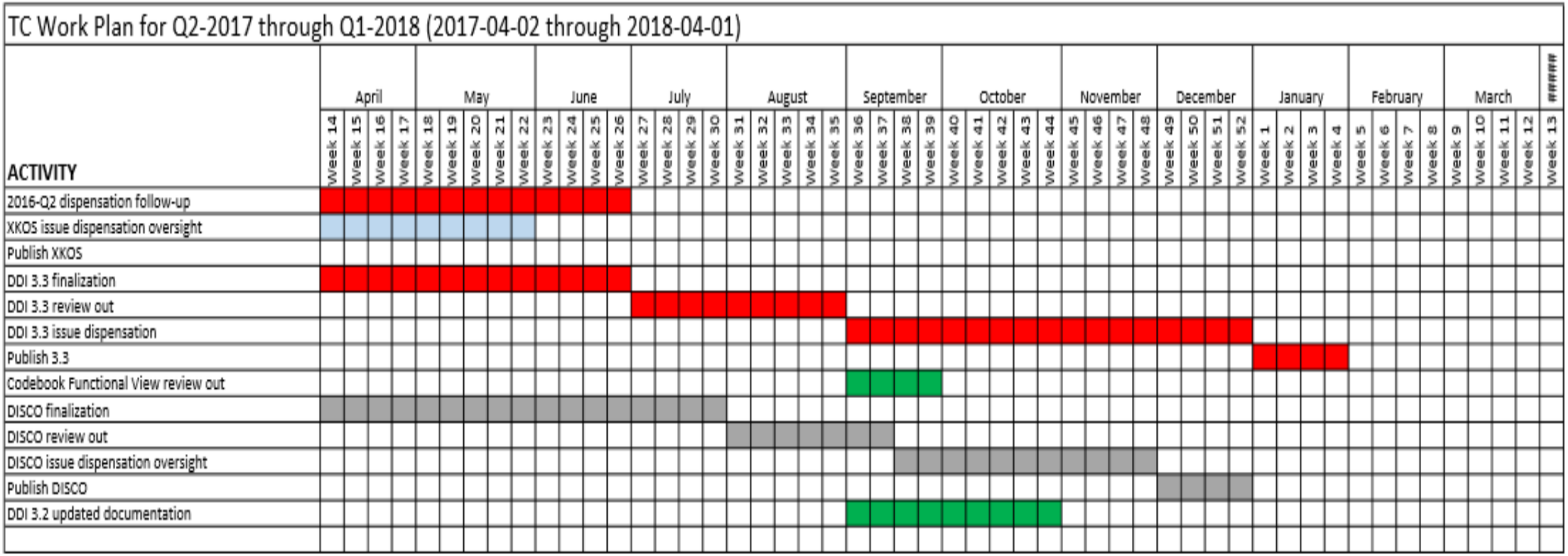
DDI 4 Q2 2016 Development Review

- Ran second developmental review of DDI 4 revising the approach for review to accomplish the following:
  - Faster response on bugs
  - Pushing broader issues back onto the developer groups
  - Tracking follow-up
  - Update on status
- Developer groups are still working on a number of issues
  - Modeling team will be addressing complex issues relating to collections, process model, and GSIM relationships during the sprint next week

XKOS RDF Vocabulary

- Issued XKOS for public review 15 January 2017
  - 51 issues filed by 6 reviewers
  - Franck Cotton is managing responses
  - Review approach: The decision can be to dismiss the issue (explain why and close), accept the issue for XKOS v1 (make corresponding modifications and close), or postpone the issue to XKOS v2.
- Pick up on this in June

TC Work Plan for Q2-2017 through Q1-2018 (2017-04-02 through 2018-04-01)



Activity Types

- Critical
- Primary
- External dependencies
- Oversight only

2017-2018

- TC has a new work plan with work identified as Primary, Critical, External Dependence, Oversight only
- New increased focus on supporting implementation of current and new users of published DDI standards
  - Best Practices
  - Updating and expanding documentation - reissued 3.2 following 3.3 review release
  - Long term managed shift in DDI Lifecycle from version 3.x series to version 4
  - Reinstating some form of the former TC on-site working meeting (3.3 focused meeting in June with 4 members to complete package for review)
- Managing Codebook Functional View development review

DDI Continuity

Creating a clear path from DDI 2.5 through DDI 3.x to DDI 4

Work path for the Technical Committee

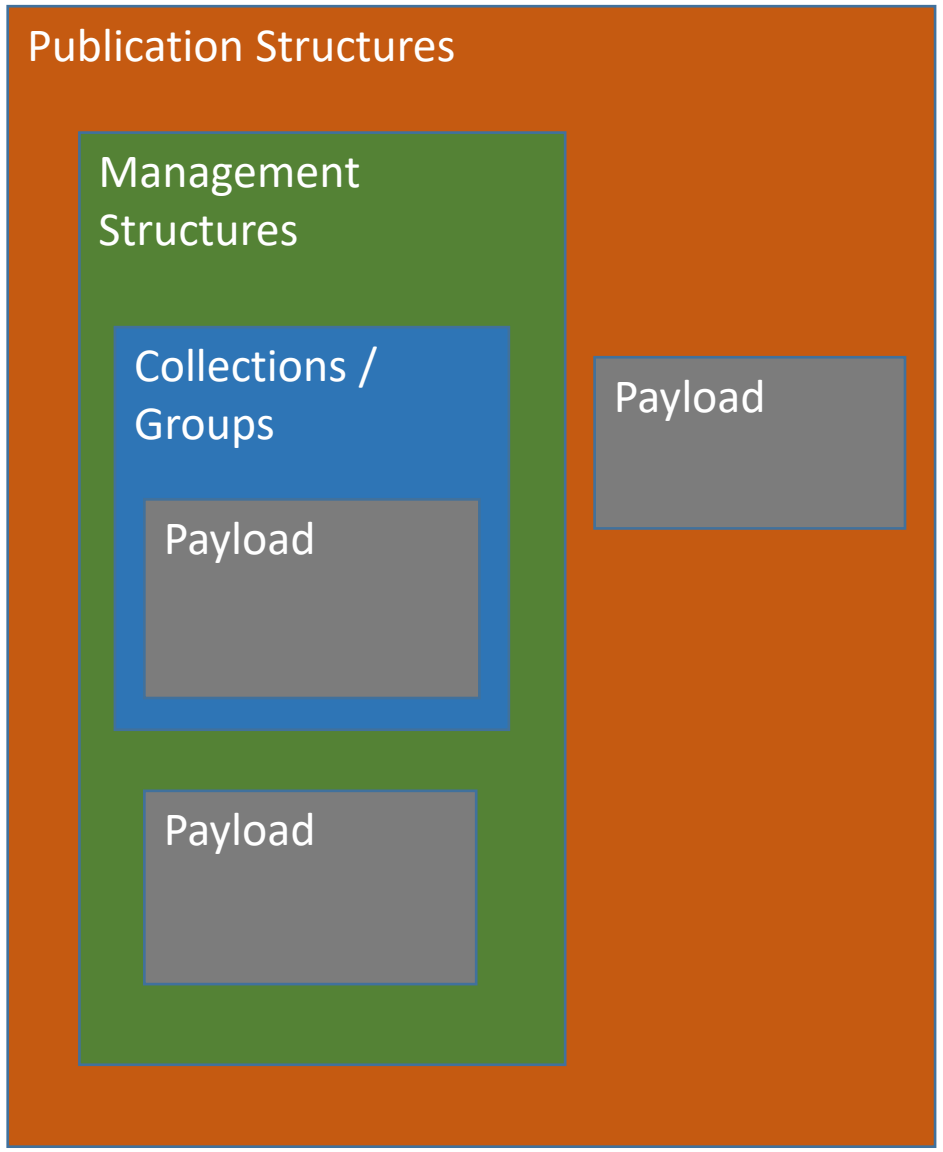
Definitions

- DDI 2.5
  - Refers to the content of current version of DDI Codebook
  - Includes the subset supported by NESSTAR
    - Note that the current version of DDI Codebook is fully backward compatible
  - 2.x refers to future versions adding requested content
- DDI 3.2
  - Refers to the content of the current version of DDI Lifecycle
  - DDI 3.3 is under final preparation for review and has been created with continuity in mind
  - 3.x refers to future versions of DDI Lifecycle leading to the release of version 4
- DDI 4
  - As stated in the original documents of the Moving Forward DDI 4 is a continuation of the DDI Lifecycle approach incorporating a more flexible underlying model to support the goals of standard

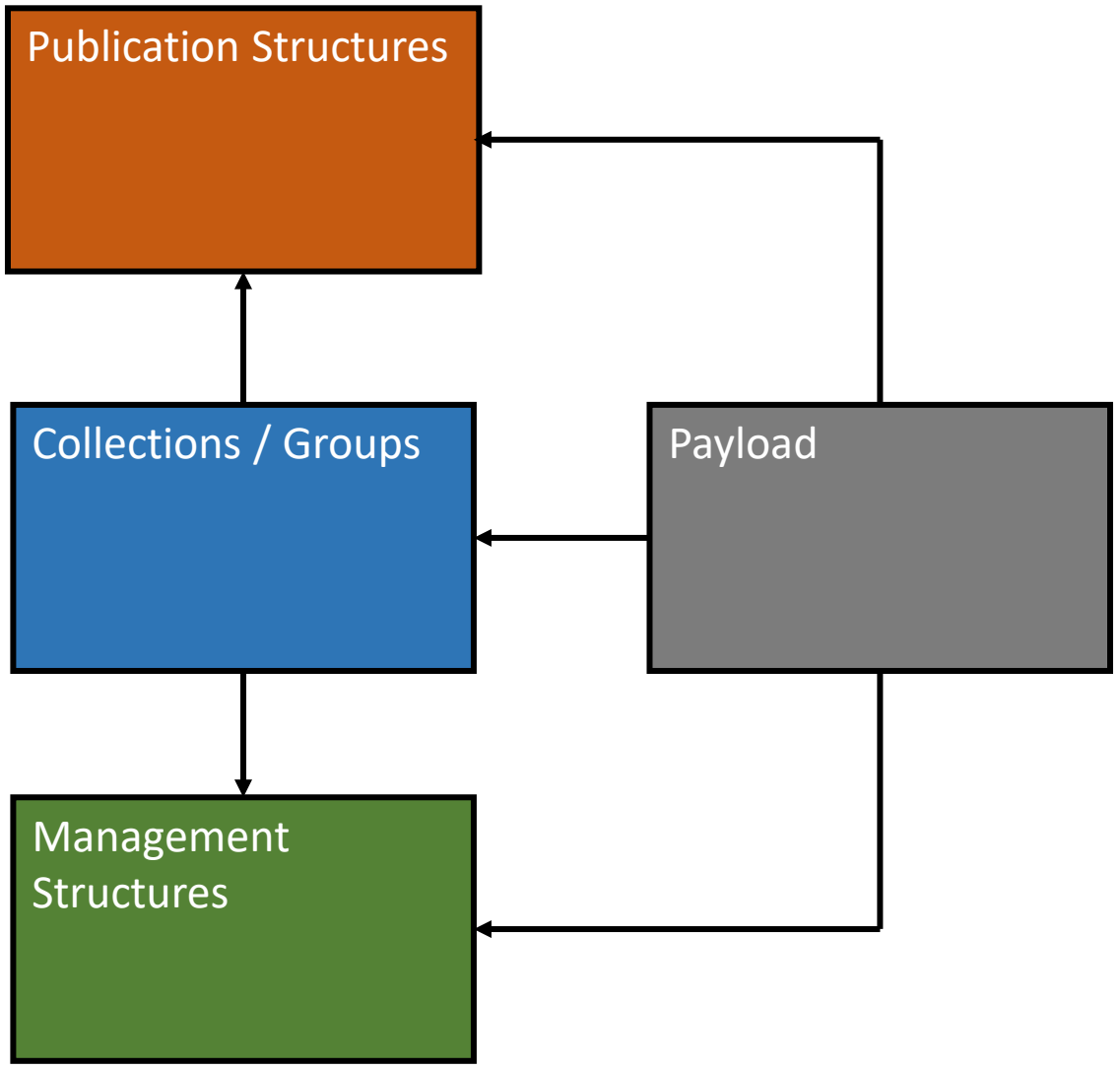
DDI 3.3 – current content

- Management Structures – organizes payload to support collective management of like or related classes
  - Schemes, Conceptual Components, Comparison, Logical Product, Physical Product, Physical Instance
- Collections / Groups – organizes like objects that are used as a set and may have internal organization
  - Scheme, Scheme Groups
- Publication Structures – pull together objects for the purpose of publication or transfer
  - DDIInstance, FragmentInstance, StudyUnit, Group, ResourcePackage, LocalHoldingPackage
- Payload (metadata content)
- Relationship paths
  - Predictable – Physical Instance to RecordLayout to LogicalRecord to Variable to Source
  - Friable – Inherited relationships dependent upon nesting or membership in a group

DDI 3.3 Current



DDI Goal



Steps from 3.3 to Goal

- Write best practices on the use of Fragment Instance which allows serialization of objects
  - Recommend that Publication, Collection, and Management structures be serialized and include Payload objects by reference whenever possible
- Identify Payload objects that are Maintainable or Versionable and make sure they may be included by reference
- Review Identifiable objects as to the purpose/use of their identification
  - Persistent relationship
  - Differentiation for selection by discovery or other application addressing the metadata content
- Retain (for backward compatibility) but deprecate inline payload content that can be independently serialized

How does the 3.x model relate to DDI 4 model?

- Separating serialization of content from implementation of the content for use in 3.x reflects the model of DDI 4 where properties (content that is dependent upon the existence of the parent class) are inline and relationships to any serialized class is by reference to that class
- Publication packages relate to the idea of Functional Views
- Friable relationships (not a part of DDI 4 model) are removed or made persistent
- Management structures can be used only when needed to support management activities
- Collections/Groups are more clearly differentiated and allow the creation of a clearer path from 3.x to 4

Implementation considerations

- DDI 3.2 is already widely used and that user base needs to be supported
- New users of DDI basically have a choice of 2.5 or 3.2 as implementable standards
- By separating these structures additional publication structures could be added to support specific user groups
  - Including easing a transition between 2.5 and 3.2
- By more clearly relating to DDI 4 model in terms of serialization functional new areas of DDI 4 could be replicated in 3.x making them available to implementers
  - Takes pressure off of development work to get a completely functional DDI 4 out the door in order to support new forms of data capture, data types, and access to the datum
  - Allows these new structures to be tested via implementation within an already functioning specification such as the Process Model
- Allows for a clearer path through the various major versions of DDI
  - Documentation and structural support for 2.x to 3.x to 4.x
  - Expression of a unified DDI brand

Required step within DDI 4 work

- Review and clarification on goals of DDI 4
  - Much of this exists but needs to be pulled together, updated, and disseminated among the community
- Completion of current work on the underlying structure of DDI 4
  - Patterns
  - Perspectives during the lifecycle of the data/metadata (design, implementation, reporting)
  - Plug-in points to support different forms of data capture and description of data types
  - Expressing and relating descriptive and actionable metadata
- Creating a clear target model of DDI 4 so that DDI 3.x can make progressive changes and translation to DDI 4

Technology and structural issues for DDI 2.x and 3.x

- Plans are already in progress to automate more of the maintenance and publication process for DDI 2.x and DDI 3.x
  - Simplified means of capturing the underlying model
  - Integration of documentation and schema production
  - Reduction in hand-crafting of XML schemas
- Increased emphasis on documentation and structures to better support implementers (current and new)
- Increased coordination with Controlled Vocabulary group

Overall goals

- To continue to support development within the different products as needed by current users
- Increase focus on overall DDI and transitioning between products
- Improve focus on implementation
  - Implementation Guide
  - Identifying content designed to:
    - carry payload
    - support interoperability
    - manage objects
    - transfer and/or publish