









9th Annual European DDI User Conference (EDDI17)

December 5-6, 2017, Lausanne, Switzerland

Hosted by FORS – Swiss Centre of Expertise in the Social Sciences

www.eddi-conferences.eu/eddi17

Schedule and Program with Abstracts

Version as of November 27, 2017

The conference will start on Tuesday, December 5 at 9:00 and will end on Wednesday, December 6 at 17:00.

Tutorials will take place on Monday, Dec 4 from 9:00 to 17:00, and on Tuesday, Dec 5 from 13:30 to 15:00.

Side meetings will take place on Monday, December 4, and on Thursday December 7.

Contents

) ^{tl}	Annual European DDI User Conference (EDDI17)	1
	Contents	2
	Venue	3
	Maps	4
	Conference Dinner	6
	Schedule	7
	Keynotes	14
	Discussion Sessions	15
	Presentations in Concurrent Sessions	16
	Posters / Software Demonstrations	26
	Reports	29
	Tutorials	30
	Closed Side Meetings	32
	Authors Index	33
	Organizations Index	34
	About FDDI and FDDI17	35

Venue

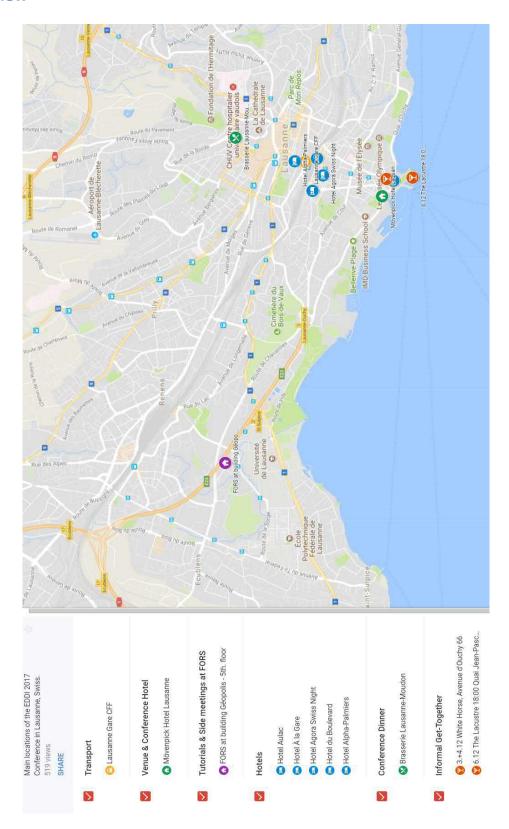
Mövenpick Hotel Lausanne

Avenue de Rhodanie 4, 1007 Lausanne, Switzerland

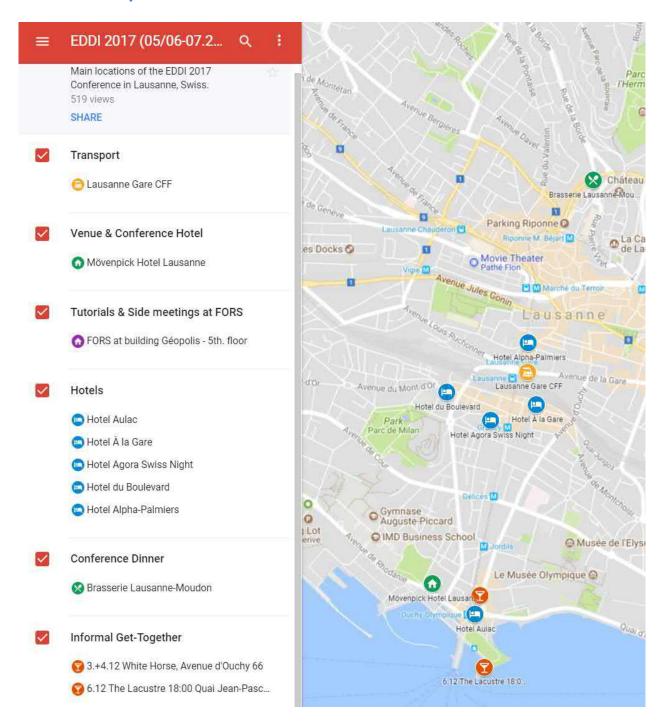
Registration for:	
Tutorials on Monday	Lobby at FORS
Conference	Lobby at Mövenpick Hotel
Main conference	Rooms "Olympia A" and "Zürich" at Mövenpick Hotel
Tutorials on Monday	FORS, Building Géopolis, University of Lausanne Rooms 5899 and 5799
Side meetings on Monday and Thursday	FORS, Building Géopolis, University of Lausanne Rooms 5408 (Monday) and 5899 (Thursday)
Conference Dinner on Tuesday	Restaurant Lausanne-Moudon Rue du Tunnel 20, 1005 Lausanne
Informal Get-Together	See detailed schedule below

Maps

Overview



Venue and City Center



Conference Dinner

The Conference Dinner will be held on December 5 at the

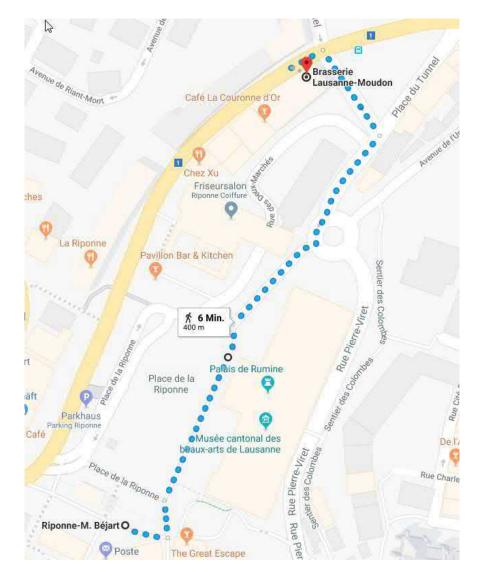
- Restaurant Lausanne-Moudon, Rue du Tunnel 20, 1005 Lausanne.
- Welcome Drinks are served from 18:30 Dinner is served at 19:00
- The dinner and the welcome drink are included in the conference fee. Additional drinks are available at participants' expense.

It's located in the heart of Lausanne and is very easily reachable by metro from the conference venue and the suggested hotels (view <u>Google Map</u>).

Travel advice

- Take the metro "m2" from the stop "Ouchy Olympique" or "Lausanne-Gare" (direction "Epalinges Croisettes") to the stop "Riponne-M. Béjart".
- Then walk across the square towards the North. After the square continue slightly uphill towards the North for about 100 meters. You'll reach the Place du Tunnel with parking spaces. The restaurant will on the left.

Map of the local area with foot route



Schedule

Sunday, December 3, 2017

P 1	· · · · · · · · · · · · · · · · · · ·
19:00	Informal Get-Together
	Location: White Horse, Avenue d'Ouchy 66, 1006 Lausanne

Monday, December 4, 2017

8:30	Starting Registration	N - Location: Lobby at FORS	
9:00 - 10:30	Concurrer	nt Tutorials	Closed Side Meetings
	Concurrent T1 (full day)		Concurrent M1
	Data Documentation		CESSDA Project
	Location: FORS, Room 5899		Location: FORS, Room 5408
	Document Questionnaires and Datasets with DDI: A Hands-On Introduction with Colectica (abstract)		CESSDA Euro Question Bank - Project Member Meeting (closed meeting (abstract)
	Jeremy Iverson, Dan Smith (both Colectica)		Organizer: Azadeh
	Part 1 of T1		MahmoudHashemi (GESIS - Leibniz Institute for the
10:30 - 10:45	Break - Location	on: Meeting Room	Social Sciences)
10:45 - 12:15	Part 2 of T1		
12:15 - 13:15		Lunch - Location: FORS Cafeteria	
13:15 - 14:45	Concurrent T1 (continued) Data Documentation	Concurrent T2 (half day) Questionnaire Capture	Concurrent M1 (continued) CESSDA Project
	Location: FORS, Room 5899	Location: FORS, Room 5799	Location: FORS, Room 5408
		Documenting Questions: A Crash Course (abstract)	CESSDA Euro Question Bank - Project Member Meeting (continued) 13:15 - 14:15
		Wendy Thomas (Minnesota Population Center), Jon Johnson (UK Data Archive)	
	Part 3 of T1	Part 1 of T2	
14:45 - 15:00	Break - Locatio	on: Meeting Room	Concurrent M2 CESSDA Project
			Location: FORS, Room 5408
15:00 - 16:30	Part 4 of T1	Part 2 of T2	CESSDA Euro Question Bank - Workshop for CESSDA Service Providers (closed meeting) (abstract) 15:00 - 17:00
			Organizer: Azadeh MahmoudHashemi (GESIS - Leibniz Institute for the Social Sciences), Anne Etheridge (UK Data Archive), Johan Fihn (Swedish National Data Service
18:00		Informal Get-Together	
18.00		•	

Tuesday, December 5, 2017

Location	P1: Welcome and Keynote
	: Room Olympia A
Chair: Joachim Wacker	row (EDDI Conference Co-Chair)
Welcome	
Georg Lutz (Director of FORS – Swiss Centre of Expertise in the Social Sciences)	
Keynote: DDI Is Not Enough (abstract)	
Ron Dekker (CESSDA ERIC - Consortium of European Social Science Data Archives)	
	Break
Concurrent Conference Sessions	
Concurrent A1:	Concurrent A2:
DDI Management	Questionnaire Development
Location: Room Olympia A	Location: Room Zürich
Chair: Knut Wenzig	Chair: Dan Smith
The CESSDA Metadata Management	A Reusable (and Reused) Questionnaire
Project, CMM1 in Retrospect and	Generator Based on DDI (abstract)
· · · · · · · · · · · · · · · · · · ·	Francis Cotton (INCEE Francis National
·	Franck Cotton (INSEE - French National Institute of Statistics and Economic Studies)
	mistrate of statistics and Economic Studies)
for the Social Sciences)	
Perspectives on the Implementation	Blaise & Colectica - Progress Update (abstract)
of the CESSDA Metadata Model	
,,	Lon Hofman (Statistics Netherlands), Jeremy
•	Iverson (Colectica)
•	
An Application of Search Engine	Progress with the CESSDA Euro Question
Topics Through the Use of DDI-3.2	Bank Project (abstract)
-	
, , , ,	Azadeh MahmoudHashemi, Wolfgang Zenk-
College London (UCL))	Möltgen, Alexander Mühlbauer (all GESIS - Leibniz Institute for the Social Sciences)
	Lunch
	Ron Dekker (CESSDA ERIC - Consortium Concurrent C Concurrent A1: DDI Management Location: Room Olympia A Chair: Knut Wenzig The CESSDA Metadata Management Project, CMM1 in Retrospect and Forecast for CMM2 (abstract) Mari Kleemola (FSD - Finnish Social Science Data Archive), Kerrin Borschewski (GESIS - Leibniz Institute for the Social Sciences) Perspectives on the Implementation of the CESSDA Metadata Model (abstract) Irena Vipavc Brvar, Irena Bolko (both Social Science Data Archives, University of Ljubljana) An Application of Search Engine

Tuesday, December 5, 2017 (continued)

13:30 - 15:00	Concurrent Conference Sessions		
	Concurrent B1:	Concurrent B2:	
	DDI Management	Controlled Vocabularies	
	Location: Room Olympia A	Location: Room Zürich	
	Chair: Mikko Saloila		
	DDI-FlatDB: Next steps (abstract)	Tutorial T3: DDI Controlled Vocabularies	
	Claus Potor Klas Oliver Hont	(<u>abstract</u>) Please register for the tutorial at conference registration	
	Claus-Peter Klas, Oliver Hopt, Alexander Mühlbauer (all GESIS -	rease register for the tatorial at conference registration	
	Leibniz Institute for the Social		
	Sciences)		
	Lessons Learned with Additional	Anne Etheridge (UK Data Archive, University	
	Mappings into DDI-FlatDB (abstract)	of Essex), Taina Jääskeläinen (FSD - Finnish	
	Claus-Peter Klas, Oliver Hopt,	Social Science Data Archive)	
	Alexander Mühlbauer (all GESIS -		
	Leibniz Institute for the Social		
	Sciences) Practical Implementations of the		
	DDILimDAS Results at the GESIS Data		
	Archive (abstract)		
	Esra Akdeniz, Wolfgang Zenk-		
	Möltgen (both GESIS - Leibniz		
	Institute for the Social Sciences)		
	Break		
15:00 - 15:30		Break	
15:00 - 15:30 15:30 - 17:00	Concurrent C	Break onference Sessions	
	Concurrent C1:		
		onference Sessions	
	Concurrent C1:	onference Sessions Concurrent C2:	
	Concurrent C1: DDI Development	onference Sessions Concurrent C2: Infrastructure	
	Concurrent C1: DDI Development Location: Room Olympia A Chair: Wolfgang Zenk-Möltgen The Picasso Project - Getting Ready	onference Sessions Concurrent C2: Infrastructure Location: Room Zürich Chair: Kerrin Borschewski DDI Drives Metadata Improvements at	
	Concurrent C1: DDI Development Location: Room Olympia A Chair: Wolfgang Zenk-Möltgen The Picasso Project - Getting Ready to Launch (abstract)	onference Sessions Concurrent C2: Infrastructure Location: Room Zürich Chair: Kerrin Borschewski DDI Drives Metadata Improvements at Roper @ Cornell (abstract)	
	Concurrent C1: DDI Development Location: Room Olympia A Chair: Wolfgang Zenk-Möltgen The Picasso Project - Getting Ready	onference Sessions Concurrent C2: Infrastructure Location: Room Zürich Chair: Kerrin Borschewski DDI Drives Metadata Improvements at Roper @ Cornell (abstract) William C. Block, Kathleen J Weldon (both	
	Concurrent C1: DDI Development Location: Room Olympia A Chair: Wolfgang Zenk-Möltgen The Picasso Project - Getting Ready to Launch (abstract) Kathryn Stevenson (Statistics Canada)	onference Sessions Concurrent C2: Infrastructure Location: Room Zürich Chair: Kerrin Borschewski DDI Drives Metadata Improvements at Roper @ Cornell (abstract) William C. Block, Kathleen J Weldon (both Cornell University)	
	Concurrent C1: DDI Development Location: Room Olympia A Chair: Wolfgang Zenk-Möltgen The Picasso Project - Getting Ready to Launch (abstract) Kathryn Stevenson (Statistics Canada) Using DDI4 in a Big Data	onference Sessions Concurrent C2: Infrastructure Location: Room Zürich Chair: Kerrin Borschewski DDI Drives Metadata Improvements at Roper @ Cornell (abstract) William C. Block, Kathleen J Weldon (both Cornell University) The Past, Present and Future of Legacy	
	Concurrent C1: DDI Development Location: Room Olympia A Chair: Wolfgang Zenk-Möltgen The Picasso Project - Getting Ready to Launch (abstract) Kathryn Stevenson (Statistics Canada)	onference Sessions Concurrent C2: Infrastructure Location: Room Zürich Chair: Kerrin Borschewski DDI Drives Metadata Improvements at Roper @ Cornell (abstract) William C. Block, Kathleen J Weldon (both Cornell University)	
	Concurrent C1: DDI Development Location: Room Olympia A Chair: Wolfgang Zenk-Möltgen The Picasso Project - Getting Ready to Launch (abstract) Kathryn Stevenson (Statistics Canada) Using DDI4 in a Big Data Infrastructure (abstract)	onference Sessions Concurrent C2: Infrastructure Location: Room Zürich Chair: Kerrin Borschewski DDI Drives Metadata Improvements at Roper @ Cornell (abstract) William C. Block, Kathleen J Weldon (both Cornell University) The Past, Present and Future of Legacy Metadata Documentation at CLOSER (abstract)	
	Concurrent C1: DDI Development Location: Room Olympia A Chair: Wolfgang Zenk-Möltgen The Picasso Project - Getting Ready to Launch (abstract) Kathryn Stevenson (Statistics Canada) Using DDI4 in a Big Data Infrastructure (abstract) Darren Stephen Bell (UK Data	onference Sessions Concurrent C2: Infrastructure Location: Room Zürich Chair: Kerrin Borschewski DDI Drives Metadata Improvements at Roper @ Cornell (abstract) William C. Block, Kathleen J Weldon (both Cornell University) The Past, Present and Future of Legacy Metadata Documentation at CLOSER (abstract) Hayley Mills (CLOSER, University College London (UCL)) DDI in Agriculture? Why not! (abstract)	
	Concurrent C1: DDI Development Location: Room Olympia A Chair: Wolfgang Zenk-Möltgen The Picasso Project - Getting Ready to Launch (abstract) Kathryn Stevenson (Statistics Canada) Using DDI4 in a Big Data Infrastructure (abstract) Darren Stephen Bell (UK Data	onference Sessions Concurrent C2: Infrastructure Location: Room Zürich Chair: Kerrin Borschewski DDI Drives Metadata Improvements at Roper @ Cornell (abstract) William C. Block, Kathleen J Weldon (both Cornell University) The Past, Present and Future of Legacy Metadata Documentation at CLOSER (abstract) Hayley Mills (CLOSER, University College London (UCL)) DDI in Agriculture? Why not! (abstract) Michelle Edwards, Carol Perry (both	
	Concurrent C1: DDI Development Location: Room Olympia A Chair: Wolfgang Zenk-Möltgen The Picasso Project - Getting Ready to Launch (abstract) Kathryn Stevenson (Statistics Canada) Using DDI4 in a Big Data Infrastructure (abstract) Darren Stephen Bell (UK Data Archive, University of Essex)	Concurrent C2: Infrastructure Location: Room Zürich Chair: Kerrin Borschewski DDI Drives Metadata Improvements at Roper @ Cornell (abstract) William C. Block, Kathleen J Weldon (both Cornell University) The Past, Present and Future of Legacy Metadata Documentation at CLOSER (abstract) Hayley Mills (CLOSER, University College London (UCL)) DDI in Agriculture? Why not! (abstract) Michelle Edwards, Carol Perry (both University of Guelph)	
	Concurrent C1: DDI Development Location: Room Olympia A Chair: Wolfgang Zenk-Möltgen The Picasso Project - Getting Ready to Launch (abstract) Kathryn Stevenson (Statistics Canada) Using DDI4 in a Big Data Infrastructure (abstract) Darren Stephen Bell (UK Data Archive, University of Essex) Confer	Concurrent C2: Infrastructure Location: Room Zürich Chair: Kerrin Borschewski DDI Drives Metadata Improvements at Roper @ Cornell (abstract) William C. Block, Kathleen J Weldon (both Cornell University) The Past, Present and Future of Legacy Metadata Documentation at CLOSER (abstract) Hayley Mills (CLOSER, University College London (UCL)) DDI in Agriculture? Why not! (abstract) Michelle Edwards, Carol Perry (both University of Guelph) rence Dinner	
15:30 - 17:00	Concurrent C1: DDI Development Location: Room Olympia A Chair: Wolfgang Zenk-Möltgen The Picasso Project - Getting Ready to Launch (abstract) Kathryn Stevenson (Statistics Canada) Using DDI4 in a Big Data Infrastructure (abstract) Darren Stephen Bell (UK Data Archive, University of Essex) Confei	Concurrent C2: Infrastructure Location: Room Zürich Chair: Kerrin Borschewski DDI Drives Metadata Improvements at Roper @ Cornell (abstract) William C. Block, Kathleen J Weldon (both Cornell University) The Past, Present and Future of Legacy Metadata Documentation at CLOSER (abstract) Hayley Mills (CLOSER, University College London (UCL)) DDI in Agriculture? Why not! (abstract) Michelle Edwards, Carol Perry (both University of Guelph)	

Wednesday, December 6, 2017

8:45		Starting Registration. Locati	on: Mövenpick Hotel, Lobby, Registration Desk	
9:00 - 10	0:00	Conference I	Plenary P2: Keynote	
		Location: Room Olympia A		
		Chair: Jon Johnson (EDDI Conference Co-Chair)		
		Welcome		
		Jared Lyle (Executive Director of the	DDI Alliance)	
		Keynote: Research Data Management	t in Switzerland - a National Perspective	
		Ingo Barkow (University of Applied Scie	ences HTW Chur)	
10:00 - 10	0:30		Break	
10:30 - 1	2:00	Concurrent Conference Sessions		
		Concurrent D1:	Concurrent D2:	
		Interoperability	Interoperability	
		Location: Room Olympia A	Location: Room Zürich	
		Chair: Iris Alfredson	Chair: Wendy Thomas	
		Elaborating an XML Crosswalk	A DDI-driven Conference Evaluation	
		Between DDI and EAD for an	Research Project (abstract)	
		Emerging Data Archive Service		
		(<u>abstract</u>) Benjamin Gabriel Peuch (State	Barry Radler (University of Wisconsin-	
		Archives of Belgium)	Madison), Jeremy Iverson (Colectica), Shan	
		g ,	McChesney (Nooro), Dan Smith (Colectica)	
		The DDI-4 Variable Cascade and	C2Metadata project (abstract)	
		Datum-Centered Approach (abstract)		
		Daniel Gillman (U.S. Bureau of Labor	Jared Lyle (ICPSR, University of Michigan),	
		Statistics (BLS))	Jeremy Iverson (Colectica)	
			How to Document Common Data Element	
			using DDI and Colectica (abstract)	
12.00 12.15		Jeremy Iverson (Colectica)		
12:00 - 1	3:15	Lunch Posters and Software Demonstrations		
			ime - Chair: Brian Kleiner	
		Working Across Boundaries - Follow-L		
		Flavio Bonifacio (Metis Ricerche SRL)		
		Survey CTRL: Questasy (abstract)		
		Edwin de Vet (CentERdata)		
		Using DDI to Link Metadata in CharmS		
			GESIS - Leibniz Institute for the Social Science	
		Survey CTRL and DDI: TMT (abstract)	#	
			(INOTH (PATERDATA)	
		Maurice Martens, Sebastiaan Pennings		
		Survey CTRL and DDI: Surveycodings (g	abstract)	
			ubstract) (both CentERdata)	

Wednesday, December 6, 2017 (continued)

13:15 - 14:45	Concurrent Conference Sessions	
	Concurrent E1:	Concurrent E2:
	DDI & Semantic Web	Interoperability
	Location: Room Olympia A	Location: Room Zürich
	Chair: Franck Cotton	Chair: Michelle Edwards
	DDI and RDF Implementation at	A Model Based Approach for DDI Lifecycle
	INSEE (abstract)	3.x Documentation (abstract)
	Guillaume Duffes (INSEE - French National Institute of Statistics and	Dan Smith (Colectica)
	Economic Studies)	
	A UK Data Service Linked Graph	Next Time Try Recycling - What Reusable
	Utilising DDI4 (abstract)	Metadata (Should) Look Like (abstract)
	Deirdre Lungley (UK Data Archive,	Knut Wenzig (German Institute for Economic
	University of Essex)	Research (DIW Berlin) / German Socio- Economic Panel (SOEP))
	Reusing Official Statistics Metadata	
	for Dissemination to Researchers	
	based on DDI and RDF Use (abstract)	
	Kamel Gadouche (GENES-CASD (Secure Data Access Centre))	
14:45 - 15:00	(Secure Data Access Certife))	l Break
14.45 - 15.00	Conform	
15:00 - 16:30		nce Plenary P3:
	Panel Discussion, Reports on DDI Specifications, and Outlook Location: Olympia A	
	Chair: Mari Kleemola	
	Panel Discussion: Is Re-use of Metadata Just a Vision? What is Missing for Real	
Panelists: Ingo Barkow (University of Applied Sciences HTW Chur), I		Applied Sciences HTW Chur), Michelle
	Edwards (University of Guelph), Claus-Peter Klas (GESIS - Leibniz Institute for the	
Social Sciences), Barry Radler (University of Wisco		•
		S - Leibniz Institute for the Social Sciences)
What you get with DDI 3.3 (abstract)		
	Wendy Thomas (Chair of the DDI Alliance Technical Committee)	
Current Status of DDI 4 (abstract)		
	Joachim Wackerow (Chair of the DDI Alliance Scientific Board)	
	Announcement of 6th NADDI, Invitation	on to EDDI18 and Goodbye
Jon Johnson and Joachim Wackerow (both EDDI co-conference cha Next Year's Host (name will be disclosed in session)		•
18:00	Informa	l Get-Together
	Location: <u>The Lacustre</u> , Quai J	ean-Pascal Delamuraz 1,1006 Lausanne

Thursday, December 7, 2017

9:00 - 16:00	Side Meeting	
M3: CESSDA Project		
CESSDA Metadata Management Project (abstract)		
	Closed Meeting	
	Location: FORS, Room 5899	
	Organizer: Mari Kleemola (FSD - Finnish Social Science Data Archive)	

Keynotes

DDI Is Not Enough

Ron Dekker (CESSDA ERIC - Consortium of European Social Science Data Archives) (schedule)

Track: General Papers – Session Type: Keynote

The Consortium of European Social Science Data Archives CESSDA is a distributed European Infrastructure with 15 member countries (www.cessda.eu).

CESSDA, wants to be a key player in social science infrastructures, providing a trusted platform with tools and services to publish and re-use research data in a safe and secure way.

Key features of platforms are that they focus on interactions between producers and users, the service providers do not own the assets, and the focus is on the users – platforms are demand-oriented. Successful platforms have viable business models and from the interactions they generate business information and turn this into value.

Traditional data services have a focus on ingest, archiving and serving data producers. The DDI serves this process of taking data in and provide them with metadata. But in a platform-world that is not enough. Users might want to re-use individual data sets, but to tackle grand challenges they need a far more complex system of data that are interlinked. Scientists and machines will perform analyses on these data clusters. Hence, we must also describe the relationships between data within clusters.

I will take CESSDA as a case to describe how we work on realising a social science data platform.

Research Data Management in Switzerland - a National Perspective

Ingo Barkow (HTW Chur) (*\text{\$\times\$ schedule})

Track: General Papers – Session Type: Keynote

In the last years science encountered a shift in paradigm how to handle and manage research data. Funding organizations demand data management plans from scientist when handing in a proposal. Secondary data analysis becomes more prominent to enable processes supporting good scientific practice. In theory this sounds like the Golden Age for Data Managers and Data Librarians, but does this really reveal the true story?

This talk takes the Swiss perspective of current proceedings in selected data management projects on a national and international level. How was the theoretical basis put into practice? Which infrastructure projects do exist and were they successful? Is it better to fund small individual infrastructures or go for a "jack of all trades" approach? Answers to these questions will be crucial on a strategical level for Switzerland and very likely also for all other countries.

Discussion Sessions

Is Re-use of Metadata Just a Vision? What is Missing for Reality?

Joachim Wackerow (GESIS - Leibniz Institute for the Social Sciences) (schedule)

Track: General Papers – Session Type: Panel Discussion

Panelists: Ingo Barkow (University of Applied Sciences HTW Chur), Michelle Edwards (University of Guelph), Claus-Peter Klas (GESIS - Leibniz Institute for the Social Sciences), Barry Radler (University of Wisconsin-Madison), Dan Smith (Colectica), Joachim Wackerow (GESIS - Leibniz Institute for the Social Sciences)

DDI Lifecycle has been available since 2009. It claims to provide re-use of identifiable metadata items along the data lifecycle.

- How effective is this re-use within one study, in multiple waves of a study, or across studies and organizations?
- Is re-use of metadata really applied or is this idea just a wish?
- What are the challenges and barriers for building a distributed infrastructure using DDI?

Panelists will make initial statements on the topic and discuss the issues. Questions and comments from the audience will broaden the discussion.

Presentations in Concurrent Sessions

(in alphabetical order by the last name of the first author)

Practical Implementations of the DDILimDAS Results at the GESIS Data Archive

Esra Akdeniz (GESIS - Leibniz Institute for the Social Sciences), Wolfgang Zenk-Möltgen (GESIS - Leibniz Institute for the Social Sciences) (schedule)

Track: DDI Management - Session Type: Regular Presentation - Project Report

So far, different DDI formats have been used at the GESIS Data Archive. The aim of the project DDILimDAS was to create a common metadata schema in DDI Lifecycle format to promote interoperability of metadata between several GESIS applications. The DDI 3.2 mappings were introduced last year at EDDI 2016. The presentation this year will show for the example of four of those GESIS applications how they implemented our DDI Lifecycle mapping recommendations of the DDILimDAS project. These metadata tools, which are in use for the purposes of documenting data holdings on study and variable level, are da|ra, DBK, EQB, and QMD.

The da|ra registration agency has recently updated its metadata schema and will introduce the new version 4.0 in December 2017. The Data Catalogue DBK uses the DDI-L mapping to provide study descriptions in DDI 3.2 format (download and OAI-PMH). Both systems contain documentation on the study level. Examples for metadata on variable level will be presented with the CESSDA Euro Question Base (EQB) project that implements an initial version of the CESSDA metadata portfolio and the Questionnaire Management and Documentation (QMD) project providing a DDI 3.2 questionnaire editor, used in a first stage for the German GLES election study.

Using DDI4 in a Big Data Infrastructure

Darren Stephen Bell (UK Data Archive, University of Essex) (↑ schedule)

Track: Infrastructure - Session Type: Regular Presentation - Community Impact

Over the last 18 months, the UK Data Service has been an early adopter of DDI4, principally the Logical Data Description package. This has led to a re-evaluation of how we think about and design a repository architecture and infrastructure. In the context of the Synergies for Europe's Research Infrastructures in the Social Sciences (SERISS) project, we are mapping out a new repository framework and the infrastructure component is being built on an ODPi-compliant Big Data Hadoop platform using DDI4 RDF as our canonical data model.

This presentation will highlight some of the technological and business challenges involved in effecting a digital transformation that is responding to rapid changes in the data landscape, for example, dealing with statistical datasets at scale and data originating from non-traditional domains such as Energy. We will also present an overview of progress so far and the roadmap for our next generation infrastructure – Data Services as a Platform (DSaaP), based on Hadoop, ElasticSearch and hybrid cloud services. Lastly, we will summarise what this means for researchers in future in areas such as secure linkage of data, machine-actionable access models and a single universal query for all data in the UKDS collection.

DDI Drives Metadata Improvements at Roper @ Cornell

William C. Block (Cornell University), Kathleen J Weldon (Cornell University) (*\text{schedule})

Track: Infrastructure - Session Type: Regular Presentation - Project Report

The Roper Center for Public Opinion Research is the oldest social science archive, and the world's largest archive devoted exclusively to public opinion survey research data, with a collection of over 23,000

datasets and iPOLL, a question bank with over 700,000 entries. After the Center moved to Cornell University in late 2015, a major rebuild of the archival structure and data model was undertaken to map the archive's metadata to DDI standards and to more effectively support emerging consensus in the U.S. polling community about necessary levels of transparency and disclosure, as defined in the standards of the American Association of Public Opinion Research (AAPOR) Transparency Initiative.

A Reusable (and Reused) Questionnaire Generator Based on DDI

Franck Cotton (INSEE - French National Institute of Statistics and Economic Studies) (*\textscriptschedule)

Track: Questionnaire Development - Session Type: Regular Presentation - Community Impact

Insee, the French statistical institute, has been developing for some years a data collection platform which includes a number of components, in particular a graphical questionnaire design and specification tool and a questionnaire generation tool targeting different support (web, paper...).

This platform relies largely on DDI: the questionnaires are specified using the Data Collection module constructs, stored in a DDI metadata repository and fed into the questionnaire generator which produces the physical collection instruments. This is the most advanced example of active metadata used in production in the institute.

Insee coordinates since the beginning of 2016 a European project which aims at fostering the reuse of statistical services between NSIs. For this project, Insee open-sourced its questionnaire generation tool, which was reused by SURS, the Slovenian NSI. A lot of work was also devoted to improving the packaging and documentation of the generator in order to maximize its reusability.

The presentation will give more detail on the questionnaire designer and generator, and describe how the latter was reused by SURS. It will also detail the future roadmaps of the different tools and the prospects for further reuse.

DDI and RDF Implementation at INSEE

Guillaume Duffes (INSEE - French National Institute of Statistics and Economic Studies) (↑ schedule)

Track: DDI & Semantic Web − Session Type: Regular Presentation - Project Report

The development of DDI 4, including a RDF serialisation, is under way.

The broad objective of RDF is to define a mechanism for describing resources that makes no assumptions about a particular application domain, nor defines a priori semantics of any application domain. Thus, existing RDF vocabularies can be straightforwardly reused by the future DDI implementation model.

Some vocabularies are already well-known and even used in the statistical community, for example SKOS (Simple Knowledge Organization System), others are developed under the auspices of the DDI Alliance (DISCO, XKOS...) or widespread in the Semantic Web community (the Dublin Core, also included in the previous versions of DDI).

Insee manages its official concepts and definitions, and is going to manage its classifications using SKOS and XKOS as core modelling standards.

The presentation will highlight how Insee articulates the usage of RDF vocabularies with the DDI implementation to make its metadata semantically richer and their reuse more consistent and focused. A quick demo will show how the concepts or the classifications can be:

- Managed in RDF
- Published as linked metadata
- Replicated as DDI in a Colectica Repository

DDI in Agriculture? Why not!

Michelle Edwards (University of Guelph), Carol Perry (University of Guelph) (*\textstyre\cdotschedule)

Track: Infrastructure - Session Type: Regular Presentation - Project Report

DDI has traditionally been deemed as the international metadata standard used in social, behavioural, economic, and health sciences; geared towards describing the data produced by surveys and other methods used in these fields. But should it be restricted to these disciplines? Should we only be teaching graduate students and researchers in these disciplines about DDI?

During the summer of 2017, we developed a series of Research Data Management workshops teaching the basics of DDI to graduate students who are conducting research in the Ontario Agricultural College, University of Guelph. The workshops, delivered during the Fall 2017 semester, introduced best practices for capturing research metadata and research workflows to enable essential metadata capture throughout the research project. This presentation will discuss our approach to teaching DDI to the agricultural research community and the responses from the course participants. We will conclude our presentation by showcasing the Agri-environmental Research Data Repository.

Reusing Official Statistics Metadata for Dissemination to Researchers based on DDI and RDF Use

Kamel Gadouche (GENES-CASD (Secure Data Access Centre)) (↑ schedule)

Track: DDI & Semantic Web – Session Type: Short Presentation - Project Report

CASD is the French Research Data Center (RDC) which provides access to many data sources from the French National Statistical Institute (INSEE): census, wages, housing, tax data... Researchers need good quality metadata for finding the best data source that fits to their needs.

Today, CASD's catalogue is updated manually according to the information that CASD can get from statistical data producers. The situation is not satisfactory: CASD cannot provide an accurate and exhaustive list of all the statistical datasets, and metadata associated as well, that could be made available to researchers. Sometimes, it is may happen to be impossible for CASD to get updates of the list of data sources from the data producers. Besides, this list is limited to the data sources that are being—or were at some point in the past—requested and used by CASD data users. As a result, the list of datasources available through CASD may not be exhaustive and—in some instances—may not be accurate enough.

CASD is a member of SCFE project, funded by Eurostat, which aims at providing and illustrating the reusability of common services. In this context, INSEE, the French National Statistical Institute, implemented from its DDI and RDF tools, a generic RDF service and hosted it in an external server made available for other NSIs and ONAs.

The DDI-4 Variable Cascade and Datum-Centered Approach

Daniel Gillman (U.S. Bureau of Labor Statistics (BLS)) (↑ schedule)

Track: DDI Management – Session Type: Regular Presentation - Community Impact

One of the features that makes metadata management so useful is the idea of reuse. Reuse allows an organization to record some metadata once and use it many times. For instance, the metadata for a variable in a recurring survey is linked to each iteration of the survey that uses it. This is powerful. Not only does it reduce the effort of the supplier of metadata, it helps the user by automatically uncovering similarities and linkages between data sets.

In DDI-4, the developers recognized that some aspects of the description of variables are reused more often than others. This led to the development of a hierarchy for describing variables, separated into levels, called the variable cascade. Each level down the cascade represents more specificity, until the metadata for each recorded datum is reached. We will illustrate the variable cascade through examples.

The ability to describe a datum provides additional power. Through reuse every copy of a datum brings all the related metadata of the original, it's possible to follow each observation as it goes through the processing life-cycle, and it's possible to track every data set to which the copies of a datum belong. This is presented in detail.

Blaise & Colectica - Progress Update

Lon Hofman (Statistics Netherlands), Jeremy Iverson (Colectica) (↑ schedule)

Track: Questionnaire Development - Session Type: Regular Presentation - Community Impact

In 2016, Colectica and Statistics Netherlands announced a long term partnership to build software linking Blaise, Colectica, and the DDI Lifecycle standard. This year, the first versions of that software are available.

Blaise Colectica Questionnaires allows survey researchers to build surveys faster, to leverage the DDI metadata standard, and to generate rich documentation and reports. The tools improves transparency into the data capture process.

The first tool offers an intuitive survey design surface and questionnaire palette, allowing survey designers to build questionnaires without learning a domain specific language. Questions, blocks, and logic can be created within the program or reused from question bank powered by DDI. Reusing standardized questions assists in creating more comparable data.

The software stores questionnaire specifications using the open DDI and GSIM standards, and can connect to metadata repositories and question banks powered by Colectica software. Data descriptions can be linked with source questions, creating harmonized data and showing data lineages.

Surveys designed with this tool can be fielded using Blaise 5 on the desktop, on the Web, and on mobile devices. The tool converts the DDI metadata into a Blaise project and source code. Changes to surveys made with the tool can be published and executed within the Blaise environment, allowing rapid iteration while developing surveys.

How to Document Common Data Elements using DDI and Colectica

Jeremy Iverson (Colectica) (↑ schedule)

Track: Interoperability – Session Type: Regular Presentation - Community Impact

Data elements describe data that are collected as part of a study. A data element includes a name, a description, and the set of possible values the data element may take.

Common data elements (CDEs) are managed in registries to promote data interoperability and re-use. Major repositories of common data elements are maintained by public organizations like the US National Institutes of Health and the RD-Connect project in the EU.

Data elements are standardized by the ISO/IEC 11179 standard for metadata registries. Although the DDI standard uses different vocabulary to describe data elements and data element concepts, a direct mapping exists between DDI's logical and conceptual descriptions of variables and data elements.

As a generalized DDI metadata repository, Colectica Repository and Colectica Portal can act as a registry for common data elements, out of the box. With the newly released version 5.4, Colectica provides rich support for storing, searching, and retrieving common data elements.

This presentation will explore the mapping among data elements as used in DDI GSIM, and ISO/IEC 11979. It will also demonstrate the use of Colectica to create and publish common data elements using DDI.

DDI-FlatDB: Next steps

Claus-Peter Klas (GESIS - Leibniz Institute for the Social Sciences), Oliver Hopt (GESIS - Leibniz Institute for the Social Sciences), Alexander Mühlbauer (GESIS - Leibniz Institute for the Social Sciences) (schedule)

Track: DDI Management - Session Type: Regular Presentation - Project Report

We analyzed our current data structures and working habits of, and with the DDI-FlatDB with respect to efficiency of data access and the effectiveness of the developer, adopting new DDI versions. For data structures within DDI we found internal links, directing forward and backward within a study as well as links to external sources, like institutions or controlled vocabulary. Instantiating these links lead currently to slow access times and to load large portions of XML snippets. In order to overcome this drawbacks the idea is to extend the DDI-FlatDB to instantiate all links within a link database based on Linked Open Data principles. This will lead to an efficient access within and across surveys. We will describe how we plan to store the links as triplets and what the advantages will be.

Along adapting DDI and XML for the CESSDA CV Manager, we found, that the description of the mapping of DDI elements via XPaths to our entities is still a complex tasks and involves XPath creation and verification of results, which lead to inefficient turnaround times. We plan to create a specific editor for capturing the structure when editing XPaths, so the developing time will be more efficient and less errorprone.

Lessons Learned with Additional Mappings into DDI-FlatDB

Claus-Peter Klas (GESIS - Leibniz Institute for the Social Sciences), Oliver Hopt (GESIS - Leibniz Institute for the Social Sciences), Alexander Mühlbauer (GESIS - Leibniz Institute for the Social Sciences) (schedule)

Track: DDI Management – Session Type: Regular Presentation - Project Report

At EDDI 15 and 16 we presented a flexible way for storing metadata structured with DDI called DDI-FlatDB on the use cases of a questionnaire editor. Within the last months, we were faced with DDI 3.2 remodelling of the metadata exported from the GESIS data catalogue (DBK). As DDI 3.2 will be the GESIS wide standard, we had to adopt this export, especially for the study level documentation from the DBK. We will present, how the data catalogue DDI structure is actually expressed in DDI 3.2, how this affects the splitting into XML snippets and how this changed the consumption of these snippets in our frontend solutions. The main feature of DDI-FlatDB, fast adaptation of new DDI formats, still holds and we didn't need to change any code in the Questionnaire editor to adopt the new DDI standard. In addition, we will present our experience with a use case from the border areas of DDI reusing DDI-FlatDB. We adopted the principle to support the management of controlled vocabularies for the CESSDA CV-Manager. In a short amount of time we were able to create a prototype, which structures its data according to SKOS with very few extensions.

The CESSDA Metadata Management Project – CMM1 in Retrospect and Forecast for CMM2

Mari Kleemola (FSD - Finnish Social Science Data Archive), Kerrin Borschewski (GESIS - Leibniz Institute for the Social Sciences) (↑ schedule)

Track: DDI Management – Session Type: Regular Presentation - Community Impact

The CESSDA (Consortium of European Social Science Data Archives) Metadata Management project produced in May 2017 the CESSDA Metadata Standards Portfolio Version 1 that contains the CESSDA Metadata Core Model and the multilingual CESSDA Controlled Vocabularies. The Portfolio is based on DDI Lifecycle 3.2 and DDI CVs.

We will provide a rough overview of the Core Metadata Model and the CVs, and demonstrate how we used the DDI capabilities to represent our model, and how the model can support building CESSDA services like the Product and Service Catalogue and the Euro Question Bank.

A UK Data Service Linked Graph Utilising DDI4

Deirdre Lungley (UK Data Archive, University of Essex) (↑ schedule)

Track: DDI & Semantic Web - Session Type: Regular Presentation - Project Report

One of the aims of the UKDS is to provide researchers with access to a linked graph of the all of the Service's data holdings. This presentation gives a technical overview of the infrastructure we have put in place to achieve this – the hardware platform, the open source software components and the data models.

A hybrid on-premises and cloud hardware solution allows us to optimally serve open, safeguarded, through to secure data.

ODPi-compliant Hadoop software components provide us with the tools to ingest, semantically enrich and harmonise, and query and analyse this data.

Modelling our data using the Logical Data Description package proposed for DDI4 has given us a schema designed to meet the needs of both the social science researcher and curator.

This presentation reports on the findings of our initial experiments with this technical implementation – a deep dive into the reality of querying a large DDI4 graph.

C2Metadata project

Jared Lyle (ICPSR, University of Michigan), Jeremy Iverson (Colectica) (1 schedule)

Track: Interoperability – Session Type: Regular Presentation - Project Report

Accurate and complete metadata is essential for data sharing and for interoperability across different data types. However, the process of describing and documenting scientific data has remained a tedious, manual process even when data collection is fully automated. Researchers are often reluctant to share data even with close colleagues, because creating documentation takes so much time.

This presentation will describe a project to greatly reduce the cost and increase the completeness of metadata by creating tools to capture data transformations from general purpose statistical analysis packages. Researchers in many fields use the main statistics packages (SPSS®, SAS®, Stata®, R) for data management as well as analysis, but these packages lack tools for documenting variable transformations in the manner of a workflow system or even a database. At best the operations performed by the statistical package are described in a script, which more often than not is unavailable to future data users.

Our project is developing new tools that will work with common statistical packages to automate the capture of metadata at the granularity of individual data transformations. Software-independent data transformation descriptions will be added to metadata in two internationally accepted standards, the Data Documentation Initiative (DDI) and Ecological Markup Language (EML). These tools will create efficiencies and reduce the costs of data collection, preparation, and re-use. Our project targets research communities with strong metadata standards and heavy reliance on statistical analysis software (social and behavioral sciences and earth observation sciences), but it is generalizable to other domains, such as biomedical research.

Progress with the CESSDA Euro Question Bank Project

Azadeh MahmoudHashemi (GESIS - Leibniz Institute for the Social Sciences), Wolfgang Zenk-Möltgen (GESIS - Leibniz Institute for the Social Sciences), Alexander Mühlbauer (GESIS - Leibniz Institute for the Social Sciences) (↑ schedule)

Track: Questionnaire Development - Session Type: Regular Presentation - Project Report

Survey questions of different datasets in different languages from the CESSDA Service Providers will be the content of the Euro Question Bank (EQB). The project develops and implements a central search facility across all these CESSDA surveys. The EQB metadata schema is based on the DDI-Lifecycle metadata standard and provides conversion mappings from other metadata standards, such as DDI-Codebook. The software architecture consists of two main parts, the EQB-Frontend and the EQB-Backend. The EQB-

Frontend is implemented with Vaadin as the user interface technology for interacting between different web services.

The EQB-Backend comprises different technologies, such as Elastic Search, Open Source Metadata Harvester (OSMH), etc. Elastic search is a search engine for indexing metadata and is used by EQB with a JSON format. The aim of OSMH is to harvest all information from heterogeneous and autonomous repository handlers with different technologies. It classifies the entities and objects to be harvested and enables repository owners to write their own repository handlers for the technology they use. The presentation will introduce into the EQB prototype application and the EQB architecture, focusing on the current work in progress.

The Past, Present and Future of Legacy Metadata Documentation at CLOSER

Hayley Mills (CLOSER, University College London (UCL)) (↑ schedule)

Track: Infrastructure – Session Type: Short Presentation - Project Report

The initial CLOSER (Cohort & Longitudinal Studies Enhancement Resources) project concluded in September 2017. The next iteration will continue for the following 2 years, building on the previous achievements. One of CLOSER's key aims was to document over 70,000 questions from eight UK longitudinal studies using DDI 3.2. The centralised legacy metadata team, which ran for the past 3.5 years, has now ended. This presentation will provide a summary of what has been achieved over the course of the legacy project, advancements made since 2016, and future plans to expand the scope of the project over the coming years, including expanding to more studies.

Elaborating an XML Crosswalk Between DDI and EAD for an Emerging Data Archive Service

Benjamin Gabriel Peuch (State Archives of Belgium) (↑ schedule)

Track: DDI Management – Session Type: Full Paper - Project Report

Belgium has recently decided to integrate the Consortium of European Social Science Data Archives (CESSDA). The Social Sciences and Humanities Data Archive (SOHDA) project aims at tackling the different challenges entailed by the setting up of a new research infrastructure in the form of a data archive. The SOHDA project involves an archival institution—the State Archives of Belgium—which, like most other large archival repositories around the world, work with the Encoded Archival Description (EAD) for managing their metadata. There exists at the State Archives a large pipeline of programs and procedures that processes EAD documents and channels their content through different applications, such as the online catalog of the institution.

Because there is a chance that the future Belgian data archive will be part of the State Archives, and because DDI is the most widespread metadata in the social sciences as well as a requirement for joining CESSDA, the State Archives have developed a DDI-to-EAD crosswalk in order to verify whether broad correspondences could be established between the two standards without departing from either one's 'spirit' too heavily.

The mapping is put into perspective by analyzing the roles played by archivists and how these largely fall within the remit of a data archive's missions. Technical illustrations highlight the conceptual differences between DDI and EAD and how these can be reconciled for the purpose of a data archive for the social sciences.

An Application of Search Engine Topics Through the Use of DDI-3.2 Concepts

Will Poynter (CLOSER, University College London (UCL)) (↑ schedule)

Track: DDI Management - Session Type: Regular Presentation - Project Report

CLOSER is a consortium of eight UK longitudinal studies for the purpose of increasing the use, value and impact of longitudinal research. CLOSER's flagship product is Discovery, a DDI-backed search engine for the documentation and appraisal for the eight consortium studies. To enhance the searchability of Discovery all Variables and QuestionConstructs in Discovery require a Topic from CLOSER's controlled vocabulary. Archivist provides bespoke infrastructure for inputting topic allocations. Through the use of Strands and Clusters the work has been reduced by 75%. Further savings are being implemented using deep learning to aid data managers.

A DDI-driven Conference Evaluation Research Project

Barry Radler (University of Wisconsin-Madison), Jeremy Iverson (Colectica), Shane McChesney (Nooro), Dan Smith (Colectica) (↑ schedule)

Track: Interoperability – Session Type: Regular Presentation - Project Report

The DDI 3.2 standard is called "DDI Lifecycle," so named because it describes metadata at each stage of the research data lifecycle, i.e., "from cradle to grave." While few projects actually employ DDI Lifecycle to drive these processes, demonstrating that DDI is an efficient framework for organizing typical survey tasks would prove that the DDI community can "eat your own dogfood" by using the standard to manage its own research.

In 2015 the North American DDI (NADDI) conference introduced a DDI-based protocol to manage the feedback survey conducted with conference participants. Because similar evaluations had been performed at previous NADDI conferences, this project also demonstrated DDI 3.2's facility in describing study series in a cross-sectional panel survey design.

This presentation will elaborate the rationale for the project, describe the relationship between the two principal stakeholders (Colectica and Nooro), and describe how DDI informed and drove each step of the fielding process: designing the conceptual questionnaire; fielding the designed instrument; documenting response data and linking to questionnaire metadata; and displaying, harmonizing, and comparing results with prior years.

A Model Based Approach for DDI Lifecycle 3.x Documentation

Dan Smith (Colectica) (*\text{schedule})

Track: Interoperability - Session Type: Regular Presentation - Community Impact

This presentation introduces COGS, an Open Source Convention-based Ontology Generation System capable of producing documentation, visualizations, and other outputs for DDI 3.x.

This talk will outline how the DDI Technical Committee has converted the DDI 3 XML schemas into a strongly typed model, explicitly stated types for all references, and extracted the type information, relationships, and documentation from the DDI 3 XML schemas into a series of CSV and markdown files.

From these source CSV and markdown files, the talk will show how DDI 3.x information can be converted by COGS into online documentation using the sphinx system, visually displayed in SVG and UML, documented in UML 2.4.2 and UML 2.5 with Diagrams and Diagram Exchange, bound to serialization formats including XML Schema, and OWL (RDF), JSON Schema, and GraphQL, and used via generated programming library source code.

In addition to DDI 3.x documentation, this talk will also show how COGS is also being used in an ICPSR project for the Continuous Capture of Metadata to define an information model for data transformations.

The Picasso Project - Getting Ready to Launch

Kathryn Stevenson (Statistics Canada) (*\text{schedule})

Track: Infrastructure - Session Type: Regular Presentation - Project Report

Building on Statistics Canada's *metadata-driven* architectural principle and metadata strategy themes: *drive, make available, structure* and *manage*, Picasso is an enterprise solution for statistical data and metadata management. Automated business rules will ensure metadata is gathered uniformly, adhering to common architecture, governance and policy instruments.

Final development work of core functionality is underway as the project team prepares to launch Picasso in spring 2018. The recent adoption of a modernization agenda in Statistics Canada has highlighted the importance of up-to-date metadata in supporting a timely and responsive statistics program, in showing leadership in the stewardship of Canada's data assets as well as in providing seamless access to data for users. Picasso promotes the sharing and reuse of data and metadata for all surveys, administrative files and record linkage projects through enterprise search and discovery, documentation of comprehensive metadata including time travel and a data service centre function for 'fit for use' data files. New tools and components include a metadata designer with an entity lifecycle management and registration process.

The solution architecture is based on a hybrid relational/semantic graph (RDF) core registry and repository with a data model driven by standard vocabularies, e.g. SKOS/XKOS, PROV-O, and reference models, e.g. GSIM, DDI 4 and SDMX. Picasso component and external systems interact with the RDF core via a Data Access Layer and Entity Services to access metadata entities via Common Information Exchange Models. Standard vocabularies and models ensure efficient information exchange internally and to external users through the Agency's website and Research Data Centres.

Perspectives on the Implementation of the CESSDA Metadata Model

Irena Vipavc Brvar (Social Science Data Archives, University of Ljubljana), Irena Bolko (Social Science Data Archives, University of Ljubljana) (↑ schedule)

Track: DDI Management - Session Type: Regular Presentation - Community Impact

CESSDA Metadata Standards Portfolio, outcome of CESSDA Metadata Management (CMM) Project, includes core metadata model and controlled vocabularies (CV) for relevant metadata fields. The Portfolio was designed to ensure compliance with Data Documentation Initiative (DDI).

We present the results of the concluding task of Phase 1 of the CMM project, where we analysed the impact of the proposed Portfolio solution and identified the challenges for its implementation. 13 CEESDA members and 2 additional stakeholders participated in the survey and provided feedback on the proposed model. We evaluated the Mandatory elements of the Portfolio, applied the (adjusted) System Usability Scale (SUS) and investigated the metadata availability. We were interested in how SPs use DDI, especially to what extent they already provide metadata and whether they would be able to adapt the existing solutions to the one proposed in the model. Moreover, we asked SPs about their usage of CV (DDI and ISO). Based on the results we gathered, we also drew some comparisons between Service Providers (SP) at different stages of development.

Next Time Try Recycling - What Reusable Metadata (Should) Look Like

Knut Wenzig (German Institute for Economic Research (DIW Berlin) / German Socio-Economic Panel (SOEP)) (1 schedule)

Track: Interoperability – Session Type: Regular Presentation - Community Impact

One feature of DDI is its focus on metadata reuse. By looking at the current practice regarding this feature the following questions shall be answered:

What are suppliers of reusable metadata?

In the context of Linked Open Data there is a regular report "State of the LOD cloud" giving an overview of

the available data and their sources. Although DDI metadata are not linked an overview over potential sources for reuse should be interesting nevertheless.

What kind of metadata are offered?

There are perhaps two main scenarios for reusing metadata: aggregate metadata from different sources for indexing and then display a link to the original source (e.g. a search portal which directs its user to a relevant dataset) or reuse for ingesting the retrieved object in a separate life-cycle of another study (e.g. a question bank, which allows to reuse the questions in a new questionnaire).

What are the organisational and technical approaches?

Relevant for reuse are the findability and the format of exported metadata. Also the possibility to store own metadata and use the system like a registry can be desirable. Of course license issues can be important, too.

After exploring the range of available metadata, in a second step some recommendations for a successful distribution of metadata will be suggested. One aim could be to develop criteria for distribution metadata following the FAIR Guiding Principles for scientific data management and stewardship.

Posters / Software Demonstrations

(in alphabetical order by the last name of the first author)

Working Across Boundaries - Follow-Up Survey

Flavio Bonifacio (Metis Ricerche SRL) (*\(\text{schedule}\))

Track: Poster Session – Session Type: Poster/Software Demonstration - Project Report

Following two poster presentations during iAssist Conferences in Toronto, 2014, *Working Across Boundaries: Public and Private domains* and in Bergen 2016, *Working Across Boundaries: Public and Private domains – Part 2*, we present now a third poster - *Working Across Boundaries: Public and Private Domains - Part 3*. The poster will present the results of a *follow-up survey* that we plan to realize in Turin in Fall. The main argument of the survey will be *WHY?* It seems that every effort done in order to organize, disseminate and make the data usable in Turin (and in Italy as well) would be unsuccessful, *WHY?* The survey topics will include items like: agency type (public or not, dimension, services offered,...), data type and volume, how and when they are used, for which purpose, the actual mode and tools used to conserve data, the archives type, the accessibility level and so on. The work is aimed to identify the reasons that withstand the organization of efficient data archives in order to better promote their use

Survey CTRL: Questasy

Edwin de Vet (CentERdata) (schedule)

Track: Poster Session – Session Type: Poster/Software Demonstration - Project Report

CentERdata has ample experience in supporting questionnaire development processes for large international survey studies. In parallel with the SERISS (Synergies for Europe's Research Infrastructures in the Social Sciences) project CentERdata has compiled a suite of tools called **Survey CTRL** to fully support the survey life cycle, containing new tools as well as improved existing ones.

Questasy is a data dissemination tool based on DDI3. It is written in CakePHP and uses a MySQL database. It supports documentation of longitudinal studies as well as the creation of custom datasets. It has not been developed under SERISS, but is a prime example of interoperability between the tools using DDI.

The strength of the Survey CTRL approach is to view a survey design process as iterative. CentERdata provides the tools to solidify and speed up this process, as well as safeguarding and collecting data on each step. This holistic approach makes it easier to monitor and collect para data on the development process. To support existing questionnaire development work processes the tools were designed independently. DDI helps in the communication between the Survey CTRL tools, but also makes it easier to integrate into existing DDI compatible work processes.

Using DDI to Link Metadata in CharmStats

Martin Friedrichs (GESIS - Leibniz Institute for the Social Sciences), Kristi Winters (GESIS - Leibniz Institute for the Social Sciences) (schedule)

Track: Poster Session – Session Type: Poster/Software Demonstration – Project Report

Harmonizing variables is an important part of research in the social sciences as it maximizes the value of existing research data by enhancing the secondary reuse value of the datasets. However, to be of wide-spread scientific value to the community, the harmonisation process must be documented and published in precise and transparent ways, so as to be both replicable and citable. GESIS solution to this challenge was to draw on DDI metadata structuring when developing our line of "CharmStats" harmonization tools. CharmStats processes metadata informed by the structure DDI uses for variable-, question- and study level information. Our poster maps the types of input flows, including DDI, into the CharmStats system, displays the types of outputs generated by CharmStats and which data formats are used while importing and exporting.

Survey CTRL and DDI: TMT

Maurice Martens (CentERdata), Sebastiaan Pennings (CentERdata) (↑ schedule)

Track: Poster Session – Session Type: Poster/Software Demonstration - Project Report

The **TMT** is the Translation Management Tool, a web environment/service that helps coordinate the translation processes for large international studies. Under the SERISS project it has been tested and further developed for the European Social Survey (ESS) and the European Values Study (EVS). It is a key tool in the **Survey CTRL** suite, but also connects and integrates with many other survey software tools.

Recently a number of new features were developed, the interface has been redesigned, the concept behind the response-construct has been changed, the archiving functionality is updated and a new way of documenting and communicating in the system has been launched.

The strength of the Survey CTRL approach is to view a survey design process as iterative. CentERdata provides the tools to solidify and speed up this process, as well as safeguarding and collecting data on each step. This holistic approach makes it easier to monitor and collect para data on the development process. To support existing questionnaire development work processes the tools were designed independently. DDI helps in the communication between the Survey CTRL tools, but also makes it easier to integrate into existing DDI compatible work processes.

Survey CTRL and DDI: Surveycodings

Maurice Martens (CentERdata), Iggy van der Wielen (CentERdata) (↑ schedule)

Track: Poster Session – Session Type: Poster/Software Demonstration - Project Report

The **surveycodings.org** website is a free to use repository and service that disseminates long lists of classified and translated imported socio economic indicators as job titles, educational attainment and industries. These lists are used by all major studies, to have a comparable set of strings that tools like an auto suggest or trigram search can be built against. This makes it easier to incorporate classify ones indicator during an interview by an interview as well as the self-identification of these indicators by respondents. Furthermore the surveycodings website provides background information, coding examples and is the place to download source code, the lists can be exported in DDI format. A classification management system is built on the backend, to allow classification experts to maintain the lists.

In parallel with the SERISS (Synergies for Europe's Research Infrastructures in the Social Sciences) project CentERdata has compiled a suite of tools called **Survey CTRL** to fully support the survey life cycle, containing new tools as well as improved existing ones. The strength of this approach is to view a survey design process as iterative. CentERdata provides the tools to solidify and speed up this process, as well as safeguarding and collecting data on each step. To support existing questionnaire development work processes the tools were designed independently. DDI helps in the communication between the Survey CTRL tools, but also makes it easier to integrate into existing DDI compatible work processes.

Survey CTRL: Fieldwork and Case CTRL

Iggy van der Wielen (CentERdata) (↑ schedule)

Track: Poster Session – Session Type: Poster/Software Demonstration - Project Report

Fieldwork and Case CTRL is a multi-mode environment that helps with Case Management and Fieldwork Management. It links to various questionnaire software tools. It has been developed under SERISS using the names CCMS (Centralized Case Management System) and FMMS (Fieldwork Monitoring and Management System), has been tested by ESS and is currently being used by EVS and SHARE (the Survey of Health, Aging and Retirement in Europe).

It is one of the important tools in the **Survey CTRL** suite. Which was developed by CentERdata to support questionnaire development processes for large international survey studies. The strength of the Survey CTRL approach is to view a survey design process as iterative. CentERdata provides the tools to solidify and speed up this process, as well as safeguarding and collecting data on each step. This holistic approach makes it easier to monitor and collect para data on the development process. To support existing questionnaire development work processes the tools were designed independently. DDI helps in the communication between the Survey CTRL tools, but also makes it easier to integrate into existing DDI compatible work processes.

Reports

What you get with DDI 3.3

Wendy Thomas (University of Minnesota, Minnesota Population Center) (↑ schedule)

Track: General Papers – Session Type: Report

DDI-Lifecycle 3.3 addresses around 90 issues found during the implementation and use of version 3.2 and relating to the incorporation of the work of the Survey Development and Implementation (SDI) working group. These changes focus on following main areas:

- Inclusion of SDI work (sampling, weighting, and questionnaire development)
- Question Grids
- Measurement
- The use of base classes to allow for clearer referencing and expansion
- Serialization of classes (allowing classes to exist without the use of a specific packaging element)
- Documentation

Without going into specific details, this presentation will present how these changes open up better support for the management of elements within a data base, increase Question Grid ease of use, clarify measurement, and open paths to transformation to future versions of DDI.

Current Status of DDI 4

Joachim Wackerow (GESIS - Leibniz Institute for the Social Sciences) (*\text{\text{schedule}})

Track: General Papers – Session Type: Report

The current status of the development work on DDI 4 will be reported. In the months before EDDI, two workshops in Dagstuhl in October and one workshop in Chur - in the week before EDDI - focus on the integration of core components of DDI 4.

Tutorials

(in alphabetical order by the last name of the first author)

DDI Controlled Vocabularies (90 min. tutorial)

Anne Etheridge (UK Data Archive, University of Essex), Taina Jääskeläinen (FSD - Finnish Social Science Data Archive) (schedule)

Track: Controlled Vocabularies – Session Type: Tutorials or Workshop

This tutorial will cover the aim and content of the DDI Controlled Vocabularies (CVs) and general principles of their use in metadata. It will include use of CVs in local languages. Tutorial aimed for persons/organisations who are using or planning to use DDI CVs in documentation. Participants may be asked to do a few exercises beforehand, classifying example datasets with some CVs.

Document Questionnaires and Datasets with DDI: A Hands-On Introduction with Colectica (full-day tutorial)

Jeremy Iverson (Colectica), Dan Smith (Colectica) (↑ schedule)

Track: General Papers – **Session Type:** Tutorials or Workshop

This workshop offers a hands-on, practical approach to creating and documenting both surveys and datasets with DDI and Colectica.

Participants will build and field a DDI-driven survey using their own questions or samples provided in the workshop. They will then ingest, annotate, and publish DDI dataset descriptions using the collected survey data. The course will cover the following DDI content areas:

- Questionnaire Design
 - Survey Instruments
 - Questions
 - o Concepts and Universes
 - Question banks
- Dataset Documentation
 - Datasets and dataset layouts
 - Summary Statistics
 - Code Lists and Categories
 - o Data harmonization with Represented Variables and Conceptual Variables

Attendees may optionally bring their own Windows laptops to participate in the hands-on exercises.

Documenting Questions: A Crash Course (half-day tutorial)

Wendy Thomas (University of Minnesota, Minnesota Population Center), Jon Johnson (UK Data Archive, University of Essex) (*\text{ schedule})

Track: General Papers – Session Type: Tutorials or Workshop

The most significant area of DDI adoption since 2008 has been around the development, management, and use of Questions. The creation of question banks, development of tools to organize and field questionnaires, and interest in new and specialized means of data capture has fueled development in the DDI. For those of you that have "Questions" and want to do something with them this half-day tutorial will address the following:

• Question structures in DDI:

- o What have these structures been designed to support
- How do they work with what types of questions
- O How can they be organized grouping and questionnaires
- Creating Question Banks:
 - What features are used
 - o Where are problems and how to deal with them
 - o Trade-offs between semantics and representation: the special case of question grids
- Creating Questionnaires:
 - Organizing question flows and adding content instructions, statements, and visual display
 - o Managing the flow of data from capture to variable
- Question development and management:
 - o Creating new questions
 - Managing old questions
- Future proofing:
 - o New features are proposed in DDI3.3, including the capability to describe measurements
 - Thinking about a world where persistent identifiers on questions are the norm and how this changes how you might manage questions.

Closed Side Meetings

(in alphabetical order by title)

CESSDA Euro Question Bank - Project Member Meeting)

Azadeh MahmoudHashemi (GESIS - Leibniz Institute for the Social Sciences), Anne Etheridge (UK Data Archive, University of Essex), Johan Fihn (Swedish National Data Service, Göteborgs universitet) (
schedule)

Track: Side Meetings – Session Type: Side Meeting

The CESSDA Euro Question Bank Project (EQB) will implement a central search facility across all CESSDA's survey holdings to assist users in finding survey questions in different languages.

EQB is based on the DDI-Lifecycle standard and has a close collaboration with the CESSDA Metadata Management project. CESSDA Service Providers can implement their own repository handler to store and document their content using DDI or other standardized metadata with different technologies. The CESSDA Open Source Metadata Harvester tool will provide this content to EQB.

The EQB system architecture uses web services to enable interactions between its components. Therefore, the CESSDA Service Providers can use the system to build a search index for their metadata within the EQB application.

The aim of this EQB workshop is to introduce the tools and technologies developed in the project so far to enable CESSDA Service Providers to contribute their content within the EQB. In particular, the workshop will be used to help test the prototype application of the EQB project and this will produce valuable feedback for further improvements of the EQB software.

CESSDA Euro Question Bank - Workshop for CESSDA Service Providers)

Azadeh MahmoudHashemi (GESIS - Leibniz Institute for the Social Sciences) (** schedule)

Track: Side Meetings – Session Type: Side Meeting

The CESSDA Euro Question Bank Project implements a central search facility across all CESSDA's survey holdings. EQB is based on DDI-Lifecycle standard and developed close collaboration with the CESSDA Metadata Management project.

The CESSDA Open Source Metadata Harvester tool is being used, so that CESSDA Service Providers can contribute documentation from their holdings in a variety of standardized metadata formats. It will be possible to integrate EQB into the CESSDA Product and Service Portal. The project partners are GESIS (Lead), FSD, DDA, NSD, SND, DANS, FORS, TARKI and UKDS.

CESSDA Metadata Management Project

Mari Kleemola (FSD - Finnish Social Science Data Archive) (↑ schedule)

Track: Side Meeting – Session Type: Side Meeting

The CESSDA Metadata Management Project develops further CESSDA's metadata model and controlled vocabularies. Another key task is to develop user guidelines and best practices for CESSDA Service Providers.

The project partners are FSD (Lead), ADP, DDA, GESIS, NSD, SND, SOHDA and UKDS.

The side meeting will support the project work related to DDI (access only to project members).

Authors Index

Akdeniz, Esra	16
Barkow, Ingo	
Bell, Darren Stephen	
Block, William C	16
Bolko, Irena	
Bonifacio, Flavio	26
Borschewski, Kerrin	20
Brvar, Irena Vipavc	24
Cotton, Franck	17
Dekker, Ron	14
Duffes, Guillaume	17
Edwards, Michelle	18
Etheridge, Anne	30, 32
Fihn, Johan	32
Friedrichs, Martin	27
Gadouche, Kamel	18
Gillman, Daniel	18
Hofman, Lon	19
Hopt, Oliver	20
lverson, Jeremy	19, 21, 23, 30
Jääskeläinen, Taina	30
Johnson, Jon	30
Klas, Claus-Peter	20
Kleemola, Mari	20, 32
Lungley, Deirdre	21
Lyle, Jared	21
MahmoudHashemi, Azadeh	21, 32
Martens, Maurice	27
McChesney, Shane	23
Mills, Hayley	22
Mühlbauer, Alexander	20, 21
Pennings, Sebastiaan	27
Perry, Carol	18
Peuch, Benjamin Gabriel	22
Poynter, Will	
Radler, Barry	23
Smith, Dan	23, 30
Stevenson, Kathryn	24
Thomas, Wendy	29, 30
Vet, Edwin de	26
Wackerow, Joachim	15, 29
Weldon, Kathleen J	•
Wenzig, Knut	
Wielen, Iggy van der	
Winters, Kristi	•
Zenk-Möltgen, Wolfgang	

Organizations Index

CentERdata	26, 27, 28
CESSDA ERIC - Consortium of European Social Science Data Archives	14
CLOSER, University College London (UCL)	22, 23
Colectica	19, 21, 23, 30
Cornell University	
FSD - Finnish Social Science Data Archive	20, 30, 32
GENES-CASD (Secure Data Access Centre)	
German Institute for Economic Research (DIW Berlin) / German Socio-Ec	conomic Panel (SOEP) 24
GESIS - Leibniz Institute for the Social Sciences	15, 16, 20, 21, 27, 29, 32
HTW Chur	
ICPSR, University of Michigan	21
INSEE - French National Institute of Statistics and Economic Studies	17
Metis Ricerche SRL	26
Nooro	23
Social Science Data Archives, University of Ljubljana	24
State Archives of Belgium	
Statistics Canada	24
Statistics Netherlands	19
Swedish National Data Service, Göteborgs universitet	32
U.S. Bureau of Labor Statistics (BLS)	18
UK Data Archive, University of Essex	16, 21, 30, 32
University of Guelph	18
University of Minnesota, Minnesota Population Center	29, 30
University of Wisconsin-Madison	·

About EDDI and EDDI17

EDDI Conference Description

<u>EDDI</u> (Annual European DDI User Conference) is the annual conference for users of <u>DDI</u> (Data Documentation Initiative), a metadata specification for the social, economic, and behavioral sciences. It is run by <u>GESIS</u> and the <u>IDSC</u> of <u>IZA</u> under the auspices of the <u>DDI</u> Alliance.

EDDI is designed to provide forum where DDI users from Europe and the world can gather to showcase their work and their progress toward DDI adoption, as well as discuss any questions or challenges they may have about the standard.

EDDI includes presentations, poster sessions, and discussion sessions. The conference closes with a "meet the experts" session in which users will have a chance to lobby for their point of view with representatives from the Technical Committee of the DDI Alliance. The philosophy of EDDI is to be an open, inclusive DDI community-building activity.

In a different European country each year, the conference (including related meetings) usually spans a week in early December.

EDDI17 Committees

Organization Committee

- Nikos Askitas, IDSC of IZA International Data Service Center of the Institute for the Study of Labor, Germany
- Denise Bloch, FORS Swiss Centre of Expertise in the Social Sciences, Switzerland
- Stefan Buerli, FORS Swiss Centre of Expertise in the Social Sciences, Switzerland
- Brian Kleiner, FORS Swiss Centre of Expertise in the Social Sciences, Switzerland
- Uwe Jensen, GESIS Leibniz Institute for the Social Sciences, Germany
- Jon Johnson, UK Data Service, United Kingdom
- Monika Vettovaglia, FORS Swiss Centre of Expertise in the Social Sciences, Switzerland
- Joachim Wackerow, GESIS Leibniz Institute for the Social Sciences, Germany

Program Committee

- Jon Johnson, UK Data Service, United Kingdom
- Mari Kleemola, FSD Finnish Social Science Data Archive, Finland
- Brian Kleiner, FORS Swiss Centre of Expertise in the Social Sciences, Switzerland
- Mikko Saloila, Statistics Finland, Finland
- Joachim Wackerow, GESIS Leibniz Institute for the Social Sciences, Germany
- Knut Wenzig, German Institute for Economic Research (DIW Berlin) / German Socio-Economic Panel (SOEP), Germany
- Wolfgang Zenk-Möltgen, GESIS Leibniz Institute for the Social Sciences, Germany

Conference Co-chairs

- Jon Johnson, UK Data Service, United Kingdom
- Joachim Wackerow, GESIS Leibniz Institute for the Social Sciences, Germany



DATA DOCUMENTATION INITIATIVE



DOCUMENT, DISCOVER, AND INTEROPERATE



METADATA POWERED BY DDI