

The DASISH Questionnaire Design Documentation Tool: Keeping track of the Questionnaire Design Process

Håvard Venge Bakkmoen, Hilde Orten

NSD - Norwegian Social Science Data Services

Yvette Prestage

City University London

EDDI 2014 - 6th Annual European DDI User Conference, December 2 – 3 2014

Outline

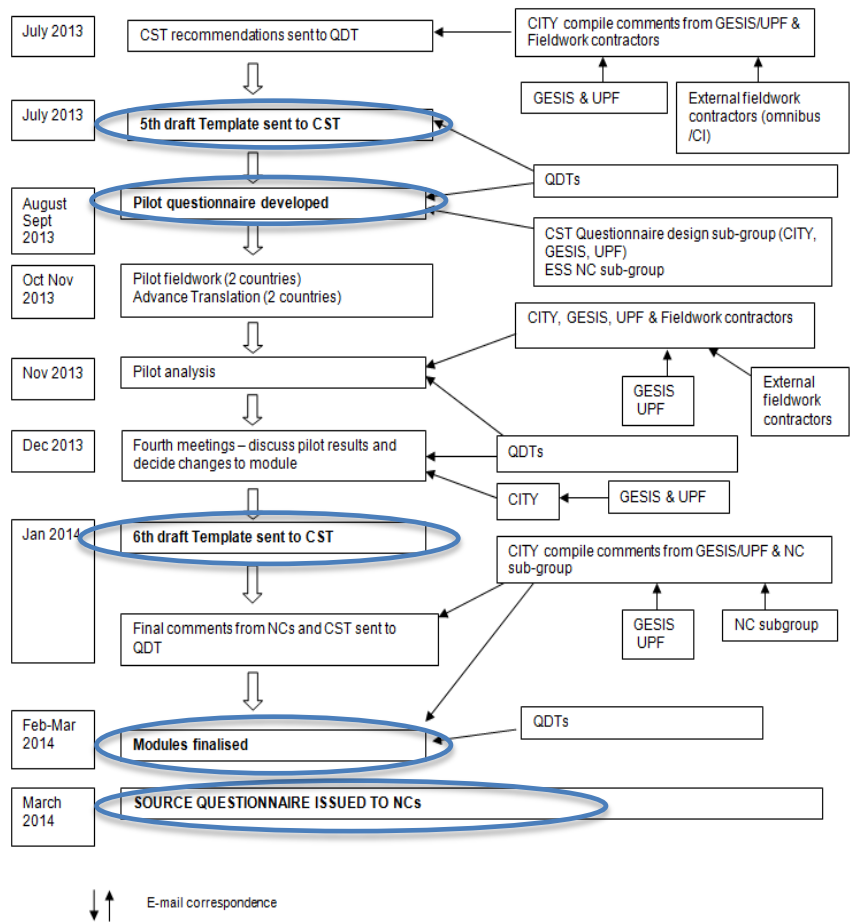
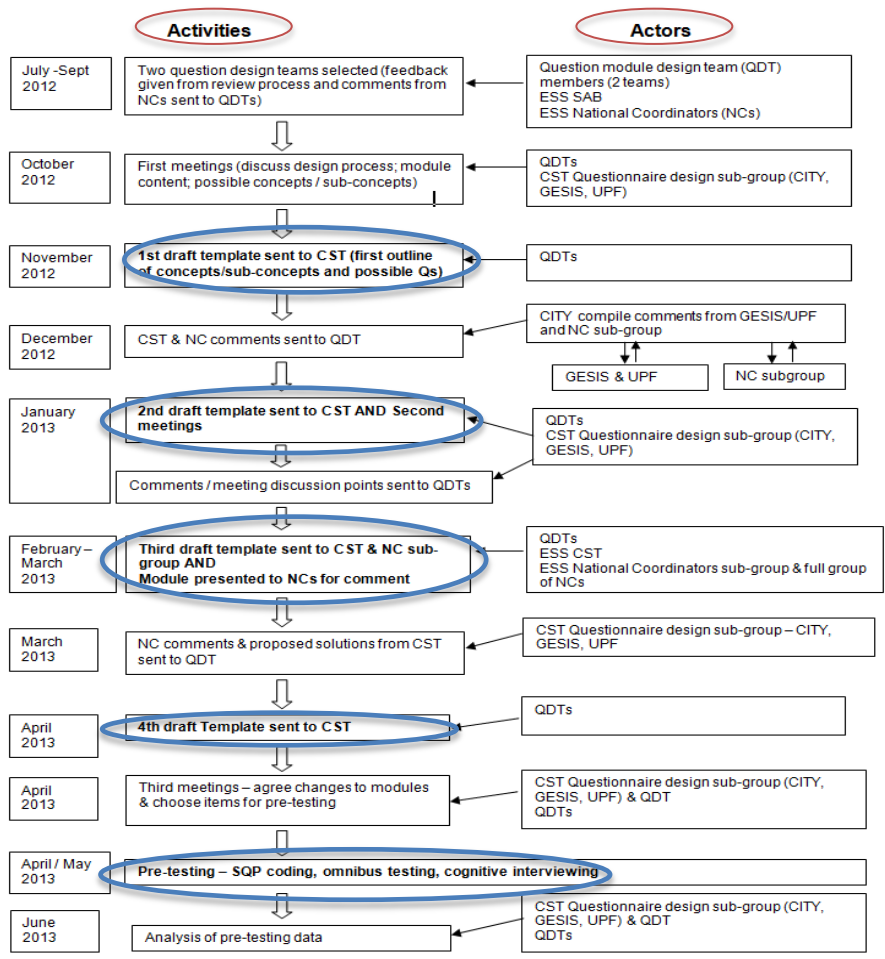
- What is the Questionnaire Design Documentation Tool QDDT?
- European Social Survey questionnaire module development workflow
- Current functionalities of the tool and the next steps

The Questionnaire Design Documentation Tool (QDDT)

- A system for developing and documenting the full questionnaire development process of cross-national survey programmes, from the first concepts and questions to the final questionnaires,
- improving both quality and transparency
- Internal (producer) users can use the tool to document the question design process
- External (consumer) users can use it to understand how each item and concept was developed
- Once the design for a questionnaire module has been completed, the information can be made available for download and transfer
- The information is permanently stored in the database for future reuse and reference
- QDDT is planned as the ‘mother tool’ in a chain of interoperable tools for the survey lifecycle
- Interoperability with the QVDB and the TMT is a key aim

Use case for specifications: The European Social Survey (ESS) questionnaire module development

- Rigorous questionnaire development process
- with multiple business process steps
- and multiple actors involved



QDDT – under development as a multi project system for questionnaire design documentation and development

DASISH QDDT

Questionnaire Design and Development Tool

Logged in as nsd: Home / Log out

Home

Modules

Survey	Study	Module
European Social Survey	ESS6	Personal and social well-being
Test Survey	Test study	Test
European Social Survey	ESS7	Attitudes towards immigration and their antecedents
European Social Survey	ESS4	Evaluations, Predispositions and Attitudes to Welfare
International Social Survey Programme	ISSP 2014	Citizenship II, ISSP 2014 module
Test Survey	Test study	Test2

New module

QDDT - Questionnaire Design and Development Tool

DASISH - Data Service Infrastructure for the Social Sciences and Humanities

QDDT – current functionalities

- creating and versioning of a questionnaire module

DASISH QDDT

Questionnaire Design and Development Tool

Logged in as nsd: Home / Log out

Module: Citizenship II, ISSP 2014 module

Module details

Name: Citizenship II, ISSP 2014 module

Study: ISSP 2014

Maintenance agency ID: int.issp

[\[Edit module details\]](#)

Module development history

#	DDI version	Release number	Version description	Actor	Publish info	
1	1.0	0.1	First presentation of concepts	Drafting group	Published internal	View
2	2.0	0.2	Revised concepts	Drafting group	Published internal	View
3	2.1	0.2	Finalised concepts	Drafting group	Published internal	View
4		0.3	Finalised other concepts, proposal uploaded	Drafting group	Not published	Update

QDDT - Questionnaire Design and Development Tool

DASISH - Data Service Infrastructure for the Social Sciences and Humanities

QDDT – questionnaire module development steps

DASISH QDDT

Questionnaire Design and Development Tool

Logged in as nsd: Home / Log out

Module: Citizenship II, ISSP 2014 module

ISSP 2014 (int.issp) - actor: Drafting group

[Title/Authors...](#) [Comments](#) [Documents](#) [Concepts](#) [Questions](#) [Response domains](#) [Instrument](#) [Reports](#) [Version](#) [Publish](#)

Title:
ISSP 2014 Citizenship II

Module Authors:
Canada (convenor), Denmark, Taiwan, Chile, Belgium

Module Author's affiliation:

Abstract:
Citizenship denotes membership in a political community. There is both a legal and psychological (identity) dimension to the composition of the citizenry of any community. The community is usually associated with the state (often the nation-state) but may be conceived of in broader or narrower terms. A set of rights and privileges go along with citizen status, but citizens also have obligations to go along with those rights. Conceptions of the obligations of citizenship involve participation in its public activities. These participatory obligations may be broad (involving voting, service, community activities) or narrow (obeying the laws). The democratic citizen blends a certain degree of trust of fellow citizens and public officials with a sense of empowerment for personal action in a variety of circumstances. The democratic state creates political institutions which encourage and accommodate participation by the citizenry at large. The well functioning democratic state engenders satisfaction among the citizenry with its performance.

[Save](#)

QDDT – current functionalities: Concepts

DASISH QDDT

Questionnaire Design and Development Tool

Logged in as test: Home / Log out

Module: Personal and social well-being

ESS6 (int.esseric) - actor:

[Title/Authors...](#) [Comments](#) [Documents](#) [Concepts](#) [Questions](#) [Response domains](#) [Instrument](#) [Reports](#) [Version](#) [Publish](#)

Concept hierarchy

- Resilience**
 - Stress resistance
 - Bouncing back
 - Normalization
- Meaning and purpose
 - General sense of meaning
 - Orientation to future
 - Meaning and purpose - Daily activities
- Autonomy and control
 - (name missing)
- Engagement
 - General sense of engagement
 - Interest in learning
 - Opportunities for learning
 - Absorption
 - Boredom
- Competence
 - Opportunity to demonstrate competence
 - Sense of accomplishment
 - Competence in activities
 - Clear thinking
 - Capable of making decisions
 - Dealing with problems well
 - Ability to concentrate

Concept

Name:

Label:

Description:

Relationship with other concepts:

Change type:
[New element - not published]

Version rationale description:

[Update concept](#) [Remove concept](#)

Comments
[Add comment](#)

QDDT – current functionalities: add developed questions to concepts

DASISH QDDT

Questionnaire Design and Development Tool

Logged in as test: [Home](#) / [Log out](#)

Module: Personal and social well-being

ESS6 (int.esseric) - actor:

[Title/Authors...](#) [Comments](#) [Documents](#) [Concepts](#) [Questions](#) [Response domains](#) [Instrument](#) [Reports](#) [Version](#) [Publish](#)

Add question to concept:

Stress resistance - Stress resistance

Questions

Name/Number:

Question intent:

Question text: When things look hopeless, I don't give up

Response:

Add this question

Name/Number:

Question intent:

Question text: How difficult or easy do you find it to deal with important problems that come up in your life? Please use this card where 0 is extremely difficult and 10 is extremely easy.

Response:

Add this question

QDDT – current functionalities: develop a question

Title/Authors... Comments Documents Concepts Questions Response domains Instrument Reports Version Publish

Edit question

Name/Number:

Question intent:

Question text (introduction):

Question text (request for answer):

Version description:

[Update](#) [Delete question](#)

Response domain

Code list

1	Yes
2	No
9	Refusal

[Change response domain](#)

QDDT – current functionalities: develop a code list

Title/Authors... Comments Documents Concepts Questions Response domains Instrument Reports Version Publish

Create a new code list or update an existing code list.

New valid code list New missing code list New code list (valid + missing)

Update existing code lists

Valid code lists

update	Yes, no code list	
	1	Yes
	2	No

Missing code lists

update	Refusal code list	
	9	Refusal

Valid + missing code lists

update	Yes, no, refusal code list	
	1	Yes
	2	No
	9	Refusal

QDDT – next step functionalities

- Add more response domains, for example text, numeric and scale
- Handling of complex question structures like batteries and grids
- Add comparison and mapping functionalities
- ControlConstruct
- Develop web-services (REST API) for export to and import from the TMT and the QVDB, as well as other systems
- Add export formats in addition to DDI 3.2 XML format, for example: DDI-C and DDI RDF
- Add print functionality that will allow users to print enhanced reports
- Questionnaire delivery:
 - PAPI has first priority.
 - CAPI and Web-survey is a goal for the further steps

Structuring of question batteries and question grids – decisions to be made:

- What the different questionnaire structures we wish to cover are, and which are their components
- Identify their more and less reusable components and decide how to structure them in order to maximise reusability
- Variable documentation issues should be kept in mind when decisions about their structuring are made
- Possibilities in DDI 3.2:
Sequence of individual (compound) questions vs. QuestionGrid

QDDT – next step functionalities (2)

- Versioning:
- Add versioning functionality to all versionable used DDI elements
 - Add RationaleCode controlled vocabularies to versionable elements
This will be used to assign a version number at a specific level automatically
 - Automatic versioning of a Scheme when an included element is updated

Example RationaleCode values for QuestionItem

Contentelement.ElementText.
TypoOrNoMeaningChange

CodeValue	Versioning level	DDI Element QuestionItem
ElementName.Added	Major	Name: Not to use for question number. Would more stable
ElementName.Removed	Major	DK
ElementName.Changed.TypoOrNoMeaningChange	Minor	DK
ElementName.Changed.MeaningChange	Major	DK
ElementLabel.Added	Major	DK
ElementLabel.Removed	Major	DK
ElementLabel.Changed.TypoOrNoMeaningChange	Minor	DK
ElementLabel.Changed.MeaningChange	Major	DK
ElementDescription.Added	Major	Y
ElementDescription.Removed	Major	Y
ElementDescription.Changed.TypoOrNoMeaningChange	Minor	Y
ElementDescription.Changed.MeaningChange	Major	Y
Contentelement.ResponseDomain.Added	Major	Y
Contentelement.ResponseDomain.Removed	Major	Y
Contentelement.ResponseDomain.Changed.TypoOrNoMeaningChange	Minor	Y
Contentelement.ResponseDomain.Changed.MeaningChange	Major	Y
Contentelement.ResponseDomain.Changed.OtherChange	Major	Y
Contentelement.ConceptOrIntent.Added	Major	Y
Contentelement.ConceptOrIntent.Removed	Major	Y
Contentelement.ConceptOrIntent.Changed.TypoOrNoMeaningChange	Minor	Y
Contentelement.ConceptOrIntent.Changed.MeaningChange	Major	Y
Contentelement.ElementText.Added	Major	Y
Contentelement.ElementText.Removed	Major	Y
Contentelement.ElementText.TypoOrNoMeaningChange	Minor	Y
Contentelement.ElementText.MeaningChange	Major	Y
Contentelement.Other.Added	Major	Y
Contentelement.Other.Removed	Major	Y
Contentelement.Other.Changed.TypoOrNoMeaningChange	Minor	Y
Contentelement.Other.Changed.MeaningChange	Major	Y
Contentelement.Other.Changed.OtherChange	Major	Y

Y = yes; N = No; DK = Don't know; NAP = Not applicable

QDDT – next step functionalities (3)

- Publication:
- Add UserAttributePair controlled vocabularies for publication status for modules and questions
 - This will be used to flag if a publication is internal (shared between partners) or external (made publicly available),
 - as well as to document the business purpose for the published version

UserAttributePair key values for publication status

DASISH WP3.2 QDDT: Controlled vocabulary for publication status

Description

The publication status CV for the QDDT is developed for the ESS and SHARE but could also possibly be used by other surveys. It is as a first step intended for usage for questionnaire modules, improve useful for other metadata elements as well.

Details

Short Name: PublicationStatusCV
Long Name: Controlled Vocabulary for publication status
Version: 1.0
Version Notes:
Canonical URI: urn:esseric-cv:PublicationStatusCV
Canonical URI of this version: urn:esseric-cv:PublicationStatusCV.1.0
Location URI: https://dasish-dev.nsd.no/api/ddi/CodeList.xml
Alternate format location URI: https://dasish-dev.nsd.no/api/ddi/CodeList.html
Alternate format location URI: https://dasish-dev.nsd.no/api/ddi/CodeList.xls
Agency Name: ESSERIC

Code List

Value of the Code	Definition of the Code
Development.NotPublished	Development – Made available for the key members of the CST questionnaire design sub group, but not designed to be published internally.
InternalPublication.AvailableForDesignTeam	AvailableForQDT – Items and discussion made available internally for members of the relevant Questionnaire/Module Design Team to view and
InternalPublication.ExportToSQP	ExportToSQP – Items made available to 'export' to SQP for coding. The results will inform the development of the item, and may be used at mu
InternalPublication.AvailableForNationalTeams	AvailableForNationalTeams – items and their development histories made available to National teams to view. They will be asked to comment, b some aspects of the development history that we would like to 'hide' from national teams.
InternalPublication.ExportToTMT	ExportToTMT – Items made available to 'export' to TMT for translation. Items may be exported to the TMT at various times in the questionnair only be a selection of items), when items are finalized – although final items may be exported via the QVDB??
ExternalPublication.ExportToQVDB	ExportToQVDB – once finalized, items will be exported to the QVDB to be made publicly available.
ExternalPublication.ExportToPublic	ExportToPublic – in addition to the final question being made available to the public, we will also want the public to be able to access the develo happened, and we made need to 'hide', in other words not publish, certain things.

InternalPublication.
Export to TMT

QDDT – future outlook

- Further development
- Real life use by ESS and SHARE
- Real life use by other survey projects
- Interoperability with other DDI-Lifecycle based and compatible survey tools

Acknowledgements

Special thanks to Joachim Wackerow for consultancy

Thank you for your attention!

havard.bakkmoen@nsd.uib.no

hilde.orten@nsd.uib.no

Yvette.Prestage.1@city.ac.uk