

# User Guide for the CESSDA Metadata Model version 3.0

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# User Guide for The CESSDA Metadata Model 3.0

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## Introduction and background

This document includes guidelines for the usage and best practices for the <u>CESSDA Metadata Model</u> <u>version 3.0</u>. The guidelines address all relevant aspects of the elements in the CESSDA Metadata Model and serve to provide recommendations and guidance for usage. This is version 3.0 of the User Guide and is the result of further development of the User Guides created in 2018, 2019 and 2020.

Version 3.0 of CMM User Guide is a part of the CESSDA Metadata Portfolio, and is the output of Metadata Office working group, deliverable 13.

### **CESSDA Metadata Management and CESSDA Metadata Office**

The CESSDA Metadata Model and CESSDA Metadata Model User Guide are results of CESSDA Metadata Management projects and the CESSDA Metadata Office (MDO) project.

CMM project phases 1 and 2 were part of the CESSDA Work Plan in 2015-2018. The main objective of the CMM projects was to develop and implement a standardized metadata design and practice for CESSDA. The project partners were FSD (lead), ADP, DDA, GESIS, NSD, SND, UKDS, CSAD (first phase) and SODA (second phase).

CESSDA Metadata Office builds on the work in the CMM projects by developing the CESSDA Metadata Model, Controlled Vocabularies as well as the European Language Social Science Thesaurus (ELSST) and multilingual vocabulary service. It was included in the CESSDA Work Plan 2019 and the work started in January 2019. The project partners were GESIS/UKDS (joint lead), FORS, FSD, NSD, APIS/DCS (from SEED funding).

The 2020 edition of MDO expanded the work from the previous year and has included the CESSDA Data Catalogue Profiles, CESSDA Metadata Validator and a UML model for CMM in its portfolio. The work started in January 2020 with GESIS/UKDS as joint lead and FSD and NSD as project partners.

The MDO working group for 2021-2022 consisted of members from GESIS (Germany), project lead, UKDS (United Kingdom), FSD (Finland), and Sikt (Norway). Please visit the MDO web site for more information about the work of the MDO.

#### **CESSDA Metadata Portfolio**

The CESSDA Metadata Portfolio (the Portfolio) consists of the CESSDA Metadata Model (the Model), User Guide, CESSDA Vocabulary Service, European Language Social Science Thesaurus (ELSST), CESSDA Data Catalogue Profiles, CESSDA Metadata Validator, UML model, Supplementary Materials and Management and Maintenance Plan. It aims to support resource discovery, question banks, preservation, and data access. The Portfolio is compliant with the Data Documentation Initiative (DDI) international standard for describing statistical and social science data. The Portfolio is aligned with other CESSDA projects, like the Euro Question Bank (EQB) and the CESSDA Data Catalogue

(CDC)<sup>1</sup> The use of the Portfolio is not limited to CESSDA. Moreover, it can support the description of data from different disciplines and can be adapted to changing requirements over time.

#### **CESSDA Metadata Model**

The CESSDA Metadata Model (CMM) is CESSDA's official metadata schema, maintained and enhanced by the CESSDA Metadata Office (MDO). The CMM is a subset of metadata elements based on the Data Documentation Initiative (DDI) — an international metadata standard for describing data from the social and behavioural sciences. The model aims to help CESSDA Service Providers make their quantitative data more discoverable and comprehensible to users. CESSDA SPs and CESSDA tool developers agreed on using this standard to document and provide their metadata in DDI and interoperate between systems via DDI. Therefore, the CMM includes DDI Lifecycle, version 3.2 and in the new version CMM version 3.0, also DDI XPaths for DDI versions 3.3, as well as DDI Codebook, versions 2.5 and 2.6.

The 2022 edition of the CESSDA Metadata Model (version 3.0) is an update from earlier versions and includes relevant changes based on feedback from CMM users as well as adaptations to the requirements of the CESSDA tools and services. The updates made in the 2022 edition of the CESSDA Metadata Model includes adding XPaths for DDI Lifecycle 3.3, DDI Codebook 2.5 and 2.6 in addition to XPaths for DDI 3.2. Metadata requirements from other standards (OpenAIRE, B2Find, DublinCore, and schema.org), especially mandatory fields, were also added to the new CMM version. In addition, (meta)data access and license information have been included for study level, question level and document description. The new edition also corrected errors found in the previous version and adjustments were made to ensure that the model follows the FAIR principles.

The CESSDA Metadata Model 3.0 contains metadata elements, their definitions and information on other requirements, such as repeatability. The Model is built from the viewpoint of quantitative (social science) data and is based on the DDI Lifecycle metadata standard. The CESSDA Metadata Model consists of the following top elements:

- 1. Information on Study
- 2. Information on Persons
- 3. Information on Organizations
- 4. Information on Dataset
- 5. Information on Instrument
- 6. Information on Questions and Responses
- 7. Information on Concepts
- 8. Information on further Documents
- 9. Information on Publications (publications where data have been used)
- 10. Information on Group of Studies
- 11. Information on Document Description ('metadata about metadata')

-

<sup>1</sup> https://datacatalogue.cessda.eu/

#### Outline of the User Guidelines

The User Guidelines are structured as explanatory tables based on the information in the CESSDA Metadata Model. The number and name of the elements in the User Guide refer to the number and name in the Model.

#### **Best Practices**

This section presents a set of best practices for the usage of the CESSDA Metadata Model. The best practices that will be included are as follows: DDI, CVs, PID, Language Code, Country Names, Dates, Coverage Elements, Long Term Preservation and Licenses.

#### **Data Documentation Initiative (DDI)**

DDI is at the core of the CESSDA Metadata Model. DDI is a well-established metadata standard for describing data produced by surveys and other observational methods in the social, behavioural, economic, and health sciences<sup>2</sup>. Using DDI as the documentation standard allows metadata to be harvested and compared across different studies, archives and countries. The DDI includes its own Controlled Vocabularies<sup>3</sup> (CVs) and supports the import of external CVs. This enables the creation of indexing and search tools (such as the CESSDA Data Catalogue<sup>4</sup>), which increases the visibility and reusability of research data.

DDI Lifecycle has been used as the baseline for the CESSDA Metadata Model. The reason for this is twofold: first, to encourage Service Providers to follow CESSDA's policy of using the Lifecycle version whenever possible; second, to ease understanding of the various elements in the model. Even though DDI Lifecycle is the basis for the model, Service Providers are free to choose the tool and technical solution they want for implementing the CESSDA Metadata Model.

Please note that when asked to transfer metadata to the CESSDA Data Catalogue or the European Question Bank there will be technical requirements. Accepted formats for the CESSDA Data Catalogue and the European Question Bank will be updated on <a href="CESSDAs web sites">CESSDAs web sites</a>.

### Controlled Vocabularies (CVs) and ISO standards

The CESSDA Metadata Model utilizes Controlled Vocabularies (CVs) wherever possible. The CVs consist of predefined terms and their associated codes (if applicable) that are used for indexing and/or information retrieval. The terms are descriptive and human-readable, while the codes are designed for machine interoperability.

The CESSDA Metadata Portfolio contains DDI and CESSDA Controlled Vocabularies as well as ISO Standards (e.g., for dates and languages). When CVs are used in metadata, the recommendation is to include the value of the code, the descriptive term in the relevant language, the CV Name,

<sup>&</sup>lt;sup>2</sup> https://ddialliance.org/

<sup>&</sup>lt;sup>3</sup> <u>https://ddialliance.org/controlled-vocabularies</u>

<sup>4</sup> https://datacatalogue.cessda.eu/

version, and URI. The CV Name should be the name in the source language, that is, in the case of the CVs used in the CMM, in English.

CVs should be used consistently. Consistent use requires that if a vocabulary term is used, it is also documented according to the recommendations above, or that the Service Providers (SPs) can produce this documentation for harvesting. It is also crucial to pay close attention to term definitions to keep their use consistent within and across organizations. This enables them to be used as efficient filters in user interfaces.

To promote the use of CVs, specifically DDI and CESSDA CVs, the CESSDA Vocabulary Service<sup>5</sup> (CVS) has been developed by CESSDA. This tool provides an overview of all CVs included in the Model. All CVs are available in English, which is the source language, and SPs provide translations for their respective languages. The CVS provides information about:

- Code value for machine interoperability (only source language)
- Code descriptive term a human readable term of the code value (can be translated)
- Code definition a complete definition of the Code value and user guidelines (can be translated)

The CVs also includes version history with a detailed change log; URN information for the vocabulary version; Agency information; Usage guidelines for DDI 3.3, 3.2 and DDI 2.5; Licence and citation information and Export/download to SKOS-, PDF-, and HTML-formats.

The European Language Social Science Thesaurus <sup>6</sup>(ELSST) is also included in the Model. ELSST is a broad-based multilingual thesaurus covering key concepts in the social sciences. Concepts are represented via terms in each language, and ELSST is currently available in 16 languages. Each ELSST concept is also associated with a URI. Content is continually reviewed and updated by a multilingual team, so that ELSST can respond to changes in the social science research landscape. New versions are released on an annual basis. Currently only ELSST terms, and not their associated IDs, are used for metadata descriptions.

An overview of the CVs included in the model is found below. Whenever you use an element that has a CV specified in the model, it is mandatory to use the specified CV for that element.

#### DDI CVs

- Contributor Role
- Analysis Unit
- Time Method
- Mode of Collection
- Sampling Procedure
- Data Source Type
- Type of Instrument
- Summary Statistic Type

<sup>&</sup>lt;sup>5</sup> https://vocabularies.cessda.eu/

<sup>6</sup> https://elsst.cessda.eu/

#### **CESSDA CVs**

- ELSST
- Topic Classification
- Persistent Identifier Types
- Use of Note Field

#### Other CVs

info:eu-repo-Access-Terms vocabulary

For more information, see either the CDC Profiles or the attached CV Usage document which contains detailed information on the required content of controlled vocabulary elements included in the CESSDA Metadata Model. Further information is indicated in the explanatory tables below.

## **Persistent Identifier (PID)**

A persistent identifier (PID) is a globally unique, long-lasting reference to a digital object. Each CESSDA SP shall use persistent identifiers to identify their data holdings. Persistent identifiers are mandatory for CESSDA SPs. According to the CESSDA Data Access Policy, the use of PIDs for resource-discovery metadata is required as of 2020. Please adhere to the CESSDA ERIC PID Policy<sup>7</sup> and the CESSDA Data Access Policy<sup>8</sup>.

#### **Language Code**

One of the most important elements in the CESSDA Metadata Model is providing information about the language of the metadata. This information is central for tools such as the CESSDA Data Catalogue (CDC) and Euro Question Databank (EQB). These tools enable users to sort and categorize studies and questions based on language, it is therefore important that the language used for certain elements is documented.

For the language code, use the lowercase two-letter ISO 639-1 if the language is included in this code list. The recommendation is to use the language code and, only when absolutely necessary, combine the language code and the country code. Some of the elements relevant for EQB require the combined language-country-code information (as is indicated in the CMM). For example, for crossnational survey questions, it is possible to use the ISO language code (ISO 639-1 - lower case) and the ISO country code (ISO 3166 - upper case) separated by a hyphen: German as spoken in Austria can be indicated with the following combination: de-AT. This will enable German questions fielded in Austria to be distinguished from questions fielded in Germany and Switzerland in the EQB for instance.

#### **Country Code**

For country, use ISO code 3166-2 wherever possible. For DDI 2.5, the country code is entered into the abbr attribute. In DDI Codebook, the country name can also be added in the language of the

<sup>&</sup>lt;sup>7</sup> CESSDA ERIC Persistent Identifier Policy: <a href="https://doi.org/10.5281/zenodo.3611316">https://doi.org/10.5281/zenodo.3611316</a> and CESSDA ERIC Persistent Identifier Policy Best Practice Guidelines: <a href="https://doi.org/10.18448/16.0041">https://doi.org/10.18448/16.0041</a>

<sup>&</sup>lt;sup>8</sup> Bolton, Sharon. (2022). CESSDA Data Access Policy (Version 2). Zenodo. https://doi.org/10.5281/zenodo.6722000

metadata. Use full, official names e.g., United Kingdom instead of UK, United States of America instead of USA. CESSDA provides a <u>Country Names and Codes</u> vocabulary which is useful for harmonising country names in English.

#### **Dates**

Use the ISO 8601 standard to document dates. ISO 8601 describes an internationally accepted way to represent dates using numbers. Use either the full date, the month and year, or the year only:

- Full date and time: the complete calendar date plus time(zone) in the YYYY-MM-DD hh:mm:ss format, e.g., 2018-03-24T13:45:55-5:00
- Full date: the complete calendar date in the YYYY-MM-DD format, e.g., 2018-03-24
- Month and year: the date in the YYYY-MM format, e.g., 2018-03
- Year: the date in the YYYY format, e.g., 2018

## **Coverage Elements**

The geographical or temporal topic of the resource, the geographical applicability, or the authority/jurisdiction the resource is part of. These elements, e.g., "Topical", "Geographical", "Temporal", should be populated as fully as possible.

### **Long Term Preservation**

The CESSDA Metadata Management project phase 2 produced a recommendation for long-term preservation (LTP) metadata that built on METS<sup>9</sup>, PREMIS<sup>10</sup> and the Finnish national specifications for long-term digital preservation<sup>11</sup>. The LTP recommendation document can be found in the Supplementary Materials.

#### Licences

In CMM 3.0 elements for specifying licenses have now been added. These are divided in two categories, one for all information in the metadata, to be used if the same license can be applied to all. And separate elements for Study metadata, data files and questions, which enables specifying specific licenses if needed. The elements are:

- 1.4.4 Data License
- 1.4.5 Metadata License
- 6.3.2 Metadata License (questions)
- 11.1.6 Metadata License (all)

For metadata at Study-level the recommendation is to use a license as open as possible, ideally CCO. This will facilitate providing metadata included in the CESSDA Data Catalogue for other catalogues, for instance, in European Open Science Cloud.

<sup>&</sup>lt;sup>9</sup> http://www.loc.gov/standards/mets/

<sup>10</sup> http://www.loc.gov/standards/premis/v3/index.html

<sup>11</sup> http://digitalpreservation.fi/en/specifications

## **User Guidelines**

#### Notes about the CESSDA Metadata Model

- The CESSDA Metadata Model is based on the DDI Lifecycle though the names or definitions
  of elements may differ. In some cases, the names selected during the creation of the Model
  were considered more intuitive and appropriate than those in DDI. For instance, element 9.3
  uses the DDI element "CreatorReference" but is called "Author Name (reference)" in the
  Model.
- Funding refers to the act of providing financial resources. Surveys/projects can have more than one funding agency.
- Whenever possible, document the language of the metadata. You will find more information about this in the tables.
- Information on publications, further documents and instruments are separated in the CMM.
   Instrument has elements that are not applicable to information on publications and further documents.
- All referenceable elements in DDI Lifecycle include a persistent identifier in the form of a
  Uniform Resource Name (URN). Unfortunately, the URNs of the controlled vocabularies
  included in the CESSDA Vocabulary Service are not resolvable. This is challenging for services
  such as CDC and CESSDA metadata validator. Therefore, for now, the CMM instead proposes
  using Uniform Resource Locators (URL) as persistent identifiers for CVs so that they can be
  resolved, or a resolvable URI. URLs for CVs can be found at CESSDAs Vocabulary Service
  under "Identity and general".
  - o For other identifiers not related to CVs the recommendation is to use URN. SPs are free to use URNs for internal purposes for CVs, if they also provide URL/URI. For URN it is recommended to have both the URN and the combination of subclasses Agency, ID and Version as an identifier in DDI Lifecycle. However, it is also possible to use only the URN of the vocabulary version or only the combination as an identifier.
  - o If an SP is using DDI Lifecycle, the occurrence<sup>16</sup> is 1-2. If an SP is using Codebook, the occurrence is 0. If an SP using DDI Lifecycle has only the URN (or only the combination of Agency, ID and Version) as an identifier, the occurrence is 1. If an SP using DDI Lifecycle has both the URN and the combination of Agency, ID and Version as an identifier, the occurrence is 2.
- References to an individual or organization refer to IDs that have been given to individuals or organizations within the DDI-Lifecycle XML. These references do not refer to PIDs external to DDI (e.g., ORCID). Please note that DDI Codebook does not support referencing the way DDI Lifecycle does.
- For the CESSDA Topic Classification please use the descriptive term in metadata language.
   Instructions for using the descriptive terms in metadata:
  - O Always use the narrower term if possible.
  - O Broader terms (in capital letters in the vocabulary) are only to be used if none of the narrower terms are suitable or if there are no narrower terms.
  - When a narrower term is used, enter it in metadata on its own, without including the broader terms as well. Use sentence case for narrower and broader terms, that

- is, capital letter only in the beginning of the term, e.g., Occupational health, History, even if it were in capital letters in the vocabulary (e.g. HISTORY).
- DDI Lifecycle does not support language specification of controlled vocabularies descriptive terms. This is not a problem in monolingual records for CDC where only one xml:lang is needed for the record but in multilingual records CDC takes the language code of the parent element, if such an element is available.

## **The Tables**

The structure of the User Guidelines is in the format of a table. Each element and how to document it is described within its own table. The structure will be as follows:

| Number and element             | The number and name of the element in the User Guide, for example "1.1.2 Study Number" and "2.2 Person Name", refer to the number and name in the Model.   |
|--------------------------------|--|
| Child element(s)               | E.g., top element is "1. Study": "1.3 Methodical Information" is a child element of "1. Study" while "1.3.1 Time Method" is a child element of "1.3 Methodical Information".   |
| Description                    | Description of what the element refers to and what should be included within the metadata.   |
| Mandatory/Recommended/Optional | Information about the mandatoriness of an element. Please note for child elements: A parent element can be defined as 'recommended', but the use of a recommended element makes some of its child elements mandatory. E.g., "4. Information on Dataset" - "4.3 Variable" has status 'recommended', and "4.3.1.2 Variable Name" has status 'mandatory'. If you use element 4.3 for a variable, the variable must have a variable name (meaning, the element 4.3.1.2 must be used as well).  |
| Occurrence                     | The occurrence indicates cardinality/quantity constraints for the properties as follows:  0-n = optional or recommended and repeatable 0-1 = optional or recommended, but not repeatable 0-2 = optional or recommended, if used may occur once or twice 1-n = required and repeatable 1 = required, but not repeatable 1-2 = required, may occur once or twice  Some fields are mandatory elements. All (child) elements with an occurrence of 1-n, 1 or 1-2 are only mandatory if the parent element/container element is used. |
| Controlled vocabulary          | Information about what kind of controlled vocabulary is to be  |

|             | used. See the CDC profiles for more information.       |
|-------------|--|
| Usage notes | Additional information on how to document the element. |

# User Guide for the CESSDA Metadata Model 3.0

| List of Contents       |  |
|------------------------|--|
| Number and top element | <ol> <li>Information on Study</li> <li>Information on Persons</li> <li>Information on Organizations</li> <li>Information on Dataset</li> <li>Information on Instrument</li> <li>Information on Questions and Responses</li> <li>Information on Concepts</li> <li>Information on further Documents</li> <li>Information on Publications (publications where data have been used)</li> <li>Information on Group of Studies</li> <li>Information on Document Description ('metadata about metadata')</li> </ol> |

# 1. Information on Study

| Number and element             | 1. Study  |
|--------------------------------|---|
| Child element                  | 1.1 Bibliographic Information 1.2 Content Information 1.3 Methodical Information 1.4 Access Information |
| Description                    | Information on the study/studies. No metadata element.  |
| Mandatory/Recommended/Optional | Mandatory   |
| Occurrence                     | 1   |
| Controlled vocabulary          | -   |
| Usage notes                    | -   |

## Information on Study: Bibliographic Information

| Number and element             | 1.1 Bibliographic Information   |
|--------------------------------|---|
| Child element                  | 1.1.1 Study DDI Identifier  1.1.2 Study Number  1.1.3 Study Title  1.1.4 Subtitle  1.1.5 Alternative Title  1.1.6 Funding Information  1.1.7 Principal Investigator Reference  1.1.8 Publisher Reference (Institution)  1.1.9 Publication Date (controlled)  1.1.10 Study Version  1.1.11 Contributor Reference  1.1.12 Link to related Studies  1.1.13 Originating Archive (reference) |
| Description                    | Bibliographic information. No metadata element.   |
| Mandatory/Recommended/Optional | Mandatory   |
| Occurrence                     | 1   |
| Controlled vocabulary          | -   |
| Usage notes                    | -   |

| Number and element             | 1.1.1 Study DDI Identifier   |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | Identifier of the study according to DDI 3.2 structure. Either DDI URN or triple Agency, ID, Version need to be provided as information.   |
| Mandatory/Recommended/Optional | Mandatory for DDI-L  |
| Occurrence                     | 1-2 for DDI-L  |
| Controlled vocabulary          | -  |
| Usage notes                    | It is recommended to have both the URN and the combination of subclasses Agency, ID and Version as an identifier in DDI-L. However, it is possible to use only the URN or only the combination of Agency, ID and Version as an identifier. |

| Number and element             | 1.1.2 Study Number  |
|--------------------------------|---|
| Child element                  | 1.1.2.1 Agency Name of Study Number (reference)   |
| Description                    | Unique archival number  |
| Mandatory/Recommended/Optional | Mandatory   |
| Occurrence                     | 1-n   |
| Controlled vocabulary          | -   |
| Usage notes                    | E.g., NSD2567, FSD1292, SN 8090 (the examples are from NSD, FSD and UKDS). If there is no unique archival number available, a PID may be used alternatively (if a PID is used as study number, the information for this PID should however still be captured in the element 1.1.10.4 Study PID) |

| Number and element             | 1.1.2.1 Agency Name of Study Number (reference)    |
|--------------------------------|--|
| Child element                  | 1.1.2.1.1 Type of object for agency (for DDI-L)    |
| Description                    | Name of the institution providing the study number |
| Mandatory/Recommended/Optional | -  |
| Occurrence                     | -  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

| Number and element             | 1.1.2.1.1 Type of object for agency (for DDI-L)  |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | States the type of object being referenced based on a persistent list of valid DDI object types. |
| Mandatory/Recommended/Optional | Mandatory (for DDI-L)  |
| Occurrence                     | 1  |
| Controlled vocabulary          | TypeOfObject is "Organization"   |
| Usage notes                    | -  |

| Number and element             | 1.1.3 Study Title   |
|--------------------------------|---|
| Child element                  | 1.1.3.1 Language of Study Title 1.1.3.2 Translation status of Study Title |
| Description                    | Study title   |
| Mandatory/Recommended/Optional | Mandatory (CDC)   |
| Occurrence                     | 1-n   |
| Controlled vocabulary          | -   |
| Usage notes                    | -   |

| Number and element             | 1.1.3.1 Language of Study Title  |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | The language of the content of the element.                              |
| Mandatory/Recommended/Optional | Mandatory  |
| Occurrence                     | 1  |
| Controlled vocabulary          | -  |
| Usage notes                    | Use ISO 639-1. If you have used different languages, repeat the element. |

| Number and element             | 1.1.3.2 Translation Status of Study Title |
|--------------------------------|---|
| Child element                  | None                                      |
| Description                    | Is the content of the element translated? |
| Mandatory/Recommended/Optional | Recommended                               |
| Occurrence                     | 0-1                                       |
| Controlled vocabulary          | -   |
| Usage notes                    | True/false                                |

| Number and element             | 1.1.4 Subtitle  |
|--------------------------------|---|
| Child element                  | 1.1.4.1 Language of Subtitle 1.1.4.2 Translation Status of Subtitle |
| Description                    | Subtitle of the study   |
| Mandatory/Recommended/Optional | Optional  |
| Occurrence                     | 0-n   |
| Controlled vocabulary          | -   |
| Usage notes                    | -   |

| Number and element             | 1.1.4.1 Language of Subtitle   |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | The language of the content of the element.                              |
| Mandatory/Recommended/Optional | Mandatory  |
| Occurrence                     | 1  |
| Controlled vocabulary          | -  |
| Usage notes                    | Use ISO 639-1. If you have used different languages, repeat the element. |

| Number and element             | 1.1.4.2 Translation Status of Subtitle    |
|--------------------------------|---|
| Child element                  | None                                      |
| Description                    | Is the content of the element translated? |
| Mandatory/Recommended/Optional | Recommended                               |
| Occurrence                     | 0-1                                       |
| Controlled vocabulary          | -   |
| Usage notes                    | True/false                                |

| Number and element             | 1.1.5 Alternative Title   |
|--------------------------------|---|
| Child element                  | 1.1.5.1 Language of Alternative Title 1.1.5.2 Translation Status of Alternative Title |
| Description                    | Alternative title of the study.   |
| Mandatory/Recommended/Optional | Optional  |
| Occurrence                     | 0-n   |
| Controlled vocabulary          | -   |
| Usage notes                    | -   |

| Number and element             | 1.1.5.1 Language of Alternative Title                                    |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | The language of the content of the element.                              |
| Mandatory/Recommended/Optional | Mandatory  |
| Occurrence                     | 1  |
| Controlled vocabulary          | -  |
| Usage notes                    | Use ISO 639-1. If you have used different languages, repeat the element. |

| Number and element             | 1.1.5.2 Translation Status of Alternative Title |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | Is the content of the element translated?       |
| Mandatory/Recommended/Optional | Recommended                                     |
| Occurrence                     | 0-1   |
| Controlled vocabulary          | -   |
| Usage notes                    | True/false                                      |

| Number and element             | 1.1.6 Funding Information   |
|--------------------------------|---|
| Child element                  | 1.1.6.1 Funding Agency Reference 1.1.6.2 Grant Number 1.1.6.3 Grant Title 1.1.6.4 Funder Role |
| Description                    | No metadata element.  |
| Mandatory/Recommended/Optional | Optional  |
| Occurrence                     | 0-n   |
| Controlled Vocabulary          | -   |
| Usage notes                    | -   |

| Number and element             | 1.1.6.1 Funding Agency Reference  |
|--------------------------------|---|
| Child element                  | 1.1.6.1.1 Type of Funding Agency Reference (for DDI-L)  |
| Description                    | Reference to the funding agency (the agency which funded the described entity).   |
| Mandatory/Recommended/Optional | Optional  |
| Occurrence                     | 0-n   |
| Controlled vocabulary          | -   |
| Usage notes                    | It is recommended to have both the URN and the combination of subclasses Agency, ID and Version as a referenced identifier in DDI-L. However, it is also possible to use only the URN or only the combination as a referenced identifier. |

| Number and element             | 1.1.6.1.1 Type of Funding Agency Reference (for DDI-L)   |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | States the type of object being referenced based on a persistent list of valid DDI object types. |
| Mandatory/Recommended/Optional | Mandatory (for DDI-L)  |
| Occurrence                     | 1  |

| Controlled vocabulary | -                            |
|-----------------------|------------------------------|
| Usage notes           | TypeOfObject is Organization |

| Number and element             | 1.1.6.2 Grant Number  |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | The identification code of the grant or other monetary award which provided funding for the described object. |
| Mandatory/Recommended/Optional | Recommended   |
| Occurrence                     | 0-n   |
| Controlled vocabulary          | -   |
| Usage notes                    | -   |

| Number and element             | 1.1.6.3 Grant Title |
|--------------------------------|---------------------|
| Child element                  | None                |
| Description                    | Title of the grant. |
| Mandatory/Recommended/Optional | Recommended         |
| Occurrence                     | 0-n                 |
| Controlled vocabulary          | -                   |
| Usage notes                    | -                   |

| Number and element             | 1.1.6.4 Funder Role   |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | A brief textual description or classification of the funder's role. |
| Mandatory/Recommended/Optional | Optional  |
| Occurrence                     | 0-1   |
| Controlled vocabulary          | -   |

| Usage notes | - |
|-------------|---|
|-------------|---|

| Number and element             | 1.1.7 Principal Investigator Reference  |
|--------------------------------|---|
| Child element                  | 1.1.7.1 Principal Investigator (Person Reference) 1.1.7.2 Principal Investigator (Institution Reference)  |
| Description                    | Reference to individual/s and/or institution/s that is/are principal investigators. Principal Investigator/s is/are the main researchers involved in producing the data.  No metadata element. The metadata elements concerning the principal investigator are the elements 1.3.1.1. and 1.3.1.2  |
| Mandatory/Recommended/Optional | Mandatory   |
| Occurrence                     | 1-n   |
| Usage notes                    | In order to capture the information for this element we use the DDI 3.2 reference. This references the information that have been captured within the section 'Person' or 'Organization / Consortium' of the individuals or organizations that are considered Principal Investigators (see also XPath). The reference does not refer to any kind of outside DDI PID (like ORCID etc.) but means the ID that has been given to the individual/organization when capturing the metadata of that individual/organization within the DDI 3.2 XML. |

| Number and element             | 1.1.7.1 Principal Investigator (Person Reference)                                    |
|--------------------------------|--|
| Child element                  | 1.1.7.1.1 Type of Principal Investigator (Person Reference) (for DDI-L)              |
| Description                    | Reference to a person who is the principal investigator.                             |
| Mandatory/Recommended/Optional | Optional (Please note that there should be one organization or one person reference) |
| Occurrence                     | 0-2 for DDI-L  |
| Controlled vocabulary          | -  |

| Usage notes | The principal investigators are the main researchers involved in producing the data. For institution reference see 1.3.1.2 Principal Investigator (Institution Reference).  |
|-------------|---|
|             | If there is more than one person, please reference the different principal investigators in priority order within the XML. The order in which they are referenced will determine the order they appear in. If there is more than one person, repeat the parent element. It is recommended to have both the URN and the combination of subclasses Agency, ID and Version as a referenced identifier in DDI-L. However, it is also possible to use only the URN or only the combination as a referenced identifier. |
|             | Even if DDI-C does not have references it is possible to document Principal Investigator by using the field AuthEnty.   |

| Number and element             | 1.1.7.1.1 Type of Principal Investigator (Person Reference) (for DDI-L)                          |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | States the type of object being referenced based on a persistent list of valid DDI object types. |
| Mandatory/Recommended/Optional | Mandatory for DDI-L  |
| Occurrence                     | 1  |
| Controlled vocabulary          | -  |
| Usage notes                    | Type of object is individual.  |

| Number and element             | 1.1.7.2 Principal Investigator (Institution Reference)                               |
|--------------------------------|--|
| Child element                  | 1.1.7.2.1 Type of Principal Investigator (Institution Reference) (for DDI-L)         |
| Description                    | Reference to an organization that is a principal investigator.                       |
| Mandatory/Recommended/Optional | Optional (note that there must be at least one person or one organization reference) |
| Occurrence                     | 0-2 for DDI-L  |
| Controlled vocabulary          | -  |

| Usage notes | The principal investigators are the main researchers involved in producing the data. When there is not a person (or persons) who are the principal investigator(s) but an organization, then reference the organization. If there is more than one organization, repeat the parent element. It is recommended to have both the URN and the combination of subclasses Agency, ID and Version as a referenced identifier in DDI-L. However, it is also possible to use only the URN or only the combination as a referenced identifier. |
|-------------|---|
|             | Even if DDI-C does not have references it is possible to document Principal Investigator by using the field AuthEnty.   |

| Number and element             | 1.1.7.2.1 Type of Principal Investigator (Institution Reference) (for DDI-L)                     |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | States the type of object being referenced based on a persistent list of valid DDI object types. |
| Mandatory/Recommended/Optional | Mandatory for DDI-L  |
| Occurrence                     | 1  |
| Controlled vocabulary          | -  |
| Usage notes                    | Type of object is Organization.  |

| Number and element             | 1.1.8 Publisher Reference (Institution)   |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | A reference to the name of the institution publishing the metadata, i.e., the name of the actual CESSDA Service Provider providing the metadata information. Only on study level. |
| Mandatory/Recommended/Optional | Mandatory (CDC)   |
| Occurrence                     | 1-n   |
| Controlled vocabulary          | -   |
| Usage notes                    | Freetext. Name of the actual CESSDA Service Provider providing the metadata information. The name of the entity that holds, archives, publishes, prints, distributes, releases,   |

| issues, or produces the resource, e.g., Sikt – Norwegian |
|--|
| Agency for Shared Services in Education and Research.    |

| Number and element             | 1.1.9 Publication Date (controlled)  |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | Date (date-time combination (YYYY-MM-DDTHH:MM:SS), date (YYYY-MM-DD), year-month (YYYY-MM), year (YYYY)) of publication (by publisher) of the study.   |
| Mandatory/Recommended/Optional | Recommended  |
| Occurrence                     | 0-1  |
| Controlled vocabulary          | ISO8601  |
| Usage notes                    | Extract the year if only this is needed (e.g., citation). This element refers to the date (ISO 8601) when the data of the study was or will be made publicly available. If there is an embargo on the data in effect, use the date when the embargo period ends. |

| Number and element             | 1.1.10 Study Version   |
|--------------------------------|--|
| Child element                  | 1.1.10.1 Version Number of the Study (freetext) 1.1.10.2 Version Date of the Study (controlled) 1.1.10.3 Reason for Versioning the Study 1.1.10.4 Study PID 1.1.10.5 Study SPURL |
| Description                    | No metadata element.   |
| Mandatory/Recommended/Optional | Recommended  |
| Occurrence                     | 0-1  |
| Controlled vocabulary          | -  |

| Usage notes | - |
|-------------|---|
|             |   |

| Number and element             | 1.1.10.1 Version Number of the Study (freetext)  |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | Number of the version of the study (freetext).   |
| Mandatory/Recommended/Optional | Optional   |
| Occurrence                     | 0-1  |
| Controlled vocabulary          | -  |
| Usage notes                    | Freetext. Use this element to document the version of the study/resource. E.g., first version, second version etc. |

| Number and element             | 1.1.10.2 Version Date of the Study (controlled)                                      |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | The date of the version (by Service Provider)  |
| Mandatory/Recommended/Optional | Optional   |
| Occurrence                     | 0-1  |
| Controlled vocabulary          | -  |
| Usage notes                    | Use ISO 8601. The complete calendar date in the YYYY-MM-DD format, e.g., 2018-03-24. |

| Number and element             | 1.1.10.3 Reason for Versioning the Study                             |
|--------------------------------|--|
| Child element                  | 1.1.10.3.1 Language of Versioning Reason                             |
| Description                    | Textual description of the rationale/purpose for the version change. |
| Mandatory/Recommended/Optional | Optional   |
| Occurrence                     | 0-1  |

| Controlled vocabulary | -  |
|-----------------------|--|
| Usage notes           | Freetext. E.g., new variable added to dataset. |

| Number and element             | 1.1.10.3.1 Language of Versioning Reason  |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | The language of the textual description of the rationale/purpose for the version change |
| Mandatory/Recommended/Optional | Mandatory   |
| Occurrence                     | 1   |
| Controlled vocabulary          | ISO 639-1   |
| Usage notes                    | Use ISO 639-1 (Language Code)   |

| Number and element             | 1.1.10.4 Study PID   |
|--------------------------------|--|
| Child element                  | 1.1.10.4.1 Study PID Type<br>1.1.10.4.2 Study PID URL  |
| Description                    | PID of this study version.   |
| Mandatory/Recommended/Optional | Mandatory  |
| Occurrence                     | 1-n  |
| Controlled vocabulary          | -  |
| Usage notes                    | To capture information on PID(s) of the study. E.g. "DOI 10.XXXXXX". Please adhere to the CESSDA PID policy. |

| Number and element             | 1.1.10.4.1 Study PID Type  |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | The identification of the agency which assigns and manages the identifier. |
| Mandatory/Recommended/Optional | Mandatory  |

| Occurrence            | 1  |
|-----------------------|--|
| Controlled vocabulary | CESSDA Persistent Identifier Types   |
| Usage notes           | The following PID systems are accepted by CESSDA Tools and Services: DOI, Handle (including ePIC-handles), URN, ARK. As the type, enter the code value from the CV CESSDA Persistent Identifier Types. |

| Number and element             | 1.1.10.4.2 Study PID URL   |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | The URL of the PID.  |
| Mandatory/Recommended/Optional | Recommended  |
| Occurrence                     | 0-1  |
| Controlled vocabulary          | -  |
| Usage notes                    | The URL of the PID should be generated automatically by CESSDA Data Catalogue (CDC) (SPs don't need to provide it). But it is a valuable field for the users of CDC and hence should be displayed there. |

| Number and element             | 1.1.10.5 Study SPURL  |
|--------------------------------|---|
| Child element                  | 1.1.10.5.1 Language of Study SPURL  |
| Description                    | A URL or URN (a reference to a web resource that specifies its location) linking to the study on the SP website.  |
| Mandatory/Recommended/Optional | Mandatory   |
| Occurrence                     | 1-n   |
| Controlled vocabulary          | -   |
| Usage notes                    | This is the document the metadata refers to, i.e., URL of the study description at the Service Provider website. CDC and EQB provide a link from a study description to the study description on SP website. [Element not visible in the UI, only needed for the link]. |

| Number and element             | 1.1.10.5.1 Language of Study SPURL          |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | The language of the content of the element. |
| Mandatory/Recommended/Optional | Recommended                                 |
| Occurrence                     | 1   |
| Controlled vocabulary          | -   |
| Usage notes                    | -   |

| Number and element             | 1.1.11 Contributor Reference  |
|--------------------------------|---|
| Child element                  | 1.1.11.1 Contributor reference (Person) 1.1.11.2 Contributor reference (Institution) 1.1.11.3 Role of Contributor   |
| Description                    | No metadata element.  |
| Mandatory/Recommended/Optional | Optional  |
| Occurrence                     | 0-n   |
| Usage notes                    | In order to capture the information for this element we use the DDI-L reference. This references the information that have been captured within the section 'Person' or 'Institution' of the individuals or organizations that are considered Further Contributor (see also XPath). The reference does not refer to any kind of outside DDI PID (like ORCID etc.) but means the ID that has been given to the individual/organization when capturing the metadata of that individual/organization within the DDI-L XML. |

| Number and element             | 1.1.11.1. Contributor reference (Person)                      |
|--------------------------------|---|
| Child element                  | 1.1.11.1.1 Type of Contributor (Person Reference) (for DDI-L) |
| Description                    | Reference in XML to the person that is the contributor.       |
| Mandatory/Recommended/Optional | Optional  |

| Occurrence            | 0-2  |
|-----------------------|--|
| Controlled vocabulary | -  |
| Usage notes           | A contributor is a person or an institution that is responsible for collecting, managing, distributing or otherwise contributing to the development of the resource. It is any kind of contributor to the study, which is NOT the principal investigator - e.g. data collector, data manager, data depositor, project manager, sponsor etc.  In order to capture the information for this element we use the DDI-L reference. This references the information that have been captured within the section 'Person' or 'Institution' of the individuals or organizations that are considered Further Contributor (see also XPath). The reference does not refer to any kind of outside DDI PID (like ORCID etc.) but means the ID that has been given to the individual/organization when capturing the metadata of that individual/organization within the DDI-L XML. |

| Number and element             | 1.1.11.1.1 Type of Contributor (Person Reference) (for DDI-L)                                    |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | States the type of object being referenced based on a persistent list of valid DDI object types. |
| Mandatory/Recommended/Optional | Mandatory for DDI-L  |
| Occurrence                     | 1  |
| Controlled vocabulary          | -  |
| Usage notes                    | Type of object is Individual.  |

| Number and element             | 1.1.11.2 Contributor reference (Institution)                           |
|--------------------------------|--|
| Child element                  | 1.1.11.2.1 Type of Contributor (Institution Reference) (for DDI-<br>L) |
| Description                    | Reference in XML to the Institution that is the contributor.           |
| Mandatory/Recommended/Optional | Optional   |
| Occurrence                     | 0-2  |

| Controlled vocabulary | -  |
|-----------------------|--|
| Usage notes           | A contributor is a person or an institution responsible for collecting, managing, distributing or otherwise contributing to the development of the resource. It is any kind of contributor to the study, which is NOT the principal investigator, e.g. data collector, data manager, data depositor, project manager, sponsor etc. |

| Number and element             | 1.1.11.2.1 Type of Contributor (Institution Reference) (for DDI-L)                               |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | States the type of object being referenced based on a persistent list of valid DDI object types. |
| Mandatory/Recommended/Optional | Mandatory for DDI-L  |
| Occurrence                     | 1 for DDI-L  |
| Controlled vocabulary          | -  |
| Usage notes                    | Type of object is Organization   |

| Number and element             | 1.1.11.3 Role of Contributor   |
|--------------------------------|--|
| Child element                  | 1.1.11.3.1 Role of Contributor (controlled/descriptive) 1.1.11.3.2 Role of Contributor Vocabulary 1.1.11.3.3 Role of Contributor Vocabulary Agency 1.1.11.3.4 Role of Contributor Vocabulary URI |
| Description                    | [no metadata element]  |
| Mandatory/Recommended/Optional | Recommended  |
| Occurrence                     | 0-n  |
| Controlled vocabulary          | =  |
| Usage notes                    | -  |

| Child element                  | None  |
|--------------------------------|---|
| Description                    | Code value of the CV "DDI Contributor Role"                                 |
| Mandatory/Recommended/Optional | Mandatory   |
| Occurrence                     | 1   |
| Controlled vocabulary          | DDI Contributor Role  |
| Usage notes                    | Code value is used in DDI-L. In DDI-C descriptive term is used for element. |

| Number and element             | 1.1.11.3.2 Role of Contributor Vocabulary            |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | The name of the vocabulary used for Contributor Role |
| Mandatory/Recommended/Optional | Mandatory  |
| Occurrence                     | 1  |
| Controlled vocabulary          | DDI Contributor Role                                 |
| Usage notes                    | -  |

| Number and element             | 1.1.11.3.3 Role of Contributor Vocabulary Agency                        |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | The name of the agency maintaining the vocabulary for Contributor Role. |
| Mandatory/Recommended/Optional | Optional  |
| Occurrence                     | 0-1   |
| Controlled vocabulary          | -   |
| Usage notes                    | DDI Alliance  |

| Number and element             | 1.1.11.3.4 Role of Contributor Vocabulary URI            |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | URI (URN or URL) of the vocabulary for contributor role. |
| Mandatory/Recommended/Optional | Mandatory  |
| Occurrence                     | 1  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

| Number and element             | 1.1.12 Link to related Studies               |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | Possibility to document/link related studies |
| Mandatory/Recommended/Optional | Optional                                     |
| Occurrence                     | 0-n  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

| Number and element             | 1.1.13 Originating Archive (reference)   |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | Another archive that also has this dataset in its collection and/or has deposited this dataset to a CESSDA Service Provider. |
| Mandatory/Recommended/Optional | Optional   |
| Occurrence                     | 0-n  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

## Information on Study: Content Information

| Number and element             | 1.2 Content Information   |
|--------------------------------|---|
| Child element                  | 1.2.1 Abstract 1.2.2 Study Topic 1.2.3 Keyword (controlled/descriptive) 1.2.4 Data type 1.2.5 Data format 1.2.6 Discipline (freetext) |
| Description                    | No metadata element.  |
| Mandatory/Recommended/Optional | Recommended   |
| Occurrence                     | 0-1   |
| Controlled vocabulary          | -   |
| Usage notes                    | -   |

| Number and element             | 1.2.1 Abstract   |
|--------------------------------|--|
| Child element                  | 1.2.1.1 Language of Abstract   |
| Description                    | Abstract that describes the content(s) of the study.   |
| Mandatory/Recommended/Optional | Mandatory (CDC)  |
| Occurrence                     | 1-n  |
| Controlled vocabulary          | -  |
| Usage notes                    | Freetext. The abstract should describe the purpose, nature, and scope of the data collection, special characteristics of its contents, major subject areas covered, and questions investigated. The length may vary from study to study. |
|                                | Information for the CDC - content must be provided at least in English, if study is supposed to show up in the CDC - other additional languages are welcome.   |

| Number and element | 1.2.1.1 Language of Abstract |
|--------------------|------------------------------|
| Child element      | None                         |

| Description                    | The language of the content of the element.                              |
|--------------------------------|--|
| Mandatory/Recommended/Optional | Mandatory (CDC)  |
| Occurrence                     | 1  |
| Controlled vocabulary          | ISO 639-1  |
| Usage notes                    | Use ISO 639-1. If you have used different languages, repeat the element. |

| Number and element             | 1.2.2 Study Topic   |
|--------------------------------|---|
| Child element                  | 1.2.2.1 Study Topic (controlled/descriptive) 1.2.2.2 Topic Classification Vocabulary 1.2.2.3 Topic Classification Agency 1.2.2.4 Topic Classification URI |
| Description                    | No metadata element   |
| Mandatory/Recommended/Optional | Recommended   |
| Occurrence                     | 0-n   |
| Controlled vocabulary          | -   |
| Usage notes                    | -   |

| Number and element             | 1.2.2.1 Study Topic (controlled/descriptive)  |
|--------------------------------|---|
| Child element                  | 1.2.2.1.1 Language of Study Topic (descriptive term)  |
| Description                    | Code value or descriptive term of the CV "CESSDA Topic Classification" or other   |
| Mandatory/Recommended/Optional | Recommended   |
| Occurrence                     | 0-1   |
| Controlled vocabulary          | CESSDA Topic Classification or other  |
| Usage notes                    | For CESSDA Topic Classification please use the descriptive term in metadata language. Always use the narrower term, if possible, only use the broader term if no narrower term is suitable or if there are no narrower terms. When a narrower term is used, do not include the broader terms as well. Use |

| sentence case for both narrower and broader terms in           |
|--|
| metadata, that is, capital letter only in the beginning, e.g., |
| Occupational health, History. For further information please   |
| see the <u>CDC Profile</u> .                                   |
|  |

| Number and element             | 1.2.2.1.1 Language of Study Topic (Descriptive) |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | The language of the content of the element.     |
| Mandatory/Recommended/Optional | Mandatory                                       |
| Occurrence                     | 1   |
| Controlled vocabulary          | ISO 639-1                                       |
| Usage notes                    | Use ISO 639-1 (Language Code)                   |

| Number and element             | 1.2.2.2 Topic Classification Vocabulary   |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | The name of the used classification system.   |
| Mandatory/Recommended/Optional | Recommended   |
| Occurrence                     | 0-1   |
| Controlled vocabulary          | e.g., CESSDA Topic Classification   |
| Usage notes                    | Always include the name of the vocabulary used. If the CESSDA classification is used, use as vocabulary name 'CESSDA Topic Classification', regardless of metadata language'. |

| Number and element             | 1.2.2.3 Topic Classification Agency                    |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | The name of the agency maintaining the classification. |
| Mandatory/Recommended/Optional | Optional   |
| Occurrence                     | 0-1  |

| Controlled vocabulary | -  |
|-----------------------|--|
| Usage notes           | If CESSDA Topic Classification is used, use 'CESSDA'. If other vocabulary is used, list the agency maintaining it. |

| Number and element             | 1.2.2.4 Topic Classification URI |
|--------------------------------|----------------------------------|
| Child element                  | None                             |
| Description                    | URI of the Topic Classification. |
| Mandatory/Recommended/Optional | Recommended                      |
| Occurrence                     | 0-1                              |
| Controlled vocabulary          | -                                |
| Usage notes                    | -                                |

| Number and element             | 1.2.3 Keyword (controlled/descriptive)  |
|--------------------------------|---|
| Child element                  | 1.2.3.1 Language of Keyword (descriptive) 1.2.3.2 Keyword Vocabulary 1.2.3.3 Keyword Vocabulary Agency 1.2.3.4 Keyword Vocabulary URI                   |
| Description                    | Value of the code or descriptive term. Use descriptive term for ELSST. For other keywords it is optional to use the descriptive term or the value code. |
| Mandatory/Recommended/Optional | Recommended   |
| Occurrence                     | 0-n   |
| Controlled vocabulary          | ELSST   |
| Usage notes                    | Keywords from thesauri (preferably ELSST) or CVs, that specify the content of the study.  |

| Number and element             | 1.2.3.1 Language of Keyword (descriptive)   |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | The language of the content of the element. |
| Mandatory/Recommended/Optional | Mandatory                                   |

| Occurrence            | 1                             |
|-----------------------|-------------------------------|
| Controlled vocabulary | ISO 639-1                     |
| Usage notes           | Use ISO 639-1 (Language Code) |

| Number and element             | 1.2.3.2 Keyword Vocabulary   |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | The name of the used thesauri or system for keywords   |
| Mandatory/Recommended/Optional | Mandatory  |
| Occurrence                     | 1  |
| Controlled vocabulary          | e.g., ELSST (https://elsst.cessda.eu/id)   |
| Usage notes                    | The recommendation is to use ELSST, if possible. For further information please see the <u>CDC Profile</u> . |

| Number and element             | 1.2.3.3 Keyword Vocabulary Agency  |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | The name of the agency maintaining the keyword vocabulary  |
| Mandatory/Recommended/Optional | Optional   |
| Occurrence                     | 0-1  |
| Controlled vocabulary          | -  |
| Usage notes                    | If ELSST is used the agency is CESSDA. If another thesaurus or CV is used, insert the name of the agency maintaining that thesaurus or CV. |

| Number and element             | 1.2.3.4 Keyword Vocabulary URI          |
|--------------------------------|---|
| Child element                  | None                                    |
| Description                    | URI (URN or URL) of the keyword system. |
| Mandatory/Recommended/Optional | Optional                                |

| Occurrence            | 0-1                                   |
|-----------------------|---------------------------------------|
| Controlled vocabulary | -                                     |
| Usage notes           | For ELSST: https://elsst.cessda.eu/id |

| Number and element             | 1.2.4 Data type  |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | Information on the type of data, possible values are quantitative, qualitative or mixed. |
| Mandatory/Recommended/Optional | Recommended  |
| Occurrence                     | 0-1  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

| Number and element             | 1.2.5 Data format  |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | Information on data format, e.g., text/numeric/image OR social media data/survey data OR some other. |
| Mandatory/Recommended/Optional | Recommended  |
| Occurrence                     | 0-n  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

| Number and element             | 1.2.6 Discipline (freetext)                  |
|--------------------------------|--|
| Child element                  | 1.2.6.1 Language of discipline (freetext)    |
| Description                    | Describes the topical coverage of the study. |
| Mandatory/Recommended/Optional | Optional                                     |
| Occurrence                     | 0-n  |

| Controlled vocabulary | - |
|-----------------------|---|
| Usage notes           | - |

| Number and element             | 1.2.6.1 Language of discipline (freetext)   |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | The language of the content of the element. |
| Mandatory/Recommended/Optional | Mandatory                                   |
| Occurrence                     | 1   |
| Controlled vocabulary          | ISO 639-1                                   |
| Usage notes                    | -   |

## Information on Study: Methodical Information

| Number and element             | 1.3. Methodical Information  |
|--------------------------------|--|
| Child element                  | 1.3.1 Time Method 1.3.2 Study Area as a Country (controlled) 1.3.3 Study Area as a Country (freetext) 1.3.4 Universe (freetext) 1.3.5 Unit of Analysis 1.3.6 Sampling Information 1.3.7 Data Collection Period 1.3.8 Temporal Coverage |
| Description                    | No metadata element.   |
| Mandatory/Recommended/Optional | Recommended  |
| Occurrence                     | 0-1  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

| Number and element | 1.3.1 Time Method                |
|--------------------|----------------------------------|
| Child element      | 1.3.1.1 Time Method (controlled) |

|                                | 1.3.1.2 Time Method (descriptive) 1.3.1.3 Time Method Vocabulary 1.3.1.4 Time Method Vocabulary Agency 1.3.1.5 Time Method Vocabulary URI |
|--------------------------------|---|
| Description                    | No metadata element   |
| Mandatory/Recommended/Optional | Mandatory   |
| Occurrence                     | 1-n   |
| Controlled vocabulary          | -   |
| Usage notes                    | -   |

| Number and element             | 1.3.1.1 Time Method (controlled)   |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | Code value of the CV "DDI Time Method". Describes the time dimension of the data collection.   |
| Mandatory/Recommended/Optional | Recommended  |
| Occurrence                     | 0-1  |
| Controlled vocabulary          | DDI Time Method  |
| Usage notes                    | Use this element to describe the time dimension of the data collection. Controlled vocabulary includes a typology of time method e.g., longitudinal, time series, cross-section, other. For DDI-L use the code value. For DDI-C the descriptive term is used for the element content and code value is entered into the concept element. For further information please see the CDC Profile. |

| Number and element             | 1.3.1.2 Time Method (descriptive)               |
|--------------------------------|---|
| Child element                  | 1.3.1.2.1 Language of Time Method (descriptive) |
| Description                    | Descriptive term of the CV "DDI Time Method"    |
| Mandatory/Recommended/Optional | Recommended                                     |
| Occurrence                     | 0-1   |

| Controlled vocabulary | - |
|-----------------------|---|
| Usage notes           | - |

| Number and element             | 1.3.1.2.1 Language of Time Method (descriptive) |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | The language of the content of the element      |
| Mandatory/Recommended/Optional | Mandatory                                       |
| Occurrence                     | 1   |
| Controlled vocabulary          | ISO 639-1                                       |
| Usage notes                    | Use ISO 639-1 (Language Code)                   |

| Number and element             | 1.3.1.3 Time Method Vocabulary                    |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | The name of the vocabulary used for "Time Method" |
| Mandatory/Recommended/Optional | Recommended                                       |
| Occurrence                     | 0-1   |
| Controlled vocabulary          | DDI Time Method                                   |
| Usage notes                    | -   |

| Number and element             | 1.3.1.4 Time Method Vocabulary Agency                              |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | The name of the agency maintaining the vocabulary for Time Method. |
| Mandatory/Recommended/Optional | Optional   |
| Occurrence                     | 0-1  |

| Controlled vocabulary | -            |
|-----------------------|--------------|
| Usage notes           | DDI Alliance |

| Number and element             | 1.3.1.5 Time Method Vocabulary URI                    |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | URI (URN or URL) of the vocabulary for "Time Method". |
| Mandatory/Recommended/Optional | Recommended   |
| Occurrence                     | 0-1   |
| Controlled vocabulary          | -   |
| Usage notes                    | -   |

| Number and element             | 1.3.2 Study Area as a Country (controlled)  |
|--------------------------------|---|
| Child element                  | 1.3.2.1 Study Area Vocabulary 1.3.2.2 Study Area Vocabulary Agency 1.3.2.3 Study Area Vocabulary URI  |
| Description                    | Country in which the study took place.  |
| Mandatory/Recommended/Optional | Recommended   |
| Occurrence                     | 0-n   |
| Controlled vocabulary          | -   |
| Usage notes                    | Use ISO 3166-1 alpha 2. If that is not possible, use another ISO Code and state in the attribute which ISO-Code you are using. CDC recommends using both the free-text element and the code if the country is in the ISO 3166-1 alpha 2 list. If not in the code list, then use the free-text element only. |

| Number and element             | 1.3.2.1 Study Area Vocabulary                   |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | The name of the vocabulary used for study area. |
| Mandatory/Recommended/Optional | Recommended                                     |

| Occurrence            | 0-1                |
|-----------------------|--------------------|
| Controlled vocabulary | -                  |
| Usage notes           | ISO 3166-1 alpha 2 |

| Number and element             | 1.3.2.2 Study Area Vocabulary Agency                              |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | The name of the agency maintaining the vocabulary for study area. |
| Mandatory/Recommended/Optional | Optional  |
| Occurrence                     | 0-1   |
| Controlled vocabulary          | -   |
| Usage notes                    | -   |

| Number and element             | 1.3.2.3 Study Area Vocabulary URI                  |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | URI (URN or URL) of the vocabulary for study area. |
| Mandatory/Recommended/Optional | Optional   |
| Occurrence                     | 0-1  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

| Number and element             | 1.3.3 Study Area as a Country (freetext)          |
|--------------------------------|---|
| Child element                  | 1.3.3.1 Language of Study Area (freetext)         |
| Description                    | Country in which the study took place (freetext). |
| Mandatory/Recommended/Optional | Recommended                                       |
| Occurrence                     | 0-n   |

| Controlled vocabulary | - |
|-----------------------|---|
| Usage notes           | - |

| Number and element             | 1.3.3.1 Language of Study Area (freetext)   |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | The language of the content of the element. |
| Mandatory/Recommended/Optional | Mandatory                                   |
| Occurrence                     | 1   |
| Controlled vocabulary          | -   |
| Usage notes                    | Use ISO 639-1.                              |

| Number and element             | 1.3.4 Universe (freetext)  |
|--------------------------------|--|
| Child element                  | 1.3.4.1 Language of Universe (freetext) 1.3.4.2. Universe Specifications |
| Description                    | Description of the population of the study (freetext).                   |
| Mandatory/Recommended/Optional | Recommended  |
| Occurrence                     | 0-n  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

| Number and element             | 1.3.4.1. Language of Universe (freetext)    |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | The language of the content of the element. |
| Mandatory/Recommended/Optional | Mandatory                                   |
| Occurrence                     | 1   |
| Controlled vocabulary          | -   |
| Usage notes                    | Use ISO 639-1.                              |

| Number and element             | 1.3.4.2. Universe Specifications   |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | The default value is "true" in DDI-L. The description statement of a universe is generally stated in inclusive terms such as "All persons residing in Europe". Occasionally a universe is defined by what it excludes, i.e., "All persons residing in Europe except for those residing on U.S. Military bases". In this case the value would be changed to "false". In DDI-C, attribute states the inclusion/exclusion with values "I" and "E" respectively. |
| Mandatory/Recommended/Optional | Optional   |
| Occurrence                     | 0-1  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

| Number and element             | 1.3.5 Unit of Analysis  |
|--------------------------------|---|
| Child element                  | 1.3.5.1 Unit of Analysis (controlled) 1.3.5.2 Unit of Analysis (descriptive) 1.3.5.3 Unit of Analysis Vocabulary 1.3.5.4 Unit of Analysis Vocabulary Agency 1.3.5.5 Unit of Analysis Vocabulary URI |
| Description                    | No metadata element   |
| Mandatory/Recommended/Optional | Mandatory   |
| Occurrence                     | 1-n   |
| Controlled vocabulary          | =   |
| Usage notes                    | Description of the unit sampled, type of units in the dataset, e.g., individual, organization, household.   |

| Number and element | 1.3.5.1 Unit of Analysis (controlled)   |
|--------------------|---|
| Child element      | None  |
| Description        | Describes the entity being analysed in the study or in the variable. The unit sampled - type of units in the dataset, e.g., |

|                                | individual, organization.   |
|--------------------------------|---|
| Mandatory/Recommended/Optional | Mandatory   |
| Occurrence                     | 1   |
| Controlled vocabulary          | -   |
| Usage notes                    | Code value is used in DDI-L. In DDI-C descriptive term is used for element content and code value entered in concept element. |

| Number and element             | 1.3.5.2 Unit of Analysis (descriptive)                 |
|--------------------------------|--|
| Child element                  | 1.3.5.2.1 Language of Unit of Analysis (descriptive)   |
| Description                    | Descriptive Term of classification of unit of analysis |
| Mandatory/Recommended/Optional | Recommended  |
| Occurrence                     | 0-1  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

| Number and element             | 1.3.5.2.1 Language of Unit of Analysis (descriptive) |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | The language of the content of the element           |
| Mandatory/Recommended/Optional | Mandatory for DDI-C not for DDI-L                    |
| Occurrence                     | 1 for DDI-C  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

| Number and element | 1.3.5.3 Unit of Analysis Vocabulary                  |
|--------------------|--|
| Child element      | None   |
| Description        | The name of the vocabulary used for unit of analysis |

| Mandatory/Recommended/Optional | Mandatory         |
|--------------------------------|-------------------|
| Occurrence                     | 1                 |
| Controlled vocabulary          | DDI Analysis Unit |
| Usage notes                    | -                 |

| Number and element             | 1.3.5.4 Unit of Analysis Vocabulary Agency                              |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | The name of the agency maintaining the vocabulary for unit of analysis. |
| Mandatory/Recommended/Optional | Optional  |
| Occurrence                     | 0-1   |
| Controlled vocabulary          | -   |
| Usage notes                    | DDI Alliance  |

| Number and element             | 1.3.5.5 Unit of Analysis Vocabulary URI                  |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | URI (URN or URL) of the vocabulary for unit of analysis. |
| Mandatory/Recommended/Optional | Mandatory  |
| Occurrence                     | 1  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

| Number and element | 1.3.6 Sampling Information                 |
|--------------------|--|
| Child element      | 1.3.6.1 Type of Data Source                |
|                    | 1.3.6.2 Type of Sampling Procedure         |
|                    | 1.3.6.3 Sampling Procedure (freetext)      |
|                    | 1.3.6.4 Mode of Data Collection            |
|                    | 1.3.6.5 Mode of Data Collection (freetext) |
|                    | <b>1</b>                                   |

| Description                    | No metadata element. |
|--------------------------------|----------------------|
| Mandatory/Recommended/Optional | Recommended          |
| Occurrence                     | 0-n                  |
| Controlled vocabulary          | -                    |
| Usage notes                    | -                    |

| Number and element             | 1.3.6.1 Type of Data Source  |
|--------------------------------|--|
| Child element                  | 1.3.6.1.1 Type of Data Source (controlled) 1.3.6.1.2 Type of Data Source (descriptive) 1.3.6.1.3 Type of Data Source Vocabulary 1.3.6.1.4 Type of Data Source Vocabulary Agency 1.3.6.1.5 Type of Data Source Vocabulary URI |
| Description                    | No metadata element  |
| Mandatory/Recommended/Optional | Optional   |
| Occurrence                     | 0-n  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

| Number and element             | 1.3.6.1.1 Type of Data Source (controlled)  |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | Describes the data source (provides information on whether data are derived from register and/or survey data). Code value of the CV "DDI Data Source Type". |
| Mandatory/Recommended/Optional | Mandatory   |
| Occurrence                     | 1   |
| Controlled vocabulary          | DDI Data Source Type  |
| Usage notes                    | -   |

| Number and element             | 1.3.6.1.2 Type of Data Source (descriptive)                    |
|--------------------------------|--|
| Child element                  | 1.3.6.1.2.1 Language of Type of Data Source (Descriptive Term) |
| Description                    | Descriptive term of the CV "DDI Data Source Type"              |
| Mandatory/Recommended/Optional | Recommended  |
| Occurrence                     | 0-1  |
| Controlled vocabulary          | -  |
| Usage notes                    | Descriptive term (from vocabulary)                             |

| Number and element             | 1.3.6.1.2.1 Language of Type of Data Source (descriptive) |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | The language of the content of the element                |
| Mandatory/Recommended/Optional | Mandatory   |
| Occurrence                     | 1   |
| Controlled vocabulary          | -   |
| Usage notes                    | Use ISO 639-1 (Language Code)                             |

| Number and element             | 1.3.6.1.3 Type of Data Source Vocabulary                |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | The name of the vocabulary used for Type of Data Source |
| Mandatory/Recommended/Optional | Mandatory   |
| Occurrence                     | 1   |
| Controlled vocabulary          | DDI Data Source Type                                    |
| Usage notes                    | -   |

| Number and element             | 1.3.6.1.4 Type of Data Source Vocabulary Agency                           |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | The name of the agency maintaining the vocabulary for Type of Data Source |
| Mandatory/Recommended/Optional | Optional  |
| Occurrence                     | 0-1   |
| Controlled vocabulary          | -   |
| Usage notes                    | DDI Alliance  |

| Number and element             | 1.3.6.1.5 Type of Data Source Vocabulary URI               |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | URI (URN or URL) of the vocabulary for "Data Source Type". |
| Mandatory/Recommended/Optional | Mandatory  |
| Occurrence                     | 1  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

| Number and element             | 1.3.6.2 Type of Sampling Procedure  |
|--------------------------------|---|
| Child element                  | 1.3.6.2.1 Type of Sampling Procedure (controlled) 1.3.6.2.2 Type of Sampling Procedure (descriptive) 1.3.6.2.3 Type of Sampling Procedure Vocabulary 1.3.6.2.4 Type of Sampling Procedure Vocabulary Agency 1.3.6.2.5 Type of Sampling Procedure Vocabulary URI |
| Description                    | No metadata element.  |
| Mandatory/Recommended/Optional | Mandatory   |
| Occurrence                     | 1-n   |
|                                |   |
| Controlled vocabulary          | -   |

| Number and element             | 1.3.6.2.1 Type of Sampling Procedure (controlled)   |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | Type of sampling procedure used for data collection. Controlled vocabulary includes a typology of sampling methods. Code value of the CV "DDI Sampling Procedure".  |
| Mandatory/Recommended/Optional | Recommended   |
| Occurrence                     | 1   |
| Controlled vocabulary          | DDI Sampling Procedure  |
| Usage notes                    | In many cases, users would benefit from having a more detailed description of the sampling procedure used. For DDI-L use the code value. For DDI-C the descriptive term can be entered as element content, preferably in the beginning of it. Additional, more detailed freetext description of the sampling procedure can be added as content. The code value is entered into 'concept'. For further information please see the CDC Profile. |

| Number and element             | 1.3.6.2.2 Type of Sampling Procedure (descriptive)  |
|--------------------------------|---|
| Child element                  | 1.3.6.2.2.1 Language of Type of Sampling Procedure  |
| Description                    | Descriptive term of the CV "DDI Sampling Procedure" |
| Mandatory/Recommended/Optional | Recommended   |
| Occurrence                     | 0-1   |
| Controlled vocabulary          | -   |
| Usage notes                    | Descriptive term (from vocabulary)                  |

| Number and element             | 1.3.6.2.2.1 Language of Type of Sampling Procedure |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | The language of the content of the element         |
| Mandatory/Recommended/Optional | Mandatory  |

| Occurrence            | 1                             |
|-----------------------|-------------------------------|
| Controlled vocabulary | -                             |
| Usage notes           | Use ISO 639-1 (Language Code) |

| Number and element             | 1.3.6.2.3 Type of Sampling Procedure Vocabulary         |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | The name of the used vocabulary for sampling procedure. |
| Mandatory/Recommended/Optional | Recommended   |
| Occurrence                     | 0-1   |
| Controlled vocabulary          | DDI Sampling Procedure                                  |
| Usage notes                    | -   |

| Number and element             | 1.3.6.2.4 Type of Sampling Procedure Vocabulary Agency                   |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | The name of the agency maintaining the vocabulary for Sampling Procedure |
| Mandatory/Recommended/Optional | Optional   |
| Occurrence                     | 0-1  |
| Controlled vocabulary          | -  |
| Usage notes                    | DDI Alliance   |

| Number and element             | 1.3.6.2.5 Type of Sampling Procedure Vocabulary URI          |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | URI (URN or URL) of the vocabulary for "Sampling Procedure". |
| Mandatory/Recommended/Optional | Recommended  |
| Occurrence                     | 0-1  |
| Controlled vocabulary          | -  |

| Usage notes | - |
|-------------|---|
|-------------|---|

| Number and element             | 1.3.6.3 Sampling Procedure (freetext)   |
|--------------------------------|---|
| Child element                  | 1.3.6.3.1 Language of Sampling Procedure (freetext)   |
| Description                    | Freetext description of the type of sampling procedure used for data collection. (In case additional information needs to be provided that cannot be covered with the categories of the CV) |
| Mandatory/Recommended/Optional | Optional  |
| Occurrence                     | 0-n   |
| Controlled vocabulary          | -   |
| Usage notes                    | Use in case additional information needs to be provided that cannot be covered with the categories of the CV. Either 1.3.6.2 (CV) or 1.3.6.3 (freetext) should be provided, or both.        |

| Number and element             | 1.3.6.3.1 Language of Sampling Procedure (freetext)                      |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | The language of the content of the element.                              |
| Mandatory/Recommended/Optional | Mandatory  |
| Occurrence                     | 1  |
| Controlled vocabulary          |  |
| Usage notes                    | Use ISO 639-1. If you have used different languages, repeat the element. |

| Number and element | 1.3.6.4 Mode of Data Collection  |
|--------------------|--|
| Child element      | 1.3.6.4.1 Mode of Data Collection (controlled) 1.3.6.4.2 Mode of Data Collection (descriptive) 1.3.6.4.3 Mode of Data Collection Vocabulary 1.3.6.4.4 Mode of Data Collection Vocabulary Agency 1.3.6.4.5 Mode of Data Collection Vocabulary URI |
| Description        | No metadata element  |

| Mandatory/Recommended/Optional | Mandatory |
|--------------------------------|-----------|
| Occurrence                     | 1-n       |
| Controlled vocabulary          | -         |
| Usage notes                    | -         |

| Number and element             | 1.3.6.4.1 Mode of Data Collection (controlled)   |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | Description of the method of data collection, the procedure, technique, or mode of inquiry used to attain the data. Code value of the CV "DDI Mode of Data Collection".  |
| Mandatory/Recommended/Optional | Recommended  |
| Occurrence                     | 0-1  |
| Controlled vocabulary          | DDI Mode Of Collection   |
| Usage notes                    | Enter the method(s) used in the data collection in the survey. Controlled vocabulary includes a typology of mode of collection. For DDI-L use the code value. For DDI-C the descriptive term is used for the element content and code value is entered into 'concept'. For further information please see the CDC Profile. |

| Number and element             | 1.3.6.4.2 Mode of Data Collection (descriptive)                    |
|--------------------------------|--|
| Child element                  | 1.3.6.4.2.1 Language of Mode of Data Collection (Descriptive Term) |
| Description                    | Descriptive term of the CV "DDI Mode of Data Collection"           |
| Mandatory/Recommended/Optional | Recommended  |
| Occurrence                     | 0-1  |
| Controlled vocabulary          | -  |
| Usage notes                    | Descriptive term (from vocabulary)                                 |

| Number and element             | 1.3.6.4.2.1 Language of Mode of Data Collection (Descriptive Term) |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | The language of the content of the element                         |
| Mandatory/Recommended/Optional | Mandatory  |
| Occurrence                     | 1  |
| Controlled vocabulary          | -  |
| Usage notes                    | Use ISO 639-1 (Language Code)                                      |

| Number and element             | 1.3.6.4.3 Mode of Data Collection Vocabulary                   |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | The name of the used vocabulary for "Mode of Data Collection". |
| Mandatory/Recommended/Optional | Recommended  |
| Occurrence                     | 0-1  |
| Controlled vocabulary          | DDI Mode of Collection   |
| Usage notes                    | -  |

| Number and element             | 1.3.6.4.4 Mode of Data Collection Vocabulary Agency                             |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | The name of the agency maintaining the vocabulary for "Mode of Data Collection" |
| Mandatory/Recommended/Optional | Optional  |
| Occurrence                     | 0-1   |
| Controlled vocabulary          | -   |
| Usage notes                    | DDI Alliance  |

| Number and element             | 1.3.6.4.5 Mode of Data Collection Vocabulary URI                  |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | URI (URN or URL) of the vocabulary for "Mode of Data Collection". |
| Mandatory/Recommended/Optional | Recommended   |
| Occurrence                     | 0-1   |
| Controlled vocabulary          | -   |
| Usage notes                    | -   |

| Number and element             | 1.3.6.5 Mode of Data Collection (freetext)  |
|--------------------------------|---|
| Child element                  | 1.3.6.5.1 Language of Mode of Data Collection (freetext)  |
| Description                    | Freetext element for the description of the method of data collection - the procedure, technique, or mode of inquiry used to attain the data. |
| Mandatory/Recommended/Optional | Optional  |
| Occurrence                     | 0-n   |
| Controlled vocabulary          | -   |
| Usage notes                    | Freetext.   |

| Number and element             | 1.3.6.5.1 Language of Mode of Data Collection (freetext)        |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | The language of the content of the element.                     |
| Mandatory/Recommended/Optional | Mandatory   |
| Occurrence                     | 1   |
| Controlled vocabulary          | -   |
| Usage notes                    | Use ISO 639-1. If you have used different languages, repeat the |

| element. |
|----------|
|          |

| Number and element             | 1.3.7 Data Collection Period   |
|--------------------------------|--|
| Child element                  | 1.3.7.1 Data Collection Period Startdate (controlled) 1.3.7.2 Data Collection Period Enddate (controlled) 1.3.7.3 Data Collection Single Date (controlled) 1.3.7.4 Data Collection Period (freetext) |
| Description                    | No metadata element.   |
| Mandatory/Recommended/Optional | Recommended  |
| Occurrence                     | 0-n  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

| Number and element             | 1.3.7.1 Data Collection Period Startdate (controlled)   |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | Start of data collection (if there are multiple start dates, use the first date): The complete calendar date with the structure YYYY-MM-DD e.g., 2018-03-24.  |
| Mandatory/Recommended/Optional | Recommended   |
| Occurrence                     | 0-n   |
| Controlled vocabulary          | -   |
| Usage notes                    | Use ISO 8601. If there are multiple start dates, use the first date. If there is only one date available, use element 1.3.7.3.  Use either the full date, the month and year or the year only. The complete calendar date in the YYYY-MM-DD format, e.g., 2018-03-24. Month and year: the date in the YYYY-MM format, e.g., 2018-03. Year: the date in the YYYY format, e.g., 2018. |

| Number and element | 1.3.7.2 Data Collection Period Enddate (controlled) |
|--------------------|---|
|--------------------|---|

| Child element                  | None  |
|--------------------------------|---|
| Description                    | End of data collection (if there are multiple end dates, use the last): The complete calendar date with the structure YYYY-MM-DD, e.g., 2018-03-24.   |
| Mandatory/Recommended/Optional | Recommended   |
| Occurrence                     | 0-n   |
| Controlled vocabulary          | -   |
| Usage notes                    | This element is mandatory if the data collection period has already ended and the Data Collection Period Startdate is used. Use ISO 8601. If there are multiple end dates, use the last date. If there is only one single date available for the date of collection (e.g., month and year but no start and end dates), use element 1.3.7.3. Use either the full date, the month and year or the year only. The complete calendar date in the YYYY-MM-DD format, e.g., 2018-03-24. Month and year: the date in the YYYY-MM format, e.g., 2018-03. Year: the date in the YYYY format, e.g., 2018. |

| Number and element             | 1.3.7.3 Data Collection Single Date (controlled)   |
|--------------------------------|--|
| Child element                  | -  |
| Description                    | If there is only one date available concerning the data collection this element is to be used. A single point in time. If a duration is expressed as a "SimpleDate", it is defining a period of time without a designated Start or End date. |
| Mandatory/Recommended/Optional | Optional   |
| Occurrence                     | 0-n  |
| Controlled vocabulary          | -  |
| Usage notes                    | Use ISO 8601. The complete calendar date in the YYYY-MM-DD format, e.g., 2018-03-24. Month and year: the date in the YYYY-MM format, e.g., 2018-03. Year: the date in the YYYY format, e.g., 2018.   |

| Number and element | 1.3.7.4 Data Collection Period (freetext)   |
|--------------------|---|
| Child element      | 1.3.7.4.1 Language of Data Collection Period (freetext) 1.3.7.4.2 Type of Data Collection Situation |
| Description        | Freetext element to the period of the data collection.  |

| Mandatory/Recommended/Optional | Optional  |
|--------------------------------|-----------|
| Occurrence                     | 0-n       |
| Controlled vocabulary          | -         |
| Usage notes                    | Freetext. |

| Number and element             | 1.3.7.4.1 Language of Data Collection Period (freetext)                  |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | The language of the content of the element.                              |
| Mandatory/Recommended/Optional | Mandatory  |
| Occurrence                     | 1  |
| Controlled vocabulary          | -  |
| Usage notes                    | Use ISO 639-1. If you have used different languages, repeat the element. |

| Number and element             | 1.3.7.4.2 Type of Data Collection Situation  |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | Description that the type of data collection is freetext field for the data collection period. |
| Mandatory/Recommended/Optional | Optional   |
| Occurrence                     | 0-n  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

| Number and element             | 1.3.8 Temporal Coverage   |
|--------------------------------|---|
| Child element                  | 1.3.8.1 Temporal Coverage Simple Date 1.3.8.2 Temporal Coverage Start Date 1.3.8.3 Temporal Coverage End Date |
| Description                    | The time period to which the data refer.  |
| Mandatory/Recommended/Optional | Optional  |

| Occurrence            | 0-n |
|-----------------------|-----|
| Controlled vocabulary | -   |
| Usage notes           | -   |

| Number and element             | 1.3.8.1 Temporal Coverage Simple Date  |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | A single point in time. If a duration is expressed as a SimpleDate it is defining a period of time without a designated start or end date. |
| Mandatory/Recommended/Optional | Optional   |
| Occurrence                     | 0-n  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

| Number and element             | 1.3.8.2 Temporal Coverage Start Date  |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | Start of a date range. A start date may be provided without a corresponding end date. This indicates that the date is intended to be a range and the end date is currently unknown. |
| Mandatory/Recommended/Optional | Optional  |
| Occurrence                     | 0-n   |
| Controlled vocabulary          | -   |
| Usage notes                    | -   |

| Number and element | 1.3.8.3 Temporal Coverage End Date   |
|--------------------|--|
| Child element      | None   |
| Description        | The end date of a range for which the start date is unknown. For example, an embargo may have only an end date. In some cases, only the end date is known. This implies that the start |

|                                | date is unknown but the date being recorded is not just a simple date but a range of unknown duration with a known end date. |
|--------------------------------|--|
| Mandatory/Recommended/Optional | Optional   |
| Occurrence                     | 0-n  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

## Information on Study: Legal Information

| Number and element             | 1.4 Access Information  |
|--------------------------------|---|
| Child element                  | 1.4.1 Data Access (controlled) 1.4.2 Data Access Conditions 1.4.3 Metadata Access Conditions (Study) 1.4.4 Data License 1.4.5 Metadata License (Study) 1.4.6 Information about application form (especially for the ARIA project) |
| Description                    | Access Information. No metadata element.  |
| Mandatory/Recommended/Optional | Mandatory   |
| Occurrence                     | 1-n   |
| Controlled vocabulary          | -   |
| Usage notes                    | -   |

| Number and element             | 1.4.1 Data Access (controlled)  |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | Controlled description of the data access (open access vs. restricted access). The attribute 'context' holds the name of the vocabulary 'OpenAIRE'. |
| Mandatory/Recommended/Optional | Mandatory   |

| Occurrence            | 1-n                                  |
|-----------------------|--------------------------------------|
| Controlled vocabulary | info:eu-repo-Access-Terms vocabulary |
| Usage notes           | -                                    |

| Number and element             | 1.4.2 Data Access Conditions  |
|--------------------------------|---|
| Child element                  | 1.4.2.1 Language of Data Access Conditions  |
| Description                    | If the preserved content is subject to any access restrictions, those must be expressed in as much detail as possible in the information package in accordance with cataloguing rules and metadata formats used.  |
| Mandatory/Recommended/Optional | Optional  |
| Occurrence                     | 0-n   |
| Controlled vocabulary          | -   |
| Usage notes                    | Examples of such restrictions are the copyright status, usage restrictions based on legislation, a licence, or other agreement concerning the content usage. Should the information package contain several digital objects with different restrictions, these restrictions should be attached correctly and individually to those objects that the restrictions concern. |

| Number and element             | 1.4.2.1 Language of Data Access Conditions                               |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | The language of the content of the element.                              |
| Mandatory/Recommended/Optional | Mandatory  |
| Occurrence                     | 1  |
| Controlled vocabulary          | -  |
| Usage notes                    | Use ISO 639-1. If you have used different languages, repeat the element. |

| Number and element             | 1.4.3 Metadata Access Conditions (Study)   |
|--------------------------------|--|
| Child element                  | 1.4.3.1 Language of Metadata Access Conditions (Study)   |
| Description                    | Freetext description on the metadata access conditions for the provided metadata for the study-related information only.                                   |
| Mandatory/Recommended/Optional | Recommended  |
| Occurrence                     | 0-1  |
| Controlled vocabulary          | -  |
| Usage notes                    | Examples of such conditions are the copyright status, usage regulations based on legislation, a license, or other agreement concerning the metadata usage. |

| Number and element             | 1.4.3.1 Language of Metadata Access Conditions (Study)                   |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | The language of the content of the element                               |
| Mandatory/Recommended/Optional | Mandatory  |
| Occurrence                     | 1  |
| Controlled vocabulary          | -  |
| Usage notes                    | Use ISO 639-1. If you have used different languages, repeat the element. |

| Number and element             | 1.4.4 Data License                      |
|--------------------------------|---|
| Child element                  | None                                    |
| Description                    | Information on the license of the data. |
| Mandatory/Recommended/Optional | Recommended                             |
| Occurrence                     | 0-1                                     |
| Controlled vocabulary          | -                                       |

| Usage notes | - |
|-------------|---|
|-------------|---|

| Number and element             | 1.4.5 Metadata License (Study)              |
|--------------------------------|---|
| Child element                  | None  |
|                                |   |
| Description                    | Information on the license of the metadata. |
| Mandatory/Recommended/Optional | Recommended                                 |
| Occurrence                     | 0-n   |
| Controlled vocabulary          | -   |
| Usage notes                    | -   |

| Number and element             | 1.4.6 Information about application form (especially for the ARIA project)   |
|--------------------------------|--|
| Child element                  | 1.4.6.1 Label of the application form or information about application form or application process  1.4.6.2 Form identifier (plain ARIA-ID)  1.4.6.3 URL of the application form |
| Description                    | [no metadata element]  |
| Mandatory/Recommended/Optional | Optional   |
| Occurrence                     | 0-n  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

| Number and element             | 1.4.6.1 Label of the application form or information about application form or application process                   |
|--------------------------------|--|
| Child element                  | 1.4.6.1.1 Language of the label of the application form or information about application form or application process |
| Description                    | Label of the application form or information about application form or application process                           |
| Mandatory/Recommended/Optional | Optional   |

| Occurrence            | - |
|-----------------------|---|
| Controlled vocabulary | - |
| Usage notes           | - |

| Number and element             | 1.4.6.1.1 Language of the label of the application form or information about application form or application process |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | Language of the label of the application form or information about application form or application process.          |
| Mandatory/Recommended/Optional | Mandatory  |
| Occurrence                     | 1  |
| Controlled vocabulary          | ISO 639-1  |
| Usage notes                    | -  |

| Number and element             | 1.4.6.2 Form identifier (plain ARIA-ID) |
|--------------------------------|---|
| Child element                  | None                                    |
|                                |   |
| Description                    | Form identifier (plain ARIA-ID).        |
| Mandatory/Recommended/Optional | Optional                                |
| Occurrence                     | -                                       |
| Controlled vocabulary          | -                                       |
| Usage notes                    | -                                       |

| Number and element | 1.4.6.3 URL of the application form |
|--------------------|-------------------------------------|
| Child element      | None                                |
| Description        | URL of the application form.        |

| Mandatory/Recommended/Optional | Optional |
|--------------------------------|----------|
| Occurrence                     | -        |
| Controlled vocabulary          | -        |
| Usage notes                    | -        |

## 2. Information on Person(s)

| Number and element             | 2. Person  |
|--------------------------------|--|
| Child element                  | 2.1 Person DDI Identifier 2.2 Person Name 2.3 Associated organization 2.4 Person PID |
| Description                    | No metadata element. Information on individual(s).                                   |
| Mandatory/Recommended/Optional | Recommended  |
| Occurrence                     | 0-n  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

| Number and element             | 2.1 Person DDI Identifier   |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | Identifier of the person (individual) according to DDI-L structure. ID that can be used in references related to this individual (e.g. in relations). |
| Mandatory/Recommended/Optional | Mandatory for DDI-L   |
| Occurrence                     | 1-2 for DDI-L   |
| Controlled vocabulary          | -   |

| Usage notes | It is recommended to have both the URI and the combination of subclasses Agency, ID and Version as an identifier in DDI-L. |
|-------------|--|
|             | However, it is possible to use only the URI or only the combination of Agency, ID and Version as an identifier.            |

| Number and element             | 2.2 Person Name   |
|--------------------------------|---|
| Child element                  | 2.2.1 Person: First Given Name 2.2.2 Person: Middle Name 2.2.3 Person: Last / Family Name |
| Description                    | No metadata element. Name of the person the metadata information refers to.               |
| Mandatory/Recommended/Optional | Mandatory   |
| Occurrence                     | 1   |
| Controlled vocabulary          | -   |
| Usage notes                    | Freetext. DDI-L specific to separate persons and institutions and to reference them.      |

| Number and element             | 2.2.1 Person: First Given Name |
|--------------------------------|--------------------------------|
| Child element                  | None                           |
| Description                    | First given name of a person.  |
| Mandatory/Recommended/Optional | Mandatory                      |
| Occurrence                     | 1                              |
| Controlled vocabulary          | -                              |
| Usage notes                    | Freetext.                      |

| Number and element             | 2.2.2 Person: Middle Name |
|--------------------------------|---------------------------|
| Child element                  | None                      |
| Description                    | Middle name of a person.  |
| Mandatory/Recommended/Optional | Optional                  |

| Occurrence            | 0-1       |
|-----------------------|-----------|
| Controlled vocabulary | -         |
| Usage notes           | Freetext. |

| Number and element             | 2.2.3 Person: Last / Family Name |
|--------------------------------|----------------------------------|
| Child element                  | None                             |
| Description                    | Last/family name of a person.    |
| Mandatory/Recommended/Optional | Mandatory                        |
| Occurrence                     | 1                                |
| Controlled vocabulary          | -                                |
| Usage notes                    | Freetext.                        |

| Number and element             | 2.3 Associated organization   |
|--------------------------------|---|
| Child element                  | 2.3.1 Associated Organization (Individual) Reference 2.3.2 Role of the Target Object (Organization) in this Relation 2.3.3 Associated Organization (Organization) |
| Description                    | No metadata element. Describes the organization affiliated to the person.   |
| Mandatory/Recommended/Optional | Optional  |
| Occurrence                     | 0-n   |
| Controlled vocabulary          | -   |
| Usage notes                    | -   |

| Number and element | 2.3.1 Associated Organization (Individual) Reference             |
|--------------------|--|
| Child element      | 2.3.1.1 Type of Associated Organization (Individual) (for DDI-L) |
| Description        | Reference to organization that is affiliation to the person.     |

| Mandatory/Recommended/Optional | Mandatory for DDI-L   |
|--------------------------------|---|
| Occurrence                     | 1-2 for DDI-L   |
| Controlled vocabulary          | -   |
| Usage notes                    | DDI-L specific to separate persons and institutions and to reference them. In DDI-L you need to create relation between referenced source object (individual) and referenced target object (organization) to affiliate organization and individual (person) together. |
|                                | It is recommended to have both the URN and the combination of subclasses Agency, ID and Version as a referenced identifier in DDI 3.2. However, it is also possible to use only the URN or only the combination as a referenced identifier.                           |

| Number and element             | 2.3.1.1 Type of Associated Organization (Individual) (for DDI-L)                                 |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | States the type of object being referenced based on a persistent list of valid DDI object types. |
| Mandatory/Recommended/Optional | Mandatory for DDI-L.   |
| Occurrence                     | 1  |
| Controlled vocabulary          | -  |
| Usage notes                    | Type of object is Individual   |

| Number and element             | 2.3.2 Role of the Target Object (Organization) in this Relation       |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | Identifies the target organization or individual in the relationship. |
| Mandatory/Recommended/Optional | Mandatory for DDI-L   |
| Occurrence                     | 1   |
| Controlled vocabulary          | -   |
| Usage notes                    | Role of the target object (organization) is affiliation.              |

| Number and element             | 2.3.3 Associated Organization (Organization)  |
|--------------------------------|---|
| Child element                  | 2.3.3.1 Type of Associated Organization (Organization) (for DDI-L)  |
| Description                    | Reference to an existing organization using the reference structure. TypeOfObject should be set to "Organization".  |
| Mandatory/Recommended/Optional | Mandatory for DDI-L   |
| Occurrence                     | 1-2 for DDI-L   |
| Controlled vocabulary          | -   |
| Usage notes                    | In DDI-L you need to create relation between referenced source object (individual) and referenced target object (organization) to affiliate organization and individual (person) together.  |
|                                | It is recommended to have both the URN and the combination of subclasses Agency, ID and Version as a referenced identifier in DDI-L. However, it is also possible to use only the URN or only the combination as a referenced identifier. |

| Number and element             | 2.3.3.1 Type of Associated Organization (Organization) (for DDI-L)                               |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | States the type of object being referenced based on a persistent list of valid DDI object types. |
| Mandatory/Recommended/Optional | Mandatory for DDI-L  |
| Occurrence                     | 1  |
| Controlled vocabulary          | -  |
| Usage notes                    | Type of object is "Organization"   |

| Number and element | 2.4 Person PID                             |
|--------------------|--|
| Child element      | 2.4.1 Person PID Type 2.4.2 Person PID URL |

| Description                    | URI (URN or URL) of the person. To capture information - type and PID value - on PID(s) of a person; Content = PID value |
|--------------------------------|--|
| Mandatory/Recommended/Optional | Recommended  |
| Occurrence                     | 0-n  |
| Controlled vocabulary          | -  |
| Usage notes                    | Content = PID value  |

| Number and element             | 2.4.1 Person PID Type                |
|--------------------------------|--------------------------------------|
| Child element                  | None                                 |
| Description                    | Type of the PID used for the person. |
| Mandatory/Recommended/Optional | Mandatory                            |
| Occurrence                     | 1                                    |
| Controlled vocabulary          | -                                    |
| Usage notes                    | -                                    |

| Number and element             | 2.4.2 Person PID URL  |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | The URL of the PID.   |
| Mandatory/Recommended/Optional | Recommended   |
| Occurrence                     | 0-1   |
| Controlled Vocabulary          | -   |
| Usage notes                    | The URL of the PID should be generated automatically by CESSDA Data Catalogue (CDC) (SPs don't need to provide it). But it is a valuable field for the users of CDC and hence it should be displayed there. |

## 3. Information on Organizations

| Number and element             | 3 Organization / Consortium  |
|--------------------------------|--|
| Child element                  | 3.1 Organization DDI Identifier 3.2 Full Name of Organization 3.3 Organization Name Abbreviation/Acronym 3.4 Country 3.5 Description of the organization 3.6 URL of the Organization |
| Description                    | No metadata element.   |
| Mandatory/Recommended/Optional | Recommended  |
| Occurrence                     | 0-n  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

| Number and element             | 3.1 Organization DDI Identifier  |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | Identifier of the organization according to the DDI-L structure.<br>Either DDI URN or triple Agency, ID, Version need to be<br>provided as information.  |
| Mandatory/Recommended/Optional | Mandatory for DDI-L  |
| Occurrence                     | 1-2 for DDI-L  |
| Controlled vocabulary          | -  |
| Usage notes                    | It is recommended to have both the URN and the combination of subclasses Agency, ID and Version as an identifier in DDI-L. However, it is possible to use only the URN or only the combination of Agency, ID and Version as an identifier. |

| Number and element | 3.2 Full Name of Organization               |
|--------------------|---|
| Child element      | 3.2.1 Language of Full Name of Organization |

| Description                    | Name of the organization the metadata information refers to.               |
|--------------------------------|--|
| Mandatory/Recommended/Optional | Mandatory  |
| Occurrence                     | 1-n  |
| Controlled vocabulary          | -  |
| Usage notes                    | DDI-L specific to separate persons and institutions and to reference them. |

| Number and element             | 3.2.1 Language of Full Name of Organization                              |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | The language of the content of the element.                              |
| Mandatory/Recommended/Optional | Mandatory  |
| Occurrence                     | 1  |
| Controlled vocabulary          | -  |
| Usage notes                    | Use ISO 639-1. If you have used different languages, repeat the element. |

| Number and element             | 3.3 Organization Name Abbreviation/Acronym   |
|--------------------------------|--|
| Child element                  | 3.3.1 Language of Organization Name Abbreviation/Acronym   |
| Description                    | If applicable: abbreviation of the organization's name, the metadata information refers to.  |
| Mandatory/Recommended/Optional | Optional   |
| Occurrence                     | 0-1  |
| Controlled vocabulary          | -  |
| Usage notes                    | DDI-L specific to separate persons and institutions and to reference them. If the institution has an abbreviation/acronym, use this element to document it. Examples of abbreviation: FSD (Finnish Social Science Data Archive), UCLA (University of California, Los Angeles). |

| Number and element             | 3.3.1 Language of Organization Name Abbreviation/Acronym |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | The language of the content of the element.              |
| Mandatory/Recommended/Optional | Optional   |
| Occurrence                     | 0-1  |
| Controlled vocabulary          | ISO 639-1  |
| Usage notes                    | -  |

| Number and element             | 3.4 Country   |
|--------------------------------|---|
| Child element                  | 3.4.1 Country Vocabulary 3.4.2 Country Vocabulary Agency 3.4.3 Country Vocabulary URI |
| Description                    | Country of the organization the metadata information refers to.                       |
| Mandatory/Recommended/Optional | Optional  |
| Occurrence                     | 0-n   |
| Controlled vocabulary          | ISO 3166-1 alpha-2.   |
| Usage notes                    | Use the ISO 3166-1 alpha-2. The field is DDI-L specific.                              |

| Number and element             | 3.4.1 Country Vocabulary                     |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | The name of the used vocabulary for country. |
| Mandatory/Recommended/Optional | Mandatory                                    |
| Occurrence                     | 1  |

| Controlled vocabulary | -  |
|-----------------------|--|
| Usage notes           | ISO 3166 2-letter code/which ISO code you are using. |

| Number and element             | 3.4.2 Country Vocabulary Agency                                |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | The name of the agency maintaining the vocabulary for country. |
| Mandatory/Recommended/Optional | Recommended  |
| Occurrence                     | 0-1  |
| Controlled vocabulary          | -  |
| Usage notes                    | ISO  |

| Number and element             | 3.4.3 Country Vocabulary URI                    |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | URI (URN or URL) of the vocabulary for country. |
| Mandatory/Recommended/Optional | Recommended                                     |
| Occurrence                     | 0-1   |
| Controlled vocabulary          | -   |
| Usage notes                    | -   |

| Number and element             | 3.5 Description of the organization               |
|--------------------------------|---|
| Child element                  | 3.5.1 Language of Description of the organization |
| Description                    | Description of the organization.                  |
| Mandatory/Recommended/Optional | Optional  |

| Occurrence            | 0-1 |
|-----------------------|-----|
| Controlled vocabulary | -   |
| Usage notes           | -   |

| Number and element             | 3.5.1 Language of Description of the organization |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | The language of the content of the element.       |
| Mandatory/Recommended/Optional | Mandatory   |
| Occurrence                     | 1   |
| Controlled vocabulary          | ISO 639-1   |
| Usage notes                    | -   |

| Number and element             | 3.6 URL of the Organization |
|--------------------------------|-----------------------------|
| Child element                  | None                        |
| Description                    | URL of the Organization.    |
| Mandatory/Recommended/Optional | Recommended                 |
| Occurrence                     | 0-n                         |
| Controlled vocabulary          | -                           |
| Usage notes                    | -                           |

# 4. Information on Dataset

| Number and element | 4. Dataset |
|--------------------|------------|
|--------------------|------------|

| Child element                  | 4.1 Identification Information 4.2 Content Information 4.3 Variable 4.4 Technical Information   |
|--------------------------------|---|
| Description                    | No metadata element. Information on dataset(s).   |
| Mandatory/Recommended/Optional | Recommended   |
| Occurrence                     | 0-n   |
| Controlled vocabulary          | -   |
| Usage notes                    | A collection of data, where every column of the statistical data matrix represents a particular variable, and each row corresponds to a given member of the data set in question. |

## Information on Dataset: Identification Information

| Number and element             | 4.1 Identification information   |
|--------------------------------|--|
| Child element                  | 4.1.1 Dataset DDI Identifier 4.1.2 Dataset PID 4.1.3 Reference of Study to Dataset 4.1.4 Dataset Publication Date 4.1.5 Dataset Version 4.1.6 Dataset Version Description 4.1.7 Dataset Language |
| Description                    | No metadata element.   |
| Mandatory/Recommended/Optional | Recommended  |
| Occurrence                     | 0-1  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

| Number and element | 4.1.1 Dataset DDI Identifier   |
|--------------------|--|
| Child element      | None   |
| Description        | Identifier of the Dataset according to the DDI-L structure. Either DDI URN or triple Agency, ID, Version need to be provided as information. |

| Mandatory/Recommended/Optional | Mandatory for DDI-L  |
|--------------------------------|--|
| Occurrence                     | 1-2 for DDI-L  |
| Controlled vocabulary          | -  |
| Usage notes                    | It is recommended to have both the URN and the combination of subclasses Agency, ID and Version as an identifier in DDI-L 3.2. However, it is possible to use only the URN or only the combination of Agency, ID and Version as an identifier. |

| Number and element             | 4.1.2 Dataset PID   |
|--------------------------------|---|
| Child element                  | 4.1.2.1 Dataset PID Type<br>4.1.2.2 Dataset PID URL                     |
| Description                    | To capture information - type and PID value - on PID(s) of the dataset. |
| Mandatory/Recommended/Optional | Recommended   |
| Occurrence                     | 0-n   |
| Controlled vocabulary          | -   |
| Usage notes                    | Content = PID value.  |

| Number and element             | 4.1.2.1 Dataset PID Type   |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | The identification of the Agency which assigns and manages the identifier. |
| Mandatory/Recommended/Optional | Mandatory  |
| Occurrence                     | 1  |
| Controlled vocabulary          | -  |
| Usage notes                    | i.e., ISBN, ISSN, DOI, etc.  |

|  | Number and element | 4.1.2.2 Dataset PID URL |
|--|--------------------|-------------------------|
|--|--------------------|-------------------------|

| Child element                  | None   |
|--------------------------------|--|
| Description                    | The URL of the PID.  |
| Mandatory/Recommended/Optional | Recommended  |
| Occurrence                     | 0-1  |
| Controlled vocabulary          | -  |
| Usage notes                    | The URL of the PID should be generated automatically by CDC (SPs don't need to provide it). But it is a valuable field for the users of CDC and hence should be displayed there. |

| Number and element             | 4.1.3 Reference of Study to Dataset  |
|--------------------------------|--|
| Child element                  | 4.1.3.1 Type of Reference between Study and Dataset (for DDI-L)  |
| Description                    | Reference of a study with a dataset.   |
| Mandatory/Recommended/Optional | Recommended  |
| Occurrence                     | 0-n  |
| Controlled vocabulary          | -  |
| Usage notes                    | It is recommended to have both the URN and the combination of subclasses Agency, ID and Version as a referenced identifier in DDI-L 3.2. However, it is possible to use only the URN or only the combination of Agency, ID and Version as a referenced identifier. |

| Number and element             | 4.1.3.1 Type of Reference between Study and Dataset (for DDI-L)                                  |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | States the type of object being referenced based on a persistent list of valid DDI object types. |
| Mandatory/Recommended/Optional | Mandatory for DDI-L.   |
| Occurrence                     | 1  |
| Controlled vocabulary          | -  |

| Jsage notes | TypeOfObject is "LogicalProduct" |
|-------------|----------------------------------|
|-------------|----------------------------------|

| Number and element             | 4.1.4 Dataset Publication Date   |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | The date this specific version of the dataset was published (different dates of publication of different datasets of study). |
| Mandatory/Recommended/Optional | Recommended  |
| Occurrence                     | 0-1  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

| Number and element             | 4.1.5 Dataset Version   |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | Version of dataset.   |
| Mandatory/Recommended/Optional | Recommended   |
| Occurrence                     | 0-1   |
| Controlled vocabulary          | -   |
| Usage notes                    | Use this element to document the version of the dataset. E.g., first version, second version etc. |

| Number and element             | 4.1.6 Dataset Version Description  |
|--------------------------------|--|
| Child element                  | 4.1.6.1 Language of Dataset Version Description  |
| Description                    | A description of the rationale for the new version of the dataset expressed using an international string to support multiple language versions of the same content. |
| Mandatory/Recommended/Optional | Optional   |
| Occurrence                     | 0-1  |

| Controlled vocabulary | - |
|-----------------------|---|
| Usage notes           | - |

| Number and element             | 4.1.6.1 Language of Dataset Version Description                          |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | The language of the content of the element.                              |
| Mandatory/Recommended/Optional | Mandatory  |
| Occurrence                     | 1  |
| Controlled vocabulary          | -  |
| Usage notes                    | Use ISO 639-1. If you have used different languages, repeat the element. |

| Number and element             | 4.1.7 Dataset Language             |
|--------------------------------|------------------------------------|
| Child element                  | None                               |
| Description                    | The language of the dataset itself |
| Mandatory/Recommended/Optional | Recommended                        |
| Occurrence                     | 0-n                                |
| Controlled vocabulary          | -                                  |
| Usage notes                    | Use ISO 639-1 (Language Code)      |

### Information on Dataset: Content Information

| Number and element             | 4.2 Content Information  |
|--------------------------------|--|
| Child element                  | 4.2.1 Dataset File Description 4.2.2 File Name 4.2.3 Number of Units 4.2.4 Number of Variables |
| Description                    | No metadata element.   |
| Mandatory/Recommended/Optional | Recommended  |

| Occurrence            | 0-1 |
|-----------------------|-----|
| Controlled vocabulary | -   |
| Usage notes           | -   |

| Number and element             | 4.2.1 Dataset File Description               |
|--------------------------------|--|
| Child element                  | 4.2.1.1 Language of Dataset File Description |
| Description                    | Description of the file content.             |
| Mandatory/Recommended/Optional | Optional                                     |
| Occurrence                     | 0-n  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

| Number and element             | 4.2.1.1 Language of Dataset File Description                             |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | The language of the content of the element.                              |
| Mandatory/Recommended/Optional | Mandatory  |
| Occurrence                     | 1  |
| Controlled vocabulary          | -  |
| Usage notes                    | Use ISO 639-1. If you have used different languages, repeat the element. |

| Number and element | 4.2.2 File Name   |
|--------------------|---|
| Child element      | 4.2.2.1 Language of File Name 4.2.2.2 Translation Status of File Name |
| Description        | File name of the dataset.   |

| Mandatory/Recommended/Optional | Mandatory |
|--------------------------------|-----------|
| Occurrence                     | 1-n       |
| Controlled vocabulary          | -         |
| Usage notes                    | -         |

| Number and element             | 4.2.2.1 Language of File Name   |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | The language of the content of the element.   |
| Mandatory/Recommended/Optional | Mandatory   |
| Occurrence                     | 1   |
| Controlled vocabulary          | -   |
| Usage notes                    | Language of the file name. Use ISO 639-1. If you have used different languages, repeat the element. |

| Number and element             | 4.2.2.2 Translation Status of File Name   |
|--------------------------------|---|
| Child element                  | None                                      |
| Description                    | Is the content of the element translated? |
| Mandatory/Recommended/Optional | Recommended                               |
| Occurrence                     | 0-1                                       |
| Controlled vocabulary          | -   |
| Usage notes                    | True/false                                |

| Number and element             | 4.2.3 Number of Units           |
|--------------------------------|---------------------------------|
| Child element                  | None                            |
| Description                    | Number of units in the dataset. |
| Mandatory/Recommended/Optional | Optional                        |

| Occurrence            | 0-1 |
|-----------------------|-----|
| Controlled vocabulary | -   |
| Usage notes           | -   |

| Number and element             | 4.2.4 Number of Variables           |
|--------------------------------|-------------------------------------|
| Child element                  | None                                |
| Description                    | Number of variables in the dataset. |
| Mandatory/Recommended/Optional | Optional                            |
| Occurrence                     | 0-1                                 |
| Controlled vocabulary          | -                                   |
| Usage notes                    | -                                   |

### Information on Dataset: Variables

| Number and element             | 4.3 Variable  |
|--------------------------------|---|
| Child element                  | 4.3.1 Basic Information about Variable 4.3.2 Reference Information 4.3.3 Statistical Information 4.3.4 Codelist |
| Description                    | No metadata element.  |
| Mandatory/Recommended/Optional | Recommended   |
| Occurrence                     | 0-n   |
| Controlled vocabulary          | -   |
| Usage notes                    | -   |

| Number and element | 4.3.1 Basic Information about Variable |
|--------------------|--|
|--------------------|--|

| Child element                  | 4.3.1.1 Variable DDI Identifier 4.3.1.2 Variable Name 4.3.1.3 Variable Label 4.3.1.4 Derivation Instructions 4.3.1.5 Variable Description 4.3.1.6 Variable Note 4.3.1.7 Variable Type 4.3.1.8 Measurement Level 4.3.1.9 Weighting Variable |
|--------------------------------|--|
| Description                    | No metadata element.   |
| Mandatory/Recommended/Optional | Mandatory  |
| Occurrence                     | 1  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

| Number and element             | 4.3.1.1 Variable DDI Identifier  |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | Identifier of the variable according to DDI-L structure. Either DDI URN or triple Agency, ID, Version need to be provided as information.  |
| Mandatory/Recommended/Optional | Mandatory for DDI-L  |
| Occurrence                     | 1-2 DDI-L  |
| Controlled vocabulary          | -  |
| Usage notes                    | It is recommended to have both the URN and the combination of subclasses Agency, ID and Version as an identifier in DDI 3.2. However, it is possible to use only the URN or only the combination of Agency, ID and Version as an identifier. |

| Number and element | 4.3.1.2 Variable Name   |
|--------------------|---|
| Child element      | 4.3.1.2.1 Language of Variable Name 4.3.1.2.2 Translation Status of Variable Name |

| Description                    | Name of variable within a dataset. |
|--------------------------------|------------------------------------|
| Mandatory/Recommended/Optional | Mandatory                          |
| Occurrence                     | 1-n                                |
| Controlled vocabulary          | -                                  |
| Usage notes                    | -                                  |

| Number and element             | 4.3.1.2.1 Language of Variable Name  |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | The language of the content of the element, meaning language of the variable names/labels and the metadata within the dataset. |
| Mandatory/Recommended/Optional | Recommended  |
| Occurrence                     | 0-1  |
| Controlled vocabulary          | -  |
| Usage notes                    | Use ISO 639-1 (Language Code)  |

| Number and element             | 4.3.1.2.2 Translation Status of Variable Name |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | Is the content of the element translated?     |
| Mandatory/Recommended/Optional | Recommended                                   |
| Occurrence                     | 0-1   |
| Controlled vocabulary          | -   |
| Usage notes                    | True/false                                    |

| Number and element | 4.3.1.3 Variable Label  |
|--------------------|---|
| Child element      | 4.3.1.3.1 Language of Variable Label 4.3.1.3.2 Translation Status of Variable label |

| Description                    | Label of variable for display. |
|--------------------------------|--------------------------------|
| Mandatory/Recommended/Optional | Recommended                    |
| Occurrence                     | 0-n                            |
| Controlled vocabulary          | -                              |
| Usage notes                    | -                              |

| Number and element             | 4.3.1.3.1 Language of Variable Label  |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | The language of the content of the element  |
| Mandatory/Recommended/Optional | Mandatory   |
| Occurrence                     | 1   |
| Controlled vocabulary          | -   |
| Usage notes                    | Use ISO 639-1 (Language Code) If you have used different languages, repeat the element. |

| Number and element             | 4.3.1.3.2 Translation Status of Variable label |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | Is the content of the element translated?      |
| Mandatory/Recommended/Optional | Recommended                                    |
| Occurrence                     | 0-1  |
| Controlled vocabulary          | -  |
| Usage notes                    | True/false                                     |

| Number and element | 4.3.1.4 Derivation Instructions               |
|--------------------|---|
| Child element      | 4.3.1.4.1 Language of Derivation Instructions |

| Description                    | Derivation instruction for derived variable. |
|--------------------------------|--|
| Mandatory/Recommended/Optional | Optional                                     |
| Occurrence                     | 0-n  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

| Number and element             | 4.3.1.4.1 Language of Derivation Instructions |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | The language of the content of the element.   |
| Mandatory/Recommended/Optional | Mandatory                                     |
| Occurrence                     | 1   |
| Controlled vocabulary          | ISO 639-1                                     |
| Usage notes                    | -   |

| Number and element             | 4.3.1.5 Variable Description  |
|--------------------------------|---|
| Child element                  | 4.3.1.5.1 Language of the Variable Description 4.3.1.5.2 Translation Status of the Variable Description |
| Description                    | Description of the variable content.  |
| Mandatory/Recommended/Optional | Optional  |
| Occurrence                     | 0-n   |
| Controlled vocabulary          | -   |
| Usage notes                    | -   |

| Number and element | 4.3.1.5.1 Language of the Variable Description |
|--------------------|--|
|--------------------|--|

| Child element                  | None   |
|--------------------------------|--|
| Description                    | The language of the content of the element.                              |
| Mandatory/Recommended/Optional | Mandatory  |
| Occurrence                     | 1  |
| Controlled vocabulary          | -  |
| Usage notes                    | Use ISO 639-1. If you have used different languages, repeat the element. |

| Number and element             | 4.3.1.5.2 Translation Status of the Variable Description |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | Is the content of the element translated?                |
| Mandatory/Recommended/Optional | Recommended  |
| Occurrence                     | 0-1  |
| Controlled vocabulary          | -  |
| Usage notes                    | True/false   |

| Number and element             | 4.3.1.6 Variable Note   |
|--------------------------------|---|
| Child element                  | 4.3.1.6.1 Language of Variable Note 4.3.1.6.2 Translation Status of Variable Note             |
| Description                    | Any kind of further information that needs to be provided concerning the referenced variable. |
| Mandatory/Recommended/Optional | Optional  |
| Occurrence                     | 0-n   |
| Controlled vocabulary          | CMMUseOfNoteField   |
| Usage notes                    | Please see the attached CV UseOfNoteField   |

| N | lumber and element | 4.3.1.6.1 Language of Variable Note |
|---|--------------------|-------------------------------------|
|---|--------------------|-------------------------------------|

| Child element                  | None   |
|--------------------------------|--|
| Description                    | The language of the content of the element.                              |
| Mandatory/Recommended/Optional | Mandatory  |
| Occurrence                     | 1  |
| Controlled vocabulary          | -  |
| Usage notes                    | Use ISO 639-1. If you have used different languages, repeat the element. |

| Number and element             | 4.3.1.6.2 Translation Status of Variable Note |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | Is the content of the element translated?     |
| Mandatory/Recommended/Optional | Recommended                                   |
| Occurrence                     | 0-1   |
| Controlled vocabulary          | -   |
| Usage notes                    | True/false                                    |

| Number and element             | 4.3.1.7 Variable Type   |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | Provides the output format of the data object in a generic way, i.e., numeric, character, dateTime, etc.            |
| Mandatory/Recommended/Optional | Recommended   |
| Occurrence                     | 0-1   |
| Controlled vocabulary          | For DDI-L: either free text or vocabulary, and for DDI-C: possible values are text, numeric, code, datetime, other. |
| Usage notes                    | -   |

| Number and element             | 4.3.1.8 Measurement Level  |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | Refers to the highest level of measurement applicable. The possible levels of measurements are defined by the attribute @classificationLevel of DDI-L.   |
| Mandatory/Recommended/Optional | Optional   |
| Occurrence                     | 0-1  |
| Controlled vocabulary          | -  |
| Usage notes                    | Possible values are: DDI-L nominal, ordinal, interval, ratio, continuous and for DDI-C @nature may contain nominal, ordinal, interval, ratio, percent, other and @intrvl may contain contin, discrete. |

| Number and element             | 4.3.1.9 Weighting Variable                               |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | Is the variable in question a weighting variable or not? |
| Mandatory/Recommended/Optional | Recommended  |
| Occurrence                     | 0-1  |
| Controlled vocabulary          | -  |
| Usage notes                    | DDI-L: true, false; DDI-C wgt, not-wgt                   |

| Number and element             | 4.3.2 Reference Information   |
|--------------------------------|---|
| Child element                  | 4.3.2.1 Reference Variable to Concept 4.3.2.2 Reference Variable to Question 4.3.2.3 Reference Variable to Codelist |
| Description                    | No metadata element.  |
| Mandatory/Recommended/Optional | Recommended   |

| Occurrence            | 0-1 |
|-----------------------|-----|
| Controlled vocabulary | -   |
| Usage notes           | -   |

| Number and element             | 4.3.2.1 Reference Variable to Concept                                  |
|--------------------------------|--|
| Child element                  | 4.3.2.1.1 Type of Reference between Variable and Code List (for DDI-L) |
| Description                    | Reference of a variable to a concept.                                  |
| Mandatory/Recommended/Optional | Recommended  |
| Occurrence                     | 0-n  |
| Controlled vocabulary          | -  |
| Usage notes                    | E.g., ELSST, CESSDA Topic Classification.                              |

| Number and element             | 4.3.2.1.1 Type of Reference between Variable and Concept (for DDI-L)                             |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | States the type of object being referenced based on a persistent list of valid DDI object types. |
| Mandatory/Recommended/Optional | Mandatory for DDI-L.   |
| Occurrence                     | 1  |
| Controlled vocabulary          | -  |
| Usage notes                    | Type of object is "Concept"  |

| Number and element | 4.3.2.2 Reference Variable to Question                       |
|--------------------|--|
| Child element      | 4.3.2.2.1 Type of Reference Variable to Question (for DDI-L) |

| Description                    | Reference of a variable to a question.   |
|--------------------------------|--|
| Mandatory/Recommended/Optional | Recommended  |
| Occurrence                     | 0-n  |
| Controlled vocabulary          | -  |
| Usage notes                    | It is recommended to have both the URN and the combination of subclasses Agency, ID and Version as a referenced identifier in DDI-L. However, it is possible to use only the URN or only the combination of Agency, ID and Version as a referenced identifier. |

| Number and element             | 4.3.2.2.1 Type of Reference Variable to Question (for DDI-L)                                     |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | States the type of object being referenced based on a persistent list of valid DDI object types. |
| Mandatory/Recommended/Optional | Mandatory for DDI-L.   |
| Occurrence                     | 1  |
| Controlled vocabulary          | -  |
| Usage notes                    | Type of object is "QuestionItem"   |

| Number and element             | 4.3.2.3 Reference Variable to Codelist   |
|--------------------------------|--|
| Child element                  | 4.3.2.3.1 Type of Reference between Variable and Codelist (for DDI-L)  |
| Description                    | Reference of a variable to a codelist.   |
| Mandatory/Recommended/Optional | Optional   |
| Occurrence                     | 0-2 for DDI-L  |
| Controlled vocabulary          | -  |
| Usage notes                    | It is recommended to have both the URN and the combination of subclasses Agency, ID and Version as a referenced identifier in DDI-L. However, it is possible to use only the URN or only |

| the combination of Agency, ID and Version as a referenced |
|---|
| identifier.   |

| Number and element             | 4.3.2.3.1 Type of Reference between Variable and Codelist (for DDI-L)                            |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | States the type of object being referenced based on a persistent list of valid DDI object types. |
| Mandatory/Recommended/Optional | Mandatory for DDI-L  |
| Occurrence                     | 1  |
| Controlled vocabulary          | -  |
| Usage notes                    | Type of object is "CodeList"   |

| Number and element                | 4.3.3 Statistical Information  |
|-----------------------------------|--|
| Child element                     | 4.3.3.1 Minimum (Summary Statistics) 4.3.3.2 Maximum (Summary Statistics) 4.3.3.3 Arithmetic Mean (Summary Statistics) 4.3.3.4 Standard Deviation (Summary Statistics) |
| Description                       | Statistical information. No metadata element.  |
| Mandatory/Recommended/Optional    | Recommended  |
|                                   |  |
| Occurrence                        | 0-1  |
| Occurrence  Controlled vocabulary | -  |

| Number and element | 4.3.3.1 Minimum (Summary Statistics)   |
|--------------------|--|
| Child element      | 4.3.3.1.1 Minimum Summary Statistics Vocabulary 4.3.3.1.2 Minimum Summary Statistics Vocabulary Agency |

|                                | 4.3.3.1.3 Minimum Summary Statistics Vocabulary URI 4.3.3.1.4 Minimum Summary Statistics Value  |
|--------------------------------|---|
| Description                    | The lowest valid value in a variable. Use DDI Summary Statistic Type and "Minimum".   |
| Mandatory/Recommended/Optional | Recommended   |
| Occurrence                     | 0-1   |
| Controlled vocabulary          | DDI Summary Statistic Type  |
| Usage notes                    | Use CodeValueType for "Minimum".  |
|                                | For DDI-L use the code value. DDI vocabulary cannot be used in DDI-C as it specifies what can be entered as sumStatType. It is already enumerated by the DDI standard. For further information please see the attached CV usage document. |

| Number and element             | 4.3.3.1.1 Minimum Summary Statistics Vocabulary         |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | The name of the used vocabulary for Summary Statistics. |
| Mandatory/Recommended/Optional | Recommended   |
| Occurrence                     | 0-1   |
| Controlled vocabulary          | DDI Summary Statistic Type                              |
| Usage notes                    | -   |

| Number and element             | 4.3.3.1.2 Minimum Summary Statistics Vocabulary Agency                    |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | The name of the agency maintaining the vocabulary for Summary Statistics. |
| Mandatory/Recommended/Optional | Optional  |
| Occurrence                     | 0-1   |
| Controlled vocabulary          | DDI Alliance  |

| Usage notes | - |
|-------------|---|
|-------------|---|

| Number and element             | 4.3.3.1.3 Minimum Summary Statistics Vocabulary URI        |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | URI (URN or URL) of the vocabulary for Summary Statistics. |
| Mandatory/Recommended/Optional | Recommended  |
| Occurrence                     | 0-1  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

| Number and element             | 4.3.3.1.4 Minimum Summary Statistics Value |
|--------------------------------|--|
| Child element                  | None                                       |
| Description                    | The value of the Summary Statistics        |
| Mandatory/Recommended/Optional | Mandatory                                  |
| Occurrence                     | 1  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

| Number and element             | 4.3.3.2 Maximum (Summary Statistics)  |
|--------------------------------|---|
| Child element                  | 4.3.3.2.1 Maximum Summary Statistics Vocabulary 4.3.3.2.2 Maximum Summary Statistics Vocabulary Agency 4.3.3.2.3 Maximum Summary Statistics Vocabulary URI 4.3.3.2.4 Maximum Summary Statistics Value |
| Description                    | The highest valid value in a variable. Use DDI Summary Statistic Type and "Maximum".  |
| Mandatory/Recommended/Optional | Recommended   |
| Occurrence                     | 0-1   |

| Controlled vocabulary | DDI Summary Statistic Type  |
|-----------------------|---|
| Usage notes           | Use CodeValueType for Maximum.  |
|                       | For DDI-L use the code value. DDI vocabulary cannot be used in DDI-C as it specifies what can be entered as sumStatType. It is already enumerated by the DDI standard. For further information please see the attached CV usage document. |

| Number and element             | 4.3.3.2.1 Maximum Summary Statistics Vocabulary         |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | The name of the used vocabulary for Summary Statistics. |
| Mandatory/Recommended/Optional | Recommended   |
| Occurrence                     | 0-1   |
| Controlled vocabulary          | DDI Summary Statistic Type                              |
| Usage notes                    | -   |

| Number and element             | 4.3.3.2.2 Maximum Summary Statistics Vocabulary Agency                    |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | The name of the agency maintaining the vocabulary for Summary Statistics. |
| Mandatory/Recommended/Optional | Optional  |
| Occurrence                     | 0-1   |
| Controlled vocabulary          | DDI Alliance  |
| Usage notes                    | -   |

| Number and element | 4.3.3.2.3 Maximum Summary Statistics Vocabulary URI |
|--------------------|---|
| Child element      | None  |

| Description                    | URI (URN or URL) of the vocabulary for "Summary Statistics Type". |
|--------------------------------|---|
| Mandatory/Recommended/Optional | Recommended   |
| Occurrence                     | 0-1   |
| Controlled vocabulary          | -   |
| Usage notes                    | -   |

| Number and element             | 4.3.3.2.4 Maximum Summary Statistics Value |
|--------------------------------|--|
| Child element                  | None                                       |
| Description                    | The value of the Summary Statistics.       |
| Mandatory/Recommended/Optional | Mandatory                                  |
| Occurrence                     | 1  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

| Number and element             | 4.3.3.3 Arithmetic Mean (Summary Statistics)  |
|--------------------------------|---|
| Child element                  | 4.3.3.3.1 Arithmetic Mean Summary Statistics Vocabulary 4.3.3.3.2 Arithmetic Mean Summary Statistics Vocabulary Agency 4.3.3.3.3 Arithmetic Mean Summary Statistics Vocabulary URI 4.3.3.3.4 Arithmetic Mean Summary Statistics Value |
| Description                    | Mathematical average of a set of values. Use DDI Summary Statistic Type and "ArithmeticMean".   |
| Mandatory/Recommended/Optional | Recommended.  |
| Occurrence                     | 0-1   |
| Controlled vocabulary          | DDI Summary Statistic Type  |
| Usage notes                    | Use CodeValueType for Arithmetic Mean.  |
|                                | For DDI-L use the code value. DDI vocabulary cannot be used in DDI-C as it specifies what can be entered as sumStatType. It   |

| is already enumerated by the DDI standard. For further |
|--|
| information please see the attached CV usage document. |

| Number and element             | 4.3.3.3.1 Arithmetic Mean Summary Statistics Vocabulary |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | The name of the used vocabulary for Summary Statistics. |
| Mandatory/Recommended/Optional | Recommended   |
| Occurrence                     | 0-1   |
| Controlled vocabulary          | DDI Summary Statistic Type                              |
| Usage notes                    | -   |

| Number and element             | 4.3.3.3.2 Arithmetic Mean Summary Statistics Vocabulary Agency            |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | The name of the agency maintaining the vocabulary for Summary Statistics. |
| Mandatory/Recommended/Optional | Optional  |
| Occurrence                     | 0-1   |
| Controlled vocabulary          | DDI Alliance  |
| Usage notes                    | -   |

| Number and element             | 4.3.3.3 Arithmetic Mean Summary Statistics Vocabulary URI         |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | URI (URN or URL) of the vocabulary for "Summary Statistics Type". |
| Mandatory/Recommended/Optional | Recommended   |
| Occurrence                     | 0-1   |

| Controlled vocabulary | - |
|-----------------------|---|
| Usage notes           | - |

| Number and element             | 4.3.3.3.4 Arithmetic Mean Summary Statistics Value |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | The value of the Summary Statistics.               |
| Mandatory/Recommended/Optional | Mandatory  |
| Occurrence                     | 1  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

| Number and element             | 4.3.3.4 Standard Deviation (Summary Statistics)   |
|--------------------------------|---|
| Child element                  | 4.3.3.4.1 Standard Deviation Summary Statistics Vocabulary 4.3.3.4.2 Standard Deviation Summary Statistics Vocabulary Agency 4.3.3.4.3 Standard Deviation Summary Statistics Vocabulary URI 4.3.3.4.4 Standard Deviation Summary Statistics Value                                     |
| Description                    | Indicates the degree to which entities within the sample differ from the sample mean. Use DDI CV SummaryStatisticType and "StandardDeviation".  |
| Mandatory/Recommended/Optional | Recommended   |
| Occurrence                     | 0-1   |
| Controlled vocabulary          | DDI Summary Statistic Type  |
| Usage notes                    | Use CodeValueType for "Standard Deviation". For DDI-L use the code value. DDI vocabulary cannot be used in DDI-C as it specifies what can be entered as sumStatType. It is already enumerated by the DDI standard. For further information please see the attached CV usage document. |

| Number and element | 4.3.3.4.1 Standard Deviation Summary Statistics Vocabulary |
|--------------------|--|
|--------------------|--|

| Child element                  | None  |
|--------------------------------|---|
| Description                    | The name of the used vocabulary for Summary Statistics. |
| Mandatory/Recommended/Optional | Recommended   |
| Occurrence                     | 0-1   |
| Controlled vocabulary          | DDI Summary Statistic Type                              |
| Usage notes                    | -   |

| Number and element             | 4.3.3.4.2 Standard Deviation Summary Statistics Vocabulary Agency        |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | The name of the agency maintaining the vocabulary for Summary Statistics |
| Mandatory/Recommended/Optional | Optional   |
| Occurrence                     | 0-1  |
| Controlled vocabulary          | DDI Alliance   |
| Usage notes                    | -  |

| Number and element             | 4.3.3.4.3 Standard Deviation Summary Statistics Vocabulary URI    |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | URI (URN or URL) of the vocabulary for "Summary Statistics Type". |
| Mandatory/Recommended/Optional | Recommended   |
| Occurrence                     | 0-1   |
| Controlled vocabulary          | -   |
| Usage notes                    | -   |

| Number and element             | 4.3.3.4.4 Standard Deviation Summary Statistics Value |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | The value of the Summary Statistics.                  |
| Mandatory/Recommended/Optional | Mandatory   |
| Occurrence                     | 1   |
| Controlled vocabulary          | -   |
| Usage notes                    | -   |

| Number and element             | 4.3.4 Codelist  |
|--------------------------------|---|
| Child element                  | 4.3.4.1 Codelist DDI Identifier 4.3.4.2 Variable Value Code 4.3.4.3 Category DDI Identifier 4.3.4.4 Category Name 4.3.4.5 Reference Code to Category Name |
| Description                    | No metadata element.  |
| Mandatory/Recommended/Optional | Recommended   |
| Occurrence                     | 0-n   |
| Controlled vocabulary          | -   |
| Usage notes                    | -   |

| Number and element | 4.3.4.1 Codelist DDI Identifier  |
|--------------------|--|
| Child element      | None   |
| Description        | Identifier of the codelist according to the DDI-L structure. A codelist is a structure used to associate a list of code values to specified categories. Either DDI URN or triple Agency, ID, Version need to be provided as information. |

| Mandatory/Recommended/Optional | Mandatory for DDI-L  |
|--------------------------------|--|
| Occurrence                     | 1-2 for DDI-L  |
| Controlled vocabulary          | -  |
| Usage notes                    | It is recommended to have both the URN and the combination of subclasses Agency, ID and Version as an identifier in DDI-L. However, it is possible to use only the URN or only the combination of Agency, ID and Version as an identifier. |

| Number and element             | 4.3.4.2 Variable Value Code |
|--------------------------------|-----------------------------|
| Child element                  | None                        |
| Description                    | Value of the code.          |
| Mandatory/Recommended/Optional | Mandatory                   |
| Occurrence                     | 1                           |
| Controlled vocabulary          | -                           |
| Usage notes                    | -                           |

| Number and element             | 4.3.4.3 Category DDI Identifier  |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | Identifier of the category according to the DDI-L structure.   |
| Mandatory/Recommended/Optional | Mandatory for DDI-L  |
| Occurrence                     | 1-2 for DDI-L  |
| Controlled vocabulary          | -  |
| Usage notes                    | It is recommended to have both the URN and the combination of subclasses Agency, ID and Version as an identifier in DDI-L. However, it is possible to use only the URN or only the combination of Agency, ID and Version as an identifier. |

| Number and element | 4.3.4.4 Category Name |
|--------------------|-----------------------|
|--------------------|-----------------------|

| Child element                  | 4.3.4.4.1 Language of Category Name 4.3.4.4.2 Translation Status of Category Name |
|--------------------------------|---|
| Description                    | Label for the code value.   |
| Mandatory/Recommended/Optional | Recommended   |
| Occurrence                     | 0-n   |
| Controlled vocabulary          | -   |
| Usage notes                    | -   |

| Number and element             | 4.3.4.4.1 Language of Category Name                                      |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | The language of the content of the element.                              |
| Mandatory/Recommended/Optional | Mandatory  |
| Occurrence                     | 1  |
| Controlled vocabulary          | -  |
| Usage notes                    | Use ISO 639-1. If you have used different languages, repeat the element. |

| Number and element             | 4.3.4.4.2 Translation Status of Category Name |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | Is the content of the element translated?     |
| Mandatory/Recommended/Optional | Recommended                                   |
| Occurrence                     | 0-1   |
| Controlled vocabulary          | true, false                                   |
| Usage notes                    | -   |

| Number and element | 4.3.4.5 Reference Code to Category Name |
|--------------------|---|
|--------------------|---|

| Child element                  | 4.3.4.5.1 Type of Reference between Code and Category Name (for DDI-L)   |
|--------------------------------|--|
| Description                    | Reference of a code to a category.   |
| Mandatory/Recommended/Optional | Mandatory for DDI-L  |
| Occurrence                     | 1-2  |
| Controlled vocabulary          | -  |
| Usage notes                    | It is recommended to have both the URN and the combination of subclasses Agency, ID and Version as a referenced identifier in DDI-L. However, it is possible to use only the URN or only the combination of Agency, ID and Version as a referenced identifier. |

| Number and element             | 4.3.4.5.1 Type of Reference between Code and Category Name (for DDI-L)                          |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | States the type of object being referenced based on a persistent list of valid DDI object types |
| Mandatory/Recommended/Optional | Mandatory for DDI-L   |
| Occurrence                     | 1   |
| Controlled vocabulary          | -   |
| Usage notes                    | Type of object is Category  |

### Information on Dataset: Technical Information

| Number and element             | 4.4 Technical Information                                |
|--------------------------------|--|
| Child element                  | 4.4.1 Dataset Software 4.4.2 Dataset File Checksum Value |
| Description                    | No metadata element.                                     |
| Mandatory/Recommended/Optional | Recommended  |
| Occurrence                     | 0-1  |

| Controlled vocabulary | - |
|-----------------------|---|
| Usage notes           | - |

| Number and element             | 4.4.1 Dataset Software   |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | Software needed to use the dataset - including version number etc. If necessary: information on specific packages that are not automatically included in the software, need to be installed, purchased, or imported etc. |
| Mandatory/Recommended/Optional | Mandatory  |
| Occurrence                     | 1  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

| Number and element             | 4.4.2 Dataset File Checksum Value                                  |
|--------------------------------|--|
| Child element                  | 4.4.2.1 Dataset Checksum Algorithm                                 |
| Description                    | Value of a check routine for the dataset file to ensure integrity. |
| Mandatory/Recommended/Optional | Mandatory  |
| Occurrence                     | 1  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

| Number and element | 4.4.2.1 Dataset Checksum Algorithm                              |
|--------------------|---|
| Child element      | None  |
| Description        | Procedure/algorithm used to create the checksum of the dataset. |

| Mandatory/Recommended/Optional | Mandatory |
|--------------------------------|-----------|
| Occurrence                     | 1         |
| Controlled vocabulary          | -         |
| Usage notes                    | -         |

# 5. Information on Instrument

| Number and element             | 5. Instrument  |
|--------------------------------|--|
| Child element                  | 5.1 Instrument DDI Identifier 5.2 Reference Instrument to Study 5.3 Content Information 5.4 Technical Information  |
| Description                    | No metadata element. A tool to obtain data from respondents. For most social and behavioural surveys, the instrument involves a questionnaire with questions and response options. |
| Mandatory/Recommended/Optional | Recommended  |
| Occurrence                     | 0-n  |
| Controlled Vocabulary          | -  |
| Usage notes                    | -  |

| Number and element             | 5.1 Instrument DDI Identifier  |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | Identifier of the Instrument according to the DDI-L structure.  Either DDI URN or triple Agency, ID, Version need to be provided as information. |
| Mandatory/Recommended/Optional | Mandatory for DDI-L  |
| Occurrence                     | 1-2 for DDI-L  |
| Controlled vocabulary          | -  |
| Usage notes                    | It is recommended to have both the URN and the combination of subclasses Agency, ID and Version as an identifier in DDI-L.                       |

| However, it is possible to use only the URN or only the |
|---|
| combination of Agency, ID and Version as an identifier. |

| Number and element             | 5.2 Reference Instrument to Study  |
|--------------------------------|--|
| Child element                  | 5.2.1 Type of Reference Instrument to Study (for DDI-L)  |
| Description                    | Reference of an instrument to a study.   |
| Mandatory/Recommended/Optional | Mandatory for DDI-L  |
| Occurrence                     | 1-n  |
| Controlled vocabulary          | -  |
| Usage notes                    | It is recommended to have both the URN and the combination of subclasses Agency, ID and Version as a referenced identifier in DDI-L. However, it is possible to use only the URN or only the combination of Agency, ID and Version as a referenced identifier. |

| Number and element             | 5.2.1 Type of Reference Instrument to Study (for DDI-L)  |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | States the type of object being referenced based on a persistent list of valid DDI object types. |
| Mandatory/Recommended/Optional | Mandatory for DDI-L  |
| Occurrence                     | 1  |
| Controlled vocabulary          | -  |
| Usage notes                    | Type of object is "Instrument".  |

## Information on Instrument: Content Information

| Number and element | 5.3 Content Information                        |
|--------------------|--|
| Child element      | 5.3.1 Type of Instrument 5.3.2 Instrument Name |

|                                | 5.3.3 Instrument Language (controlled) 5.3.4 Instrument Source 5.3.5 Instrument Source Reference |
|--------------------------------|--|
| Description                    | No metadata element.   |
| Mandatory/Recommended/Optional | Mandatory  |
| Occurrence                     | 1  |
| Controlled Vocabulary          | -  |
| Usage notes                    | -  |

| Number and element             | 5.3.1 Type of Instrument  |
|--------------------------------|---|
| Child element                  | 5.3.1.1 Type of Instrument (controlled) 5.3.1.2 Type of Instrument (descriptive) 5.3.1.3 Instrument Type Vocabulary 5.3.1.4 Instrument Type Vocabulary Agency 5.3.1.5 Type of Instrument Vocabulary URI   |
| Description                    | No metadata element   |
| Mandatory/Recommended/Optional | Mandatory   |
| Occurrence                     | 1-n   |
| Controlled vocabulary          | DDI Type of Instrument  |
| Usage notes                    | CV Includes a typology of data collection instruments, e.g., a questionnaire. For DDI-L use the code value. For DDI-C the descriptive term is used for the element content and code value is entered into 'concept'. For further information please see the attached CV usage document. |

| Number and element | 5.3.1.1 Type of Instrument (controlled)  |
|--------------------|--|
| Child element      | None   |
| Description        | Type of the instrument (measurement device(s) of a study e.g., questionnaire. CV includes a typology of data collection instruments. |

| Mandatory/Recommended/Optional | Mandatory  |
|--------------------------------|--|
| Occurrence                     | 1  |
| Controlled vocabulary          | DDI Type of Instrument   |
| Usage notes                    | Code value of the CV "DDI Type of Instrument". Code value is used in DDI-L. In DDI-C descriptive term is used for element content and code value entered in concept element. |

| Number and element             | 5.3.1.2 Type of Instrument (descriptive)               |
|--------------------------------|--|
| Child element                  | 5.3.1.2.1 Language of Type of Instrument (descriptive) |
| Description                    | Descriptive term of the CV "DDI Type of Instrument".   |
| Mandatory/Recommended/Optional | Recommended  |
| Occurrence                     | 0-1  |
| Controlled vocabulary          | DDI Type of Instrument                                 |
| Usage notes                    | Descriptive term (from vocabulary)                     |

| Number and element             | 5.3.1.2.1 Language of Type of Instrument (descriptive) |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | The language of the content of the element             |
| Mandatory/Recommended/Optional | Mandatory  |
| Occurrence                     | 1  |
| Controlled vocabulary          | -  |
| Usage notes                    | Use ISO 639-1 (Language Code)                          |

| Number and element | 5.3.1.3 Type of Instrument Vocabulary |
|--------------------|---------------------------------------|
| Child element      | None                                  |

| Description                    | The name of the used vocabulary for "Type of Instrument". |
|--------------------------------|---|
| Mandatory/Recommended/Optional | Mandatory   |
| Occurrence                     | 1   |
| Controlled vocabulary          | DDI Type of Instrument                                    |
| Usage notes                    | -   |

| Number and element             | 5.3.1.4 Type of Instrument Vocabulary Agency                          |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | The name of the agency maintaining the vocabulary for Instrument Type |
| Mandatory/Recommended/Optional | Optional  |
| Occurrence                     | 0-1   |
| Controlled vocabulary          | -   |
| Usage notes                    | DDI Alliance  |

| Number and element             | 5.3.1.5 Type of Instrument Vocabulary URI                    |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | URI (URN or URL) of the vocabulary for "Type of Instrument". |
| Mandatory/Recommended/Optional | Mandatory  |
| Occurrence                     | 1  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

| Number and element | 5.3.2 Instrument Name |
|--------------------|-----------------------|
|--------------------|-----------------------|

| Child element                  | 5.3.2.1 Language of Instrument Name 5.3.2.2 Translation Status of Instrument Name |
|--------------------------------|---|
| Description                    | Name of the instrument the metadata refer to.                                     |
| Mandatory/Recommended/Optional | Mandatory   |
| Occurrence                     | 1-n   |
| Controlled vocabulary          | -   |
| Usage notes                    | -   |

| Number and element             | 5.3.2.1 Language of Instrument Name   |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | The language of the content of the element containing a combined ISO Code of language and country (optional)  |
| Mandatory/Recommended/Optional | Mandatory   |
| Occurrence                     | 1   |
| Controlled vocabulary          | -   |
| Usage notes                    | Use ISO 639-1 + ISO 3166-1. It is mandatory to use ISO 639-1, but optional to include ISO 3166-1. If you have used different languages, repeat the element. |

| Number and element             | 5.3.2.2 Translation Status of Instrument Name |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | Is the content of the element translated?     |
| Mandatory/Recommended/Optional | Recommended                                   |
| Occurrence                     | 0-1   |
| Controlled vocabulary          | -   |
| Usage notes                    | True/false                                    |

| Number and element             | 5.3.3 Instrument Language (controlled)   |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | A language for the instrument that is being used in the study containing a combined ISO Code of language and country (optional).   |
| Mandatory/Recommended/Optional | Mandatory for DDI-L  |
| Occurrence                     | 1  |
| Controlled vocabulary          | -  |
| Usage notes                    | Use ISO 639-1 + ISO 3166-1. It is mandatory to use ISO 639-1, but optional to include ISO 3166-1. Language does not refer to computer language in this case but spoken language by humans. |

| Number and element             | 5.3.4 Instrument Source  |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | Description of other instruments on which the instrument in question is based. |
| Mandatory/Recommended/Optional | Optional   |
| Occurrence                     | 0-1  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

| Number and element             | 5.3.5 Instrument Source Reference                                 |
|--------------------------------|---|
| Child element                  | 5.3.5.1 Type of Instrument Source Reference (for DDI-L)           |
| Description                    | Reference to other instruments on which this instrument is based. |
| Mandatory/Recommended/Optional | Optional  |

| Occurrence            | 0-n  |
|-----------------------|--|
| Controlled vocabulary | -  |
| Usage notes           | It is recommended to have both the URN and the combination of subclasses Agency, ID and Version as a referenced identifier in DDI-L. However, it is possible to use only the URN or only the combination of Agency, ID and Version as a referenced identifier. |

| Number and element             | 5.3.5.1 Type of Instrument Source Reference (for DDI-L)  |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | States the type of object being referenced based on a persistent list of valid DDI object types. |
| Mandatory/Recommended/Optional | Mandatory for DDI-L  |
| Occurrence                     | 1  |
| Controlled vocabulary          | -  |
| Usage notes                    | Type of object is "Instrument".  |

## Information on Instrument: Technical Information

| Number and element             | 5.4 Technical information  |
|--------------------------------|--|
| Child element                  | 5.4.1 Reference of Instrument to Question 5.4.2 Instrument PID 5.4.3 Instrument Description 5.4.4 Instrument File Checksum Value |
| Description                    | No metadata element  |
| Mandatory/Recommended/Optional | Optional   |
| Occurrence                     | 0-1  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

| Number and element             | 5.4.1 Reference of Instrument to Question  |
|--------------------------------|--|
| Child element                  | 5.4.1.1 Type of Reference of Instrument to Question  |
| Description                    | A reference of the instrument to a question using the DDI reference structure (ID, Version, Agency).   |
| Mandatory/Recommended/Optional | Mandatory for DDI-L  |
| Occurrence                     | 1-2  |
| Controlled vocabulary          | -  |
| Usage notes                    | It is recommended to have both the URN and the combination of subclasses Agency, ID and Version as a referenced identifier in DDI-L. However, it is possible to use only the URN or only the combination of Agency, ID and Version as a referenced identifier. |

| Number and element             | 5.4.1.1 Type of Reference of Instrument to Question  |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | States the type of object being referenced based on a persistent list of valid DDI object types. |
| Mandatory/Recommended/Optional | Mandatory for DDI-L  |
| Occurrence                     | 1  |
| Controlled vocabulary          | -  |
| Usage notes                    | The type of object is "QuestionItem"   |

| Number and element             | 5.4.2 Instrument PID   |
|--------------------------------|--|
| Child element                  | 5.4.2.1 Instrument PID Type 5.4.2.2 Instrument PID URL   |
| Description                    | To capture information - type and PID value - on PID(s) of the instrument, Content = PID value |
| Mandatory/Recommended/Optional | Optional   |

| Occurrence      |        | 0-n                  |
|-----------------|--------|----------------------|
| Controlled voca | bulary | -                    |
| Usage notes     |        | Content = PID value. |

| Number and element             | 5.4.2.1 Instrument PID Type |
|--------------------------------|-----------------------------|
| Child element                  | None                        |
| Description                    | Type of Instrument PID.     |
| Mandatory/Recommended/Optional | Mandatory                   |
| Occurrence                     | 1                           |
| Controlled vocabulary          | -                           |
| Usage notes                    | -                           |

| Number and element             | 5.4.2.2 Instrument PID URL |
|--------------------------------|----------------------------|
| Child element                  | None                       |
| Description                    | URL of the Instrument PID. |
| Mandatory/Recommended/Optional | Recommended                |
| Occurrence                     | 0-1                        |
| Controlled vocabulary          | -                          |
| Usage notes                    | -                          |

| Number and element             | 5.4.3 Instrument Description               |
|--------------------------------|--|
| Child element                  | 5.4.3.1 Language of Instrument Description |
| Description                    | A description of the instrument.           |
| Mandatory/Recommended/Optional | Optional                                   |
| Occurrence                     | 0-1  |

| Controlled vocabulary | - |
|-----------------------|---|
| Usage notes           | - |

| Number and element             | 5.4.3.1 Language of Instrument Description   |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | A language for the instrument that is being used in the study containing a combined ISO Code of language and country (optional). |
| Mandatory/Recommended/Optional | Mandatory (for DDI-L)  |
| Occurrence                     | 1  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

| Number and element             | 5.4.4 Instrument File Checksum Value                                  |
|--------------------------------|---|
| Child element                  | 5.4.4.1 Instrument Checksum Algorithm                                 |
| Description                    | Value of a check routine for the instrument file to ensure integrity. |
| Mandatory/Recommended/Optional | Optional  |
| Occurrence                     | 0-1   |
| Controlled vocabulary          | -   |
| Usage notes                    | type="data/dataFile".   |

| Number and element | 5.4.4.1 Instrument Checksum Algorithm                              |
|--------------------|--|
| Child element      | None   |
| Description        | Procedure/algorithm used to create the checksum of the instrument. |

| Mandatory/Recommended/Optional | Mandatory if checksum is used. |
|--------------------------------|--------------------------------|
| Occurrence                     | Mandatory                      |
| Controlled vocabulary          | 1                              |
| Usage notes                    | -                              |

## 6. Information on Questions and Responses

| Number and element             | 6 Questions and Responses                                     |
|--------------------------------|---|
| Child element                  | 6.1 Questions 6.2 Response Domain Type 6.3 Access Information |
| Description                    | No metadata element.  |
| Mandatory/Recommended/Optional | Recommended   |
| Occurrence                     | 0-1   |
| Controlled vocabulary          | -   |
| Usage notes                    | -   |

## Information on Questions and Responses: Questions

| Number and element             | 6.1 Questions   |
|--------------------------------|---|
| Child element                  | 6.1.1 Question Item 6.1.2 Questions - Question Grid 6.1.3 Sequence of the Questions |
| Description                    | No metadata element. Information on Question(s).                                    |
| Mandatory/Recommended/Optional | Mandatory (EQB)   |
| Occurrence                     | 1-n   |
| Controlled vocabulary          | -   |
| Usage notes                    | Questions are mandatory for EQB.  |

| Number and element | 6.1.1 Question Item |
|--------------------|---------------------|
|--------------------|---------------------|

| Child element                  | 6.1.1.1 Question Item DDI Identifier 6.1.1.2 Question Item Version 6.1.1.3 User ID for Question Item 6.1.1.4 Question Item Name 6.1.1.5 Question Item Text 6.1.1.6 Question Item Statement 6.1.1.7 Question Item Interviewer Instruction 6.1.1.8 Question Item Number 6.1.1.9 Reference of Question Item to Response Domain 6.1.1.10 Reference of Question Item to Concept 6.1.1.11 Showcards |
|--------------------------------|---|
| Description                    | No metadata element. A question item is a term for a single question that contains a version, ID, title, text, statement, interviewer instructions and number.  |
| Mandatory/Recommended/Optional | Recommended   |
| Occurrence                     | 0-n   |
| Controlled vocabulary          | -   |
| Usage notes                    | -   |

| Number and element             | 6.1.1.1 Question Item DDI Identifier   |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | Identifier of question according to the DDI-L structure. Either DDI URN or triple Agency, ID, Version need to be provided as information.  |
| Mandatory/Recommended/Optional | Mandatory for DDI-L  |
| Occurrence                     | 1-2 for DDI-L  |
| Controlled vocabulary          | -  |
| Usage notes                    | It is recommended to have both the URN and the combination of subclasses Agency, ID and Version as an identifier in DDI-L. However, it is possible to use only the URN or only the combination of Agency, ID and Version as an identifier. |

| Number and element | 6.1.1.2 Question Item Version |
|--------------------|-------------------------------|
|--------------------|-------------------------------|

| Child element                  | None                                 |
|--------------------------------|--------------------------------------|
| Description                    | Version number of the question item. |
| Mandatory/Recommended/Optional | Recommended                          |
| Occurrence                     | 0-1                                  |
| Controlled vocabulary          | -                                    |
| Usage notes                    | -                                    |

| Number and element             | 6.1.1.3 User ID for Question Item                    |
|--------------------------------|--|
| Child element                  | 6.1.1.3.1 Type of User ID for Question Item          |
| Description                    | An identifier provided by the user for the question. |
| Mandatory/Recommended/Optional | Mandatory  |
| Occurrence                     | 1-n  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

| Number and element             | 6.1.1.3.1 Type of User ID for Question Item |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | Type of UserID for question for (DDI-L)     |
| Mandatory/Recommended/Optional | Mandatory for DDI-L                         |
| Occurrence                     | 1 for DDI-L                                 |
| Controlled vocabulary          | -   |
| Usage notes                    | The type of User ID is "QuestionID"         |

| Number and element | 6.1.1.4 Question Item Name |
|--------------------|----------------------------|
|--------------------|----------------------------|

| Child element                  | 6.1.1.4.1 Context for the Question Item Name 6.1.1.4.2 Language of Question Item Name 6.1.1.4.3 Translation Status of Question Item Name |
|--------------------------------|--|
| Description                    | Label of the question the metadata refers to for display.  |
| Mandatory/Recommended/Optional | Optional   |
| Occurrence                     | 0-n  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

| Number and element             | 6.1.1.4.1 Context for the Question Item Name  |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | Identify the context related to the question item name, in this case to separate between number and label for DDI-L |
| Mandatory/Recommended/Optional | Mandatory for DDI-L   |
| Occurrence                     | 1 for DDI-L   |
| Controlled vocabulary          | -   |
| Usage notes                    | Examples: title-english, title-originallang   |

| Number and element             | 6.1.1.4.2 Language of Question Item Name  |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | The language of the content of the element containing a combined ISO Code of language and country (optional).   |
| Mandatory/Recommended/Optional | Mandatory   |
| Occurrence                     | 1   |
| Controlled vocabulary          | -   |
| Usage notes                    | Use ISO 639-1 + ISO 3166-1. It is mandatory to use ISO 639-1, but optional to include ISO 3166-1. If you have used different languages, repeat the element. |

| Number and element             | 6.1.1.4.3 Translation Status of Question Item Name |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | Is the content of the element translated?          |
| Mandatory/Recommended/Optional | Recommended  |
| Occurrence                     | 0-1  |
| Controlled vocabulary          | -  |
| Usage notes                    | True/false   |

| Number and element             | 6.1.1.5 Question Item Text  |
|--------------------------------|---|
| Child element                  | 6.1.1.5.1 Language of Question Text 6.1.1.5.2 Translation Status of Question Text |
| Description                    | A literal question item text.   |
| Mandatory/Recommended/Optional | Mandatory   |
| Occurrence                     | 1-n   |
| Controlled vocabulary          | -   |
| Usage notes                    | -   |

| Number and element             | 6.1.1.5.1 Language of Question Text   |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | The language of the content of the element containing a combined ISO Code of language and country (optional).   |
| Mandatory/Recommended/Optional | Mandatory   |
| Occurrence                     | 1   |
| Controlled vocabulary          | -   |
| Usage notes                    | Use ISO 639-1 + ISO 3166-1. It is mandatory to use ISO 639-1, but optional to include ISO 3166-1. If you have used different languages, repeat the element. |

| Number and element             | 6.1.1.5.2 Translation Status of Question Text |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | Is the content of the element translated?     |
| Mandatory/Recommended/Optional | Recommended                                   |
| Occurrence                     | 0-1   |
| Controlled vocabulary          | -   |
| Usage notes                    | True/false                                    |

| Number and element             | 6.1.1.6 Question Item Statement   |
|--------------------------------|---|
| Child element                  | 6.1.1.6.1 Language of Question Item Statement 6.1.1.6.2 Translation Status of Question Item Statement   |
| Description                    | A prequestion and/or postquestion and other statements as part of the question item text.   |
| Mandatory/Recommended/Optional | Optional  |
| Occurrence                     | 0-n   |
| Controlled vocabulary          | -   |
| Usage notes                    | Prequestion text: can be used to supplement certain questions, explain how something should be understood or transition to new themes.  |
|                                | Postquestion text: can be used to clarify words, terms or concepts used in the literal question text. It can also be used to provide further instructions on answering the question or skipping to another question in the questionnaire. |

| Number and element | 6.1.1.6.1 Language of Question Item Statement |
|--------------------|---|
| Child element      | None  |

| Description                    | The language of the content of the element containing a combined ISO Code of language and country (optional).   |
|--------------------------------|---|
| Mandatory/Recommended/Optional | Mandatory   |
| Occurrence                     | 1   |
| Controlled vocabulary          | -   |
| Usage notes                    | Use ISO 639-1 + ISO 3166-1. It is mandatory to use ISO 639-1, but optional to include ISO 3166-1. If you have used different languages, repeat the element. |

| Number and element             | 6.1.1.6.2 Translation Status of Question Item Statement |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | Is the content of the element translated?               |
| Mandatory/Recommended/Optional | Recommended   |
| Occurrence                     | 0-1   |
| Controlled vocabulary          | -   |
| Usage notes                    | -   |

| Number and element             | 6.1.1.7 Question Item Interviewer Instruction   |
|--------------------------------|---|
| Child element                  | 6.1.1.7.1 Language of Question Item Interviewer Instruction 6.1.1.7.2 Translation Status of Question Item Interviewer Instruction 6.1.1.7.3 Reference of Question Item to Interviewer Instruction |
| Description                    | Instructions for the interviewer.   |
| Mandatory/Recommended/Optional | Recommended   |
| Occurrence                     | 0-n   |
| Controlled vocabulary          | -   |
| Usage notes                    | Interviewer instructions: can be used in cases where an interviewer poses questions to the respondent, either face to   |

| face or over the phone and the original questionnaire contains |
|--|
| instructions on how the questions should be asked and how to   |
| proceed after each response.                                   |
|  |

| Number and element             | 6.1.1.7.1 Language of Question Item Interviewer Instruction   |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | The language of the content of the element containing a combined ISO Code of language and country (optional).   |
| Mandatory/Recommended/Optional | Mandatory   |
| Occurrence                     | 1   |
| Controlled vocabulary          | -   |
| Usage notes                    | Use ISO 639-1 + ISO 3166-1. It is mandatory to use ISO 639-1, but optional to include ISO 3166-1. If you have used different languages, repeat the element. |

| Number and element             | 6.1.1.7.2 Translation Status of Question Item Interviewer Instruction |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | Is the content of the element translated?                             |
| Mandatory/Recommended/Optional | Recommended   |
| Occurrence                     | 0-1   |
| Controlled vocabulary          | -   |
| Usage notes                    | True/false  |

| Number and element | 6.1.1.7.3 Reference of Question Item to Interviewer Instruction   |
|--------------------|---|
| Child element      | None  |
| Description        | A reference from the question item to an interviewer instruction. |

| Mandatory/Recommended/Optional | Recommended |
|--------------------------------|-------------|
| Occurrence                     | 0-n         |
| Controlled vocabulary          | -           |
| Usage notes                    | True/false  |

| Number and element             | 6.1.1.8 Question Item Number   |
|--------------------------------|--|
| Child element                  | 6.1.1.8.1 Context for the Question Item Number 6.1.1.8.2 Language of Question Item Number 6.1.1.8.3 Translation Status of Question Item Number |
| Description                    | A number of the question item the metadata refer to within the associated instrument.  |
| Mandatory/Recommended/Optional | Recommended  |
| Occurrence                     | 0-n  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

| Number and element             | 6.1.1.8.1 Context for the Question Item Number  |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | Number of the question item within the associated instrument to separate label and number for DDI-L |
| Mandatory/Recommended/Optional | Mandatory for DDI-L   |
| Occurrence                     | 1 for DDI-L   |
| Controlled vocabulary          | -   |
| Usage notes                    | Context is "questionNumber"   |

| Number and element | 6.1.1.8.2 Language of Question Item Number |
|--------------------|--|
| Child element      | None                                       |

| Description                    | The language of the content of the element containing a combined ISO Code of language and country (optional).   |
|--------------------------------|---|
| Mandatory/Recommended/Optional | Recommended   |
| Occurrence                     | 0-1   |
| Controlled vocabulary          | -   |
| Usage notes                    | Use ISO 639-1 + ISO 3166-1. It is mandatory to use ISO 639-1, but optional to include ISO 3166-1. If you have used different languages, repeat the element. |

| Number and element             | 6.1.1.8.3 Translation Status of Question Item Number |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | Is the content of the element translated?            |
| Mandatory/Recommended/Optional | Recommended  |
| Occurrence                     | 0-1  |
| Controlled vocabulary          | -  |
| Usage notes                    | True/false   |

| Number and element             | 6.1.1.9 Reference of Question Item to Response Domain  |
|--------------------------------|--|
| Child element                  | 6.1.1.9.1 Type of Response Domain (Domain Reference)   |
| Description                    | A reference of a specific question item to an existing Response Domain type (e.g., Code Domain, Numeric Domain or Text Domain) using the DDI reference structure (Agency, ID, Version).  |
| Mandatory/Recommended/Optional | Recommended  |
| Occurrence                     | 0-2 for DDI-L  |
| Controlled vocabulary          | -  |
| Usage notes                    | It is recommended to have both the URN and the combination of subclasses Agency, ID and Version as a referenced identifier in DDI-L. However, it is possible to use only the URN or only |

| the combination of Agency, ID and Version as a referenced |
|---|
| identifier.   |

| Number and element             | 6.1.1.9.1 Type of Response Domain (Domain Reference)   |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | States the type of object being referenced based on a persistent list of valid DDI object types.   |
| Mandatory/Recommended/Optional | Mandatory for DDI-L  |
| Occurrence                     | 1 for DDI-L  |
| Controlled vocabulary          | -  |
| Usage notes                    | Possible values for the type of object are: ManagedNumericRepresentation ManagedScaleRepresentation ManagedTextRepresentation ManagedDateTimeRepresentation ManagedMissingValuesRepresentation |

| Number and element             | 6.1.1.10 Reference of Question Item to Concept   |
|--------------------------------|--|
| Child element                  | 6.1.1.10.1 Type of Concept (for DDI-L)   |
| Description                    | A reference of a specific question item to an existing concept or keyword that is related to the question using the DDI reference structure (Agency, ID, Version).   |
| Mandatory/Recommended/Optional | Recommended  |
| Occurrence                     | 0-2  |
| Controlled vocabulary          | -  |
| Usage notes                    | It is recommended to have both the URN and the combination of subclasses Agency, ID and Version as a referenced identifier in DDI-L. However, it is possible to use only the URN or only the combination of Agency, ID and Version as a referenced identifier. |

| Number and element             | 6.1.1.10.1 Type of Concept (for DDI-L)   |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | States the type of object being referenced based on a persistent list of valid DDI object types. |
| Mandatory/Recommended/Optional | Mandatory for DDI-L  |
| Occurrence                     | 1 for DDI-L  |
| Controlled vocabulary          | -  |
| Usage notes                    | Type of object is Concept.   |

| Number and element             | 6.1.1.11 Showcards   |
|--------------------------------|--|
| Child element                  | 6.1.1.11.1 Showcard File Name<br>6.1.1.11.2 Showcard URL   |
| Description                    | No metadata element. Within the context of survey research, a showcard or show sheet is a visual aid used predominantly during in-person surveys. It is a card, a piece of paper, or an electronic screen containing answer categories to a question, from which the respondent chooses the answer to the survey question. |
| Mandatory/Recommended/Optional | Recommended  |
| Occurrence                     | 0-n  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

| Number and element | 6.1.1.11.1 Showcard File Name   |
|--------------------|---|
| Child element      | 6.1.1.11.1.1 Language of the Showcard File Name 6.1.1.11.1.2 Translation Status of the Showcard File Name |
| Description        | File name of the showcard.  |

| Mandatory/Recommended/Optional | Mandatory |
|--------------------------------|-----------|
| Occurrence                     | 1         |
| Controlled vocabulary          | -         |
| Usage notes                    | -         |

| Number and element             | 6.1.1.11.1 Language of the Showcard File Name   |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | The language of the content of the element containing a combined ISO Code of language and country (optional).   |
| Mandatory/Recommended/Optional | Mandatory   |
| Occurrence                     | 1   |
| Controlled vocabulary          | -   |
| Usage notes                    | Use ISO 639-1 + ISO 3166-1. It is mandatory to use ISO 639-1, but optional to include ISO 3166-1. If you have used different languages, repeat the element. |

| Number and element             | 6.1.1.11.1.2 Translation Status of the Showcard File Name |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | Is the content element translated?                        |
| Mandatory/Recommended/Optional | Recommended   |
| Occurrence                     | 0-1   |
| Controlled vocabulary          | -   |
| Usage notes                    | True/false  |

| Number and element | 6.1.1.11.2 Showcard URL |
|--------------------|-------------------------|
|--------------------|-------------------------|

| Child element                  | None                  |
|--------------------------------|-----------------------|
| Description                    | Link to the showcard. |
| Mandatory/Recommended/Optional | Recommended           |
| Occurrence                     | 0-1                   |
| Controlled vocabulary          | -                     |
| Usage notes                    | -                     |

| Number and element             | 6.1.2 Questions - Question Grid  |
|--------------------------------|--|
| Child element                  | 6.1.2.1 Question Grid DDI Identifier 6.1.2.2 Question Grid Version 6.1.2.3 User ID for Question Grid 6.1.2.4 Question Grid Name 6.1.2.5 Question Grid Text 6.1.2.6 Question Grid Statement 6.1.2.7 Question Grid Interviewer Instruction 6.1.2.8 Question Grid Number 6.1.2.9 Reference of Question Grid to a Concept 6.1.2.10 Grid Dimension 6.1.2.11 Showcards Question Grid |
| Description                    | No metadata element. A question grid is a term for a matrix or a ranking scale question that contains an ID, number, title, text, statement and interviewer instructions.  |
| Mandatory/Recommended/Optional | Recommended  |
| Occurrence                     | 0-n  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

| Number and element | 6.1.2.1 Question Grid DDI Identifier |
|--------------------|--------------------------------------|
| Child element      | None                                 |

| Description                    | Identifier of question according to DDI-L structure. Either DDI URN or triple Agency, ID, Version need to be provided as information.  |
|--------------------------------|--|
| Mandatory/Recommended/Optional | Mandatory for DDI-L  |
| Occurrence                     | 1-2 for DDI-L  |
| Controlled vocabulary          | -  |
| Usage notes                    | It is recommended to have both the URN and the combination of subclasses Agency, ID and Version as a referenced identifier in DDI-L. However, it is possible to use only the URN or only the combination of Agency, ID and Version as a referenced identifier. |

| Number and element             | 6.1.2.2 Question Grid Version       |
|--------------------------------|-------------------------------------|
| Child element                  | None                                |
| Description                    | Version number of the question grid |
| Mandatory/Recommended/Optional | Optional                            |
| Occurrence                     | 0-1                                 |
| Controlled vocabulary          | -                                   |
| Usage notes                    | -                                   |

| Number and element             | 6.1.2.3 User ID for Question Grid                          |
|--------------------------------|--|
| Child element                  | 6.1.2.3.1 Type of Question Grid ID (for DDI-L)             |
| Description                    | An identifier for the question grid the metadata refers to |
| Mandatory/Recommended/Optional | Mandatory for DDI-L  |
| Occurrence                     | 1-n for DDI-L  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

| Number and element             | 6.1.2.3.1 Type of Question Grid ID (for DDI-L)  |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | Type of UserID for question grid ID (for DDI-L) |
| Mandatory/Recommended/Optional | Mandatory for DDI-L, not for DDI-C              |
| Occurrence                     | 1 for DDI-L                                     |
| Controlled vocabulary          | -   |
| Usage notes                    | typeOfUserID is "QuestionID"                    |

| Number and element             | 6.1.2.4 Question Grid Name  |
|--------------------------------|---|
| Child element                  | 6.1.2.4.1 Context of Question Grid Name 6.1.2.4.2 Language of Question Grid Name 6.1.2.4.3 Translation Status of Question Grid Name |
| Description                    | Label of question the metadata refer to for display   |
| Mandatory/Recommended/Optional | Optional  |
| Occurrence                     | 0-n   |
| Controlled vocabulary          | -   |
| Usage notes                    | -   |

| Number and element             | 6.1.2.4.1 Context of Question Grid Name  |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | Identify the context related to the question grid name, in this case to separate between Question Number and Label for DDI-L |
| Mandatory/Recommended/Optional | Mandatory for DDI-L  |
| Occurrence                     | 1 for DDI-L  |
| Controlled vocabulary          | -  |

| Usage notes examples: title-english | Usage notes | examples: title-english |
|-------------------------------------|-------------|-------------------------|
|-------------------------------------|-------------|-------------------------|

| Number and element             | 6.1.2.4.2 Language of Question Grid Name  |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | The language of the content of the element containing a combined ISO Code of language and country (optional).   |
| Mandatory/Recommended/Optional | Mandatory   |
| Occurrence                     | 1   |
| Controlled vocabulary          | -   |
| Usage notes                    | Use ISO 639-1 + ISO 3166-1. It is mandatory to use ISO 639-1, but optional to include ISO 3166-1. If you have used different languages, repeat the element. |

| Number and element             | 6.1.2.4.3 Translation Status of Question Grid Name |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | Is the content of the element translated?          |
| Mandatory/Recommended/Optional | Recommended  |
| Occurrence                     | 1  |
| Controlled vocabulary          | -  |
| Usage notes                    | True, false  |

| Number and element | 6.1.2.5 Question Grid Text  |
|--------------------|---|
| Child element      | 6.1.2.5.1 Language of Question Grid Text 6.1.2.5.2 Translation Status of Question Grid Text |
| Description        | A literal question grid text  |

| Mandatory/Recommended/Optional | Mandatory |
|--------------------------------|-----------|
| Occurrence                     | 1-n       |
| Controlled vocabulary          | -         |
| Usage notes                    | -         |

| Number and element             | 6.1.2.5.1 Language of Question Grid Text  |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | The language of the content of the element containing a combined ISO Code of language and country (optional).   |
| Mandatory/Recommended/Optional | Mandatory   |
| Occurrence                     | 1   |
| Controlled vocabulary          | -   |
| Usage notes                    | Use ISO 639-1 + ISO 3166-1. It is mandatory to use ISO 639-1, but optional to include ISO 3166-1. If you have used different languages, repeat the element. |

| Number and element             | 6.1.2.5.2 Translation Status of Question Grid Text |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | Is the content of the element translated?          |
| Mandatory/Recommended/Optional | Recommended  |
| Occurrence                     | 0-1  |
| Controlled vocabulary          | -  |
| Usage notes                    | True/false   |

| Number and element | 6.1.2.6 Question Grid Statement |
|--------------------|---------------------------------|
|--------------------|---------------------------------|

| Child element                  | 6.1.2.6.1 Language of Question Grid Statement 6.1.2.6.2 Translation Status of Question Grid Statement 6.1.2.6.3 Reference of Question Grid to a Statement  |
|--------------------------------|--|
| Description                    | A prequestion and/or postquestion and other statements as part of the question grid text   |
| Mandatory/Recommended/Optional | Optional   |
| Occurrence                     | 0-n  |
| Controlled vocabulary          | -  |
| Usage notes                    | Pre-question text: can be used to supplement certain questions, explain how something should be understood or transition to new themes.  |
|                                | Post-question text: can be used to clarify words, terms or concepts used in the literal question text. It can also be used to provide further instructions on answering the question or skipping to another question in the questionnaire. |

| Number and element             | 6.1.2.6.1 Language of Question Grid Statement   |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | The language of the content of the element containing a combined ISO Code of language and country (optional)  |
| Mandatory/Recommended/Optional | Mandatory   |
| Occurrence                     | 1   |
| Controlled vocabulary          | -   |
| Usage notes                    | Use ISO 639-1 + ISO 3166-1. It is mandatory to use ISO 639-1, but optional to include ISO 3166-1. If you have used different languages, repeat the element. |

| Number and element | 6.1.2.6.2 Translation Status of Question Grid Statement |
|--------------------|---|
| Child element      | None  |
| Description        | Is the content of the element translated?               |

| Mandatory/Recommended/Optional | Recommended |
|--------------------------------|-------------|
| Occurrence                     | 0-1         |
| Controlled vocabulary          | -           |
| Usage notes                    | True/false  |

| Number and element             | 6.1.2.6.3 Reference of Question Grid to a Statement |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | Reference of a question grid to a statement.        |
| Mandatory/Recommended/Optional | Recommended   |
| Occurrence                     | 0-n   |
| Controlled vocabulary          | -   |
| Usage notes                    | -   |

| Number and element             | 6.1.2.7 Question Grid Interviewer Instruction  |
|--------------------------------|--|
| Child element                  | 6.1.2.7.1 Language of Question Grid Interviewer Instruction 6.1.2.7.2 Translation Status of Question Grid Interviewer Instruction 6.1.2.7.3 Reference of Question Grid to Interviewer Instruction  |
| Description                    | Instruction to the interviewer.  |
| Mandatory/Recommended/Optional | Optional   |
| Occurrence                     | 0-n  |
| Controlled vocabulary          | -  |
| Usage notes                    | Interviewer instructions: can be used in cases where an interviewer poses questions to the respondent, either face to face or over the phone and the original questionnaire contains instructions on how the questions should be asked and how to proceed after each response. |

| Number and element             | 6.1.2.7.1 Language of Question Grid Interviewer Instruction   |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | The language of the content of the element containing a combined ISO Code of language and country (optional).   |
| Mandatory/Recommended/Optional | Mandatory   |
| Occurrence                     | 1   |
| Controlled vocabulary          | -   |
| Usage notes                    | Use ISO 639-1 + ISO 3166-1. It is mandatory to use ISO 639-1, but optional to include ISO 3166-1. If you have used different languages, repeat the element. |

| Number and element             | 6.1.2.7.2 Translation Status of Question Grid Interviewer Instruction |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | Is the content of the element translated?                             |
| Mandatory/Recommended/Optional | Recommended   |
| Occurrence                     | 0-1   |
| Controlled vocabulary          | -   |
| Usage notes                    | True/false  |

| Number and element             | 6.1.2.7.3 Reference of Question Grid to Interviewer Instruction   |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | A reference from the question grid to an interviewer instruction. |
| Mandatory/Recommended/Optional | Recommended   |

| Occurrence            | 0-n |
|-----------------------|-----|
| Controlled vocabulary | -   |
| Usage notes           | -   |

| Number and element             | 6.1.2.8 Question Grid Number  |
|--------------------------------|---|
| Child element                  | 6.1.2.8.1 Context of Question Grid Number 6.1.2.8.2 Language of Question Grid Number 6.1.2.8.3 Translation Status of Question Grid Number |
| Description                    | Number of the question grid the metadata refer to within the associated instrument.   |
| Mandatory/Recommended/Optional | Optional  |
| Occurrence                     | 0-n   |
| Controlled vocabulary          | -   |
| Usage notes                    |   |

| Number and element             | 6.1.2.8.1 Context of Question Grid Number   |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | Number of the question grid within the associated instrument to separate label and number for DDI-L |
| Mandatory/Recommended/Optional | Mandatory for DDI-L   |
| Occurrence                     | 1 for DDI-L   |
| Controlled vocabulary          | -   |
| Usage notes                    | context is "QuestionNumber"   |

| Number and element | 6.1.2.8.2 Language of Question Grid Number |
|--------------------|--|
|--------------------|--|

| Child element                  | None   |
|--------------------------------|--|
| Description                    | The language of the content of the element containing a combined ISO Code of language and country (optional).  |
| Mandatory/Recommended/Optional | Mandatory  |
| Occurrence                     | 1  |
| Controlled vocabulary          | -  |
| Usage notes                    | Use ISO 639-1 + ISO 3166-1. It is mandatory to use ISO 639-1, but optional to include ISO 3166-1. If you have used different languages, repeat the element |

| Number and element             | 6.1.2.8.3 Translation Status of Question Grid Number |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | Is the content of the element translated?            |
| Mandatory/Recommended/Optional | Recommended  |
| Occurrence                     | 0-1  |
| Controlled vocabulary          | -  |
| Usage notes                    | True. false  |

| Number and element             | 6.1.2.9 Reference of Question Grid to a Concept  |
|--------------------------------|--|
| Child element                  | 6.1.2.9.1 Type of Object for Concept (for DDI-L) |
| Description                    | Reference of question grid to a concept.         |
| Mandatory/Recommended/Optional | Recommended                                      |
| Occurrence                     | 0-n  |
| Controlled vocabulary          | -  |

| Usage notes | It is recommended to have both the URN and the combination      |
|-------------|---|
|             | of subclasses Agency, ID and Version as a referenced identifier |
|             | in DDI-L. However, it is possible to use only the URN or only   |
|             | the combination of Agency, ID and Version as a referenced       |
|             | identifier.   |
|             |   |

| Number and element             | 6.1.2.9.1 Type of Object for Concept (for DDI-L)   |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | States the type of object being referenced based on a persistent list of valid DDI object types. |
| Mandatory/Recommended/Optional | Mandatory for DDI-L  |
| Occurrence                     | 1 for DDI-L  |
| Controlled vocabulary          | -  |
| Usage notes                    | Type of object is "Concept".   |

| Number and element             | 6.1.2.10 Grid Dimension   |
|--------------------------------|---|
| Child element                  | 6.1.2.10.1 Subquestion Number 6.1.2.10.2 Subquestion Text 6.1.2.10.3 Response Domain for Grid Dimension |
| Description                    | No metadata element. Holds subquestion No. + Text.  |
| Mandatory/Recommended/Optional | Recommended   |
| Occurrence                     | 0-n   |
| Controlled vocabulary          | -   |
| Usage notes                    | -   |

|  | Number and element | 6.1.2.10.1 Subquestion Number |
|--|--------------------|-------------------------------|
|--|--------------------|-------------------------------|

| Child element                  | 6.1.2.10.1.1 Language of Subquestion Number 6.1.2.10.1.2 Translation Status of Subquestion Number |
|--------------------------------|---|
| Description                    | A value for the subquestion of a question grid  |
| Mandatory/Recommended/Optional | Recommended   |
| Occurrence                     | 0-n   |
| Controlled vocabulary          | -   |
| Usage notes                    | -   |

| Number and element             | 6.1.2.10.1.1 Language of Subquestion Number   |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | The language of the content of the element containing a combined ISO Code of language and country (optional).   |
| Mandatory/Recommended/Optional | Mandatory   |
| Occurrence                     | 1   |
| Controlled vocabulary          | -   |
| Usage notes                    | Use ISO 639-1 + ISO 3166-1. It is mandatory to use ISO 639-1, but optional to include ISO 3166-1. If you have used different languages, repeat the element. |

| Number and element             | 6.1.2.10.1.2 Translation Status of Subquestion Number |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | Is the content of the element translated?             |
| Mandatory/Recommended/Optional | Recommended   |
| Occurrence                     | 0-1   |
| Controlled vocabulary          | -   |
| Usage notes                    | True/false  |

| Number and element             | 6.1.2.10.2 Subquestion Text   |
|--------------------------------|---|
| Child element                  | 6.1.2.10.2.1 Language of Subquestion Text 6.1.2.10.2.2 Translation Status of Subquestion Text       |
| Description                    | A statement/or question which is part of the grid and comes after the preceding question grid text. |
| Mandatory/Recommended/Optional | Mandatory   |
| Occurrence                     | 1-n   |
| Controlled vocabulary          | -   |
| Usage notes                    | -   |

| Number and element             | 6.1.2.10.2.1 Language of Subquestion Text   |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | The language of the content of the element containing a combined ISO Code of language and country (optional).   |
| Mandatory/Recommended/Optional | Mandatory   |
| Occurrence                     | 1   |
| Controlled vocabulary          | -   |
| Usage notes                    | Use ISO 639-1 + ISO 3166-1. It is mandatory to use ISO 639-1, but optional to include ISO 3166-1. If you have used different languages, repeat the element. |

| Number and element             | 6.1.2.10.2.2 Translation Status of Subquestion Text |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | Is the content of the element translated?           |
| Mandatory/Recommended/Optional | Recommended   |
| Occurrence                     | 0-1   |

| Controlled vocabulary | -           |
|-----------------------|-------------|
| Usage notes           | True, false |

| Number and element             | 6.1.2.10.3 Response Domain for Grid Dimension  |
|--------------------------------|--|
| Child element                  | 6.1.2.10.3.1 Reference of Question Grid to Response Domain 6.1.2.10.3.2 Out Parameter 6.1.2.10.3.3 Grid Attachment 6.1.2.10.3.4 Reference Grid Dimension to Codelist |
| Description                    | A domain used for capturing the response to a question. No metadata element.   |
| Mandatory/Recommended/Optional | Recommended  |
| Occurrence                     | 0-n  |
| Controlled vocabulary          | -  |
| Usage notes                    | True, false  |

| Number and element             | 6.1.2.10.3.1 Reference of Question Grid to Response Domain   |
|--------------------------------|--|
| Child element                  | 6.1.2.10.3.1.1 Type of Response Domain (Domain Reference) for Question Grid  |
| Description                    | Response Domain used by question grid item included by reference. Can be replaced by several domains e.g. Code Domain, Numeric Domain or Text Domain   |
| Mandatory/Recommended/Optional | Recommended  |
| Occurrence                     | 0-2 for DDI-L  |
| Controlled vocabulary          | -  |
| Usage notes                    | It is recommended to have both the URN and the combination of subclasses Agency, ID and Version as a referenced identifier in DDI-L. However, it is possible to use only the URN or only the combination of Agency, ID and Version as a referenced identifier. |

| Number and element             | 6.1.2.10.3.1.1 Type of Response Domain (Domain Reference) for Question Grid   |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | States the type of object being referenced based on a persistent list of valid DDI object types.                                |
| Mandatory/Recommended/Optional | Mandatory for DDI-L   |
| Occurrence                     | 1 for DDI-L   |
| Controlled vocabulary          | -   |
| Usage notes                    | Possible values for the type of object are: ManagedNumericRepresentation; ManagedScaleRepresentation; ManagedTextRepresentation |

| Number and element             | 6.1.2.10.3.2 Out Parameter  |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | Defines an OutParameter that can be used by variable to connect it with |
| Mandatory/Recommended/Optional | Optional  |
| Occurrence                     | 0-1   |
| Controlled vocabulary          | -   |
| Usage notes                    | -   |

| Number and element             | 6.1.2.10.3.3 Grid Attachment  |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | Defines the grid dimension and the subquestion for the response value |
| Mandatory/Recommended/Optional | Mandatory for DDI-L   |
| Occurrence                     | 1 for DDI-L   |

| Controlled vocabulary | - |
|-----------------------|---|
| Usage notes           | - |

| Number and element             | 6.1.2.10.3.4 Reference Grid Dimension to Codelist |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | Reference of a grid dimension to a codelist.      |
| Mandatory/Recommended/Optional | Mandatory for DDI-L                               |
| Occurrence                     | 1-2 for DDI-L                                     |
| Controlled vocabulary          | -   |
| Usage notes                    | -   |

| Number and element             | 6.1.2.11 Showcards Question Grid                                       |
|--------------------------------|--|
| Child element                  | 6.1.2.11.1 Showcard File Name Question Grid<br>6.1.2.11.2 Showcard URL |
| Description                    | No metadata element  |
| Mandatory/Recommended/Optional | Recommended  |
| Occurrence                     | 0-n  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

| Number and element             | 6.1.2.11.1 Showcard File Name Question Grid   |
|--------------------------------|---|
| Child element                  | 6.1.2.11.1.1 Language of the Showcard Question Grid 6.1.2.11.1.2 Translation Status of the Showcard Question Grid |
| Description                    | File name of the showcard   |
| Mandatory/Recommended/Optional | Mandatory   |
| Occurrence                     | 1   |

| Controlled vocabulary | - |
|-----------------------|---|
| Usage notes           | - |

| Number and element             | 6.1.2.11.1.1 Language of the Showcard Question Grid   |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | The language of the content of the element containing a combined ISO Code of language and country (optional)  |
| Mandatory/Recommended/Optional | Mandatory   |
| Occurrence                     | 1   |
| Controlled vocabulary          | -   |
| Usage notes                    | Use ISO 639-1 + ISO 3166-1. It is mandatory to use ISO 639-1, but optional to include ISO 3166-1. If you have used different languages, repeat the element. |

| Number and element             | 6.1.2.11.1.2 Translation Status of the Showcard Question Grid |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | Is the content of the element translated?                     |
| Mandatory/Recommended/Optional | Recommended   |
| Occurrence                     | 0-1   |
| Controlled vocabulary          | -   |
| Usage notes                    | True, false   |

| Number and element | 6.1.2.11.2 Showcard URL |
|--------------------|-------------------------|
|--------------------|-------------------------|

| Child element                  | None                    |
|--------------------------------|-------------------------|
| Description                    | A link to the showcard. |
| Mandatory/Recommended/Optional | Optional                |
| Occurrence                     | 0-1                     |
| Controlled vocabulary          | -                       |
| Usage notes                    | -                       |

| Number and element             | 6.1.3 Sequence of the Questions                                      |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | Order of the question items or question grids within the instrument. |
| Mandatory/Recommended/Optional | Mandatory for DDI-L  |
| Occurrence                     | 1 for DDI-L  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

## Information on Questions and Responses: Responses

| Number and element             | 6.2 Response Domain Type   |
|--------------------------------|--|
| Child element                  | 6.2.1 Code Domain 6.2.2 Numeric Domain 6.2.3 Text Domain                     |
| Description                    | No metadata element. A domain used for capturing the response to a question. |
| Mandatory/Recommended/Optional | Recommended  |
| Occurrence                     | 0-n  |

| Controlled vocabulary | - |
|-----------------------|---|
| Usage notes           | - |

| Number and element             | 6.2.1 Code Domain  |
|--------------------------------|--|
| Child element                  | 6.2.1.1 Codelist   |
| Description                    | No metadata element. A Response Domain capturing a coded response (where both codes and their related category value are displayed) for a question item or variable. |
| Mandatory/Recommended/Optional | Optional   |
| Occurrence                     | 0-1  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

| Number and element             | 6.2.1.1 Codelist   |
|--------------------------------|--|
| Child element                  | 6.2.1.1.1 Codelist DDI Identifier 6.2.1.1.2 User ID for Codelist 6.2.1.1.3 Codelist Name 6.2.1.1.4 Codelist Label 6.2.1.1.5 Codelist Description 6.2.1.1.6 Codelist Response Cardinality 6.2.1.1.7 Answer Code 6.2.1.1.8 Answer Category 6.2.1.1.9 Reference of Answer Code to Answer Category |
| Description                    | No metadata element. A structure used to associate a list of code values to specified categories.  |
| Mandatory/Recommended/Optional | Mandatory for DDI-L  |
| Occurrence                     | 1 for DDI-L  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

| Number and element             | 6.2.1.1.1 Codelist DDI Identifier   |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | An identifier of the codelist the metadata refer to according to DDI3.2 structure. Either DDI URN or triple Agency, ID, Version need to be provided as information.   |
| Mandatory/Recommended/Optional | Mandatory for DDI-L   |
| Occurrence                     | 1-2 for DDI-L   |
| Controlled vocabulary          | -   |
| Usage notes                    | It is recommended to have both the URN and the combination of subclasses Agency, ID and Version as a referenced identifier in DDI-L. However, it is possible to use only the URN or only the combination of Agency, ID and Version as a referenced identifier |

| Number and element             | 6.2.1.1.2 User ID for Codelist                      |
|--------------------------------|---|
| Child element                  | 6.2.1.1.2.1 Type of User ID for Codelist            |
| Description                    | An identifier provided by the user for the codelist |
| Mandatory/Recommended/Optional | Mandatory   |
| Occurrence                     | 1-n   |
| Controlled vocabulary          | -   |
| Usage notes                    | -   |

| Number and element | 6.2.1.1.2.1 Type of User ID for Codelist            |
|--------------------|---|
| Child element      | None  |
| Description        | Type of UserID for User ID for Question (for DDI-L) |

| Mandatory/Recommended/Optional | Mandatory for DDI-L         |
|--------------------------------|-----------------------------|
| Occurrence                     | 1                           |
| Controlled vocabulary          | -                           |
| Usage notes                    | typeOfUserID is "CodeList". |

| Number and element             | 6.2.1.1.3 Codelist Name                   |
|--------------------------------|---|
| Child element                  | 6.2.1.1.3.1 Language of the Codelist Name |
| Description                    | A name of codelist.                       |
| Mandatory/Recommended/Optional | Optional                                  |
| Occurrence                     | 0-1                                       |
| Controlled vocabulary          | -   |
| Usage notes                    | -   |

| Number and element             | 6.2.1.1.3.1 Language of the Codelist Name   |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | The language of the content of the element containing a combined ISO Code of language and country (optional). |
| Mandatory/Recommended/Optional | Mandatory   |
| Occurrence                     | 1   |
| Controlled vocabulary          | -   |
| Usage notes                    | ISO 639-1 (M) + ISO 3166-1 (O). If you have used different languages, repeat the element.                     |

| Number and element | 6.2.1.1.4 Codelist Label |
|--------------------|--------------------------|
|--------------------|--------------------------|

| Child element                  | 6.2.1.1.4.1 Language of the Codelist Label |
|--------------------------------|--|
| Description                    | A label of a codelist.                     |
| Mandatory/Recommended/Optional | Optional                                   |
| Occurrence                     | 0-1  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

| Number and element             | 6.2.1.1.4.1 Language of Codelist label  |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | The language of the content of the element containing a combined ISO Code of language and country (optional). |
| Mandatory/Recommended/Optional | Mandatory   |
| Occurrence                     | 1   |
| Controlled vocabulary          | -   |
| Usage notes                    | ISO 639-1 (M) + ISO 3166-1 (O). If you have used different languages, repeat the element.                     |

| Number and element             | 6.2.1.1.5 Codelist Description                   |
|--------------------------------|--|
| Child element                  | 6.2.1.1.5.1 Language of the Codelist Description |
| Description                    | A description of a codelist.                     |
| Mandatory/Recommended/Optional | Optional   |
| Occurrence                     | 0-1  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

| Number and element             | 6.2.1.1.5.1 Language of the Codelist Description  |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | The language of the content of the element containing a combined ISO Code of language and country (optional). |
| Mandatory/Recommended/Optional | Mandatory   |
| Occurrence                     | 1   |
| Controlled vocabulary          | -   |
| Usage notes                    | ISO 639-1 (M) + ISO 3166-1 (O). If you have used different languages, repeat the element.                     |

| Number and element             | 6.2.1.1.6 Codelist Response Cardinality   |
|--------------------------------|---|
| Child element                  | 6.2.1.1.6.1 Codelist Response Cardinality Minimum 6.2.1.1.6.2 Codelist Response Cardinality Maximum |
| Description                    | Indicates the minimum and maximum number of possible answers within the codelist.                   |
| Mandatory/Recommended/Optional | Optional  |
| Occurrence                     | 0-1   |
| Controlled vocabulary          | -   |
| Usage notes                    | -   |

| Number and element             | 6.2.1.1.6.1 Codelist Response Cardinality Minimum                     |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | Indicates the minimum number of possible answers within the codelist. |
| Mandatory/Recommended/Optional | Optional  |

| Occurrence            | 0-1 |
|-----------------------|-----|
| Controlled vocabulary | -   |
| Usage notes           | -   |

| Number and element             | 6.2.1.1.6.2 Codelist Response Cardinality Maximum                     |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | Indicates the maximum number of possible answers within the codelist. |
| Mandatory/Recommended/Optional | Optional  |
| Occurrence                     | 0-1   |
| Controlled vocabulary          | -   |
| Usage notes                    | -   |

| Number and element             | 6.2.1.1.7 Answer Code  |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | A structure that links a unique value of a code to a specified category. |
| Mandatory/Recommended/Optional | Mandatory  |
| Occurrence                     | 1-n  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

| Number and element | 6.2.1.1.8 Answer Category   |
|--------------------|---|
| Child element      | 6.2.1.1.8.1 Language of the Answer Category 6.2.1.1.8.2 Translation Status of the Answer Category |

|                                | 6.2.1.1.8.3 Answer Missing Value                    |
|--------------------------------|---|
| Description                    | A description of a particular category or response. |
| Mandatory/Recommended/Optional | Mandatory   |
| Occurrence                     | 1-n   |
| Controlled vocabulary          | -   |
| Usage notes                    | -   |

| Number and element             | 6.2.1.1.8.1 Language of the Answer Category   |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | The language of the content of the element containing a combined ISO Code of language and country (optional). |
| Mandatory/Recommended/Optional | Mandatory   |
| Occurrence                     | 1   |
| Controlled vocabulary          | -   |
| Usage notes                    | ISO 639-1 (M) + ISO 3166-1 (O). If you have used different languages, repeat the element.                     |

| Number and element             | 6.2.1.1.8.2 Translation Status of the Answer Category |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | Is the content of the element translated?             |
| Mandatory/Recommended/Optional | Recommended   |
| Occurrence                     | 0-1   |
| Controlled vocabulary          | -   |
| Usage notes                    | True/false  |

| Number and element             | 6.2.1.1.8.3 Answer Missing Value   |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | If the category is describing a classification of "missing data" set the value of isMissing to "true".         |
| Mandatory/Recommended/Optional | Optional   |
| Occurrence                     | 0-1  |
| Controlled vocabulary          | DDI-L: true, false; DDI-C: Y, N  |
| Usage notes                    | True/false. If the category describes a classification of "missing data" set the value of isMissing to "true". |

| Number and element             | 6.2.1.1.9 Reference of Answer Code to Answer Category  |
|--------------------------------|--|
| Child element                  | 6.2.1.1.9.1 Type of Object for Category (for DDI-L)  |
| Description                    | A reference of an answer code to an answer category using the DDI reference structure (Agency, ID, Version).   |
| Mandatory/Recommended/Optional | Recommended  |
| Occurrence                     | 0-n  |
| Controlled vocabulary          | -  |
| Usage notes                    | It is recommended to have both the URN and the combination of subclasses Agency, ID and Version as a referenced identifier in DDI-L 3.2. However, it is possible to use only the URN or only the combination of Agency, ID and Version as a referenced identifier. |

| Number and element | 6.2.1.1.9.1 Type of Object for Category (for DDI-L)  |
|--------------------|--|
| Child element      | None   |
| Description        | States the type of object being referenced based on a persistent list of valid DDI object types. |

| Mandatory/Recommended/Optional | Mandatory for DDI-L        |
|--------------------------------|----------------------------|
| Occurrence                     | 1 for DDI-L                |
| Controlled vocabulary          | -                          |
| Usage notes                    | TypeOfObject is "Category" |

| Number and element             | 6.2.2 Numeric Domain   |
|--------------------------------|--|
| Child element                  | 6.2.2.1 Numeric Domain Name 6.2.2.2 Numeric Domain Label 6.2.2.3 Numeric Domain Description 6.2.2.4 Numeric Domain Range: Low 6.2.2.5 Numeric Domain Range: High |
| Description                    | No metadata element. A Response Domain capturing a numeric response to a question item.  |
| Mandatory/Recommended/Optional | Optional   |
| Occurrence                     | 0-1  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

| Number and element             | 6.2.2.1 Numeric Domain Name                   |
|--------------------------------|---|
| Child element                  | 6.2.2.1.1 Language of the Numeric Domain Name |
| Description                    | Name of Numeric Domain.                       |
| Mandatory/Recommended/Optional | Optional                                      |
| Occurrence                     | 0-1   |
| Controlled vocabulary          | -   |
| Usage notes                    | -   |

| Number and element             | 6.2.2.1.1 Language of the Numeric Domain Name  |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | The language of the content of the element containing a combined ISO Code of language and country (optional) |
| Mandatory/Recommended/Optional | Mandatory  |
| Occurrence                     | 1  |
| Controlled vocabulary          |  |
| Usage notes                    | ISO 639-1 (M) + ISO 3166-1 (O). If you have used different languages, repeat the element.                    |

| Number and element             | 6.2.2.2 Numeric Domain Label                   |
|--------------------------------|--|
| Child element                  | 6.2.2.2.1 Language of the Numeric Domain Label |
| Description                    | Label of Numeric Domain.                       |
| Mandatory/Recommended/Optional | Optional                                       |
| Occurrence                     | 0-1  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

| Number and element             | 6.2.2.2.1 Language of the Numeric Domain Label   |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | The language of the content of the element containing a combined ISO Code of language and country (optional) |
| Mandatory/Recommended/Optional | Mandatory  |
| Occurrence                     | 1  |
| Controlled vocabulary          | -  |

| Use ISO 639-1 + ISO 3166-1. It is mandatory to use ISO 639-1,  |
|--|
| but optional to include ISO 3166-1. If you have used different |
| languages, repeat the element.                                 |
|  |

| Number and element             | 6.2.2.3 Numeric Domain Description                   |
|--------------------------------|--|
| Child element                  | 6.2.2.3.1 Language of the Numeric Domain Description |
| Description                    | Description of Numeric Domain.                       |
| Mandatory/Recommended/Optional | Optional   |
| Occurrence                     | 0-1  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

| Number and element             | 6.2.2.3.1 Language of the Numeric Domain Description  |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | The language of the content of the element containing a combined ISO Code of language and country (optional).   |
| Mandatory/Recommended/Optional | Mandatory   |
| Occurrence                     | 1   |
| Controlled vocabulary          | -   |
| Usage notes                    | Use ISO 639-1 + ISO 3166-1. It is mandatory to use ISO 639-1, but optional to include ISO 3166-1. If you have used different languages, repeat the element. |

| Number and element | 6.2.2.4 Numeric Domain Range: Low                    |
|--------------------|--|
| Child element      | None   |
| Description        | Structures a numeric range. Low value is designated. |

| Mandatory/Recommended/Optional | Optional |
|--------------------------------|----------|
| Occurrence                     | 0-1      |
| Controlled vocabulary          | -        |
| Usage notes                    | -        |

| Number and element             | 6.2.2.5 Numeric Domain Range: High                    |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | Structures a numeric range. High value is designated. |
| Mandatory/Recommended/Optional | Optional  |
| Occurrence                     | 0-1   |
| Controlled vocabulary          | -   |
| Usage notes                    | -   |

| Number and element             | 6.2.3 Text Domain  |
|--------------------------------|--|
| Child element                  | 6.2.3.1 Text Domain Name 6.2.3.2 Text Domain Label 6.2.3.3 Text Domain Description 6.2.3.4 Text Domain Length: Min 6.2.3.5 Text Domain Length: Max |
| Description                    | No metadata element. A Response Domain capturing a textual response.   |
| Mandatory/Recommended/Optional | Optional   |
| Occurrence                     | 0-1  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

| Number and element | 6.2.3.1 Text Domain Name |
|--------------------|--------------------------|
|--------------------|--------------------------|

| Child element                  | 6.2.3.1.1 Language of the Text Domain Name |
|--------------------------------|--|
| Description                    | Name of Text Domain.                       |
| Mandatory/Recommended/Optional | Optional                                   |
| Occurrence                     | 0-1  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

| Number and element             | 6.2.3.1.1 Language of the Text Domain Name  |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | The language of the content of the element containing a combined ISO Code of language and country (optional). |
| Mandatory/Recommended/Optional | Mandatory   |
| Occurrence                     | 1   |
| Controlled vocabulary          | -   |
| Usage notes                    | ISO 639-1 (M) + ISO 3166-1 (O). If you have used different languages, repeat the element.                     |

| Number and element             | 6.2.3.2 Text Domain Label                   |
|--------------------------------|---|
| Child element                  | 6.2.3.2.1 Language of the Text Domain Label |
| Description                    | Label of Text Domain.                       |
| Mandatory/Recommended/Optional | Optional                                    |
| Occurrence                     | 0-1   |
| Controlled vocabulary          | -   |
| Usage notes                    | -   |

| Number and element             | 6.2.3.2.1 Language of the Text Domain Label   |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | The language of the content of the element containing a combined ISO Code of language and country (optional). |
| Mandatory/Recommended/Optional | Mandatory   |
| Occurrence                     | 1   |
| Controlled vocabulary          | -   |
| Usage notes                    | ISO 639-1 (M) + ISO 3166-1 (O). If you have used different languages, repeat the element.                     |

| Number and element             | 6.2.3.3 Text Domain Description                   |
|--------------------------------|---|
| Child element                  | 6.2.3.3.1 Language of the Text Domain Description |
| Description                    | Description of Text Domain.                       |
| Mandatory/Recommended/Optional | Optional  |
| Occurrence                     | 0-1   |
| Controlled vocabulary          | -   |
| Usage notes                    | -   |

| Number and element             | 6.2.3.3.1 Language of the Text Domain Description   |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | The language of the content of the element containing a combined ISO Code of language and country (optional). |
| Mandatory/Recommended/Optional | Mandatory   |
| Occurrence                     | 1   |
| Controlled vocabulary          | -   |

| Usage notes | ISO 639-1 (M) + ISO 3166-1 (O). If you have used different |
|-------------|--|
|             | languages, repeat the element.                             |

| Number and element             | 6.2.3.4 Text Domain Length: Min |
|--------------------------------|---------------------------------|
| Child element                  | None                            |
| Description                    | Length of the text: Min length  |
| Mandatory/Recommended/Optional | Optional                        |
| Occurrence                     | 0-1                             |
| Controlled vocabulary          | -                               |
| Usage notes                    | -                               |

| Number and element             | 6.2.3.5 Text Domain Length: Max |
|--------------------------------|---------------------------------|
| Child element                  | None                            |
| Description                    | Length of the text: Max length  |
| Mandatory/Recommended/Optional | Optional                        |
| Occurrence                     | 0-1                             |
| Controlled vocabulary          | -                               |
| Usage notes                    | -                               |

| Number and element             | 6.3 Access Information  |
|--------------------------------|---|
| Child element                  | 6.3.1 Metadata Access Conditions (Questions) 6.3.2 Metadata License (Questions) |
| Description                    | No metadata element. Access Information.  |
| Mandatory/Recommended/Optional | Recommended   |
| Occurrence                     | 0-1   |

| Controlled vocabulary | - |
|-----------------------|---|
| Usage notes           |   |

| Number and element             | 6.3.1 Metadata Access Conditions (Questions)  |
|--------------------------------|---|
| Child element                  | 6.3.1.1 Language of Metadata Access Conditions (Questions)  |
| Description                    | Freetext description on the metadata access conditions for the provided metadata for question-related information only.  Examples of such conditions are the copyright status, usage regulations based on legislation or other agreement concerning the metadata usage. Type of Note describes that this information is about metadata access conditions for questions. |
| Mandatory/Recommended/Optional | Recommended   |
| Occurrence                     | 0-1   |
| Controlled vocabulary          | -   |
| Usage notes                    | Use this element if there are different metadata access conditions on study level and question level.   |

| Number and element             | 6.3.1.1 Language of Metadata Access Conditions (Questions)               |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | The language of the content of the element                               |
| Mandatory/Recommended/Optional | Mandatory  |
| Occurrence                     | 1  |
| Controlled vocabulary          | -  |
| Usage notes                    | Use ISO 639-1. If you have used different languages, repeat the element. |

| Number and element | 6.3.2 Metadata License (Questions) |
|--------------------|------------------------------------|
|--------------------|------------------------------------|

| Child element                  | None   |
|--------------------------------|--|
| Description                    | Freetext description on the metadata license information for the provided metadata for question-related information only.  Type of Note describes that this information is about metadata license for questions. |
| Mandatory/Recommended/Optional | Recommended  |
| Occurrence                     | 0-n  |
| Controlled vocabulary          | -  |
| Usage notes                    |  |

## 7. Information on Concepts

| Number and element             | 7 Concept   |
|--------------------------------|---|
| Child element                  | 7.1 Concept DDI Identifier 7.2 Concept Name 7.3 Concept Label 7.4 Concept Description 7.5 Concept Reference |
| Description                    | No metadata element. Concept of the Question.   |
| Mandatory/Recommended/Optional | Optional  |
| Occurrence                     | 0-n   |
| Controlled vocabulary          | -   |
| Usage notes                    | -   |

| Number and element | 7.1 Concept DDI Identifier |
|--------------------|----------------------------|
| Child element      | None                       |

| Description                    | ID of the concept the metadata refer to. Either DDI URN or triple Agency, ID, Version need to be provided as information.  |
|--------------------------------|--|
| Mandatory/Recommended/Optional | Mandatory for DDI-L  |
| Occurrence                     | 1-2 for DDI-L  |
| Controlled vocabulary          | -  |
| Usage notes                    | It is recommended to have both the URN and the combination of subclasses Agency, ID and Version as an identifier in DDI-L. However, it is possible to use only the URN or only the combination of Agency, ID and Version as an identifier. |

| Number and element             | 7.2 Concept Name                   |
|--------------------------------|------------------------------------|
| Child element                  | 7.2.1 Language of the Concept Name |
| Description                    | Name of the concept.               |
| Mandatory/Recommended/Optional | Recommended                        |
| Occurrence                     | 0-1                                |
| Controlled vocabulary          | -                                  |
| Usage notes                    | -                                  |

| Number and element             | 7.2.1 Language of the Concept Name                                       |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | The language of the content of the element.                              |
| Mandatory/Recommended/Optional | Mandatory  |
| Occurrence                     | 1  |
| Controlled vocabulary          | -  |
| Usage notes                    | Use ISO 639-1. If you have used different languages, repeat the element. |

| Number and element             | 7.3 Concept Label                   |
|--------------------------------|-------------------------------------|
| Child element                  | 7.3.1 Language of the Concept Label |
| Description                    | Label of concept.                   |
| Mandatory/Recommended/Optional | Optional                            |
| Occurrence                     | 0-1                                 |
| Controlled vocabulary          | -                                   |
| Usage notes                    | -                                   |

| Number and element             | 7.3.1 Language of the Concept Label                                      |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | The language of the content of the element.                              |
| Mandatory/Recommended/Optional | Mandatory  |
| Occurrence                     | 1  |
| Controlled vocabulary          | -  |
| Usage notes                    | Use ISO 639-1. If you have used different languages, repeat the element. |

| Number and element             | 7.4 Concept Description                   |
|--------------------------------|---|
| Child element                  | 7.4.1 Language of the Concept Description |
| Description                    | Description of concept.                   |
| Mandatory/Recommended/Optional | Optional                                  |
| Occurrence                     | 0-1                                       |

| Controlled vocabulary | - |
|-----------------------|---|
| Usage notes           | - |

| Number and element             | 7.4.1 Language of the Concept Description                                |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | The language of the content of the element.                              |
| Mandatory/Recommended/Optional | Mandatory  |
| Occurrence                     | 1  |
| Controlled vocabulary          | -  |
| Usage notes                    | Use ISO 639-1. If you have used different languages, repeat the element. |

| Number and element             | 7.5 Concept Reference  |
|--------------------------------|--|
| Child element                  | 7.5.1 Type of Reference for Concept (for DDI-L)  |
| Description                    | Reference to another concept.  |
| Mandatory/Recommended/Optional | Optional   |
| Occurrence                     | 0-1  |
| Controlled vocabulary          | -  |
| Usage notes                    | It is recommended to have both the URN and the combination of subclasses Agency, ID and Version as a referenced identifier in DDI-L. However, it is possible to use only the URN or only the combination of Agency, ID and Version as a referenced identifier. |

| Number and element | 7.5.1 Type of reference for Concept (for DDI-L) |
|--------------------|---|
|--------------------|---|

| Child element                  | None   |
|--------------------------------|--|
| Description                    | States the type of object being referenced based on a persistent list of valid DDI object types. |
| Mandatory/Recommended/Optional | Mandatory for DDI-L  |
| Occurrence                     | 1  |
| Controlled vocabulary          | -  |
| Usage notes                    | TypeOfObject is "Concept"  |

## 8. Information on Further Documents

| Number and element             | 8 Document  |
|--------------------------------|---|
| Child element                  | 8.1 Document ID 8.2 Document Title 8.3 Document URL 8.4 Document Format 8.5 Document Type                 |
| Description                    | No metadata element. All documents that a Service Provider might want to add in addition (e.g. codebook). |
| Mandatory/Recommended/Optional | Optional  |
| Occurrence                     | 0-n   |
| Controlled vocabulary          | -   |
| Usage notes                    | E.g. Codebook   |

| Number and element             | 8.1 Document ID                       |
|--------------------------------|---------------------------------------|
| Child element                  | 8.1.1 Type of Document ID (for DDI-L) |
| Description                    | An identifier for the document.       |
| Mandatory/Recommended/Optional | Recommended                           |
| Occurrence                     | 0-1                                   |
| Controlled vocabulary          | -                                     |

| Usage notes | - |
|-------------|---|
|-------------|---|

| Number and element             | 8.1.1 Type of Document ID (for DDI-L) |
|--------------------------------|---------------------------------------|
| Child element                  | None                                  |
| Description                    | Type of user ID for document ID.      |
| Mandatory/Recommended/Optional | Mandatory for DDI-L                   |
| Occurrence                     | 1 for DDI-L                           |
| Controlled vocabulary          | -                                     |
| Usage notes                    | typeOfUserID is "DocumentID"          |

| Number and element             | 8.2 Document Title  |
|--------------------------------|---|
| Child element                  | 8.2.1 Language of Document Title 8.2.2 Translation Status of Document Title |
| Description                    | Name of the document the metadata refer to.                                 |
| Mandatory/Recommended/Optional | Mandatory   |
| Occurrence                     | 1   |
| Controlled vocabulary          | -   |
| Usage notes                    | -   |

| Number and element             | 8.2.1 Language of Document Title   |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | The language of the content of the element.                              |
| Mandatory/Recommended/Optional | Mandatory  |
| Occurrence                     | 1  |
| Controlled vocabulary          | -  |
| Usage notes                    | Use ISO 639-1. If you have used different languages, repeat the element. |

| Number and element             | 8.2.2 Translation Status of Document Title |
|--------------------------------|--|
| Child element                  | None                                       |
|                                |  |
| Description                    | Is the content of the element translated?  |
| Mandatory/Recommended/Optional | Recommended                                |
| Occurrence                     | 0-1  |
| Controlled vocabulary          | -  |
| Usage notes                    | True/false                                 |

| Number and element             | 8.3 Document URL   |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | URL / web address of the document the metadata refer to. |
| Mandatory/Recommended/Optional | Optional   |
| Occurrence                     | 0-1  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

| Number and element             | 8.4 Document Format   |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | A textual description of the technical format of the document (e.g. XML). |
| Mandatory/Recommended/Optional | Recommended   |
| Occurrence                     | 1   |
| Controlled vocabulary          | -   |
| Usage notes                    |   |

| umber and element | 8.5 Document Type |
|-------------------|-------------------|
|-------------------|-------------------|

| Child element                  | None   |
|--------------------------------|--|
| Description                    | Description of the type of material provided. Default term should be "Document". |
| Mandatory/Recommended/Optional | Mandatory for DDI-L  |
| Occurrence                     | 1  |
| Controlled vocabulary          | -  |
| Usage notes                    | TypeOfMaterial is "Document"   |

## 9. Information on Publication

| Number and element             | 9 Publication  |
|--------------------------------|--|
| Child element                  | 9.1 Reference of Publication to Study 9.2 Type of Material of Publication (for DDI-L) 9.3 Author Name (reference) 9.4 Editor Name (reference) 9.5 Publication Title 9.6 Publication Year [YYYY] (controlled) 9.7 Publisher Name (reference) 9.8 Journal/Serial 9.9 Publication PID 9.10 Publication URL 9.11 Bibliographic citation of publication |
| Description                    | No metadata element. Information on publication(s) that is/are related to the resource if not entered at Related ID.   |
| Mandatory/Recommended/Optional | Recommended  |
| Occurrence                     | 0-n  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

| Number and element | 9.1 Reference of Publication to Study |
|--------------------|---------------------------------------|
|--------------------|---------------------------------------|

| Child element                  | 9.1.1 Type of Reference Publication to Study (for DDI-L)   |
|--------------------------------|--|
| Description                    | Reference literature to study  |
| Mandatory/Recommended/Optional | Mandatory for DDI-L  |
| Occurrence                     | 1-n for DDI-L  |
| Controlled vocabulary          | -  |
| Usage notes                    | It is recommended to have both the URN and the combination of subclasses Agency, ID and Version as a referenced identifier in DDI-L. However, it is possible to use only the URN or only the combination of Agency, ID and Version as a referenced identifier. |

| Number and element             | 9.1.1 Type of Reference Publication to Study (for DDI-L)   |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | States the type of object being referenced based on a persistent list of valid DDI object types. |
| Mandatory/Recommended/Optional | Mandatory for DDI-L  |
| Occurrence                     | 1 for DDI-L  |
| Controlled vocabulary          | -  |
| Usage notes                    | Type of object is "StudyUnit".   |

| Number and element             | 9.2 Type of Material of Publication (for DDI-L)   |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | Description of the type of material provided. Default term should be "Related Publication". |
| Mandatory/Recommended/Optional | Mandatory for DDI-L   |
| Occurrence                     | 1 for DDI-L   |
| Controlled vocabulary          | -   |

| Usage notes | TypeOfMaterial is "Related Publication". |
|-------------|--|
|             |  |

| Number and element             | 9.3 Author Name (reference)  |
|--------------------------------|--|
| Child element                  | 9.3.1 Type of Author Name (reference) (for DDI-L)  |
| Description                    | Reference to name of author(s) of the publication the metadata refer to. No reference in DDI-C possible, use structure: Last name and first name for person(s).  |
| Mandatory/Recommended/Optional | Recommended  |
| Occurrence                     | 0-n  |
| Controlled vocabulary          | -  |
| Usage notes                    | Full name of the individual or organization. For the name of an individual, use the structure: Last Name, First Name. It is recommended to have both the URN and the combination of subclasses Agency, ID and Version as a referenced identifier in DDI-L. However, it is possible to use only the URN or only the combination of Agency, ID and Version as a referenced identifier. |

| Number and element             | 9.3.1 Type of Author Name (reference) (for DDI-L)  |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | States the type of object being referenced based on a persistent list of valid DDI object types. |
| Mandatory/Recommended/Optional | Mandatory for DDI-L  |
| Occurrence                     | 1 for DDI-L  |
| Controlled vocabulary          | -  |
| Usage notes                    | Type of object is either "Individual" or "Organization".   |

| Number and element | 9.4 Editor Name (reference) |
|--------------------|-----------------------------|
|--------------------|-----------------------------|

| Child element                  | 9.4.1 Type of Editor Name (reference) (for DDI-L) 9.4.2 Contributor Role (controlled/descriptive)  |
|--------------------------------|--|
| Description                    | Reference to name of editors(s) of the publication the metadata refer to. No reference in DDI-C possible, use structure: Last name and first name for person(s) or organization(s).  |
| Mandatory/Recommended/Optional | Recommended  |
| Occurrence                     | 0-n  |
| Controlled vocabulary          | -  |
| Usage notes                    | Full name of the individual or organization. For the name of an individual, use the structure: Last Name, First Name. It is recommended to have both the URN and the combination of subclasses Agency, ID and Version as a referenced identifier in DDI-L. However, it is possible to use only the URN or only the combination of Agency, ID and Version as a referenced identifier. |

| Number and element             | 9.4.1 Type of Editor Name (reference) (for DDI-L)  |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | States the type of object being referenced based on a persistent list of valid DDI object types. |
| Mandatory/Recommended/Optional | Mandatory for DDI-L  |
| Occurrence                     | 1 for DDI-L  |
| Controlled vocabulary          | -  |
| Usage notes                    | Type of object is either "Individual" or "Organization".   |

| Number and element             | 9.4.2 Contributor Role (controlled/descriptive)   |
|--------------------------------|---|
| Child element                  | 9.4.2.1 Role of Contributor Vocabulary 9.4.2.2 Role of Contributor Vocabulary Agency 9.4.2.3 Role of Contributor Vocabulary URI |
| Description                    | Role of the contributor.  |
| Mandatory/Recommended/Optional | Recommended   |

| Occurrence            | 0-n  |
|-----------------------|--|
| Controlled vocabulary | -  |
| Usage notes           | DDI Contributor Role (Code value is used in DDI-L. In DDI-C descriptive term is used for element content). |

| Number and element             | 9.4.2.1 Role of Contributor Vocabulary                  |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | The name of the vocabulary used for "Contributor Role". |
| Mandatory/Recommended/Optional | Mandatory   |
| Occurrence                     | 1   |
| Controlled vocabulary          | -   |
| Usage notes                    | DDI Contributor Role                                    |

| Number and element             | 9.4.2.2 Role of Contributor Vocabulary Agency                             |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | The name of the agency maintaining the vocabulary for "Contributor Role". |
| Mandatory/Recommended/Optional | Optional  |
| Occurrence                     | 0-1   |
| Controlled vocabulary          | -   |
| Usage notes                    | DDI Alliance  |

| Number and element             | 9.4.2.3 Role of Contributor Vocabulary URI                 |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | URI (URN or URL) of the vocabulary for "Contributor Role". |
| Mandatory/Recommended/Optional | Mandatory  |

| Occurrence            | 1 |
|-----------------------|---|
| Controlled vocabulary | - |
| Usage notes           | - |

| Number and element             | 9.5 Publication Title   |
|--------------------------------|---|
| Child element                  | 9.5.1 Language of Publication Title 9.5.2 Translation Status of Publication Title |
| Description                    | Title of the publication the metadata refer to.                                   |
| Mandatory/Recommended/Optional | Mandatory   |
| Occurrence                     | 1-n   |
| Controlled vocabulary          | -   |
| Usage notes                    | -   |

| Number and element             | 9.5.1 Language of Publication Title                                      |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | The language of the content of the element.                              |
| Mandatory/Recommended/Optional | Mandatory  |
| Occurrence                     | 1  |
| Controlled vocabulary          | -  |
| Usage notes                    | Use ISO 639-1. If you have used different languages, repeat the element. |

| Number and element | 9.5.2 Translation Status of Publication Title |
|--------------------|---|
| Child element      | None  |
| Description        | Is the content of the element translated?     |

| Mandatory/Recommended/Optional | Recommended |
|--------------------------------|-------------|
| Occurrence                     | 0-1         |
| Controlled vocabulary          | -           |
| Usage notes                    | True/false  |

| Number and element             | 9.6 Publication Year [YYYY] (Controlled)                   |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | Year of the publication the metadata refer to [YYYY].      |
| Mandatory/Recommended/Optional | Mandatory  |
| Occurrence                     | 1  |
| Controlled vocabulary          | -  |
| Usage notes                    | Use ISO 8601. Year: the date in the YYYY format e.g. 2018. |

| Number and element             | 9.7 Publisher Name (reference)   |
|--------------------------------|--|
| Child element                  | 9.7.1 Type of Publisher Name (reference) (for DDI-L)   |
| Description                    | Name of the publishing house of the publication the metadata refer to. No reference in DDI-C possible, add name of organization(s).  |
| Mandatory/Recommended/Optional | Recommended  |
| Occurrence                     | 0-n  |
| Controlled vocabulary          | -  |
| Usage notes                    | It is recommended to have both the URN and the combination of subclasses Agency, ID and Version as a referenced identifier in DDI-L. However, it is possible to use only the URN or only the combination of Agency, ID and Version as a referenced identifier. |

| Number and element | 9.7.1 Type of Publisher Name (reference) (for DDI-L) |
|--------------------|--|
|--------------------|--|

| Child element                  | None   |
|--------------------------------|--|
| Description                    | States the type of object being referenced based on a persistent list of valid DDI object types. |
| Mandatory/Recommended/Optional | Mandatory for DDI-L  |
| Occurrence                     | 1 for DDI-L  |
| Controlled vocabulary          | -  |
| Usage notes                    | Type of object is "Organization".  |

| Number and element             | 9.8 Journal/Serial  |
|--------------------------------|---|
| Child element                  | 9.8.1 Name of the Journal/Serial  |
| Description                    | Information on publication(s) that is/are related to the resource if not entered at Related ID. |
| Mandatory/Recommended/Optional | Recommended   |
| Occurrence                     | 0-n   |
| Controlled vocabulary          | -   |
| Usage notes                    | -   |

| Number and element             | 9.8.1 Name of the Journal/Serial                              |
|--------------------------------|---|
| Child element                  | 9.8.1.1. Language of Name of the Journal/Serial               |
| Description                    | The name of the journal in which a publication was published. |
| Mandatory/Recommended/Optional | Optional  |
| Occurrence                     | 0-n   |
| Controlled vocabulary          | -   |
| Usage notes                    | -   |
|                                |   |

| Number and element             | 9.8.1.1. Language of Name of the Journal/Serial |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | The language of the content of the element.     |
| Mandatory/Recommended/Optional | Mandatory                                       |
| Occurrence                     | 1   |
| Controlled vocabulary          | -   |
| Usage notes                    | -   |

| Number and element             | 9.8.2 Role of the publisher for DDI-L  |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | The role of the publisher stating that the publication was published in a journal or serial. |
| Mandatory/Recommended/Optional | Optional   |
| Occurrence                     | 0-n  |
| Controlled vocabulary          | journal, serial  |
| Usage notes                    |  |

| Number and element             | 9.9. Publication PID  |
|--------------------------------|---|
| Child element                  | 9.9.1 Publication PID Type 9.9.2. Publication PID URL   |
| Description                    | To capture information - type and PID value - on PID(s) of the publication, Content = PID value |
| Mandatory/Recommended/Optional | Recommended   |
| Occurrence                     | 0-n   |
| Controlled vocabulary          | -   |
| Usage notes                    |   |

| Number and element             | 9.9.1 Publication PID Type  |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | The name of the agency maintaining the PID. When applicable use OpenAIRE's list of PID types (https://guidelines.openaire.eu/en/latest/data/field_relatedid entifier.html#d-relatedidentifier). |
| Mandatory/Recommended/Optional | Mandatory   |
| Occurrence                     | 1   |
| Controlled vocabulary          | -   |
| Usage notes                    |   |

| Number and element             | 9.9.2. Publication PID URL |
|--------------------------------|----------------------------|
| Child element                  | None                       |
| Description                    | The URL of the PID.        |
| Mandatory/Recommended/Optional | Recommended                |
| Occurrence                     | 0-1                        |
| Controlled vocabulary          | -                          |
| Usage notes                    |                            |

| Number and element             | 9.10 Publication URL  |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | URL of website on which the publication can be found (or at least information concerning the literature). |
| Mandatory/Recommended/Optional | Recommended   |
| Occurrence                     | 0-1   |

| Controlled vocabulary | - |
|-----------------------|---|
| Usage notes           | - |

| Number and element             | 9.11 Bibliographic citation of publication |
|--------------------------------|--|
| Child element                  | None                                       |
| Description                    | Information on the bibliographic citation. |
| Mandatory/Recommended/Optional | Optional                                   |
| Occurrence                     | 0-1  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

## 10. Information on Group of Studies

| Number and element                       | 10 Study Group   |
|--|--|
| Child element                            | 10.1 Study Group DDI Identifier  10.2 User ID for Study Group  10.3 Study Group Name  10.4 Study Group Description  10.5 Reference Study Group to Study Unit  10.6 Reference to Document |
| Description                              | No metadata element. Information on group(s) of studies.   |
| Mandatory/Recommended/Optional           | Optional   |
|  | Optional   |
| Occurrence                               | 0-n  |
| ,, |  |

| Number and element | 10.1 Study Group DDI Identifier |
|--------------------|---------------------------------|
|--------------------|---------------------------------|

| Child element                  | None   |
|--------------------------------|--|
| Description                    | Identifier of the study group according to the DDI-L structure. Either DDI URN or triple Agency, ID, Version need to be provided as information.   |
| Mandatory/Recommended/Optional | Mandatory for DDI-L  |
| Occurrence                     | 1-2 for DDI-L  |
| Controlled vocabulary          | -  |
| Usage notes                    | It is recommended to have both the URN and the combination of subclasses Agency, ID and Version as an identifier in DDI-L. However, it is possible to use only the URN or only the combination of Agency, ID and Version as an identifier. |

| Number and element             | 10.2 User ID for Study Group                            |
|--------------------------------|---|
| Child element                  | 10.2.1 Type of UserID for Study Group ID (for DDI-L)    |
| Description                    | An identifier provided by the user for the study group. |
| Mandatory/Recommended/Optional | Optional  |
| Occurrence                     | 0-n   |
| Controlled vocabulary          | -   |
| Usage notes                    | -   |

| Number and element             | 10.2.1 Type of UserID for Study Group ID (for DDI-L)  |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | A required attribute containing the local user identification system that maintains and defines the UserID. |
| Mandatory/Recommended/Optional | Mandatory for DDI-L   |
| Occurrence                     | 1 for DDI-L   |
| Controlled vocabulary          | -   |
| Usage notes                    | The type of UserID should be "GroupID".   |

| Number and element             | 10.3 Study Group Name   |
|--------------------------------|---|
| Child element                  | 10.3.1 Language of Study Group Name 10.3.2 Translation Status of Study Group Name |
| Description                    | Name of the study group.  |
| Mandatory/Recommended/Optional | Mandatory   |
| Occurrence                     | 1-n   |
| Controlled vocabulary          | -   |
| Usage notes                    | -   |

| Number and element             | 10.3.1 Language of Study Group Name                                      |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | The language of the content of the element.                              |
| Mandatory/Recommended/Optional | Mandatory  |
| Occurrence                     | 1  |
| Controlled vocabulary          | -  |
| Usage notes                    | Use ISO 639-1. If you have used different languages, repeat the element. |

| Number and element             | 10.3.2 Translation Status of Study Group Name |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | Is the content of the element translated?     |
| Mandatory/Recommended/Optional | Recommended                                   |
| Occurrence                     | 0-1   |
| Controlled vocabulary          | -   |
| Usage notes                    | True/false                                    |

| Number and element             | 10.4 Study Group Description  |
|--------------------------------|---|
| Child element                  | 10.4.1 Language of Study Group Description 10.4.2 Study Group Description URI |
| Description                    | Description of the study group.   |
| Mandatory/Recommended/Optional | Recommended   |
| Occurrence                     | 0-n   |
| Controlled vocabulary          | -   |
| Usage notes                    | -   |

| Number and element             | 10.4.1 Language of Study Group Description                               |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | The language of the content of the element.                              |
| Mandatory/Recommended/Optional | Mandatory  |
| Occurrence                     | 1  |
| Controlled vocabulary          | -  |
| Usage notes                    | Use ISO 639-1. If you have used different languages, repeat the element. |

| Number and element             | 10.4.2 Study Group Description URI                         |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | Link to content description of the study group on the web. |
| Mandatory/Recommended/Optional | Recommended  |
| Occurrence                     | 0-1  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

| Number and element             | 10.5 Reference Study Group to Study Unit   |
|--------------------------------|--|
| Child element                  | 10.5.1 Type of Reference Study Group to Study Unit (reference) (for DDI-L)   |
| Description                    | Reference of a study group to a study unit.  |
| Mandatory/Recommended/Optional | Mandatory for DDI-L  |
| Occurrence                     | 1-n  |
| Controlled vocabulary          | -  |
| Usage notes                    | It is recommended to have both the URN and the combination of subclasses Agency, ID and Version as a referenced identifier in DDI-L. However, it is possible to use only the URN or only the combination of Agency, ID and Version as a referenced identifier. |

| Number and element             | 10.5.1 Type of Reference Study Group to Study Unit (reference) (for DDI-L)                       |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | States the type of object being referenced based on a persistent list of valid DDI object types. |
| Mandatory/Recommended/Optional | Mandatory for DDI-L  |
| Occurrence                     | 1  |
| Controlled vocabulary          | -  |
| Usage notes                    | Type of object is StudyUnit (use StudyUnit ID - Unique Archival Number).                         |

| Number and element             | 10.6 Reference to Document                                     |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | Reference of a study group to a document, e.g a questionnaire. |
| Mandatory/Recommended/Optional | Optional   |
| Occurrence                     | 0-n  |

| Controlled vocabulary | -   |
|-----------------------|---|
| Usage notes           | E.g. reference of a study group to a questionnaire. |

## 11. Information about the Document Description ('metadata about metadata')

| Number and element             | 11. Study Documentation  |
|--------------------------------|--|
| Child element                  | 11.1 Description 11.2 Technical Information                              |
| Description                    | Information on the study documentation description. No metadata element. |
| Mandatory/Recommended/Optional | Mandatory  |
| Occurrence                     | 1  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

| Number and element             | 11.1 Description   |
|--------------------------------|--|
| Child element                  | 11.1.1 Title of the Study Description Document 11.1.2 Study Documentation Copyright 11.1.3 Study Documentation Publication Date 11.1.4 Study Documentation Publisher (reference) 11.1.5 Metadata Access Conditions (all) 11.1.6 Metadata License (all) 11.1.7 Metadata Quality |
| Description                    | No metadata element.   |
| Mandatory/Recommended/Optional | Mandatory  |
| Occurrence                     | 1  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

| Number and element             | 11.1.1 Title of the Study Description Document                    |
|--------------------------------|---|
| Child element                  | 11.1.1.1 Language of the Title of the Study Description  Document |
| Description                    | Title of the study description document.                          |
| Mandatory/Recommended/Optional | Mandatory   |
| Occurrence                     | 1-n   |
| Controlled vocabulary          | -   |
| Usage notes                    | -   |

| Number and element             | 11.1.1.1 Language of the Title of the Study Description Document         |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | The language of the content of the element.                              |
| Mandatory/Recommended/Optional | Mandatory  |
| Occurrence                     | 1  |
| Controlled vocabulary          | -  |
| Usage notes                    | Use ISO 639-1. If you have used different languages, repeat the element. |

| Number and element             | 11.1.2 Study Documentation Copyright  |
|--------------------------------|---|
| Child element                  | 11.1.2.1 Language of Study Documentation Copyright  |
| Description                    | Information on the copyright of the study documentation.  |
| Mandatory/Recommended/Optional | Recommended   |
| Occurrence                     | 0-n   |
| Controlled vocabulary          | -   |
| Usage notes                    | The element covers the copyright of the documentation (the metadata) of the study/dataset, and not the whole study. In practice study documentation copyright can be the same as for the study/data but it can also be different. |

| Number and element             | 11.1.2.1 Language of Study Documentation Copyright                       |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | The language of the content of the element.                              |
| Mandatory/Recommended/Optional | Mandatory  |
| Occurrence                     | 1  |
| Controlled vocabulary          | -  |
| Usage notes                    | Use ISO 639-1. If you have used different languages, repeat the element. |

| Number and element             | 11.1.3 Study Documentation Publication Date                |
|--------------------------------|--|
| Child element                  | 11.1.3.1 Study Documentation Publication Date (controlled) |
| Description                    | No metadata element.                                       |
| Mandatory/Recommended/Optional | Recommended  |
| Occurrence                     | 0-n  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

| Number and element             | 11.1.3.1 Study Documentation Publication Date (controlled)                          |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | The date the study documentation (metadata) was published.                          |
| Mandatory/Recommended/Optional | Optional  |
| Occurrence                     | 0-1   |
| Controlled vocabulary          | -   |
| Usage notes                    | Use ISO 8601. The complete calendar date in the YYYY-MM-DD format, e.g. 2018-03-24. |

| Number and element             | 11.1.4 Study Documentation Publisher (reference)   |
|--------------------------------|--|
| Child element                  | 11.1.4.1 Type of Study Documentation Publisher (reference) (for DDI-L)   |
| Description                    | Person or institution that published the study documentation (metadata).   |
| Mandatory/Recommended/Optional | Mandatory  |
| Occurrence                     | 1-2  |
| Controlled vocabulary          | -  |
| Usage notes                    | It is recommended to have both the URN and the combination of subclasses Agency, ID and Version as a referenced identifier in DDI-L. However, it is possible to use only the URN or only the combination of Agency, ID and Version as a referenced identifier. |

| Number and element             | 11.1.4.1 Type of Study Documentation Publisher (reference) (for DDI-L)                           |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | States the type of object being referenced based on a persistent list of valid DDI object types. |
| Mandatory/Recommended/Optional | Mandatory for DDI-L  |
| Occurrence                     | 1 for DDI-L  |
| Controlled vocabulary          | -  |
| Usage notes                    | Type of object is either "individual" or "organization".   |

| Number and element | 11.1.5 Metadata Access Conditions (all)  |
|--------------------|--|
| Child element      | 11.1.5.1 Language of Metadata Access Conditions (all)  |
| Description        | Freetext description on the metadata access conditions for the provided metadata if there is one access condition for both study- and question-related metadata. Examples of such conditions are the copyright status, usage regulations based |

|                                | on legislation, a license, or other agreement concerning the metadata usage. |
|--------------------------------|--|
| Mandatory/Recommended/Optional | Recommended  |
| Occurrence                     | 0-1  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

| Number and element             | 11.1.5.1 Language of Metadata Access Conditions (all)                    |
|--------------------------------|--|
| Child element                  | None   |
| Description                    | The language of the content of the element.                              |
| Mandatory/Recommended/Optional | Mandatory  |
| Occurrence                     | 1  |
| Controlled vocabulary          | -  |
| Usage notes                    | Use ISO 639-1. If you have used different languages, repeat the element. |

| Number and element             | 11.1.6 Metadata Licence (All)   |
|--------------------------------|---|
| Child element                  | None  |
| Description                    | License information on the metadata including both the study level, variable level, and question level. |
| Mandatory/Recommended/Optional | Optional  |
| Occurrence                     | 0-n   |
| Controlled vocabulary          | -   |
| Usage notes                    | -   |

| Number and element | 11.1.7 Metadata Quality   |
|--------------------|---|
| Child element      | None  |
| Description        | Information on the metadata quality on whether the metadata was curated (i.e. checked or produced at a data |

|                                | archive/repository) or and produced by the researchers themselves. |
|--------------------------------|--|
| Mandatory/Recommended/Optional | Optional   |
| Occurrence                     | 0-n  |
| Controlled vocabulary          | -  |
| Usage notes                    | -  |

| Number and element             | 11.2 Technical Information |
|--------------------------------|----------------------------|
| Child element                  | 11.2.1 Schema Location     |
| Description                    | No metadata element.       |
| Mandatory/Recommended/Optional | Mandatory                  |
| Occurrence                     | 1                          |
| Controlled vocabulary          | -                          |
| Usage notes                    | -                          |

| Number and element             | 11.2.1 Schema Location                  |
|--------------------------------|---|
| Child element                  | None                                    |
| Description                    | Location of used XML schema definition. |
| Mandatory/Recommended/Optional | Mandatory                               |
| Occurrence                     | 1                                       |
| Controlled vocabulary          | -                                       |
| Usage notes                    | -                                       |