**Version 1.02, 2019. 9. 13**

**Table I-1 Catalogue overview**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Name/Role name** | **Description** | **M/R/O** | **Cardinality** | **Domain** | **DCAT Element/Prop.** | **DCAT Range** |
| 1 | BDC\_Catalogue | root entity which defines metadata about dataset resource | M | 1 | Line 2 to 12 | dcat:Catalog |  |
| 2 | role: responsibleParty | responsible party information for the data catalogue | M | N | BDC\_ResponsibleParty | dct:publisher | foaf:Agent |
| 3 | role: dataset | dataset information for the data catalogue | M | N | BDC\_Dataset | dcat:dataset | dcat:Dataset |
| 4 | role: sourceDomain | source domain information for the data catalogue | M | 1 | BDC\_Domain | dcat:themeTaxanomy | skos:ConceptScheme |
| 5 | role: usageDomain | usage domain information for the data catalogue | R | N | BDC\_Domain | dcat:themeTaxanomy | skos:ConceptScheme |
| 6 | role: dataQuality | data quality information for the data catalogue | R | N | BDC\_DataQuality | None |  |
| 7 | role: record | record information for the data catalogue | R | N | BDC\_record | dcat:record | dcat:CatalogRecord |
| 8 | role: hasRelation | related data catalogue of the data catalogue | O | 1 | BDC\_Catalogue | None |  |
| 9 | title | title of data catalogue | M | 1 | free text | dct:title | free text |
| 10 | description | a short introduction to data catalogue | M | 1 | free text | dct:description | free text |
| 11 | language | language used within the data catalogue | R | 1 | RFC 5646 | dct:language | ISO639-1 |
| 12 | versionInfo | version of data catalogue specification | R | 1 | free text  (major.minor.patch) | None |  |

Table I-2 shows the data dictionary of *BDC*\_*ResponsibleParty* and its data type class *BDC\_ContactType* which describes the responsible party in clause 7.3.

**Table I-2 Responsible party information**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Name/Role name** | **Description** | **M/R/O** | **Cardinality** | **Domain** | **DCAT Element/Prop.** | **DCAT Range** |
| 13 | BDC\_ResponsibleParty | name and position information for an individual or organization that is responsible for the data catalogue or dataset | M | N | Line 14 to 18 | foaf:Agent |  |
| 14 | indivisualName | name of the responsible person- surname, given name, title | M | 1 | free text | foaf:name | free text |
| 15 | organisationName | name of the responsible organization | M | 1 | free text | None |  |
| 16 | positionName | role or position of the responsible person | M | 1 | free text | None |  |
| 17 | function | function performed by the responsible party | M | 1 | free text | None |  |
| 18 | contact | information required to enable contact with the responsible person and/or organization | R | N | BDC\_ContactType | None |  |
| 19 | BDC\_ContactType | information required to enable contact with the responsible person and/or organization | R | N | Line 20 to 23 |  |  |
| 20 | phoneNumber | telephone numbers at which the organization or individual may be contacted | R | N | free text | foaf:phone |  |
| 21 | address | physical and email address at which the organization or individual may be contacted | R | 1 | free text | foaf:mbox | mailto: URI |
| 22 | onlineResource | on-line information that can be used to contact the individual or organization | R | N | URI | foaf:homepage | URI |
| 23 | hoursOfServices | time period (including time zone) when individuals can contact the organization or individual | R | 1 | free text | None |  |

Table I-3 shows the data dictionary of *BDC\_Dataset* and its sub-classes (*BDC\_Distribution*, *BDC\_DataRight*) which describes dataset information in clause 7.4.

**Table I-3 Dataset information**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Name/Role name** | **Description** | **M/R/O** | **Cardinality** | **Domain** | **DCAT Element/Prop.** | **DCAT Range** |
| 24 | BDC\_Dataset | a collection of data which is available for access and/or download | M | N | Line 25 to 32 | dcat:Dataset |  |
| 25 | role: contactPoint | contact point information for the dataset | R | N | BDC\_ResponsibleParty | dcat:publisher | foaf:Agent |
| 26 | role: distribution | information about the distributor of and options for obtaining the dataset | R | N | BDC\_Distribution | dcat:distribution | dcat:Distribution |
| 27 | role: hasRelation | related dataset of the dataset | O | 1 | BDC\_Dataset | None |  |
| 28 | title | title of the dataset | M | 1 | free text | dct:title | free text |
| 29 | description | a short introduction to the dataset | M | 1 | free text | dct:description | free text |
| 30 | keyword | commonly used word(s) used to describe the dataset | R | N | free text | dct:keyword | free text |
| 31 | temporalCoverage | time period (including time zone) when the dataset was captured | O | 1 | free text | dct:temporal | free text |
| 32 | updateFrequency | rate of occurrence of dataset update | O | 1 | free text | dct:accuralPeriodicity | free text |
| 33 | BDC\_Distribution | information about the distributor of and options for obtaining the dataset | R | N | Line 34 to39 | dcat:Distribution |  |
| 34 | role: dataRight | Information about limitation placed upon the use of the dataset | R | 1 | BDC\_DataRight | None | dct:LicenseDocument,  dct:RightsStatement |
| 35 | dataType | the type information of the dataset | M | 1 | BDC\_DataTypeCode | dcat:mediaType | dct:MediaTypeOrExtent |
| 36 | format | the format information of the dataset including a version | M | 1 | free text | dct:format | dct:MediaTypeOrExtent |
| 37 | byteSize | information about the size of dataset in bytes | M | 1 | int | dcat:byteSize | free text |
| 38 | accessInformation | access information to dataset | M | 1 | free text | dcat:accessURL / dcat:downloadURL |  |
| 39 | sampleData | location information about a sample data including URL | R | N | URI | None |  |
| 40 | BDC\_DataRight | information about limitation placed upon the use of the dataset | R | 1 | Line 41 to 42 | None |  |
| 41 | rightStatement | information to the usage permissions being agreed to | R | 1 | free text | dct:rights  (in dcat:Distribution) | dct:LicenseDocument |
| 42 | license | This links to the license document under which the catalog is made available and not the datasets. | R | N | URI | dct:license  (in dcat:Distribution) | dct:RightsStatement |

Table I-4 shows the data dictionary of *BDC\_Domain* which describes domain information in clause 7.5.

**Table I-4 Domain information**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Name/Role name** | **Description** | **M/R/O** | **Cardinality** | **Domain** | **DCAT Element/Prop.** | **DCAT Range** |
| 43 | BDC\_Domain | source and/ or usage information for data catalogue | M | 1 | Line 44 to 46 | skos:ConceptScheme |  |
| 44 | title | a member item of taxonomy which used for identifying the domain of source and /or usage | M | 1 | free text | skos:prefLabel | free text |
| 45 | taxonomy | taxonomy information including classification system and authority | M | N | URI | skos:themeTaxonomy | skos:ConceptScheme |
| 46 | comment | an additional information for domain | O | N | free text | skos:note | free text |

Table I-5 shows the data dictionary of *BDC\_DataQuality* which describes data quality in clause 7.6.

**Table I-5 Data quality information**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Name/Role name** | **Description** | **M/R/O** | **Cardinality** | **Domain** | **DCAT Element/Prop.** | **DCAT Range** |
| 47 | BDC\_DataQuality | data quality information for the data catalogue | R | N | Line 48 to 50 | None |  |
| 48 | qualityRequirement | requirement statement for evaluating quality of dataset | M | 1 | free text | None |  |
| 49 | unitOfMeausre | standard unit or system of units by means of which a quantity is accounted for and expressed. | M | 1 | free text | None |  |
| 50 | qualityResult | the result of quality evaluation described by the unit of measure | M | 1 | free text | None |  |

Table I-6 shows the data dictionary of *BDC\_Record* which describes catalogue record in clause 7.7.

**Table I-6 Catalogue record information**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Name/Role name** | **Description** | **M/R/O** | **Cardinality** | **Domain** | **DCAT Element/Prop.** | **DCAT Range** |
| 51 | BDC\_Record | record information for the data catalogue | R | N | Line 52 to 53 | dcat:CatalogRecord |  |
| 52 | modifiedDate | the most resent modified date of data catalogue | M | N | ISO 8601 | dct:modified | ISO 8601 |
| 53 | issuedDate | the issued date of listing the dataset in the catalogue | R | 1 | ISO 8601 | dct:issued | ISO 8601 |

Table I- shows the data dictionary of *BDC\_DataTypeCode* describing the enumerated data type for data distribution.

**Table I-7 <<Enumeration>> DataTypeCode**

|  |  |  |
| --- | --- | --- |
| **Concept name** | **Domain code** | **Definition** |
| STURECTURED | 001 | data that is organized in a format easily used by formatted repository |
| SEMI\_STRUCTURED | 002 | data that is neither raw data, nor typed data in a conventional database system (e.g. XML, JSON) |
| UNDTRUCTURED | 003 | data that either does not have a pre-defined data model or is not organized in a pre-defined manner |