SPA – Coordinated Metadata Catalogue

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Content

1. Introduction

The Single Point of Access is an intermediary digital platform and it is part of 3 Delegated Regulations following Priority Actions b, c and e of the EU ITS Directive 2010/40/EU. One of the main functions is providing information about existing traffic relevant data to interested persons or companies. A detailed and standardized dataset description – the so-called metadata - is needed to create a searchable, easy manageable and high quality register.

There is more than one approach to find a practical way for an interoperable compatible minimum data description method. The working group composed by representatives from the Netherlands, Germany and Austria decided to limit its work to the definition of the attribute names and data field definitions. This approach has several benefits for the potential user seeking for information via a Single Point of Access (SPA). In case an international user accesses SPAs of several EU Member States, there should be no difference in wording and their meaning between the metadata provided, even in different languages. Thus, the considerations laid down in this document aim to support easy data exchange and to prevent data errors when exchanging data between databases. Therefore it is necessary to define data fields and data field definitions which we call metadata catalogue.

2. Purpose

Regarding to EU Regulations 885/2013, 886/2013 and 2015/962 every EU Member State has to implement a Single Access Point to data for its country. For reasons of data exchange, compatibility and interoperability the responsible partners of the Netherlands, Germany and Austria started a working group to develop a common minimum metadata set which describes all data covered by the EU Directive and the respective specifications. This minimum metadata set describes the most important data elements, a technical description of the data elements and contains all necessary information for the metadata definition necessary to fulfil the duties of the national SPAs.

The objectives of this paper are:

- Definition of data elements which are necessary to describe a dataset in a minimal but adequately way
- Definition of wordings and semantics
- Definition of predefined categorisations
- Definition of data field name
- Definition of data value type
- Recommendations of data field length

The definition of data elements, wordings and predefined categorisations form the core element for data exchange and interoperability. For a technical information exchange and later database operations technical parts like value type and length need to be harmonised.

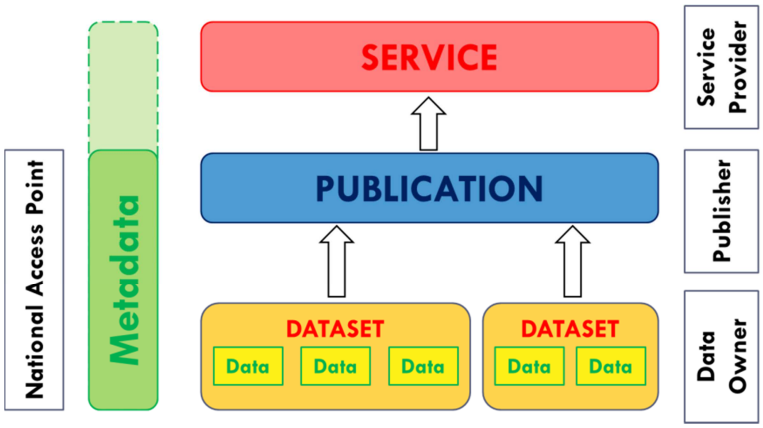
The common minimum dataset should be compatible with the INSPIRE regulation (2007/2/EG), where appropriate, and take into account the DCAT - AP (Application profile for data profiles in Europe) specification. Every national implementation is free to add more metadata elements then described in this document. However it should adhere to the minimum metadata set as specified here.

This paper focuses only on content and the technical aspects of the minimum metadata set. It does not cover recommendations about the user interface, front end, data presentation or any other web part including all national laws (e.g. privacy).

3. Definition

Certain terms and definitions need to be specified to achieve a common understanding.

This figure is used for an easy understanding and the common idea of the metadata that describes both, the content of data and the publication i.e. the way data is accessible:



Publication

A publication is an abstract information element that covers the (recurring) data set(s) of a distinct content provided in a specific data format based on a specific communication method.

So a publication is the combination of a data set and the way the data is published (made accessible). The same data set (e.g. static parking information for truck drivers) can be provided in different ways e.g. as downloadable zip file or as XML using a SOAP web service. These are two publications based on one data set.

Metadata set

Metadata contain information about a publication facilitating discovery services.

Metadata set is the collection of all metadata elements.

Data set

A data set contains the road and traffic data which are provided by the data owner.

Publisher

A Publisher is the entity (company, authority or person) who publishes a dataset. He holds up the data access and defines data routines.

Contact Point

A Contact Point is the entity (company, authority or person) who registered the dataset at the SPA and is liable for the correctness of the metadata. In most case this will be the data owner.

Data Owner

A Data owner is the entity (company or authority) which owns or produces data. It is liable for processing, aggregation, quantity and quality of the data.

4. Minimum Metadata Elements - Description

In case of data exchanges between two databases concerning metadata, the element name, field type and recommend field size have to be the same and type equal. To enhance the usability the name should also be the same. In this chapter data fields will be described, but without any order or categorisation.

This paper does not cover with the exchange format and the communication protocol that shall be used for automatic (meta)data exchange[1]. In a further step these formats and protocols should also be specified to facilitate automated search functionalities.

[1] A possible specification would be a XML-schema for the metadata (like INSPIRE do) and the definition of a SOAP web service for communication.

4.1. Overview

	Name of Metadata element	Mandatory for Nation	Field name (proposal)	Type of value	Field length (proposal)	Technical description	Example
Metadata information	Metadata Date	True	metadata_date	DateTime	-	YYYY-MM-DD'T'hh:mm:ssTZD; NOT NULL	2015-10-23T09:00:00+01:00
	Metadata language	True	md_language	Predefined Text	-	Predefined EU24 Language set ISO 639-2 conform; multiple choice; NOT NULL	ger; eng;
	Contact point for metadata	False	cp_name	Free text	50	Text; utf8; NULL	Hans Maier
		True	cp_org_name	Free text	50	Text; utf8; NOT NULL	Data GmbH
		False	cp_address	Free text	50	Text; utf8; NULL	Data street 1, Vienna
		True	cp_email	Free text	50	Text; utf8; NOT NULL	hans@data.at
		False	cp_website	Free text	50	Text; utf8; NULL	http://data.at
		False	cp_tel	Free text	50	Text; utf8; NULL	-
Content Information	Name of dataset	True	d_name	Free text	250	Text; utf8; NOT NULL	Highway network Austria
	Description of dataset	True	d_description	Free text	1000	Text; utf8; NOT NULL	Contains static high priority network of Austria, Link information: Speed, lanes, direction
	Dataset type category	True	data_agr_type	Predefined Text	-	Predefined 15 data categories; Lookup Table; multiple choice; NOT NULL	

	Dataset detailed type	True for self-declaration	data_org_type	Predefined Text	-	Predefined 50 data types; Lookup Table; multiple choice; NULL	
	Dataset language	True	ds_language	Predefined Text	-	Predefined EU24 Language set; single choice; NOT NULL	ger;
Temporal information	Start date of publication	True	p_start_date	DateTime	-	YYYY-MM-DD'T'hh:mm:ssTZD; NOT NULL	2015-10-23T09:00:00+01:00
	End date of publication	False	p_end_date	DateTime	-	YYYY-MM-DD'T'hh:mm:ssTZD; NULL	2015-10-23T09:00:00+01:00
Geographical coverage	Area covered by publication	True	val_area	Predefined Text	-	Predefined NUTS 0 – 3 Codes; UTF8; multiple choice; NOT NULL	AUT11; AUT12;AUT13;
	Network coverage	True	net_category	Predefined Text	-	Predefined; UTF8; multiple choice; NOT NULL	Motorway
	Network coverage description	False	net_description	Free text	1000	Text; utf8; NULL	structural separated bidirectional lanes, 2 to 4 lanes, minimum speed 80, use condition
Responsibilities/ Contact Information	Publisher	False	p_name	Free text	50	Text; utf8; NULL	Hans Maier
		True	p_org_name	Free text	50	Text; utf8; NOT NULL	Data GmbH
		False	p_address	Free text	50	Text; utf8; NULL	Data street 1, Vienna
		True	p_email	Free text	50	Text; utf8; NOT NULL	hans@data.at
		False	p_website	Free text	50	Text; utf8; NULL	http://data.at
		False	p_tel	Free text	50	Text; utf8; NULL	-
	Data owner	False	do_name	Free text	50	Text; utf8; NULL	Hans Maier
		True	do_org_name	Free text	50	Text; utf8; NOT NULL	Data GmbH
		False	do_address	Free text	50	Text; utf8; NULL	Data street 1, Vienna

		True	do_email	Free text	50	Text; utf8; NOT NULL	hans@data.at
		False	do_website	Free text	50	Text; utf8; NULL	http://data.at
		False	do_tel	Free text	50	Text; utf8; NULL	-
Condition for use	Contract or licence	True	con_lic	Predefined Text	-	Predefined; UTF8; single choice; NOT NULL	Licence
	Condition for use	True if con_lic is used	con_description	Free text	1000	Text; utf8; NULL	http://data.at/terms.pdf
Access information	Structure of publication	True	tech_structure	Predefined Text	-	Predefined; single choice; utf8; NOT NULL	Datex II XML
	Publication structure description	True if con_lic is used	p_structure_description	Free text	1000	Text; utf8; NULL	http://data.at/tech_description.pdf
	Access interface	True	interface	Predefined Text	-	Predefined; single choice; utf8; NOT NULL	SOAP;
	Communication method	True	com_method	Predefined Text	-	Predefined; Multiple choice; utf8; NOT NULL	push;
	Access URL	True	access_url	Free text	250	Text; utf8; NOT NULL	http://data.at/access.csv
Quality information	Update frequency	True	update_freq	Predefined Text	-	Predefined; Single choice; utf8; NOT NULL	yearly
	Quality Indicator	True	qm_indicator	Free text	1000	Text; UTF8;NOT NULL	According to the EIP+ quality measures
	National Body assessment date	False	assessment_date	DateTime	-	YYYY-MM-DD'T'hh:mm:ssTZD; NULL	2015-10-23T09:00:00+01:00

4.2. Metadata elements for minimum metadata set

4.2.1. Metadata information

4.2.1.1. Metadata Date

Description and References

The element “Date of metadata” is the date stamp (date and time) when the current version of the metadata set was created or last modified. It will be generated by the system. Therefore it’s mandatory.

Reference to:
DCAT-AP: catalogue-record: modified (mandatory)
INSPIRE: Metadata date (mandatory)
ISO8601 and W3C for the description

Obligation: mandatory

Type: DateTime

Description: YYYY-MM-DD’T’hh:mm:ssTZD [2015-10-23T09:00:00+01:00]; NOT NULL

Proposed Database features

Proposed Fieldname: metadata_date

Proposed length: -

4.2.1.2. Metadata language

Description and References

This element indicates the language in which the metadata is described. Next to the national operators and publishers there are international operators which use their own language for descriptions. According to the ISO 639 standard part 2, there is a 3 letter code for 24 EU languages, which should be used. In the minimum data set at least one language has to be set. According to the international character of each SPA and in consideration of MS having multiple official languages it should be possible to select more than one language. It is preferred to have a predefined selection of languages.

The list of codes for the 24 official EU languages is:

Bulgarian – **bul**	Irish – **gle**
Croatian – **hrv**	Italian – **ita**

Czech – **cze**
Danish – **dan**
Dutch – **dut**
English – **eng**
Estonian – **est**
Finnish – **fin**
French – **fre**
German – **ger**
Greek – **gre**
Hungarian – **hun**
Latvian – **lav**
Lithuanian – **lit**
Maltese – **mlt**
Polish – **pol**
Portuguese – **por**
Romanian – **rum**
Slovak – **slo**
Slovenian – **slv**
Spanish – **spa**
Swedish – **swe**

The list of all the codes is defined at
http://www.loc.gov/standards/iso639-2/
Regional languages also are included in this list.

Reference to:
DCAT-AP: catalogue-record: language (mandatory)
INSPIRE: Metadata language (mandatory)

Obligation: mandatory

Type: Predefined text

Description: Predefined; UTF8; NOT NULL

Proposed Database features

Proposed Fieldname: md_language

Proposed length: -

4.2.1.3. Metadata point of contact

Description and References

The contact point describes an organisation, if applicable a person, which is responsible for creation and maintenance of the metadata. This person or company is the direct contact for the single access point and data searching users. This information is mandatory but each user can decide if the information is shown in the SPA-Interface.

For the data fields the common vCard-format is used. The vCard standard defines up to 40 fields, which could be filled in. To simplify metadata input, only a selection of fields are part of the minimum meta data set and might be shown in the user interface.

Reference to:
DCAT-AP: n/a

INSPIRE: Metadata point of contact (mandatory)

Obligation: Organisation Name and E-Mail: mandatory, other fields: optional

Type: vCard-Textfields

Title	**Proposed DB_Name**	**DB_Type**	**Proposed DB_ Field_length**	**DB_description**
Name	cp_name	Free text	50	Text, utf8, NULL
Organisation Name	cp_org_name	Free text	50	Text, utf8, NOT NULL
Address	cp_address	Free text	50	Text, utf8, NULL
E-Mail	cp_email	Free text	50	Text, utf8, NOT NULL
Website	cp_website	Free text	50	Text, utf8, NULL
Telephone number	cp_tel	Free text	50	Text, utf8, NULL

4.2.2. Content Information

4.2.2.1. Name of dataset

Description and References

The field “Name of dataset” is a free text entry. It describes the data set in a generic term or short description. The author is encouraged to write a meaningful description. This field is only for a brief overview, because free text fields are unsuitable for searches, due to spelling mistakes, different wordings and other aspects. The categorisation of the data sets is done within other fields.

Reference to:
DCAT-AP: dataset: title, free text with opt. further language versions (mandatory)
INSPIRE: Resource title, free text (mandatory)

Obligation: mandatory

Type: Free text

Description: Free Text (e.g. Highway Network); utf8; NOT NULL

Proposed Database features

Proposed Fieldname: d_name

Proposed length: 200

4.2.2.2. Description of dataset

Description and References

To give the user more information about content of the dataset a brief description is mandatory. It’s a free text field. The used language for the description should be the language from the field “metadata language”. If more than one language is marked at “metadata language”, for each language there should be another description.

Reference to
DCAT-AP: dataset: description, free text with opt. further language versions (mandatory)
INSPIRE: Resource abstract, free text (mandatory)

Obligation: mandatory

Type: Free text

Description: Free Text (Contains static high priority network of Austria: Road Name, Lane number, Direction); NOT NULL

Proposed Database features

Proposed Fieldname: d_ description

Proposed length: 1000

4.2.2.3. Dataset type category / Dataset detailed information

Description and References

The “Data Set Type” is the main classification of the publication content. It contains an aggregated dataset and detailed dataset. According to the EU-Regulations there are predefined categorisations for Data Sets of priority b/c/e. For the reason of usability it is not feasible to show all 50 categories in the user interface. But in case that these categories are needed for validation by the national body they have to be mentioned in the SPA data system. The currently agreed assembling method can be found as ANNEX 1

Reference to:
DCAT-AP: dataset: theme (definable categories, recommended)
INSPIRE: Keyword: free text (may originate from a controlled vocabulary, mandatory)

Dataset type category

Obligation: mandatory

Type: predefined list

Description: lookup Table, NOT NULL

Proposed Database features

Proposed Fieldname: data_agr_type

Proposed length: -

Dataset detailed information

Obligation: optional (mandatory for self declaration)

Type: predefined list

Description: lookup Table, NULL

Proposed Database features

Proposed Fieldname: data_org_type

Proposed length: -

4.2.2.4. Dataset language

Description and References

This element indicates the language of the data itself (text fields, addresses etc.). Depending on the data source the language will be different. Selection of one language is mandatory. According to the ISO 639 standard part 2, a 3 letter code for 24 EU languages is available. For implementation of this item in the metadata registry, it is recommended to have a predefined selection of languages.

The list of codes for the 24 official EU languages is:

Bulgarian – **bul**	Irish – **gle**
Croatian – **hrv**	Italian – **ita**
Czech – **cze**	Latvian – **lav**
Danish – **dan**	Lithuanian – **lit**
Dutch – **dut**	Maltese – **mlt**
English – **eng**	Polish – **pol**
Estonian – **est**	Portuguese – **por**
Finnish – **fin**	Romanian – **rum**
French – **fre**	Slovak – **slo**
German – **ger**	Slovenian – **slv**
Greek – **gre**	Spanish – **spa**
Hungarian – **hun**	Swedish – **swe**

The list of all the codes is defined at
http://www.loc.gov/standards/iso639-2/
Regional languages also are included in this list.

Reference to:
DCAT-AP: dataset: language (worldwide), multiple languages possible (optional)
INSPIRE: Resource language (European subset) (mandatory)

Obligation: mandatory

Type: predefined list

Description: Text; UTF8; NOT NULL

Proposed Database features

Proposed Fieldname: ds_language

Proposed length: -

4.2.3. Temporal information

4.2.3.1. Start date of publication

Description and References

This field describes from which date on the data delivery is applicable. In the metadata registry, this field can be set optional for the user input but for the data base it is mandatory. If there is no entry it means that the publication gets valid immediately and the timestamp is the same as the metadata timestamp.

Reference to:
DCAT-AP: n/a (validity of data set: dataset: temporal coverage – start date)
INSPIRE: n/a (validity of data set: temporal extent – starting date)

Obligation: mandatory (no entry means that the publication gets valid immediately)

Type: DateTime

Description: YYYY-MM-DD'T'hh:mm:ssTZD [2015-10-23T09:00:00+01:00]; NOT NULL

Proposed Database features

Proposed Fieldname: p_start_date

Proposed length: -

4.2.3.2. End date of publication

Description and References

This field describes the date when data delivery to this publication terminates. This field is optional, if there is no entry it means that the publication does not expire.

Reference to:
DCAT-AP: n/a (validity of data set: dataset: temporal coverage – end date)
INSPIRE: n/a (validity of data set: temporal extent – end date)

Obligation: optional

Type: DateTime

Description: YYYY-MM-DD'T'hh:mm:ssTZD [2015-10-23T09:00:00+01:00]; NOT NULL

Proposed Database features

Proposed Fieldname: p_end_date

Proposed length: -

4.2.4. Geographical coverage

4.2.4.1. Area covered by publication

Description and References

This attribute describes the geographic area that is covered by datasets of the publication. Datasets can be valid for more than one region, for that reason a multiple choice selection should be applied. A dataset without an area is not valid, therefore this field is mandatory.

NUTS (Nomenclature des unités territoriales statistiques) provide a clearly clarification of regional levels. The "NUTS Level" defines a possible selection of area level (city, district, and region).

http://ec.europa.eu/eurostat/ramon/nomenclatures/index.cfm?TargetUrl=LST_NOM_DTL&StrNom=NUTS_22&StrLanguageCode=DE&IntPcKey=&StrLayoutCode=HIERARCHIC&IntCurrentPage=1

The standard selection is "Nuts 0". It is the country level and tells that the data are valid in one or more countries. The Nuts-Level is another categorisation field.

Reference to:
DCAT-AP: dataset: spatial/geographical coverage – A spatial region or named place (free text, optional)
INSPIRE: Geographic bounding box (westbound and eastbound longitudes, and southbound and northbound latitudes in decimal degrees, mandatory)

Obligation: mandatory

Type: Predefined text

Description: Predefined NUTS 0-3; UTF8; Multiple choice; NOT NULL

Proposed Database features

Proposed Fieldname: val_area

Proposed length: -

4.2.4.2. Network coverage

Description and References

The field “Network coverage: main category” describes the part of the transport network (functional road classes) that is covered by datasets of the publication in a general way. The idea is to provide more detailed information about the data coverage. Since it should be searchable and compatible to other SPA’s, the categorisation has to be harmonized.

The categories are (proposal from the working group, as no commonly agreed European definition is existing):

- Motorways
- arterial_road_network (in the meaning of state roads or federal roads)
- Regional roads
- Urban and local roads
- other

Reference to:
DCAT-AP: n/a
INSPIRE: n/a

Obligation: mandatory

Type: Predefined text

Description: Predefined; multiple choice; NOT NULL

Proposed Database features

Proposed Fieldname: net_category

Proposed length: -

4.2.4.3. Network coverage description

Description and References

The field “Network coverage: Description” describes details of transport network (functional road classes) on a national basis. This is necessary due to different meanings and understanding of different terms in each country. This field is optional and free text, so each country can describe the parts of the road network covered by the data set.

Reference to:
DCAT-AP: n/a
INSPIRE: n/a

Obligation: optional

Type: Free text

Description: Free Text (e.g. structural separated bidirectional lanes, 2 to 4 lanes, minimum speed 80); NULL

Proposed Database features

Proposed Fieldname: net_description

Proposed length: 1000

4.2.5. Responsibilities / contact information

4.2.5.1. Publisher

Description and References

The "publisher" describes an entity (company and person) that publishes datasets of a publication. He is responsible for the given information and concludes a contract if applicable. The contact information has to be as complete as possible to establish a direct contact to the publisher. The publisher contact information is mandatory.

For the data fields the common vCard is used. But there are up to 40 fields available. For efficiency reasons, only a selection of fields of the possible 40 data fields of the vCard standard is used. For privacy reasons only non-person datafields (e.g. organisation name, organisation address etc.) might be displayed in the user interface.

Reference to:
DCAT-AP: dataset: publisher – only organisation name is given (free text);
dataset: contact point (contact details for feedback); recommended
INSPIRE: Responsible party, role: publisher – organisation name and e-mail address; mandatory

Obligation: Organisation Name and E-Mail: mandatory, other fields: optional

Title	DB_Name	DB_Type	DB_ Field_length	DB_description
Name	p_name	Free text	50	Text, utf8, NULL
Organisation Name	p_org_name	Free text	50	Text, utf8, NOT NULL
Address	p_address	Free text	50	Text, utf8, NULL
E-Mail	p_email	Free text	50	Text, utf8, NOT NULL
Website	p_website	Free text	50	Text, utf8, NULL
Telephone number	p_tel	Free text	50	Text, utf8, NULL

4.2.5.2. Data Owner

Description and References

The Data Owner defines the company that owns the dataset of a publication and is responsible for content and quality of the dataset. In case that the publisher is also the data owner the contact data will be copied from the publisher entry.

Reference to:
DCAT-AP: dataset: creator – authority under whose responsibility the dataset is made available (free text; optional)
INSPIRE: responsible party, role: owner (organisation name, e-mail address; mandatory if applicable)

Obligation: Organisation Name and E-Mail: mandatory, other fields: optional

Title	DB_Name	DB_Type	DB_ Field_length	DB_description
Name	do_name	Free text	50	Text, utf8, NULL
Organisation Name	do_org_name	Free text	50	Text, utf8, NOT NULL
Address	do_address	Free text	50	Text, utf8, NULL
E-Mail	do_email	Free text	50	Text, utf8, NOT NULL
Website	do_website	Free text	50	Text, utf8, NULL
Telephone number	do_tel	Free text	50	Text, utf8, NULL

4.2.6. Condition for use

4.2.6.1. Contract or licence

Description and References

The field “Contract or licence” indicates the condition of use: whether a free and unrestricted use is possible, a contract has to be concluded or a licence has to be agreed on to use a dataset. Therefore there are predefined tags where only one can be selected. “No licence – No contract” is preselect, for this mandatory field.

Predefined tags:

- No licence – No contract
- Licence and Free of charge
- Licence and Fee
- Contract and Free of charge
- Contract and Fee

Reference to:
DCAT-AP: n/a (indirectly if licence and/or right statement is provided)
INSPIRE: conditions for access and use (free text with predefined suggestions); mandatory

Obligation: mandatory

Type: Predefined text

Description: Predefined values; UTF8; NOT NULL

Proposed Database features

Proposed Fieldname: con_lic

Proposed length: -

4.2.6.2. Condition for use

Description and References

If licence or contract in field “contract or licence” is selected the condition of use has to be clarified. Here a sample contract or the terms of use need shall be provided as part of the metadata set, in order to allow potential data consumers to check and prove terms and conditions before getting in touch with the publisher. This field contains an URL to a PDF document, which contains all important information. The operator of SPA can decide to store that document on the SPA server to ensure that the document is accessible.

Reference to:
DCAT-AP: catalogue record: licence / dataset: access rights (complex structure); optional
INSPIRE: conditions for access and use (free text with predefined suggestions); mandatory

Obligation: mandatory if contract or license is selected

Type: Free text

Description: URL; NULL

Proposed Database features

Proposed Fieldname: con_description

Proposed length: 1000

4.2.7. Access information

4.2.7.1. Structure of Publication

Description and References

The “structure of publication” describes the technical format of the data set. There are predefined tags of the common data formats.

The options to be used are:

- DATEX II XML
- tpegML
- RSS
- KML
- JSON
- XML
- Mpeg4
- MDM_Container
- Vlog
- Other

Reference to:
DCAT-AP: distribution: format (media type / extent: ods, csv, xls, xlsx, rdf, ttl, xml); recommended
INSPIRE: n/a

Obligation: mandatory

Type: Predefined text

Description: Predefined Text (DATEX II XML); NOT NULL

Proposed Database features

Proposed Fieldname: tech_structure

Proposed length: -

4.2.7.2. Publication Structure Description

Description and References

If the “structure of publication” identifies the technical format of the data set as “other”, here a definition needs to be done.

Reference to:
DCAT-AP: n/a

INSPIRE: n/a

Obligation: mandatory, if the “structure of publication” identifies the technical format of the data set as “other”

Type: Free text

Description: Free Text; NULL

Proposed Database features

Proposed Fieldname: p_structure_description

Proposed length: 1000

4.2.7.3. Access interface – Application layer protocol

Description and References

The access interface describes the IT protocol of the data interface that will be used to transfer data. For error minimising there are predefined tags. It is mandatory and the minimum selection is “other”.

Options to be used are:

- SOAP
- OTS2
- HTTP/HTTPS
- FTP
- RSS
- Other

Reference to:
DCAT-AP: n/a
INSPIRE: n/a

Obligation: mandatory

Type: Predefined text

Description: Predefined Values; UTF8; NOT NULL

Proposed Database features

Proposed Fieldname: interface

Proposed length: -

4.2.7.4. Communication method

Description and References

The communication method describes the transmitting procedure from data provider to data receiver. It differs between push and pull. This mandatory field gives the service provider the opportunity to check the common data procedure on compatibility. If the data could be received by more than one method, a multiple choice selection could be done.

Reference to:
DCAT-AP: n/a
INSPIRE: n/a

Options to be used are:

- Push
- Pull

Obligation: mandatory

Type: Predefined text

Description: Predefined Values; UTF8; NOT NULL

Proposed Database features

Proposed Fieldname: com_method

Proposed length: -

4.2.7.5. Access URL

Description and References

The Access URL provides a link for access to the current dataset of a publication. It is mandatory if applicable (e.g. not applicable for publications providing datasets in push mode only). Furthermore, an access URL can be unique for each single relation between data owner and data receiver, as it is realised by the MDM [2](Mobilitäts Daten Marktplatz). In this case, the access URL is no metadata for a publication but linked to a subscription that enables the access to the publication.

[2] http://www.mdm-portal.de/

Reference to:
DCAT-AP: distribution: Access URL; mandatory
INSPIRE: resource locator; optional

Obligation: mandatory

Type: Free text

Description: URL (http://nap.austriatech.at/sampledata/asf.html); NOT NULL

Proposed Database features

Proposed Fieldname: access_url

Proposed length: 250

4.2.8. Quality information

4.2.8.1. Update frequency

Description and References

The update frequency describes the update rate of the data set. If there is a specific time interval or data only provided on occurrence precise information should be given. It is mandatory to select one update category.

Pre definitions to be used:

- On occurrence
- Up to 1min
- Up to 5min
- Up to 10 min
- Up to 15 min
- Up to 30 min
- Up to 1h
- Up to 2h
- Up to 3h
- Up to 12h
- Up to 24h
- Up to Weekly
- Up to Monthly
- Up to every 3month
- Up to every 6month
- Up to yearly
- more

Reference to:
DCAT-AP: Dataset: Frequency (minutely, daily ..., half yearly, annual) optional
INSPIRE: n/a

Obligation: mandatory

Type: Predefined text

Description: Predefined (up to yearly); NOT NULL

Proposed Database features

Proposed Fieldname: update_freq

Proposed length: -

4.2.8.2. Quality Indicator

Description and References

The quality indicator describes means and results of a quality assessment. This information shall assist data consumers in determining the value of data for their own services. Furthermore, it can be helpful for the validation process by a national body, where necessary. In accordance to INSPIRE and because of the ongoing quality analysis, it is proposed to describe of the Quality indicator by free text and link by an additional URL to further quality information.

Reference to:
DCAT-AP: n/a
INSPIRE: lineage (free text; “Where appropriate it may include a statement whether the data set has been validated or quality assured, whether it is the official version (if multiple versions exist), and whether it has legal validity.”) rec. if appropriate

Obligation: mandatory

Type: Free text

Description: Text/URL (Quality Indicators); NOT NULL

Proposed Database features

Proposed Fieldname: qm_indicator

Proposed length: 1000

4.2.8.3. National Body Assessment Date

Description and References

For the future validation process by the national body an indicator field is necessary. It indicates if a self-declaration was cross checked for correctness by a national body or not. If the dataset is cross-checked the date is mentioned in the data storage. It’s optional and only needed for the assessment of compliance process.

Obligation: optional

Type: DateTime

Description: YYYY-MM-DD’T’hh:mm:ssTZD [2015-10-23T09:00:00+01:00]; NOT NULL

Proposed Database features

Proposed Fieldname: assessment_date

Proposed length: -

ANNEX I – Clustering of Dataset Types

Dataset type (Category)	Detailed information (necessary for self-declaration)	Priority action
Static road network data	Geometry	Action B: RTTI
	Road width	
	Number of lanes	
	Gradients	
	Junctions	
	Road classification	
Traffic regulations and identifying dangers	Access conditions for tunnels	Action B: RTTI
	Access conditions for bridges	
	Speed limits	
	Permanent access restrictions and other traffic regulations	
	other traffic regulations	
	traffic circulation plans	
Toll information	Location of tolling stations	Action B: RTTI
	Identification of tolled roads and applicable static road user charges	
	Variable road user charges	
Parking information	Location of parking places and service areas	Action B: RTTI
	Availability of parking places	
	Cost of parking	
Filling and charging stations	Location of charging points for electric vehicles and the conditions for their use	Action B: RTTI
	location of compressed natural gas, liquefied natural gas, liquefied petroleum gas stations	
	Availability of charging points for electric vehicles	
Freight logistics	Freight delivery regulations	Action B: RTTI
	Location of delivery areas	
	Availability of delivery areas	
Location of public transport stops and interchange points	Location of public transport stops and interchange points	Action B: RTTI
Dynamic access information	Road closures	Action B: RTTI
	Lane closures	
	Bridge closures	
Temporary traffic regulation	Direction of travel on reversible lanes	Action B: RTTI
	Dynamic overtaking bans on heavy goods vehicles	
Road Work information	road works	Action B: RTTI
Unexpected events and conditions (not being safety related)	Accidents and incidents	Action B: RTTI
	Poor road conditions	
	Weather conditions affecting road surface and visibility	

Traffic management measures	Dynamic access conditions for tunnels	Action B: RTTI
	Dynamic access conditions for bridges	
	Dynamic Speed limits	
	Dynamic access restrictions and other traffic regulations	
	temporary traffic management measures	
	Traffic management plans	
Real-time traffic data	Traffic volume	Action B: RTTI
	Speed	
	Travel times	
	locations of queues	
	Traffic data at border crossings to third countries	
	Estimated travel times	
	waiting time at border crossings to non-EU Member States	
	Expected delays	
Safety Related Traffic Information	Temporary slippery road	Action C: SRTI
	Animal, people, obstacle, debris on the road	
	Unprotected accident area	
	Short term road works	
	Reduced visibility	
	Wrong-way driver	
	Unmanaged blockage of a road	
	Exceptional weather conditions	
Truck parking information	Static Truck parking information	Action E: Truck parking information
	Dynamic Truck parking information	

ERROR: undefinedfilename
OFFENDING COMMAND: C:\Windows\Temp\PDFCreator\Spool\C4CDA3E7FFBD40638B3557E6649154B1.mt

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