

Metadata data.gv.at

classification:

binding

short name:

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data.gv.at - 2.6

short description:

The Working Group on Metadata developed a metadata structure as a recommendation for Open Government Data (OGD) in Austria. Relevance for INSPIRE, PSI (IWG) and DCAT-AP was also taken into account.

The result includes a metadata core, as well as optional attributes plus relevant vocabulary for the metadata catalogue Austria.

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1 General remarks

[Cooperation OGD Austria](#), at its meeting in Vienna on 13 July 2011, decided to establish a Working Group on Metadata (AG Metadaten) with the objective to prepare a recommendation for the metadata structure for Open Government Data (OGD) in Austria.

The report of the Working Group presided by the City of Vienna was published as a White Paper "OGD Metadata – 1.0" on 24 October 2011.

Consultations were held with additional stakeholders, such as INSPIRE, the results of which provided the basis for "OGD Metadata - 1.1" published on 12 March 2012.

"OGD Metadata - 2.0" contains observations on version 1.1, as well as experience made with OGD implementations since publication of "OGD Metadata - 1.1", especially when integrating OGD portals of cities and provinces into the main portal data.gv.at.

A detailed version history was introduced with version 2.2.

The BLSG - Working Group Infrastructure-Interoperability (AG-II) developed a XML-specification for a metadata interface (OeGov XML interface), which based on OGD metadata - 2.2.

Trigger for version 2.3 was the implementation of legal regulations: PSI Directive 2013/37/EU, Federal Act of the Re-use of Information from Public Sector Bodies (IWG), respectively the Acts of the Re-use of Information from Public Sector Bodies of the federal provinces as well as efforts to create a Freedom of Information Act (IFG).

In version 2.4 DCAT-AP, as well as the harmonization with OeGov XML interface and best-practice experiences are considered.

Trigger for version 2.5 was the change from CC BY 3.0 AT to CC BY 4.0 International.

The main focus of version 2.6 is the mapping to "Data Catalogue Application Profile (DCAT-AP)". DCAT-AP is a specification for describing datasets from public sectors in Europe. The description of datasets (metadata) aims to enable the exchange of datasets between data portals.

Related documents and files can be found at conventions on the reference server <https://neu.ref.wien.gv.at/at.gv.wien.ref-live/web/reference-server/konventionen-weitere-konzepte> and [data.gv.at](https://neu.ref.wien.gv.at)

2 Management Summary

The document contains a proposal for the Metadata definition data.gv.at.

Results are available for

- the **metadata core** consisting of 12 mandatory fields
- 26 additional recommended **optional metadata fields**

- Overview of vocabularies and code tables (categories, OGD formats and OGD interfaces, update cycle).
- Image metadata
- Version history
- List of authors

3 Notes on Implementation

CKAN based aggregation portals, such as data.gv.at, assign a separate ID (CKAN field "id") by default. This also applies to harvested data from other portals.

The field "metadata modified on" is also rebuilt automatically when generating a new data set/schema.

To ensure traceability across several data portals (e.g. local - national - EU) it is imperative to take over the unique identifiers from the source system to the target system. When using CKAN the CKAN field "extras:metadata_identifier" (ID=1) must be applied for unique identification - harvesters must be configured accordingly and the message window/display at the front end must also take this into account.

When using the field "metadata modified on" the CKAN field "metadata_modified" (ID=5) must be applied instead of the standard field "metadata_date".

To implement the above logic for filling in metadata sheets in the base portals it is recommended to resort to a database procedure which automatically copies the value of the CKAN field "id" into the field "extras:metadata_identifier" and that of the field "metadata_date" into the field "metadata_modified" when generating a data set.

Alternatively these fields can also be filled in manually. When doing so it is important to assign a UUID (according to RFC:4122) because assigning IDs, such as 1, 2 or 3 would not guarantee uniqueness following aggregation through metadata portals.

4 Basics of the metadata structure

- The metadata core contains mandatory fields only.
- As a guiding principle the number of attributes in the metadata core, i.e. the mandatory attributes, must be kept to a necessary minimum.
- The mandatory fields in the metadata core must be listed for the OGD metadata set/schema to be considered valid. This is important as otherwise the integrity of the different catalogues in the event of linking would be at risk or downright impossible.
- Additional optional metadata fields are available for the metadata structure OGD Austria which are not part of the metadata core and therefore do not constitute mandatory fields.
- However, optional OGD metadata fields should be listed and documented provided sufficient relevant information is available.
- ALL OGD metadata fields are to be stated for documentation of Austrian OGD data sets or services (documents, services, media, etc.).
- OGD communities are welcome to define their own additional metadata fields and integrate them in their community profile. These metadata fields do not constitute part of the metadata structure for OGD Austria.
- OGD metadata sets take over INSPIRE data relevant to them. It is not intended that INSPIRE harvests OGD metadata.
- Metadata sheets must be easily readable and interpretable both by humans and machines.
- The metadata structure must be expandable, i.e. it should allow for further attributes to be added. In other words, several versions of the recommended metadata structure are admissible, provided the versions are clearly distinguishable.
- The metadata structure is to be compatible in respect of existing international metadata structures for Open (Government) Data.

5 Overview OGD Metadata fields

Note on literals: Language specification is necessary. Free text is always specified in German and the corresponding tag must also be transferred to RDF ("@de"). Additional language specifications are possible.

General information on catalog level should be adapted specifically to data.gv.at, i.e. data.gv.at as catalog for all.

For better clarity, the column with the CKAN field has been removed, but this information is still included in the detailed listing.

If necessary, an interim version will be published before version 3.0 to announce fields intended for deletion. This is to prepare for the changeover to DCAT-AP.AT or data.gv.at 3.0.

The information model of DCAT-AP is based on different classes. A mapping to DCAT-AP therefore makes it necessary not only to map to properties, but also to refer to the corresponding DCAT-AP classes. The following table contains only the identifiers of the properties, further explanations of the exact form of the necessary information structure can be found in the detailed list below.

Table 1- Metadata fields

	ID	identifier	OGD short name	DCAT-AP class	DCAT-AP Property
M e t a d a t C o r e	1	Metadata identifier	metadata_identifier	dcat:Dataset	dct:identifier
	5	Metadata modified	metadata_modified	dcat:Dataset	dct:modified
	8	Title	title	dcat:Dataset	dct:title
	9	Description	description	dcat:Dataset	dct:description
	10	Categories	categorization	dcat:Dataset	dcat:theme
	11	Keywords	keywords	dcat:Dataset	dcat:keyword
	14	Resource URL	resource_url	dcat:Distribution	dcat:accessURL dcat:downloadURL
	15	Resource format	resource_format	dcat:Distribution	dct:format
	19	Maintainer	maintainer	dcat:Dataset	dcat:contactPoint
	20	Publisher	publisher	dcat:Dataset	dct:publisher
	21	Licence	license	dcat:Distribution	dct:license
	24	Begin date and time	begin_datetime	dcat:Dataset	dct:temporal

	ID	Identifier	OGD short name	DCAT-AP class	DCAT-AP Property
A d d i t i o n a l	2	Schema name	schema_name	dcat:CatalogRecord	dct:conformsTo
	3	Schema language	schema_language	dcat:CatalogRecord	dct:language
	4	Schema character set code	schema_characterset	Not available in DCAT-AP	
O p t i o n a l	6	Metadata linkage URL	metadata_linkage	dcat:CatalogRecord	foaf:page
	12	Attribute description	attribute_description	dcat:Distribution	dct:description
	13	Maintainer Link	maintainer_link	dcat:Dataset	dcat:contactPoint
	16	Resource name	resource_name	dcat:Distribution	dct:title
	17	Resource created or published	resource_created	dcat:Distribution	dct:issued
M e t a d a t a	18	Resource modified on last	resource_lastmodified	dcat:Distribution	dct:modified
	22	Geographic coverage/location	geographic_toponym	dcat:Dataset	dcterms:spatial
	23	Geographic range	geographic_bbox	dcat:Dataset	dcterms:spatial
F i e l d s	25	End data and time	end_datetime	dcat:Dataset	dcterms:temporal
	26	Update frequency	update_frequency	dcat:Dataset	dcterms:accrualPeriodicity
	27	Data quality and lineage	lineage_quality	dcat:Dataset	dcterms:provenance
	28	English title and description	en_title_and_desc	is not taken over	
	29	Resource size	resource_size	is not taken over	
	30	License citation	license_citation	dcat:Distribution	dcterms:rights

	ID	Identifier	OGD-short name	DCAT-AP class	DCAT-AP Property
	31	Resource language	resource_language	dcat:Dataset	dcterms:language
	32	Resource character set code	resource_encoding	Not available in DCAT-AP	
	33	Metadata original portal	metadata_original_portal	dcatalog:CatalogRecord	dct:source
	34	Maintainer e-mail	maintainer_email	dcatalog:Dataset	dcatalog:contactPoint
	35	Publisher link	publisher_link	dcatalog:Catalog / dcatalog:Dataset	dcterms:publisher
	36	Publisher e-mail	publisher_email	dcatalog:Catalog / dcatalog:Dataset	dcterms:publisher
	37	Metadata lineage name	metadata_linkage_name	Not available in DCAT-AP	
	38	License URL	license_url	dcatalog:Distribution	dcterms:license
	39	Terms URL	terms_url	dcatalog:Distribution	dcterms:rights see (30)

6 Metadata core

The "metadata core" consists of 12 mandatory fields.

Metadata identifier

ID	Identifier	OGD short name	CKAN field	Amount
1	Metadata identifier	metadata_identifier	extras: metadata_identifier	1
Definition	Unique identifier for metadata set. The entry describes unique identification for a metadata set. A UUID (according to RFC:4122) or the INSPIRE URI should be chosen.			
Explanation	The system (software) automatically generates the identifier. Existing identifiers (where existing metadata sets are harvested) must be taken over. INSPIRE examples: https://data.inspire.gv.at/0002/37d564f9-5d63-4760-aae6-29d3f98ee1b4 or https://data.inspire.gv.at/0019/HAZARD_AREA_HQ30			
Example	550e8400-e29b-11d4-a716-446655441234			
ON A 2270:2017	1.1 2.1.6.1			
ON/EN/ISO 19115:2003 19115-1:2014	mdFileID (2) metadataidentifier (22)			
RDF property	skos:notation			
DCAT-AP	Class: dcat:Dataset URI: dcat:identifier Value range: rdfs:Literal (cardinality: 0..n) Note: This property contains the main identifier for the dataset, e.g. the URI or other unique identifier in the context of the catalog.			
Definition English	Unique Identifier for metadata set. Select UUID conforming to RFC:4122			

Metadata modified

ID	Identifier	OGD short name	CKAN field	Amount
5	Metadata modified	metadata_modified	metadata_modified	1
Definition	Date of metadata creation or update. Dates are given in accordance with ÖNORM ISO 8601, i.e. YYYY-MM-DD.			
Explanation	Date of metadata creation or update. This metadata element is to be filled in automatically by the system (software). It is required for incremental updates (harvesting) in a metadata network.			
Example	2011-05-22			
ON A 2270:2016	1.6			
ON/EN/ISO 19115:2003 19115-1:2014	mdDateSt (9) dateinfo (20)			
RDF property	dct:modified as type rdfs:Literal			
DCAT-AP	Class. dcat:Dataset URI: dcat:modified Range of values: rdfs:Literal typed as xsd:date or xsd:dateTime (cardinality: 0..1) Note: This property contains the last date on which the dataset was changed or modified.			
Definition English	Metadata creation or update timestamp. Specification according to ÖNORM ISO 8601 as YYYY-MM-DD			

Title

ID	Identifier	OGD short name	CKAN field	Amount
8	Title	title	title	1
Definition	Title of the resource described			
Explanation	<p>Title of the resource described.</p> <p>The field is used to split des metadata_source-element of the OeGov XML interface into the fields <name> und <url>. Title corresponds to the field <name>. <url> is represented by the field ID = 33 Metadata original portal.</p>			
Example	Locations of schools Vienna, commuter statistics 2010 Linz			
ON A 2270:2017	2.1.1			
ON/EN/ISO 19115:2003 19115-1:2014	title (370) title (370)			
RDF property	Class. dcat:Dataset URI: dct:title Range of values: rdfs:Literal (cardinality: 1..n) Note: This property contains a name given to the dataset. This property can be repeated for parallel language versions of the name.			
DCAT-AP				
Definition English	Resource title			

Description

ID	Identifier	OGD short name	CKAN field	Amount
9	Description	description	notes	1
Definition	Description of the resource content (data set, service or document).			
Explanation	Brief description of the resource content for users.			
Example	Number of people with main residence in Linz in 2010, by gender, age, etc.			
ON A 2270:2017	2.2			
ON/EN/ISO 19115:2003 19115-1:2014	idAbs (25) abstract (45)			
RDF property	Class. dcat:Dataset URI: dct:description Range of values: rdfs:Literal (cardinality: 1..n) Remark: This property contains a free text description of the dataset. This property can be repeated for parallel language versions of the description.			
DCAT-AP				
Definition English	Description of the resource content.			

Categorization

ID	Identifier	OGD short name	CKAN field	Amount
10	Categorization	categorization	extras: categorization["..."; "..."]	N
Definition	Categorization of resource content. Predefined schema of categories for Austria, see annex 9c).			
Explanation	The resource (data set, service or document) must be assigned according to the predefined schema of categories. Multiple assignments are permitted.			
Example	Health care			
ON A 2270:2017	2.7.1 & 2.7.2			
ON/EN/ISO 19115:2003 19115-1:2014	keyword (53) & thesaName (55) keyword (76) & thesaurusName (78)			
RDF property	dcat:theme as type skos:Concept			
DCAT-AP	Class. dcat:Dataset URI: dcat:theme Value range: skos:Concept, see vocabulary categories (cardinality: 0..n). Note: This property refers to one category of the dataset. A dataset may be associated with multiple themes.			
Definition English	Categorization of the resource content.			

Keywords

ID	Identifier	OGD short name	CKAN field	Amount
11	Keywords	keywords	tags	N
Definition	Assigning keywords to the resource (data set, service or document).			
Explanation	Assigning a free choice of keywords to the resource. Thus, keywords may also be used for additional categorization and references of metadata to resources, data sets, services or documents.			
Examples	Habitat model, brown bear, Ursus arctos			
ON A 2270:2016	2.7.1			
ON/EN/ISO 19115:2003 19115-1:2014	keyword (53) keyword (76)			
RDF property	dcat:keyword as type rdfs:Literal			
DCAT-AP	Class. dcat:Dataset URI: dcat:keyword Range of values: rdfs:Literal (Cardinality: 0..n) Note: This property contains a keyword or tag that describes the dataset.			
Definition English	Key words describing the resource			

Resource URL

ID	Identifier	OGD short name	CKAN field	Amount
14	Resource URL	resource_url	resources:url	N
Definition	URL for accessing the resource.			
Explanation	URL for accessing the resource (data set, service or document). This field takes into account different formats. Comparable information only may be mapped in any given resource group. In case of doubt separate metadata sets must be created. In the case of inventory lists or licensed data, a further URL can be referred to.			
Example	https://www.wien.gv.at/statistik/ogd/vie-district-pop-foreignborn.csv			
ON A 2270:2017	6.1.4.1.1			
ON/EN/ISO 19115:2003	linkage (397)			
19115-1:2014	linkage (414)			
RDF property	dcat:accessURL			
DCAT-AP	<p>Class. dcat:Distribution</p> <p>URI: dcat:accessURL</p> <p>Range of values: rdfs:Resource (cardinality: 1..n)</p> <p>Note: This property contains a URL that provides access to a distribution of the dataset. The resource at the accessURL may contain information about how to obtain the dataset. The GetCapabilities service of a geoserver should be located under accessURL.</p> <p>dcat:downloadURL</p> <p>Range of values: rdfs:Resource (cardinality: 0..n)</p> <p>Note: This property contains a URL that is a direct link to a downloadable file in a specific format. The recommendations at https://joinup.ec.europa.eu/release/how-use-accessurl-and-downloadurl indicate that in the case of only direct downloadURLs, the data for the AccessURL and DownloadURL should be duplicated. The GetFeature and GetMap services of a geoserver should be located under downloadURL.</p>			
Definition English	URL to the resource			

Resource format

ID	Identifier	OGD short name	CKAN field	Amount
15	Resource format	resource_format	resources:format	N
Definition	Specifies the resource format as file type, download or service link. For a list of OGD formats and interfaces see chapter 09.			
Explanation	OGD formats in principle should be open machine-readable formats. In other words, there are published specifications and the formats may be used without legal restrictions. Use lower cases without dots.			
Example	csv			
ON A 2270:2017	6.1.2.1			
ON/EN/ISO 19115:2003 19115-1:2014	formatName (285) formatSpecificationCitation (265)			
RDF property	dct:format as type dct:MediaTypeOrExtent			
DCAT-AP	Class. dcat:Distribution URI: dct:format Range of values: dct:MediaTypeOrExtent (cardinality: 0..1). Note: This property refers to the file format of the distribution.			
Definition English	Specification of the resource. This may be a file type, download or service link. List of defined OGD formats and interfaces see chapter 9.			

Maintainer

ID	Identifier	OGD short name	CKAN field	Amount
19	Maintainer	maintainer	maintainer	1
Definition	Name of the person or entity responsible for the resource			
Explanation	Name of the person or entity responsible for the resource. May be the publisher at the same time.			
Example	Magistrat Wien - Magistratsabteilung 33 - Wien Leuchtet; Magistrat der Landeshauptstadt Linz, Stadtkämmerei; Tirol Werbung GmbH.			
ON A 2270:2017	2.5.1 / 2.5.2			
ON/EN/ISO 19115:2003 19115-1:2014	rpIndName (375) / rpOrgName (376) citedResponsibleParty (376)			
RDF property	dcat:contactPoint			
DCAT-AP	Class. dcat:Dataset URI: dcat:contactPoint Range of values: vcard:child (cardinality: 0..n) Note: This property contains contact information that can be used to send comments about the dataset.			
Definition English	Name of the person or entity responsible for the resource.			

Publisher

ID	Identifier	OGD short name	CKAN field	Amount
20	Publisher	publisher	extras:publisher	1
Definition	Name of the organisation publishing the metadata set.			
Explanation	Name of the organisation responsible for the metadata set. The publisher is not necessarily the maintainer.			
Example	City of Vienna, Province of Tirol			
ON A 2270:2017	6.1.1.1.1 & 6.1.1.1.2			
ON/EN/ISO 19115:2003 19115-1:2014	rpIndName (375) / rpOrgName (376) citedResponsibleParty (376)			
RDF property	dct:publisher			
DCAT-AP	Class. dcat:Dataset URI: dct:publisher Value range: foaf:Agent (cardinality: 0..1). Note: This property refers to an entity (organization) responsible for providing the dataset.			
Definition English	Name of the publishing entity or person			

Licence

ID	Identifier	OGD short name	CKAN field	Amount
21	Licence	license	license	1
Definition	Legal information on the use of the resource (data set, service or document).			
Explanation	<p>Information on the licence type for the resource. In the case of OGD this refers to "Creative Commons Namensnennung 4.0 International (CC BY 4.0)".</p> <p>If another license is used, it is recommended to include a corresponding link in the field ID = 38 "License URL".</p>			
Example	Creative Commons Namensnennung 4.0 International (CC BY 4.0)			
ON A 2270:2017	2.8.1.1			
ON/EN/ISO 19115:2003 19115-1:2014	othConsts (72) reference (106)			
RDF property	dct:license (URI of the licence document)			
DCAT-AP	Class. dcat:Distribution URI: dct:license Range of values: dct:LicenseDocument (cardinality: 0..1). Note: This property refers to the license under which the distribution is provided.			
Definition English	Legal information concerning the usage of the resource			

Begin date and time

ID	Identifier	OGD short name	CKAN field	Amount
24	Begin date and time	begin_datetime	extras:begin_datetime	1
Definition	Element specifying the valid from date of the resource			
Explanation	Element specifying the begin date and time of a resource. The information is entered as YYYY-MM-DDThh:mm:ss. TM_Primitive (in accordance with ON EN 8601 and ON EN ISO 19108 respectively).			
Example	2008-12-23T22:30:12			
ON A 2270:2017	2.9.6.2.1			
ON/EN/ISO 19115:2003 19115-1:2014	exTemp (351) extent (361)			
RDF property	dct:temporal			
DCAT-AP	Class: dcat:Dataset URI: dct:temporal Range of values: dct:PeriodOfTime (cardinality: 0..n) Note: This property refers to a temporal range covered by the dataset. Must be managed together with "25 Temporal Extension (End)".			
Definition English	Date specifying valid from of the resource according to ON EN 8601 or ON EN ISO 19108 respectively.			

7 Additional optional metadata attributes

The metadata structure OGD for Austria offers 26 additional optional metadata fields which do not constitute part of the metadata core and which are therefore not mandatory.

Each optional OGD metadata element should, however, be listed and documented, provided sufficient relevant information is available.

In some cases (e.g. implementation OeGov XML, with CKAN instances), optional fields, such as ID16, may also be implemented as mandatory fields in forms.

On no account must mandatory fields be implemented as optional fields!

Schema name

ID	Identifier	OGD short name	CKAN field	Amount
2	Schema name	schema_name	extras:schema_name	0..1
Definition	Name of the metadata structure			
Explanation	This element for OGD metadata is optional but highly recommended. Consistent metadata maintenance is facilitated when adapting the OGD metadata structure. The element is to be filled in automatically by the system (software). If the documentation is implemented according to OeGov XML, this element is obligatory.			
Example	OGD Austria Metadata 2.4			
ON A 2270:2017	1.4			
ON/EN/ISO 19115:2003 19115-1:2014	mdStanName (10) metadataStandard (23)			
RDF property	dct:conformsTo			
DCAT-AP	Class: cat:CatalogRecord URI: dct:conformsTo Value range: dct:Standard (cardinality: 0..1)			
Definition English	OGD Austria Metadata 2.4			

Schema language

ID	Identifier	OGD short name	CKAN field	Amount
3	Schema language	schema_language	extras: schema_language	1
Definition	ISO 639-2 three digit ISO language code for the metadata set			
Explanation	Language the metadata set was prepared in. The element is to be filled in automatically by the system (software). If the documentation is implemented according to OeGov XML, this element is obligatory.			
Example	ger			
ON A 2270:2017	1.2			
ON/EN/ISO 19115:2003 19115-1:2014	mdLang (3) language (16)			
RDF property	dct:language			
DCAT-AP	Class: dcat:CatalogRecord URI: dct:language Value range: dct:LinguisticSystem (cardinality: 0..n)			
Definition English	Metadata language, always ger (German)			

Schema character set code

ID	Identifier	OGD short name	CKAN field	Amount
4	Schema character set code	schema_characterset	extras: schema_characterset	1
Definition	Character set code to specify the metadata set according to ISO\IEC 10646-1			
Explanation	For a European integration this metadata element is needed, otherwise a merge is not possible. This metadata element should be filled automatically by the system (software). If the documentation is carried out according to metadata-MD (XML specification for metadata interface), this element is mandatory.			
Example	utf8			
ON A 2270:2017	1.3			
ON/EN/ISO 19115:2003 19115-1:2014	mdC (4) characterSet (17)			
RDF property	cnt:characterEncoding			
DCAT-AP	No equivalent in DCAT-AP. RDF properties expect UTF-8 encoding.			
Definition English	Metadata payload character encoding, always utf8			

Metadata linkage

ID	Identifier	OGD short name	CKAN field	Amount
6	Metadata linkage	metadata_linkage	extras: metadata_linkage	N
Definition	Links to further information on a dataset or service. Links to datasets used or interpreted in the document.			
Explanation	Links to data and metadata descriptions. Corresponds to the field <url> of the metadata linkage element of OeGov XML interface. <name> is represented by field ID = 37 "Metadata linkage name".			
Example	https://data.wien.gv.at/pdf/wienerlinien-echtzeitdaten-dokumentation.pdf https://open.gip.gv.at/ogd/gip_standardbeschreibung.pdf https://data.bka.gv.at/RIS/Documents/RIS_OGD_Dokumentation.pdf https://data.linz.gv.at/katalog/politik_verwaltung/verwaltung/budget/2013/VA/Nachweise%20-%20Er%3%A4uterung%20zur%20Ermittlung.pdf			
ON A 2270:2017	6.1.4.1.1 – Link für den Online-Zugang zu einer Ressource. 1.1.1 + 1.1.2			
ON/EN/ISO 19115:2003 19115-1:2014	linkage (397) metadataLinkage (25)			
RDF property	foaf:page als Typ foaf:Document			
DCAT-AP	Class: dcat:dataset URI:foaf:page Value range: foaf:Document (cardinality: 0..n) Description: This property points to a page or document about this dataset			
Definition English	Links providing further descriptive metadata			

Attribute description

ID	Identifier	OGD short name	CKAN field	Amount
12	Attribute description	attribute_description	extras: attribute_description	1
Definition	Describes the attribute information of a dataset or service			
Explanation	Human-readable description of the significance of data fields in a dataset or service. If the documentation is implemented according to OeGov XML, this element is obligatory.			
Example	ADRESSE: Address (street name, orientation number); OEFFNUNGSZEITEN1-6: opening times; TELEFON: telephone number, DISTRICT_CODE: district code, ACCOUNTS_TRANSFER: current transfer payments			
ON A 2270:2017	2.11.3 & 2.11.4			
ON/EN/ISO 19115:2003 19115-1:2014	memberName (4.1) & definition (4.2) attributeDescription (209)			
RDF property	dct:description			
DCAT-AP	Class: dcat:Distribution URI: dct:description Range: rdfs:Literal (cardinality: 0..n) Comment: Would actually fit better with "Documentation", but for practical reasons (Documentation requires foaf:page with reference to own page) dct:description is suggested.			
Definition English	Human-readable description of dataset fields			

Maintainer link

ID	Identifier	OGD short name	CKAN field	Amount
13	Maintainer link	maintainer_link	extras: maintainer_link	1
Definition	Contact page of the maintaining entity			
Explanation	URL to the dataset maintaining entity			
Example	http://www.wien.gv.at/freizeit/bildungjugend/			
ON A 2270:2017	2.5.4.8			
ON/EN/ISO 19115:2003 19115-1:2014	Linkage (397) linkage (414)			
RDF property	dcat:landingPage als Typ foaf:Document			
DCAT-AP	Class: dcat:Dataset URI: dcat:contactPoint, vcard:child,vcard:URL Value range: vcard:child,vcard:URL (cardinality: 0..n) Note: This property contains contact information for the data responsible entity. Link extension to class with ID 19			

Resource name

In OGD Metadata - 1.1 this element was part of the metadata core, i.e. it as was a mandatory field. As of OGD Metadata - 2.0 it is an optional metadata field!

ID	Identifier	OGD short name	CKAN field	Amount
16	Resource name	resource_name	resources:name	N
Definition	Name for individual data sets, services or individual documents. The attribute corresponds with the resource URL (ID 14).			
Explanation	CKAN uses this optional element to specify individual resource URLs. If the documentation is implemented according to OeGov XML, this element is obligatory.			
Example	People with main residence			
ON A 2270:2017	2.1.1			
ON/EN/ISO 19115:2003 19115-1:2014	title (370) title (370)			
RDF property	dct:description als Typ rdfs:Literal			
DCAT-AP	Class: dcat:Distribution URI: dct:title Value range: rdfs:Literal with language tag "de" (cf. element 8 - here identifier of the resource at element 8 designation of the metadata record) (Cardinality: 0..n) Remark: 'Readable' title of the distribution. Applies to data set and service.			
Definition English	Specifier for the single resource link within a metadata sheet. Will be used as an end user friendly text instead of the resource link.			

Resource created or published on

ID	Identifier	OGD short name	CKAN field	Amount
17	Resource created or published on	resource_created	resources:created	1
Definition	Resource publication date.			
Explanation	Describes the date a data set, service or document is published (e.g. the date the resource was made available on the authority's website).			
Example	2011-03-21 (YYYY-MM-DD)			
ON A 2270:2017	2.1.3.1 & 2.1.3.2			
ON/EN/ISO 19115:2003 19115-1:2014	refDate (394) & refDateType (395) date (411) & dateType (412)			
RDF property	dct:issued			
DCAT-AP	Class: dcat:Distribution URI: publication date dct:issued Value range: rdfs:Literal typed as xsd:date or xsd:dateTime (cardinality: 0..n)			
Definition English	Resource publication timestamp			

Resource last modified on

ID	Identifier	OGD short name	CKAN field	Amount
18	Resource last modified on	resource_lastmodified	resources: last_modified	1
Definition	Date the resource was last modified on.			
Explanation	Date the resource was last updated on.			
Example	2012-01-15 (YYYY-MM-DD)			
ON A 2270:2017	2.1.3.1 & 2.1.3.2			
ON/EN/ISO 19115:2003 19115-1:2014	refDate (394) & refDateType (395) date (411) & dateType (412)			
RDF property	dct:modified			
DCAT-AP	Class: dcat:Distribution URI: Update/modification date dct:modified Value range: rdfs:Literal typed as xsd:date or xsd:dateTime (cardinality: 0..n)			
Definition English	Resource last update timestamp			

Geographic coverage/location

ID	Identifier	OGD short name	CKAN field	Amount
22	Geographic coverage/location	geographic_toponym	extras: geographic_toponym	1
Definition	Geographic identification of a data set, service or document			
Explanation	Human-readable description of the resource's geographic location.			
Example	Linz			
ON A 2270:2017	2.9.6.1.3.1.1			
ON/EN/ISO 19115:2003 19115-1:2014	identCode (207) code (194)			
RDF property	dct:spatial			
DCAT-AP	Class: dcat:Dataset URI: dct:spatial Value range: URI			
Definition English	Human-readable description of the resource's spatial context			

Geographic range

ID	Identifier	OGD short name	CKAN field	Amount
23	Geographic range	geographic_bbox	extras: geographic_bbox	1
Definition	Documentation of the resource's geographic range using a bounding box.			
Explanation	Description of the geographic range of a data set, service or document using a bounding box. Specifications are given in a coordinate system EPSG:4326 (WGS84) with a minimum accuracy of two decimal places in a "Well Known Text String" representation. A total of five coordinate pairs must be given. The first and the last coordinate pair are identical indicating that the bound box is closed. The coordinate pairs are enclosed by double brackets.			
Example	POLYGON ((-180.00 -90.00,180.00 -90.00,180.00 90.00, -180.00 90.00, -180.00 -90.00))			
ON A 2270:2017	2.9.6.1.1.1 & 2.9.6.1.1.2 & 2.9.6.1.1.3 & 2.9.6.1.1.4			
ON/EN/ISO 19115:2003 19115-1:2014	westBL (344) & eastBL (345) & southBL (346) & northBL (347) westBoundLongitude (354) & eastBoundLongitude (355) & southBoundLongitude (356) & northBoundLongitude (357)			
RDF property	dct:spatial			
DCAT-AP	Class: dcat:Dataset URI: dct:spatial Range of values: dct:Location with dcat:bbox			
Definition English	Bounding box specifying the resources spatial coverage			

End date and time

ID	Identifier	OGD short name	CKAN field	Amount
25	End date and time	end_datetime	extras:end_datetime	1
Definition	Specifies the valid to date of a data set, service or document			
Explanation	Element specifying the end date and time of a resource. The information is entered as YYYY-MM-DDThh:mm:ss. TM_Primitive (according to ON EN 8601 and ON EN ISO 19108 respectively)			
Example	2009-11-23T20:36:00			
ON A 2270:2017	2.9.6.2.1			
ON/EN/ISO 19115:2003 19115-1:2014	exTemp (351) extent (361)			
RDF property	dct:temporal			
DCAT-AP	Class: dcat:Dataset URI: dct:temporal Value range: dct:PeriodOfTime Must be managed together with "24 Temporal extension (start)".			
Definition English	Date specifying valid to of the resource according to ON EN 8601 or ON EN ISO 19108 respectively.			

Update frequency

ID	Identifier	OGD short name	CKAN field	Amount
26	Update frequency	update_frequency	extras: update_frequency	1
Definition	Human-readable update frequency of a data set, service or document. For a code list see annex 9d)			
Explanation	Update sequence for a data set or service			
Example	Monthly, annually			
ON A 2270:2017	2.9.7.1			
ON/EN/ISO 19115:2003 19115-1:2014	maintFreq (143) maintenanceAndUpdateFrequency (144)			
RDF property	dct:accrualPeriodicity			
DCAT-AP	Class: dcat:Dataset URI: dct:accrualPeriodicity Value range: frequency vocabulary, see https://publications.europa.eu/resource/authority/frequency			
Definition English	Human readable resource update frequency			

Data quality and lineage

ID	Identifier	OGD short name	CKAN field	Amount
27	Data quality/lineage	lineage_quality	extras:lineage_quality	1
Definition	Human-readable description of the quality and/or origin of a data set or service, e.g. the method of data collection.			
Explanation	General information on the quality and/or origin of a data set or service			
Example	The data set was digitalised based on ÖK50/ 2011. All forests in the municipality of Kopfing were recorded.			
ON A 2270:2017	3.2.1			
ON/EN/ISO 19115:2003 19115-1:2014	statement (83) statement (120)			
RDF property	dct:provenance			
DCAT-AP	Class: dcat:Dataset URI: dct:provenance Value range: dcterms:ProvenanceStatement with dcterms:description			
Definition English	Human readable indication of resource quality and / or data origin, such as the methodology describing the data collection or acquisition.			

English title and description

ID	Identifier	OGD short name	CKAN field	Amount
28	English title and description	en_title_and_desc	extras: en_title_and_desc	1
Definition	English title and description of a data set, service or document			
Explanation	English title of a data set, service or service plus brief description of contents for users.			
Example	Population of Vienna 2010. Contains the population of permanent residents of Vienna and its districts as a moving average in the census period 1 January, 2010 to 31 December, 2012.			
ON A 2270:2017	2.1.1 & 7.1			
ON/EN/ISO 19115:2003 19115-1:2014	resTitle (360) & language title (370)			
RDF property	dct:description als Typ rdfs:Literal (with language tag "en")			
DCAT-AP	Will not be applied. Language tagging is possible directly for all values of type rdfs:Literal, where title and description are always managed separately (dct:title and dct:description with corresponding "language tags").			
Definition English	Resource title and description in English			

Resource size

ID	Identifier	OGD short name	CKAN field	Amount
29	Resource size	resource_size	resources:size	1
Definition	Resource size			
Explanation	Size of a data set in byte. Information on size of services not relevant.			
Example	899652			
ON A 2270:2016	-			
ON/EN/ISO 19115:2003	-			
19115-1:2014	-			
RDF property	dcat:byteSize as Typ rdfs:Literal, coded as xsd:decimal			
DCAT-AP	Not adopted because the data quality on data.gv.at does not usually allow clear conclusions to be drawn about the unit used (DCAT-AP requires "bytes").			
Definition English	Resource size			

Licence citation

ID	Identifier	OGD short name	CKAN field	Amount
30	Licence citation	license_citation	extras:license_citation	1
Definition	Correct name (CC BY) of the data source according to the conditions of use for the relevant data portal. Corresponds to the field "data source" in OGD-Metadate – 1.1.			
Explanation	Facilitates correct citation in the event of automated reuse of data from one or more data sources.			
Example	Data source: City of Linz - data.linz.gv.at			
ON A 2270:2017	2.8.1.2			
ON/EN/ISO 19115:2003 19115-1:2014	accessConsts (70) accessConstraints (110)			
RDF property	cc:attributionName			
DCAT-AP	Class: dcat:Distribution URI: dct:rights Value range: dct:RightsStatement Note: For the DCAT-AP.AT standard, the more detailed http://schema.theodi.org/odrs#RightsStatement should be considered.			
Definition English	Attribution as required by CC BY license			

Resource language

ID	Identifier	OGD short name	CKAN field	Amount
31	Resource language	resource_language	resources:language	1
Definition	ISO 639-2 three-digit ISO language code for data set, service or document			
Explanation	Language used by the data set or service or the document was written in			
Example	ger			
ON A 2270:2016	2.9.3			
ON/EN/ISO 19115:2003 19115-1:2014	dataLang (39) language (65)			
RDF property	dct:language			
DCAT-AP	Class: dcat:Dataset URI: dct:language Value range: dct:LinguisticSystem Mapping required from ISO 639-2 to value from "EU Vocabularies Languages Named Authority List", see http://publications.europa.eu/resource/authority/language .			
Definition English	Resource language			

Resource character set code

ID	Identifier	OGD short name	CKAN field	Amount
32	Resource character set code	resource_encoding	resources:charset	1
Definition	Character set code of the data set or service in accordance with ISO\IEC 10646-1			
Explanation	Character set code used in the document, data set or service			
Example	utf8			
ON A 2270:2017	2.9.4			
ON/EN/ISO 19115:2003 19115-1:2014	dataChar (40) characterSet (65)			
RDF property	cnt:characterEncoding			
DCAT-AP	No equivalent in DCAT-AP class			
Definition English	Resource character encoding			

Metadata original portal

ID	Identifier	OGD short name	CKAN field	Amount
33	Metadata original portal	metadata_original_portal	extras: metadata_original_portal	1
Definition	Link to the original metadata sheet			
Explanation	<p>This value is set by data portals so that metadata portals can take over the link to the original source in a defined field. In the event that this value is not set by the portal providing the data the portal taking over the data can set it automatically.</p> <p>This field is used to map the splitting of the metadata_source element of the OeGov XML interface into the fields <name> and <url>. The field <name> is represented by the field 8 = Title. <url> is the link to the original metadata. The additional type identifier <type> should correspond to the list of OGD formats, see appendix 9a).</p>			
Example	https://metadata.geoportal.at/tiris/catalog/search/resource/details.page?uuid={10B86BFC-E72E-4577-95B0-05A1A8E8E580}			
ON A 2270:2017	1.1.1, 1.1.2 (for INSPIRE Ressourcen)			
ON/EN/ISO 19115:2003 19115-1:2014	suppInfo (46), code (207) metadataLinkage (25)			
RDF property	dct:source type dcat:CatalogRecord			
DCAT-AP	Class: dct:CatalogRecord URI: dct:source Range of values: dct:CatalogRecord (cardinality 0..1) This property points to the original metadata used to create the metadata for the dataset			
Definition English	Link to metadata description of originating data portal			

Maintainer e-mail

ID	Identifier	OGD short name	CKAN field	Amount
34	Maintainer e-mail	maintainer_email	maintainer_email	1
Definition	e-mail of the entity or person responsible for the data set, service or document			
Explanation	<p>e-mail address of the entity or person responsible for the data set, service or document. In small organisations the maintainer may at the same time be the publisher.</p> <p>Should be published to allow questions about the published data.</p>			
Example	post@ma33.wien.gv.at			
ON A 2270:2017	2.5.4.5			
ON/EN/ISO 19115:2003 19115-1:2014	<p>eMailAdd (386)</p> <p>electronicMailAdress (403)</p>			
RDF property	adms:contactPoint			
DCAT-AP	<p>Class: dcat:Dataset</p> <p>URI: dcat:contactPoint</p> <p>Value range: vcard:Organization, see https://www.w3.org/TR/vcard-rdf/</p>			
Definition English	e-mail address of the person or entity responsible for the resource.			

Publisher link

ID	Bezeichner	OGD-Kurzname	CKAN Feld	Anzahl
35	Publisher link	publisher_link	extras: publisher_link	1
Definition	Contact page of the publishing entity			
Explanation	URL to the dataset publishing entity			
Example	https://www.wien.gv.at/advuew/internet/AdvPrSrv.asp?Layout=stelle&Type=K&stellecd=2013070208413343&STELLE=Y			
ON A 2270:2017	6.1.1.1.6			
ON/EN/ISO 19115:2003	linkage (397)			
19115-1:2014	linkage (414)			
RDF property	dcat:landingPage			
DCAT-AP	Class: dcat:Dataset URI: dct:publisher Value range: foaf:Agent Must be managed together with 36.			
Definition English	URL to the dataset publishing entity			

Publisher e-mail

ID	Bezeichner	OGD-Kurzname	CKAN Feld	Anzahl
36	Publisher e-mail	publisher_email	publisher_email	1
Definition	e-mail of the entity or person publishing the data set, service or document			
Explanation	e-mail address of the entity or person publishing the data set, service or document. Should be published to allow questions about the published data.			
Example	redaktion@wien.at			
ON A 2270:2017	2.5.4.5			
ON/EN/ISO 19115:2003 19115-1:2014	eMailAdd (386) electronicMailAdress (403)			
RDF property	adms:contactPoint			
DCAT-AP	Class: dcat:Dataset URI: dct:publisher Value range: foaf:Agent Must be managed together with 35.			
Definition English	Email address of the person or entity responsible for the resource.			

Metadata linkage name

ID	Bezeichner	OGD-Kurzname	CKAN Feld	Anzahl
37	Metadata linkage name	metadata_linkage_name	extras: metadata_linkage_name	N
Definition	Name of the reference (URL) to further information on the record or service. References to records that are used or interpreted in the document.			
Explanation	<p>In order to ensure compatibility with the OeGov XML interface, the additional field is used for mapping the splitting of the metadata_linkage element into the fields <name> and <url>.</p> <p>The identifier corresponds to the field <name> and should indicate the title of the metadata record (field ID = 8). <url> is represented by the field ID = 6 "Metadata linkage URL".</p>			
Example	<p>Further information on the air quality measuring method Description of the Wiener Linien - Real-Time Data Interface Standard description of the graph integration platform (GIP) RIS - OGDService user guide</p> <p>Further information on the determination of the evidence on the basis of the raw data of the financial accounting</p>			
ON A 2270:2017	1.1.1.			
ON/EN/ISO 19115:2003 19115-1:2014	<p>- suppInfo (46) supplementalInformation (68)</p>			
RDF property	foaf:page als Typ foaf:Document			
DCAT-AP	Has no equivalent in DCAT-AP.			
Definition English	Name of link providing further descriptive metadata			

Licence URL

ID	Bezeichner	OGD-Kurzname	CKAN Feld	Anzahl
38	Licence URL	license_url	extras:license_url	1
Definition	Link (URL) to publication of the licence on the web			
Explanation	In order to ensure compatibility with the OeGov XML interface, the additional field for mapping the link (URL) to the web publication of the license is used.			
Example	https://creativecommons.org/licenses/by/4.0/legalcode			
ON A 2270:2017	2.8.1.1 (gmx:Anchor Namespace substitution)			
ON/EN/ISO 19115:2003	72			
19115-1:2014	112			
RDF property	dct:licence			
DCAT-AP	Class: dcat:Distribution URI: dct:license Value range: dcterms:LicenseDocument with URI of the license. Example: http://creativecommons.org/licenses/by/4.0/ Note: Exact specification of URL necessary, e.g. language, version, deed, etc. HTTP and HTTPS are not equivalent in URLs.			
Definition English	URL to legal information concerning the usage of the resource			

Terms URL

ID	Bezeichner	OGD-Kurzname	CKAN Feld	Anzahl
39	Terms URL	terms_url	extras:terms_url	1
Definition	Link (URL) to terms of use			
Explanation	In order to ensure compatibility with the OeGov XML interface, the additional field for mapping the link (URL) to the web publication of the terms of use is used. Should additions to the license be required, these can be quoted in the terms of use.			
Example	https://www.data.wien.gv.at/nutzungsbedingungen/			
ON A 2270:2017	2.8.3.1 (gmx:Anchor Namespace substitution)			
ON/EN/ISO 19115:2003	68			
19115-1:2014	103			
RDF property	cc:useGuidelines			
DCAT-AP	<p>Like 30.</p> <p>Class: dcat:Distribution</p> <p>URI: dct:rights</p> <p>Value range: dcterms:RightsStatement</p> <p>Note: For the DCAT-AP.AT standard, the more detailed http://schema.theodi.org/odrs#RightsStatement should be considered.</p>			
Definition English	URL to terms of licence			

8 Context Metadata record, service, or document, and cardinality

The metadata fields are in a relationship which is illustrated in the following figure:

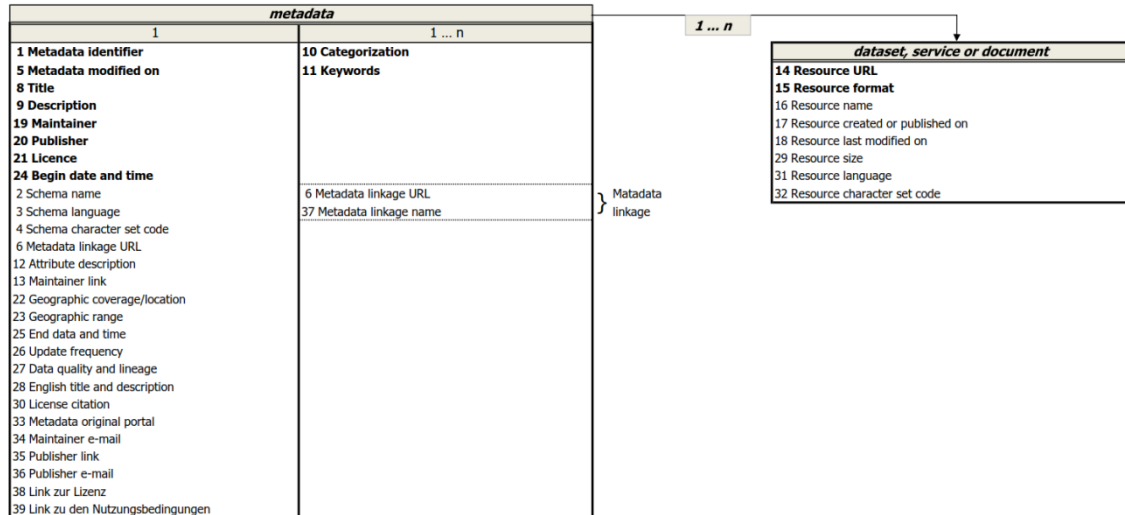


figure 1- (1) Context Metadata record, service, or document, and cardinality

Each metadata record has at least one or more records, services, or documents.

Categories, keywords, and information about advanced metadata can be specified multiple times per metadata record.

Metadata linkage: to provide compatibility with the OeGov XML interface, the fields ID = 6 Advanced Metadata Link and ID = 37 are used *jointly* to map the metadata_linkage element into the fields <name> and <url>.

9 Vocabulary for the metadata structure

The tables have been taken over from version 2.5. and an assignment to the EU vocabulary has been added. In the future it is planned to delete these tables and to refer directly to the EU vocabulary.

Table 2- OGD-Formats - Texts and Tables

text and tables	Format ¹	File type according to EU-Vocabular https://op.europa.eu/en/web/eu-vocabularies/concept/-/resource?uri=http://publications.europa.eu/resource/authority/file-type/ATOM
Comma Separated Value	csv	Label: CSV URI: http://publications.europa.eu/resource/authority/file-type/CSV IANA Mime: text/csv
Hypertext Markup Language for unstructured texts (HTML) ²	html	Label: HTML URI: http://publications.europa.eu/resource/authority/file-type/HTML IANA Mime: text/html
JSON (JavaScript Object Notation)	json	Label: JSON URI: http://publications.europa.eu/resource/authority/file-type/JSON IANA Mime: application/json
Open Document Formats: ODF	odf	Label: ODF URI: http://publications.europa.eu/resource/authority/file-type/ODF IANA Mime: application/vnd.oasis.opendocument.formula
Open Document Formats: ODT	odt	Label: ODT

¹ Format listed with the data set or service in the OGD portal. Media types registered with IANA (<http://www.iana.org/assignments/media-types>) must use the assigned formats, others may deviate. Lower cases are used for all formats.

² HTML documents conform with the OGD principles, provided HTML is used as a logical structure for data. HTML pages with visualisation and logical structure as a rule do not meet the OGD requirements. Reference to existing websites containing visualised and unstructured information is not considered a valid OGD data set.

		<p>URI: http://publications.europa.eu/resource/authority/file-type/ODT</p> <p>IANA Mime: application/vnd.oasis.opendocument.text</p>
Open Document Formats: ODB	odb	<p>Label: ODB</p> <p>URI: http://publications.europa.eu/resource/authority/file-type/ODB</p> <p>IANA Mime: application/vnd.oasis.opendocument.database</p>
Open Document Formats: ODC	odc	<p>Label: ODC</p> <p>URI: http://publications.europa.eu/resource/authority/file-type/ODC</p> <p>IANA Mime: application/vnd.oasis.opendocument.chart</p>
Open Document Formats: ODG	odg	<p>Label: ODG</p> <p>URI: http://publications.europa.eu/resource/authority/file-type/ODG</p> <p>IANA Mime: application/vnd.oasis.opendocument.graphics</p>
Open Document Formats: ODP	odp	<p>Label: ODP</p> <p>URI: http://publications.europa.eu/resource/authority/file-type/ODP</p> <p>IANA Mime: application/vnd.oasis.opendocument.presentation</p>
Open Document Formats: ODS	ods	<p>Label: ODS</p> <p>URI: http://publications.europa.eu/resource/authority/file-type/ODS</p> <p>IANA Mime: application/vnd.oasis.opendocument.spreadsheet</p>
Resource Description Framework	rdf	<p>Label: RDF</p> <p>URI: http://publications.europa.eu/resource/authority/file-type/RDF</p> <p>IANA Mime: application/rdf+xml</p>

Newsfeed/Webfeed Syndication	rss	Label: RSS feed URI: http://publications.europa.eu/resource/authority/file-type/RSS IANA Mime: application/rss+xml
Newsfeed/Webfeed Syndication	atom	Label: Atom Feed URI: http://publications.europa.eu/resource/authority/file-type/ATOM IANA Mime: application/atom+xml
Klassische Textdateien	txt	Label: TXT URI: http://publications.europa.eu/resource/authority/file-type/TXT IANA Mime: text/plain
Extensible Markup Language	xml	Label: XML URI: http://publications.europa.eu/resource/authority/file-type/XML IANA Mime: application/xml

Table 3- OGD-Formats – Images and graphics

Images and graphics	Format	File type according to EU-Vocabular https://op.europa.eu/en/web/eu-vocabularies/concept/-/resource?uri=http://publications.europa.eu/resource/authority/file-type/ATOM
Graphics Interchange Format	gif	Label: GIF URI: http://publications.europa.eu/resource/authority/file-type/GIF IANA Mime: image/gif
JPEG	jpeg (.jpg, .jpeg)	Label: JPEG URI: http://publications.europa.eu/resource/authority/file-type/JPEG IANA Mime: image/jpeg
Portable Network Graphics	png	Label: PNG URI: http://publications.europa.eu/resource/authority/file-type/PNG IANA Mime: image/png
Scalable Vector Graphics	svg+xml	Label: SVG URI: http://publications.europa.eu/resource/authority/file-type/SVG IANA Mime: image/svg+xml
Tagged Image File (TIFF)	tiff	Label: TIFF URI: http://publications.europa.eu/resource/authority/file-type/TIFF IANA Mime: image/tiff

Table 4- OGD-Formats – Geo formats

Geo formats	Format	File type according to EU-Vocabular https://op.europa.eu/en/web/eu-vocabularies/concept/-/resource?uri=http://publications.europa.eu/resource/authority/file-type/ATOM
Geography Markup Language	gml	Label: GML URI: http://publications.europa.eu/resource/authority/file-type/GML IANA Mime: application/gml+xml
GPS Exchange Format	gpx	Label: GPX URI: - Apache Mime: application/gpx+xml https://svn.apache.org/repos/asf/httpd/httpd/trunk/docs/conf/mime.types https://www.topografix.com/gpx.asp (Online 11.03.21)
Keyhole Markup Language: KML	kml	Label: KML URI: http://publications.europa.eu/resource/authority/file-type/KML IANA Mime: application/vnd.google-earth.kml+xml
Keyhole Markup Language: KMZ	kmz	Label: KMZ URI: http://publications.europa.eu/resource/authority/file-type/KMZ IANA Mime: application/vnd.google-earth.kml+xml
GeoRSS	rss+xml	Label: GeoRSS URI: - Mime: application/x-ogcgeorss-gml Mime source: https://portal.ogc.org/files/?artifact_id=47860
ESRI Shapefile	shp	Label: SHP URI: http://publications.europa.eu/resource/authority/file-type/SHP IANA Mime: application/x-shapefile

GeoJSON	json	Label: GeoJSON URI: - IANA Mime: application/geo+json Definition: https://tools.ietf.org/html/rfc7946
GeoPackage	gpkg	Label: GML URI: - IANA Mime: application/geopackage+sqlite3 Definition: https://www.geopackage.org/

Table 5- OGD-interfaces

OGD APIs	File type according to EU-Vocabular https://op.europa.eu/en/web/eu-vocabularies/concept-/resource?uri=http://publications.europa.eu/resource/authority/file-type/ATOM
Web Catalogue Service (WCAS) and/or Catalogue Service for the Web (CSW [2.0.2 ISO profile])	Label: CSW URI: - IANA Mime: application/xml
Web Coverage Service (WCS 2.0)	Label: WCS URI: - http://publications.europa.eu/resource/authority/file-type/WFS_SRVC IANA Mime: application/xml, image/tiff, application/netcdf, image/jpeg, application/x-hdf4, application/x-hdf5, application/x--ogc-NITF, image/jp2
Web Feature Service (WFS 1.1.0 & WFS 2.0)	Label: WFS URI: http://publications.europa.eu/resource/authority/file-type/WFS_SRVC IANA Mime: text/xml, application/gml+xml
Web Map Service (WMS 1.1.1 & WMS 1.3)	Label: WMS URI: http://publications.europa.eu/resource/authority/file-type/WMS_SRVC IANA Mime: text/xml, application/vnd.ogc.wms_xml
Web Map Tile Service (WMTS 1.0)	Label: WMTS URI: - IANA Mime: application/xml
Sensor Observation Service (OGC SOS 1.0 & OGC SOS 2.0)	Label: SOS URI: - IANA Mime: application/xml
SensorThings API	Label: CSW URI: - IANA Mime: application/jsonl
Others	

Documentation of GeoWebservices

When documenting GeoWebservices please note:

GeoWebservices must be documented as separate metadata sets and the ServiceURL be given as a GetCapabilities request:

[Example](#)

Dataset or service

Name	Format
WMS GetCapabilities	wms

The geodata retrievable via the GeoWebService must also be documented as separate metadata sets. The ServiceURL in this case must be given both as a GetCapabilities request and as an example request (GetMap) for the formats supported by the service.

[Example](#)

Dataset or service

Name	Format
WFS GetCapabilities	wfs
WFS GetFeature (CSV)	csv
WFS GetFeature (GML)	gml
WFS GetFeature (JSON)	json
WFS GetFeature (SHP)	shp

Categories

The datasets must be categorized into one or more topics. The controlled EU vocabulary of data topics is used as categories (<http://publications.europa.eu/resource/dataset/data-theme>). The table contains for each possible topic the reference, the labels in German and English, as well as a best possible mapping of the categories of the national metadata standard used so far in Austria up to version 2.5.

Table 6- categories

Reference	Label English	Label Germany	best possible mapping of categories of version data.gv.at 2.5
http://publications.europa.eu/resource/authority/data-theme/AGRI	Agriculture, fisheries, forestry and food	Landwirtschaft, Fischerei, Forstwirtschaft und Nahrungsmittel	Land und Forstwirtschaft
http://publications.europa.eu/resource/authority/data-theme/ECON	Economy and finance	Wirtschaft und Finanzen	Arbeit; Finanzen und Rechnungswesen; Wirtschaft und Tourismus
http://publications.europa.eu/resource/authority/data-theme/EDUC	Education, culture and sport	Bildung, Kultur und Sport	Bildung und Forschung; Kunst und Kultur; Sport und Freizeit
http://publications.europa.eu/resource/authority/data-theme/ENER	Energy	Energie	n.a.
http://publications.europa.eu/resource/authority/data-theme/ENVI	Environment	Umwelt	Umwelt
http://publications.europa.eu/resource/authority/data-theme/GOVE	Government and public sector	Regierung und öffentlicher Sektor	Verwaltung und Politik
http://publications.europa.eu/resource/authority/data-theme/HEAL	Health	Gesundheit	Gesundheit

http://publications.europa.eu/resource/authority/data-theme/INTR	International issues	Internationale Themen	n.a.
http://publications.europa.eu/resource/authority/data-theme/JUST	Justice, legal system and public safety	Justiz, Rechtssystem und öffentliche Sicherheit	n.a.
http://publications.europa.eu/resource/authority/data-theme/REGI	Regions and cities	Regionen und Städte	Geographie und Planung
http://publications.europa.eu/resource/authority/data-theme/SOCI	Population and society	Bevölkerung und Gesellschaft	Bevölkerung; Gesellschaft und Soziales
http://publications.europa.eu/resource/authority/data-theme/TECH	Science and technology	Wissenschaft und Technologie	Bildung und Forschung
http://publications.europa.eu/resource/authority/data-theme/TRAN	Transport	Verkehr	Verkehr und Technik

Update frequency

Previously, the entries were based on the code list defined in ON EN ISO 19115:2003, section B5.18 - MD_MaintenanceFrequencyCode: "frequency with which modifications and deletions are made to the data after it is first produced" / "interval at which the data is updated after it is first produced". Starting with version 2.6, the Frequency Vocabulary is used as a reference.

References to the Frequency Vocabulary are from the Publications Office of the European Union table of definitions for temporal cycles (<http://publications.europa.eu/mdr/authority/frequency/>). See <http://publications.europa.eu/resource/dataset/frequency>, the URIs are composed of namespace <http://publications.europa.eu/resource/authority/frequency/> together with the name, e.g. <http://publications.europa.eu/resource/authority/frequency/DAILY>.

Table 7- update frequency

Deutsch	Name	Domain code	Frequency Vocabulary (DCAT-AP)	Definition
kontinuierlich	continual	001	CONT oder UPDATE_CONT	data is repeatedly and frequently updated
täglich	daily	002	DAILY	data is updated each day
wöchentlich	weekly	003	WEEKLY	data is updated on a weekly basis
14-tägig	fortnightly	004	BIWEEKLY	data is updated every two weeks
monatlich	monthly	005	MONTHLY	data is updated each month
zweimonatlich	bimonthly	- ³	BIMONTHLY	data is updated every two months
quartalsweise	quarterly	006	QUARTERLY	data is updated every three months
halbjährlich	biannually	007	BIENNIAL	data is updated twice each year
jährlich	annually	008	ANNUAL	data is updated every year
nach Bedarf	asNeeded	009	IRREG	data is updated as deemed necessary
unregelmäßig	irregular	010	IRREG	data is updated in intervals that are uneven in duration
nicht geplant	notPlanned	011	UNKNOWN	there are no plans to update the data
unbekannt	unknown	012	UNKNOWN	frequency of maintenance for the data is not known

³ Table of the Publications Office of the European Union for definitions for frequencies (<http://publications.europa.eu/mdr/authority/frequency/>)

10 Image-metadata

When publishing images, photos or entire photo directories, it should be noted that each published image also has corresponding metadata. Preferably, this metadata should be stored directly in the file in Exif, IPTC or XMP format. This guarantees that the image rights are preserved even if the photo is used or shared in isolation on the Internet.

The following should be kept in mind:

- Before publishing, check each photo for the metadata stored in the photo.
- Only disclose information that you want users to know. Deciding what that content is may vary depending on the photo.
- Some metadata can already be set in the device (camera, scanner) when the image is captured or digitized. Thus, they are automatically written into the file.

Mandatory information in the metadata are:

Table 1 – Mandatory information in the metadata

Metadaten data.gv.at	Exif	IPTC	XMP	Example
Titel	ImageDescription	Überschrift	dc:title	Rathaus Wien
Datenverantwortliche Stelle	Artist	Ersteller	dc:creator	Stadt Wien
Lizenz	Copyright	Urheberrecht svermerk	dc:rights	https://creativecommons.org/licenses/by/4.0/deed.de

Tools for editing the metadata stored in the image:

- XnView MP (freeware)
- Adobe Bridge or Photoshop (paid products)

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14 Descriptions for the abbreviations and attributes

ID ... consecutive unique numbering in the OGD metadata catalogue for Austria
Amount... 1= single-value field N=multi-value field (cardinality)

15 Version history

Version 1.0: 24.10.2011
Version 1.1: 12.03.2012
Version 2.0: 10.10.2012
Version 2.1: 15.10.2012
Version 2.2: 12.12.2013
Version 2.3: 06.11.2014
Version 2.4: 28.02.2017
Version 2.5: 01.03.2019
Version 2.6: 21.07.2021

Changes in OGD Metadata 2.6

Addition of DCAT.AP classes and attributes
Deletion of the CKAN field name
Conversion of the categories to the controlled EU vocabulary
Conversion of the code list for the update cycle
Addition of chapter image metadata
Conversion to the new document template of the BLSG

Changes in OGD Metadata 2.5

- Changing the document class from "White Paper" to "Convention" and renaming the document title from "OGD Metadata Austria" to "Metadata data.gv.at", because
 - data.gv.at is stated in the Federal Procurement Act - Bundesvergabeengesetz 2018 (e.g. § 62. (1) After an award procedure has been carried out, the contracting authority shall disclose each contract awarded, each framework agreement concluded and the result of each ideas competition by providing the metadata of the core data of the award procedure <https://www.data.gv.at/> ...),
 - data.gv.at is used as an inventory list for the implementation of the Public Sector Information directive - Informationsweiterverwendungsgesetz (IWG) and publications according to the Environmental Information Act – Umwelt-informationsgesetz (UIG),
 - this document represents the semantic description and specification for the technical implementation of the metadata on data.gv.at and the corresponding document to the convention "XML specification for the metadata interface".
- Conversion CC BY 3.0 AT to CC BY 4.0 International
- Editorial corrections.
- After the resolution was passed, the document was transferred to the new document class regime before being published on E-Government Reference Server, according to the provisions of the "e-gov-koop 2.1.0" convention. The document is assigned to the document class "mandatory".

Changes in OGD Metadata 2.4

- CKAN update to 2.6 requires an adaptation of OGD metadata 2.4 in order to be able to map it conformally to data.gv.at:
 - ID 5: field "metadata_modified", since the update CKAN does not allow to exist in the "extras" section, so "extras: metadata_modified" has been changed to "metadata_modified".
- Move the listing "Contributions from" from the cover sheet to the list of authors (chapter 11)
- Additions in chapter (1) General remarks
- Field description ID 16 moved according to ascending numbering by ID
- Additional field ID 35 – Publisher Link (the contact page of the publishing body), based on the requirements that have occurred in practice and as a correspondence to <publisher_url> of the OeGov XML interface.
- Additional field ID 36 -E-mail contact from the issuing agency on the basis of the requirements that have arisen in practice.
- To ensure compatibility with the OeGov XML interface, additional fields ID 37 - ID 39 must be included in the overview and semantic descriptions. The description of field ID = 6 has been supplemented with - Link. The reference to the obligatory use of field ID = 12 was added.
- Explanation of the OeGov XML interface for fields ID 6, ID 8 and ID 33
- Correction of the cardinality for fields ID = 17 and ID = 18 from "1" to "N". The cardinality of the individual fields has been rechecked and the meta-data record, service or document and cardinality are explained by the new sketch in 8)
- Additions ON A 2270: 2017 and ON / EN / ISO 19115-1: 2014

- Correction ON A 2270: 2010 Field ID 13 and Field ID 20
- Update various examples in the descriptions
- Supplementary OGD format "GEOPackage" (Chapter 8 a)
- Supplementary OGD interfaces "SensorThings API" and "Others" (Chapter 8 b)
- Supplementary update cycle "two-monthly" (chapter 8 d)
- Update RDF namespace prefixes (chapter 8e) and counter-rendering the RDF vocabulary to version 2.3
- Mapping of categories updated (europeandataportal instead of public.eu)
- Formatting (fonts, tables) unified
- The overview tables are available as OGD on data.gv.at.

Changes in OGD Metadata 2.3

- Table of content is updated.
- Reference to the XML schema added .
- Field ID 20 – Publisher becomes a mandatory field in metadata core

Changes in OGD Metadata 2.2

- Introduction of version history.
- Chapter 3 from OGD Metadata 2.1 is integrated into the version history.
- All denominations "dataset or service" were expanded to read "dataset, service or document" where appropriate. This takes into account documents with the metadata set structure Austria. Consequently identifiers for metadata fields have changed (ID 14, 15, 16, 17, 18, 29, 31, 32).
- Field ID 6 – Metadata linkage: definition, explanation and example have been changed for ease of clarity, use of referencing on data basis, ONA 2270:2010 reference corrected, ON/EN/ISO 19119:2005 reference added.
- Field ID 8 – Title: definition added, explanation of the element indicating that the title of the 'resource' may also be used (to ensure compatibility with profil.AT and OGD Metadata Profile Germany)
- Field ID 11 – Keywords: explanation added.
- Field ID 19 – Maintainer: explanation and description have been changed for ease of clarity.
- Field ID 20 – Publisher: definition, explanation and example have been changed for ease of clarity.
- Field ID 21 – Licence: explanation adapted.
- Field ID 23 – Geographic range: explanations changed for ease of clarity, example corrected so

that geographic range is defined as WKT.

- Field ID 32 – Resource character set code: reference in definition changed to ISO 19115:2003. List of character codes for data and services expanded.
- Fields ID 33 and ID 34 added.
- In chapter 9 – Vocabulary for the metadata structure
Item a): heading changed, formats instead of endings, OGD interfaces shown in a separate subitem (b), chapter documentation of GeoWebservices and examples added.
Item d): allocation of theme categories in accordance with EN ISO 19115 now possible.
Item f): added, DCAT-AP

Changes in OGD Metadata 2.1

Not specified.

Changes in OGD Metadata 2.0

- In OGD Metadata 2.0, comments to version 1.1 and the experience of the OGD implementations since publication of "OGD Metadata - 1.1" have been considered. In particular, the experiences gained during the integration of the OGD portals of the cities and countries into the portal data.gv.at were included.
- The tables, explanatory texts and various names have been changed to improve readability and ease of understanding.
- In OGD Metadata - 1.1 the terms "dataset" and "resource" are often used in the same meaning. OGD Metadata - 2.0 uses "dataset or service" instead of the above terms. Consequently the names of some metadata fields have changed (ID 14,15,16,29).
- Each metadata field is clearly described with all its elements.
For better readability headings for the describing elements have been changed:

OGD Metadata - 1.1	OGD Metadata - 2.0
Description German	Definition
Description English	Definition English
Commentary	Explanation

- Metadata fields are given additional describing elements (CKAN field, example, ON A 2270:2010 and ON/EN/ISO 19115:2003 and RDF Properties).
- RDF properties are mapped with the DCAT model, providing full compatibility with the EC Recommendation (ISA Programme), as well as W3C (GLD Working Group Recommendation).
- Contents of the field "explanation" are designed to also serve as help texts, e.g. in CKAN.
- Definitions for metadata fields, categories and the code list of the update frequency are

available in English (international verifiability, vocabulary recommendation, first evaluation of lists for specifying categories, etc.).

- Field ID=1: CKAN assignment changed.
- Field ID=5: Name and CKAN assignment changed.
- Field ID=6: Explanation adapted and cardinality/amount changed to N.
- One of the main changes concerns the metadata field ID=14 "Resource URL" (in OGD Metadata -1.1 "Ressourcen-Link")

OGD Metadata - 2.0 recommends that links to more than one data set in "Resource URL" are provided only if these are guaranteed to have comparable contents. This would be the case where identical data sets are available in different formats. This would not be the case with data sets for a time series developed with different collection methods that are not comparable with each other. In case of doubt separate metadata sheets must be prepared for each data set!

- Field ID=7 has been shut down.

7	<p>Metadata URI</p> <p><i>metadata_uri</i></p>	1	<p>Permanente, eindeutige URL auf die Metadaten eines Datensatzes (das Datenblatt selbst)</p>	<p>Permanent and unique URL to meta data, possibly a referrer to itself</p>	<p>Entspricht in manchen Fällen dem Feld Ressourcen-URL (ein Zeiger auf sich selbst)</p>
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- As most datasets have their own metadata sheets the metadata field ID=16 "**Resource name**" (in OGD Metadata – 1.1 "Ressourcen-Titel") was made **optional** and therefore removed from the metadata core. This has no bearing on implementations to date.

Implementation of metadata sheets is thus made simpler: the field ID=16 "Resource name" is no longer mandatory, i.e. it need not have the same value as field ID=8 "Title".

- OGD Metadata – 1.1 uses the CKAN field **author** for ID=19 "Maintainer". To emphasise the significance of the maintainer OGD Metadata – 2.0 uses the CKAN field **maintainer**.
- OGD-Metadata - 2.0 introduces optional fields ID=30 "Licence citation", ID=31 "Resource language" und ID=32 "Resource character set code".
- The CKAN attribute "name" is no longer used in OGD-Metadata - 2.0.