

Cooperation OGD Austria: Working Group on Metadata		White Paper
		OGD Metadata – 2.4
		Working Group Result
short description	<p>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.</p> <p>The result includes a metadata core, as well as optional attributes plus relevant vocabulary for the metadata catalogue Austria.</p>	
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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: **31.10.2016**

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OGD Cooperation Austria: Recommendation of the Working Group on Metadata

(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) and 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.

Related documents and files can be found at conventions on the reference server <http://reference.e-government.gv.at/KONVENTIONEN-WEITERE-KONZEPT.506.0.html>. and data.gv.at

(2) Management Summary

The document contains a proposal for the OGD – metadata definition 2.4 of [Cooperation OGD Austria](#).

Results are available for

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

The annex contains:

- an overview of OGD formats and OGD-interfaces
- a catalogue of categories
- the code list “update frequency”
- RDF namespace prefixes plus full URIs
- equivalent to DCAT-AP
- version history
- list of authors

As supplement (dataset on [data.gv.at](#)):

- Overview table for the metadata fields and their correspondences
- Table categories and best possible mapping

(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 2.4

	ID	Identifier	OGD short name	CKAN field
Metadata core	1	Metadata identifier	metadata_identifier	extras:metadata_identifier
	5	Metadata modified on	metadata_modified	metadata_modified
	8	Title	title	title
	9	Description	description	notes
	10	Categorization	categorization	extras: categorization
	11	Keywords	keywords	Tags
	14	Resource URL	resource_url	resources:url
	15	Resource format	resource_format	resources:format
	19	Maintainer	maintainer	maintainer
	20	Publisher	publisher	extras:publisher
	21	Licence	license	license
	24	Begin date and time	begin_datetime	extras:begin_datetime
Additional Optional Metadata Attributes	2	Schema name	schema_name	extras:schema_name
	3	Schema language	schema_language	extras:schema_language
	4	Schema character set code	schema_characterset	extras:schema_characterset
	6	Metadata linkage URL	metadata_linkage	extras:metadata_linkage
	12	Attribute description	attribute_description	extras:attribute_description
	13	Maintainer link	maintainer_link	extras:maintainer_link
	16	Resource name	resource_name	resources:name
	17	Resource created or published on	resource_created	resources:created
	18	Resource last modified on	resource_lastmodified	resources:last_modified
	22	Geographic coverage/location	geographic_toponym	extras:geographic_toponym
	23	Geographic range	geographic_bbox	extras:geographic_bbox
	25	End data and time	end_datetime	extras:end_datetime
	26	Update frequency	update_frequency	extras:update_frequency
	27	Data quality and lineage	lineage_quality	extras:lineage_quality
	28	English title and description	en_title_and_desc	extras:en_title_and_desc
	29	Resource size	resource_size	resources:size
	30	License citation	license_citation	extras:license_citation

ID ... consecutive unique numbering in the OGD metadata catalogue for Austria

Additional Optional Metadata Attributes	ID	Identifier	OGD short name	CKAN field
	31	Resource language	resource_language	resources:language
	32	Resource character set code	resource_encoding	resources:charset
	33	Metadata original portal	metadata_original_portal	extras:metadata_original_portal
	34	Maintainer e-mail	maintainer_email	maintainer_email
	35	Publisher link	publisher_link	extras:publisher_link
	36	Publisher e-mail	publisher_email	publisher_email
	37	Metadata linkage name	metadata_linkage_name	extras:metadata_linkage_name
	38	Licence URL	license_url	extras:license_url
	39	Terms URL	terms_url	extras:terms_url

ID ... consecutive unique numbering in the OGD metadata catalogue for Austria

(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. Select UUID (according to RFC:4122).			
Explanation	The system (software) automatically generates the identifier. Existing identifiers (where existing metadata sets are harvested) must be taken over.			
Example	550e8400-e29b-11d4-a716-446655441234			
ON A 2270:2010	1.1			
ON A 2270:2016	1.1			
ON/EN/ISO 19115:2003	mdFileID (2)			
19115-1:2014	metadataidentifier (22)			
RDF property	skos:notation			
Definition English	Unique Identifier for metadata set. Select UUID conforming to RFC:4122			

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

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 2270:2010	1.6			
ON A 2270:2016	1.6			
ON/EN/ISO 19115:2003	mdDateSt (9)			
19115-1:2014	dateinfo (20)			
RDF property	dct:modified as type rdfs:Literal			
Definition English	Metadata creation or update timestamp. Specification according to ÖNORM ISO 8601 as YYYY-MM-DD			

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

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, commuter statistics Linz 2010			
ON A 2270:2010	2.1.1			
ON A 2270:2016	2.1.1			
ON/EN/ISO 19115:2003	title (370)			
19115-1:2014	title (370)			
RDF property	dct:title als Typ rdfs:Literal (mit language tag "de")			
Definition English	Resource title			

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

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 2270:2010	2.2			
ON A 2270:2016	2.2			
ON/EN/ISO 19115:2003	idAbs (25)			
19115-1:2014	abstract (45)			
RDF property	dct:description als Typ rdfs:Literal			
Definition English	Description of the resource content.			

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

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 2270:2010	2.7.1 & 2.7.2			
ON A 2270:2016	2.7.1 & 2.7.2			
ON/EN/ISO 19115:2003	keyword (53) & thesaName (55)			
19115-1:2014	keyword (76) & thesaurusName (78)			
RDF property	dcat:theme as type skos:Concept			
Definition English	Categorization of the resource content.			

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

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 2270:2010	2.7.1			
ON A 2270:2016	2.7.1			
ON/EN/ISO 19115:2003	keyword (53)			
19115-1:2014	keyword (76)			
RDF property	dcat:keyword as type rdfs:Literal			
Definition English	Key words describing the resource			

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

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.			
Example	https://www.wien.gv.at/statistik/ogd/vie-district-pop-foreignborn.csv			
ON A 2270:2010	6.1.4.1.1			
ON A 2270:2016	6.1.4.1.1			
ON/EN/ISO 19115:2003	linkage (397)			
19115-1:2014	linkage (414)			
RDF property	dcat:accessURL			
Definition English	URL to the resource			

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

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 annex 9a) and 9b).			
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 2270:2010	6.1.2.1			
ON A 2270:2016	6.1.2.1			
ON/EN/ISO 19115:2003	formatName (285)			
19115-1:2014	formatSpecificationCitation (265)			
RDF property	dct:format as type dct:MediaTypeOrExtent			
Definition English	Specification of the resource. This may be a file type, download or service link. List of defined OGD formats and interfaces see annex 9a) and 9b).			

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

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 2270:2010	2.5.1 / 2.5.2			
ON A 2270:2016	2.5.1 / 2.5.2			
ON/EN/ISO 19115:2003	rpIndName (375) / rpOrgName (376)			
19115-1:2014	citedResponsibleParty (376)			
RDF property	dcat:contactPoint			
Definition English	Name of the person or entity responsible for the resource.			

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

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 2270:2010	6.1.1.1.1 & 6.1.1.1.2			
ON A 2270:2016	6.1.1.1.1 & 6.1.1.1.2			
ON/EN/ISO 19115:2003	rpIndName (375) / rpOrgName (376)			
19115-1:2014	citedResponsibleParty (376)			
RDF property	dct:publisher			
Definition English	Name of the publishing entity or person			

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

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 3.0 Österreich (CC BY 3.0 AT)".</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 3.0 Österreich (CC BY 3.0 AT)			
ON A 2270:2010	2.8.1.1			
ON A 2270:2016	2.8.1.1			
ON/EN/ISO 19115:2003	othConsts (72)			
19115-1:2014	reference (106)			
RDF property	dct:license (URI of the licence document)			
Definition English	Legal information concerning the usage of the resource			

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

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 2270:2010	2.9.6.2.1			
ON A 2270:2016	2.9.6.2.1			
ON/EN/ISO 19115:2003	exTemp (351)			
19115-1:2014	extent (361)			
RDF property	dct:temporal			
Definition English	Date specifying valid from of the resource according to ON EN 8601 or ON EN ISO 19108 respectively.			

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

(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	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 2270:2010	1.4			
ON A 2270:2016	1.4			
ON/EN/ISO 19115:2003	mdStanName (10)			
19115-1:2014	metadataStandard (23)			
RDF property	dct:conformsTo			
Definition English	OGD Austria Metadata 2.4			

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

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 2270:2010	1.2			
ON A 2270:2016	1.2			
ON/EN/ISO 19115:2003	mdLang (3)			
19115-1:2014	language (16)			
RDF property	dct:language			
Definition English	Metadata language, always ger (German)			

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

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	This element will be imperative for European integration, as consolidation would otherwise not be possible. 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	utf8			
ON A 2270:2010	1.3			
ON A 2270:2016	1.3			
ON/EN/ISO 19115:2003	mdC (4)			
19115-1:2014	characterSet (17)			
RDF property	cnt:characterEncoding			
Definition English	Metadata payload character encoding, always utf8			

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

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 2270:2010	6.1.4.1.1 – Link für den Online-Zugang zu einer Ressource.			
ON A 2270:2016	1.1.1 + 1.1.2			
ON/EN/ISO 19115:2003	linkage (397)			
19115-1:2014	metadataLinkage (25)			
RDF property	foaf:page als Typ foaf:Document			
Definition English	Links providing further descriptive metadata			

ID ... consecutive unique numbering in the OGD metadata catalogue for Austria

Amount... 1= single-value field N=multi-value field (cardinality)

Attribute description

ID	Identifier	OGD short name	CKAN field	Amount
12	Attribute description	attribute_descriptio n	extras: attribute_descriptio n	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 2270:2010	2.11.3 & 2.11.4			
ON A 2270:2016	2.11.3 & 2.11.4			
ON/EN/ISO 19115:2003	memberName (4.1) & definition (4.2)			
19115-1:2014	attributeDescription (209)			
RDF property	dct:description			
Definition English	Human-readable description of dataset fields			

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

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 2270:2010	2.5.4.8			
ON A 2270:2016	2.5.4.8			
ON/EN/ISO 19115:2003	Linkage (397)			
19115-1:2014	linkage (414)			
RDF property	dcat:landingPage als Typ foaf:Document			
Definition English	URL to the dataset maintaining entity			

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

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 2270:2010	2.1.1			
ON A 2270:2016	2.1.1			
ON/EN/ISO 19115:2003	title (370)			
19115-1:2014	title (370)			
RDF property	dct:description als Typ rdfs:Literal			
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.			

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

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 2270:2010	2.1.3.1 & 2.1.3.2			
ON A 2270:2016	2.1.3.1 & 2.1.3.2			
ON/EN/ISO 19115:2003	refDate (394) & refDateType (395)			
19115-1:2014	date (411) & dateType (412)			
RDF property	dct:issued			
Definition English	Resource publication timestamp			

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

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 2270:2010	2.1.3.1 & 2.1.3.2			
ON A 2270:2016	2.1.3.1 & 2.1.3.2			
ON/EN/ISO 19115:2003	refDate (394) & refDateType (395)			
19115-1:2014	date (411) & dateType (412)			
RDF property	dct:modified			
Definition English	Resource last update timestamp			

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

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 2270:2010	2.9.6.1.3.1.1			
ON A 2270:2016	2.9.6.1.3.1.1			
ON/EN/ISO 19115:2003	identCode (207)			
19115-1:2014	code (194)			
RDF property	dct:spatial			
Definition English	Human-readable description of the resource's spatial context			

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

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 2270:2010	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 A 2270:2016	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	westBL (344) & eastBL (345) & southBL (346) & northBL (347)			
19115-1:2014	westBoundLongitude (354) & eastBoundLongitude (355) & southBoundLongitude (356) & northBoundLongitude (357)			
RDF property	dct:spatial			
Definition English	Bounding box specifying the resources spatial coverage			

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

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 2270:2010	2.9.6.2.1			
ON A 2270:2016	2.9.6.2.1			
ON/EN/ISO 19115:2003	exTemp (351)			
19115-1:2014	extent (361)			
RDF property	dct:temporal			
Definition English	Date specifying valid to of the resource according to ON EN 8601 or ON EN ISO 19108 respectively.			

ID ... consecutive unique numbering in the OGD metadata catalogue for Austria

Amount... 1= single-value field N=multi-value field (cardinality)

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 2270:2010	2.9.7.1			
ON A 2270:2016	2.9.7.1			
ON/EN/ISO 19115:2003	maintFreq (143)			
19115-1:2014	maintenanceAndUpdateFrequency (144)			
RDF property	dct:accrualPeriodicity			
Definition English	Human readable resource update frequency			

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

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 2270:2010	3.2.1			
ON A 2270:2016	3.2.1			
ON/EN/ISO 19115:2003	statement (83)			
19115-1:2014	statement (120)			
RDF property	dct:provenance			
Definition English	Human readable indication of resource quality and / or data origin, such as the methodology describing the data collection or acquisition.			

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

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 2270:2010	2.1.1 & 7.1			
ON A 2270:2016	2.1.1 & 7.1			
ON/EN/ISO 19115:2003	resTitle (360) & language			
19115-1:2014	title (370)			
RDF property	dct:description als Typ rdfs:Literal (with language tag "en")			
Definition English	Resource title and description in English			

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

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 2270:2010	-			
ON A 2270:2016	-			
ON/EN/ISO 19115:2003	-			
19115-1:2014	-			
RDF property	dcat:byteSize as Typ rdfs:Literal, coded as xsd:decimal			
Definition English	Resource size			

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

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-Metadata – 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 2270:2010	2.8.1.2			
ON A 2270:2016	2.8.1.2			
ON/EN/ISO 19115:2003	accessConsts (70)			
19115-1:2014	accessConstraints (110)			
RDF property	cc:attributionName			
Definition English	Attribution as required by CC-BY license			

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

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 2270:2010	2.9.3			
ON A 2270:2016	2.9.3			
ON/EN/ISO 19115:2003	dataLang (39)			
19115-1:2014	language (65)			
RDF property	dct:language			
Definition English	Resource language			

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

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 2270:2010	2.9.4			
ON A 2270:2016	2.9.4			
ON/EN/ISO 19115:2003	dataChar (40)			
19115-1:2014	characterSet (65)			
RDF property	cnt:characterEncoding			
Definition English	Resource character encoding			

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

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 2270:2010	-			
ON A 2270:2016	1.1.1, 1.1.2 (for INSPIRE Ressourcen)			
ON/EN/ISO 19115:2003	suppInfo (46), code (207)			
19115-1:2014	metadataLinkage (25)			
RDF property	dct:source type dcat:CatalogRecord			
Definition English	Link to metadata description of originating data portal			

ID ... consecutive unique numbering in the OGD metadata catalogue for Austria

Amount... 1= single-value field N=multi-value field (cardinality)

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@ma33wien.gv.at			
ON A 2270:2010	2.5.4.5 - electronicMailAddress			
ON A 2270:2016	2.5.4.5			
ON/EN/ISO 19115:2003	eMailAdd (386)			
19115-1:2014	electronicMailAdress (403)			
RDF property	adms:contactPoint			
Definition English	e-mail address of the person or entity responsible for the resource.			

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

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 2270:2010	6.1.1.1.6			
ON A 2270:2016	6.1.1.1.6			
ON/EN/ISO 19115:2003	linkage (397)			
19115-1:2014	linkage (414)			
RDF property	dcat:landingPage			
Definition English	URL to the dataset publishing entity			

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

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 2270:2010	2.5.4.5			
ON A 2270:2016	2.5.4.5			
ON/EN/ISO 19115:2003	eMailAdd (386)			
19115-1:2014	electronicMailAdress (403)			
RDF property	adms:contactPoint			
Definition English	Email address of the person or entity responsible for the resource.			

ID ... consecutive unique numbering in the OGD metadata catalogue for Austria

Amount... 1= single-value field N=multi-value field (cardinality)

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 2270:2010	-			
ON A 2270:2016	-			
ON/EN/ISO 19115:2003	-			
19115-1:2014	-			
RDF property	foaf:page als Typ foaf:Document			
Definition English	Name of link providing further descriptive metadata			

ID ... consecutive unique numbering in the OGD metadata catalogue for Austria

Amount... 1= single-value field N=multi-value field (cardinality)

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/3.0/at/legalcode			
ON A 2270:2010	2.8.1.1 (gmx:Anchor Namespace substitution)			
ON A 2270:2016	2.8.1.1 (gmx:Anchor Namespace substitution)			
ON/EN/ISO 19115:2003	72			
19115-1:2014	112			
RDF property	dct:licence			
Definition English	URL to legal information concerning the usage of the resource			

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

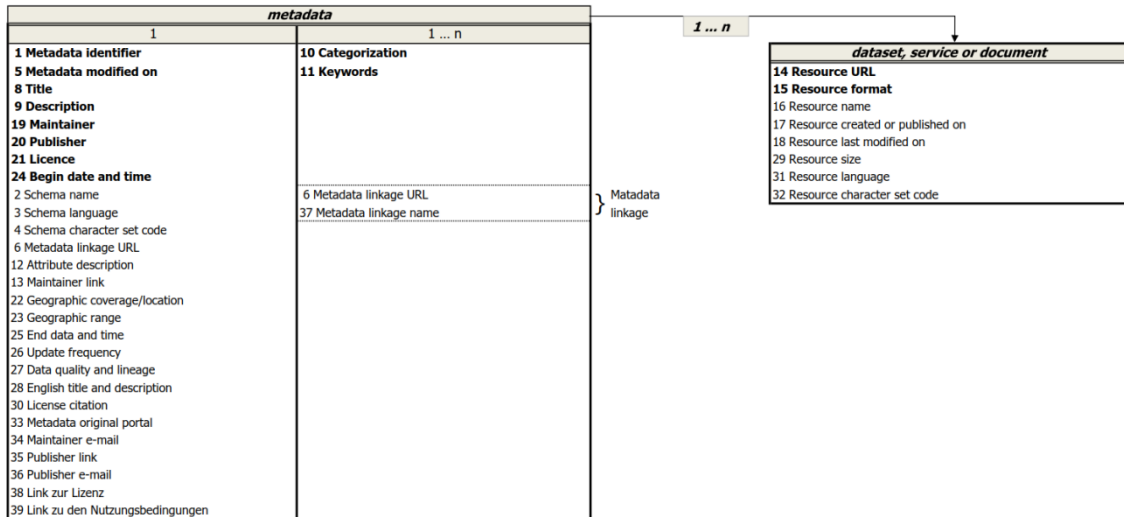
Terms URL

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 2270:2010	2.8.3.1 (gmx:Anchor Namespace substitution)			
ON A 2270:2016	2.8.3.1 (gmx:Anchor Namespace substitution)			
ON/EN/ISO 19115:2003	68			
19115-1:2014	103			
RDF property	cc:useGuidelines			
Definition English	URL to terms of licence			

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

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

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



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

a) OGD-Formats

Texts and tables	Format¹
Comma Separated Value	csv
Hypertext Markup Language for unstructured texts (HTML) ²	html
JSON (JavaScript Object Notation)	json
Open Document Formats	odt, ods,...
Resource Description Framework	rdf
Newsfeed/Webfeed Syndication	rss, atom
Classical text files	txt
Extensible Markup Language	xml

Images and graphics	Format
Graphics Interchange Format	gif
JPEG	jpeg
Portable Network Graphics	png
Scalable Vector Graphics	svg+xml
Tagged Image File (TIFF)	tiff

Geo formats	Format
Geography Markup Language	gml
GPS Exchange Format	gpx
Keyhole Markup Language	kml, kmz
GeoRSS	rss+xml
ESRI Shapefile	shp
GeoJSON	json
GeoPackage	SQLite

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.

b) OGD interfaces

Web Catalogue Service (WCAS) and/or Catalogue Service for the Web (CSW [2.0.2 ISO profile])
Web Coverage Service (WCS 2.0)
Web Feature Service (WFS 1.1.0 & WFS 2.0)
Web Map Service (WMS 1.1.1 & WMS 1.3)
Web Map Tile Service (WMTS 1.0)
Sensor Observation Service (OGC SOS 1.0 & OGC SOS 2.0)
SensorThings API
Others

Documentation of GeoWebservices

When documenting GeoWebservices please note:

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

[Example](#)

Dataset or service

Name	Modified on	format
WMS GetCapabilities		wms

2. 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	Modified on	format
WFS GetCapabilities		wfs
WFS GetFeature (CSV Example)		csv
WFS GetFeature (GML Example)		gml
WFS GetFeature (JSON Example)		json
WFS GetFeature (SHP Example)		shp

c) Categories

OGD-categories Austria	englisch	Best possible matching europeandataportal.eu
Arbeit	labour; employment	Economy & Finance
<i>Bevölkerung</i>	population	<i>Population & Society</i>
Bildung und Forschung	education and science	Education, Culture & Sport; Science & Technology
Finanzen und Rechnungswesen	finance	<i>Economy & Finance</i>
<i>Geographie und Planung</i>	geography and planning	Regions & Cities
Gesellschaft und Soziales	society	<i>Population & Society</i>
Gesundheit	health	Health
Kunst und Kultur	culture	Education, Culture & Sport
Land- und Forstwirtschaft	agriculture	Agriculture, Fisheries, Forestry & Foods
Sport und Freizeit	recreation	Education, Culture & Sport
Umwelt	environment	Environment; Energy
Verkehr und Technik	transport	Transport
<i>Verwaltung und Politik</i>	government and politics	Government & Public Sector
Wirtschaft und Tourismus	economy and tourism	<i>Economy & Finance</i>
n.a.	n.a.	Justice, Legal System & Public Safety
n.a.	n.a.	International Issues

- 11 of the 14 categories are based on the Sector Delimitation Regulation (E-Gov-BerAbgrV, StF: Federal Law Gazette. II No. 289/2004, attachment to section 3 para. 1, part 1) and the BLSG Convention "E-Government Procedural and Service Areas" (v1b 1.3) (<https://reference.e-government.gv.at/EP-VV-v1b-1-3-0-Version-vom.563.0.html>).
- The categories of Open Government Data for Vienna, Linz, Berlin, publicdata.eu, London, Seattle, Great Britain, Belgium, Canada und Kenya and the menu page for Statistics Austria were assessed for consistency.
- 3 categories from OGD practice were added (shown in *italics* in the table).
- The thematic classification derived from these sources is used as a basis for standardisation and from the best practice perspective of Cooperation OGD Austria is suitable for expansion.
- The English terms may be used for the URL convention.
- The mapping to categories from europeandataportal.at is possible with this table. Further comparisons (on Germany, EN ISO 19115, etc.) can be found in the overall table, which is published as OGD on data.gv.at.

d) Update frequency

Entry is 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“

Deutsch	Name	Domain code	Definition
kontinuierlich	continual	001	data is repeatedly and frequently updated
täglich	daily	002	data is updated each day
wöchentlich	weekly	003	data is updated on a weekly basis
14-tägig	fortnightly	004	data is updated every two weeks
monatlich	monthly	005	data is updated each month
zweimonatlich	bimonthly	- ³	data is updated every two months
quartalsweise	quarterly	006	data is updated every three months
halbjährlich	biannually	007	data is updated twice each year
jährlich	annually	008	data is updated every year
nach Bedarf	asNeeded	009	data is updated as deemed necessary
unregelmäßig	irregular	010	data is updated in intervals that are uneven in duration
nicht geplant	notPlanned	011	there are no plans to update the data
unbekannt	unknown	012	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/>)

e) DCAT-AP

DCAT-AP (https://joinup.ec.europa.eu/asset/dcat_application_profile/description) is an expansion of DCAT (<http://www.w3.org/TR/vocab-dcat/>) created to describe data and data portals. Originally launched as a project of the European Commission DCAT is now further developed by W3C. DCAT-AP is the format the European data portal will be using to describe its data.

Members of Cooperation OGD Austria were actively involved in the public assessment of DCAT-AP, making sure that existing expertise from the discussions on the OGD metadata structure for Austria was considered and a high degree of conformity between the two description formats was achieved.

Thus, the OGD Metadata structure for Austria in its current version is easily converted to DCAT-AP without incurring losses, making it easy to find Austrian administration data on the European data portal. DCAT-AP in its final version (Version 1.0, https://joinup.ec.europa.eu/system/files/project/DCAT-AP_Final_v1.00.docx) refers to the Austrian metadata structure as an implementation (profile) of DCAT-AP.

f) RDF namespace prefixes and their complete URIs

skos	http://www.w3.org/2004/02/skos/core#
dct	http://purl.org/dc/terms/
dcat	http://www.w3.org/ns/dcat#
cc	https://creativecommons.org/ns#
rdfs	http://www.w3.org/2000/01/rdf-schema#
cnt	http://www.w3.org/2011/content#
foaf	http://xmlns.com/foaf/0.1/
xsd	http://www.w3.org/2001/XMLSchema#
adms	http://www.w3.org/ns/adms#

The RDF Namespaces have changed to version 2.3:

ID	OGD Metadaten up to version 2.3	OGD - Metadaten since version 2.4
1	dcterms:identifier	skos:notation
5	dcterms:issued	dct:modified
8	dcterms:title	dct:title
9	dcterms:abstract	dct:description
10	dcat:theme	dcat:theme
11	dcat:keyword	dcat:keyword
14	dcat:accessURL	dcat:accessURL
15	dcterms:format	dct:format
19	dcelements:creator	dcat:contactPoint
20	dcelements:publisher	dct:publisher
21	dcterms:license	dct:license
24	dcterms:temporal	dct:temporal
2	dcterms:alternative	dct:conformsTo
3	dcterms:language	dct:language
4	cnt:characterEncoding	cnt:characterEncoding
6	dcat:dataDictionary	foaf:page

ID	OGD Metadaten up to version 2.3	OGD - Metadaten since version 2.4
12	dcterms:description	dct:description
13	dcterms:creator	dcat:landingPage
16	rdfs:literal	dct:description
17	dcterms:issued	dct:issued
18	dcterms:modified	dct:modified
22	dcterms:description	dct:spatial
23	dcterms:spatial	dct:spatial
25	dcterms:temporal	dct:temporal
26	dcterms:accrualPeriodicity	dct:accrualPeriodicity
27	dcat:dataQuality	dct:provenance
28	dcterms:abstract	dct:description
29	dcat:bytes	dcat:byteSize
30	cc:attributionName	cc:attributionName
31	dcterms:language	dct:language
32	cnt:characterEncoding	cnt:characterEncoding
33	dcat:landingPage	dct:source
34	adms:contactPoint	adms:contactPoint
35	-	dcat:landingPage
36	-	adms:contactPoint
37	-	foaf:page
38	-	dct:licence
39	-	cc:useGuidelines

(10) Version history

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: 2016 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	Metadata URI <i>metadata_uri</i>	1	Permanente, eindeutige URL auf die Metadaten eines Datensatzes (das Datenblatt selbst)	Permanent and unique URL to meta data, possibly a referrer to itself	Entspricht in manchen Fällen dem Feld Ressourcen-URL (ein Zeiger auf sich selbst)
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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.

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