



# Metadaten & Registry

TOOLS – VALIDIERUNG – REGISTRY/ CODELISTS

KASTL – ILLMEYER – SCHUBERT - BRENDLE

# INSPIRE METADATEN

- | Geonetwork (Illmeyer)
- | Geoportal (Kastl)
- | Validierung von Metadaten (Brendle)
- | Verfügbarkeit von Daten auf unterschiedlichen Portalen (Brendle)
- | **Diskussion**
- | Registry und Codelisten
- | **Diskussion**

# ARBEITSGRUPPEN DER NKS – METADATEN & REGISTRY

## Technik

- | Versionen - Erfahrungen
- | Wie ist das Tool implementiert? Ev. Architektur, Schnittstellen...
- | Werden auch andere Schemas verwendet? (z.B. profilAt, OGD, eigene)
- | Wie flexibel können Änderungen eingebracht werden?

## Administrativ

- | Wie funktioniert der Arbeitsablauf für die Erfassung und Wartung der Metadaten?
- | Zusammenarbeit mit internen Fachabteilungen und INSPIRE Techniker
- | Externe Zusammenarbeit (Fachaustausch, GitHub, ...)

**Fazit:** positive Eigenschaften/ Negative Erfahrungen

## Fragen/Diskussion



# Metadaten & Registry

VALIDIERUNG VON METADATEN

CHRISTINE BRENDLE

# QUALITÄTSCHECK METADATEN

## I Methode

- I Aufbereitung der JRC Fehlerreports
- I Interpretation der Fehler
- I Schemaprüfung stichprobenartig (Altova XML Spy)
- I Prüfung mit altem Validator (Stichprobe)
- I Check Services, Umsetzung in einem GIS System, Stichprobe

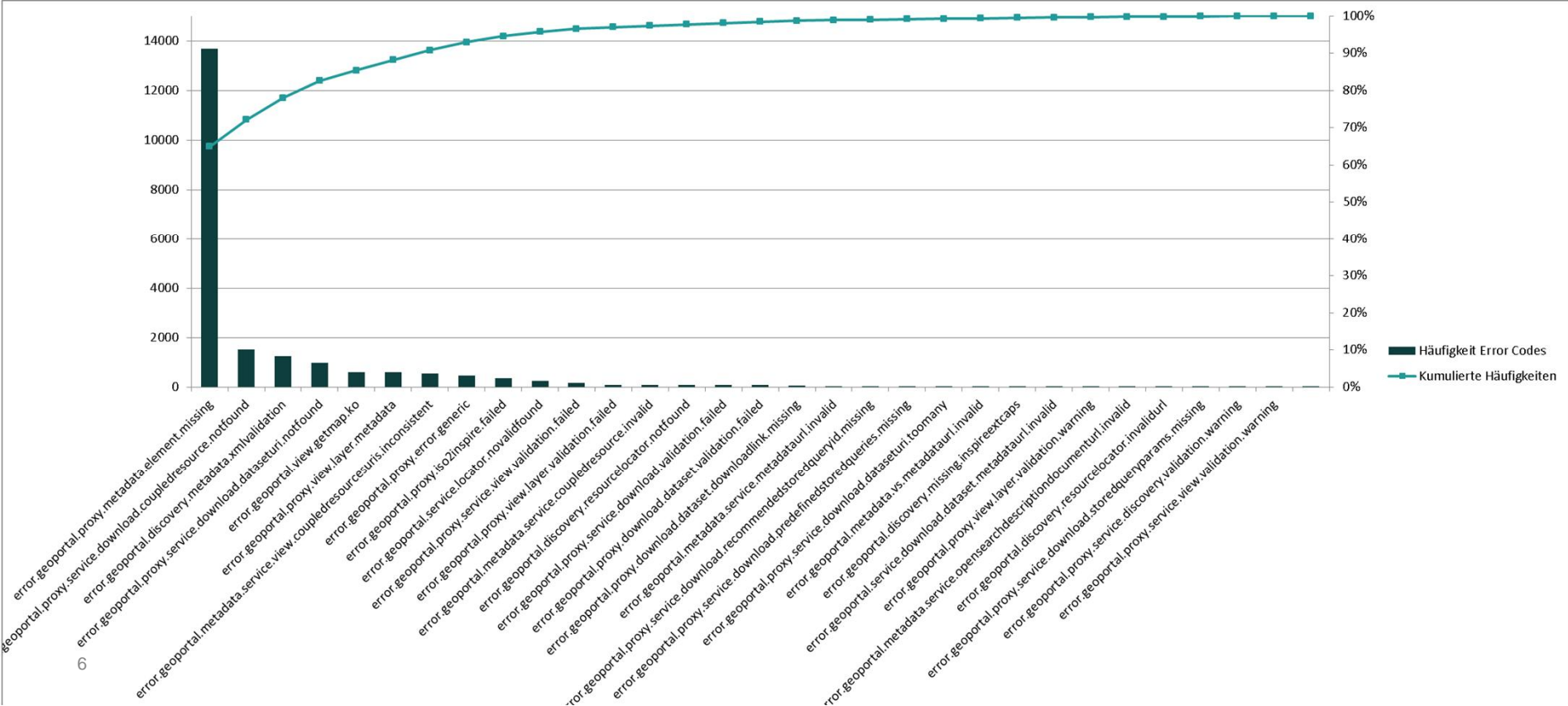
## I Klassifizierung der Fehler

- I Software Metadaten - Editoren
- I Eingabefehler qualitativ
- I Fehler in den Metadateneinträgen in den Services

## I Validierung

- I Fehlerreports monatlich bis Juli 2017 – alter Validator
- I Fehlerreport ab August (nur eine Version verfügbar) - neuer Validator

# QS METADATEN - FEHLER - HÄUFIGKEITEN



# FEHLERSTATISTIK

Fehlercodes	Anzahl	Prozent	Kumuliert	EM_Short
39	1360	6,92	6,92	"Coordinate Reference System" element empty, incomplete or missing
82	1252	6,37	13,30	URI not found in coupled resources
67	864	4,40	17,70	"Unique Resource Identifier" element empty, incomplete or missing
92	852	4,34	22,03	Inside subfeed with id * no Spatial Object Type has been declared
6	722	3,68	25,71	<SpatialDataSetDownloadLink>
65	683	3,48	29,19	"Temporal Reference" element empty, incomplete or missing
52	680	3,46	32,65	"Metadata Date" element empty, incomplete or missing
88	680	3,46	36,11	"Resource Type" element empty, incomplete or missing
59	678	3,45	39,56	"Responsible Organisation" element empty, incomplete or missing
54	674	3,43	42,99	"Metadata Point Of Contact" element empty, incomplete or missing
53	661	3,37	46,36	"Metadata Language" element empty, incomplete or missing
37	653	3,32	49,68	"Conditions For Access And Use" element empty, incomplete or missing
50	648	3,30	52,98	"Lineage" element empty, incomplete or missing
49	643	3,27	56,26	"Limitations On Public Access" element empty, incomplete or missing
55	639	3,25	59,51	"Resource Abstract" element empty, incomplete or missing
41	638	3,25	62,76	"Geographic Bounding Box" element empty, incomplete or missing
66	638	3,25	66,01	"Topic Category" element empty, incomplete or missing

# INSPIRE VALIDATOR NEU

**INSPIRE Validator**

Starte Test    Status    Testberichte    Hilfe

Download Services (Technical Guidance version 3.1)

- + Conformance Class: Download Service - Direct WFS
- + Conformance Class: Download Service - Pre-defined Atom
- + Conformance Class: Download Service - Pre-defined WFS

**Metadata (Technical Guidance version 1.3)**

- + Conformance class: INSPIRE Profile based on EN ISO 19115 and EN ISO 19119
- + Conformance class: Metadata for interoperability

Interoperable data sets in GML (Guidelines for the Encoding of Spatial Data version 3.3)

- + Conformance class: Data consistency, General requirements
- + Conformance class: INSPIRE GML application schemas, General requirements

ETF WebApp 2.0.0-b171127T1902 © 2017 European Union, interactive instruments GmbH

[Kontakt](#) [Impressum](#)

<http://inspire-sandbox.jrc.ec.europa.eu/etf-webapp/>

GitHub !



# Validator neu

Test run on 11:26 - 21.11.2017 with test suite Conformance class:  
INSPIRE Profile based on EN ISO 19115 and EN ISO 19119

<b>Status</b> Failed						
<b>Started</b> 21/11/2017 11:26:26 GMT						
<b>Duration</b> 8 s						
	<b>Total</b>	<b>Count</b>	<b>Skipped</b>	<b>Failed</b>	<b>Warnings</b>	<b>Manual</b>
<b>Test suites</b>	2	0	2	0	0	
<b>Test cases</b>	9	0	2	0	1	
<b>Assertions</b>	30	0	3	0	1	

**Conformance class: XML encoding of ISO 19115/19119 metadata**

This test suite examines XML documents containing gmd:MD\_Metadata records against basic requirements for the encoding for metadata in INSPIRE.

**This is a draft version. It has limitations and is expected to contain errors.** Please report any issues or problems [in GitHub](#).

Source: [Conformance Class 'XML encoding of ISO 19115/19119 metadata'](#)

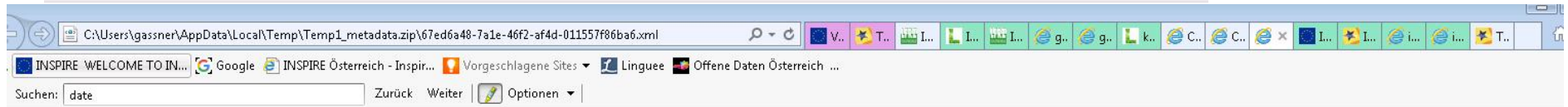
**Status** Failed  
**Duration** 7 s  
**Version** 0.2.0

**Schema validation** <http://inspire-sandbox.jrc.ec.europa.eu/etf-webapp/>

Validation of the XML documents under test against the ISO/OGC metadata schemas.

**Status** Failed  
**Duration** 7 s

Test run on 11:26 - 21.11.2017 with test suite Conformance class:  
INSPIRE Profile based on EN ISO 19115 and EN ISO 19119



```
<?xml version="1.0"?>
<gmd:MD_Metadata xsi:schemaLocation="http://www.isotc211.org/2005/gmd http://schemas.opengis.net/iso/19139/20060504/gmd/gmd.xsd" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:geonet="http://www.fao.org/geonetwork" xmlns:xlink="http://www.w3.org/1999/xlink" xmlns:gml="http://www.opengis.net/gml" xmlns:gco="http://www.isotc211.org/2005/gco" xmlns:gmd="http://www.isotc211.org/2005/gmd">
- <gmd:fileIdentifier>
  <gco:CharacterString>67ed6a48-7a1e-46f2-af4d-011557f86ba6</gco:CharacterString>
</gmd:fileIdentifier>
- <gmd:language>
  <gmd:LanguageCode codeListValue="ger" codeList="http://www.loc.gov/standards/iso639-2/">
</gmd:language>
- <gmd:characterSet>
  <gmd:MD_CharacterSetCode codeListValue="MD_CharacterSetCode_utf8"
  codeList="http://standards.iso.org/ittf/PubliclyAvailableStandards/ISO_19139_Schemas/resources/Codelist/ML_gmxCodellists.xml#MD_CharacterSetCode" codeSpace="ISOTC211/19115"/>
</gmd:characterSet>
- <gmd:hierarchyLevel>
  <gmd:MD_ScopeCode codeListValue="dataset" codeList="http://standards.iso.org/ittf/PubliclyAvailableStandards/ISO_19139_Schemas/resources/Codelist/ML_gmxCodellists.xml#MD_ScopeCode"
</gmd:hierarchyLevel>
```

**Schema validation**

Validation of the XML documents under test against the ISO/OGC metadata schemas.

**Status** Failed

**Duration** 7 s

# VALIDATOR ALT

## Validierung mit unterschiedlichen Ergebnissen



The screenshot shows the web interface of the INSPIRE Geoportal Metadata Validator. At the top, there is a browser address bar with the URL <http://inspire-geoportal.ec.europa.eu/validator2/>. Below the browser, the page header features the European Commission logo and the text "INSPIRE GEOPORTAL Enhancing access to European spatial data". The main heading is "INSPIRE Geoportal Metadata Validator" with a breadcrumb trail: "EUROPEAN COMMISSION > INSPIRE > INSPIRE GEOPORTAL > Validator".

Below the header, there is a paragraph: "This validator replaces the former [schematron validator](#) and implements the same validation criteria applied during the INSPIRE Geoportal discovery process."

Next is another paragraph: "It is possible to use this validator as a Web Service (instructions available [here](#))." followed by the instruction: "Paste your resource in the text field below (ISO 19139 Metadata or OGC Service Endpoint or CSW GetRecords or GetRecordById GET Request or URL to metadata)".

Below this is a large, empty text input field with a vertical scrollbar on the right side.

Underneath the input field, there is a section for file uploads: "You can also upload a file to test" followed by a "Select the file to be tested:" label and a "Durchsuchen..." button.

Below the file upload section, there is a "Test Resource" button and a checkbox labeled "Probe Network Services" which is checked.

At the bottom, there is a disclaimer: "DISCLAIMER: This service is used in the context of the INSPIRE Geoportal to perform validation of the metadata of resources discovered through the Member State Discovery Services. It is provided as is and it is not to be considered a full INSPIRE compliance test. While we have tried to ensure compliance with the INSPIRE Regulations and the relevant Technical Guidance documents we do recognise that there may still be issues that will need to be addressed. We would appreciate if you could [report to us](#) any issue you find with this validator so that we can improve it."

At the very bottom, there is a footer: "INSPIRE WIEN WORKSHOP 29./30. NOVEMBER 2017 - INSPIRE NATIONAL".

<http://inspire-geoportal.ec.europa.eu/validator2/>

# VALIDATOR ALT

Translate this page English  
 Microsoft® Translator

Average degree of conformity of INSPIRE Metadata: 100.00%



Ramsar Gebiete Wien

**Metadata Language** German  
**Resource Language** German  
**Metadata Date** 2017-11-20

**Metadata Point Of Contact**  
 Koordinierungsstelle fuer die Geodateninfrastruktur des Landes Wien  
 E-mail: koordinierungsstelle.gdi@ma41.wien.gv.at

**Responsible Party**  
 Point Of Contact: Koordinierungsstelle fuer die Geodateninfrastruktur des Landes Wien  
 E-mail: koordinierungsstelle.gdi@ma41.wien.gv.at

*Spatial data set*

**Conditions Applying To Access And Use**  
 Creative Commons Namensnennung 3.0 Österreich Lizenz (CC BY 3.0)

**Limitations On Public Access**  
 keine Einschränkungen

**Resource Title** Ramsar Gebiete Wien  
**Spatial Data Theme** Protected sites (Protected sites)

**Topic Category**  
 Environment

**Resource Abstract**  
 Übereinkommen über Feuchtgebiete, insbesondere als Lebensraum für Wasser- und Watvögel, von internationaler Bedeutung (BGBl. 225/1983)

**Lineage**  
 Die Abgrenzung erfolgt auf Grundlage von Grundstücksgrenzen (übernommen aus dem digitalen Kataster), der Wiener Landesgrenze, vermessenen bzw. digitalisierten Abgrenzungen nach den naturräumlichen Gegebenheiten und ihrer fachlichen Zuordnung.

**Conformity**  
 Specification: VERORDNUNG (EG) Nr. 1089/2010 DER KOMMISSION vom 23. November 2010 zur Durchführung der Richtlinie 2007/2/EG des Europäischen Parlaments und des Rates hinsichtlich der Interoperabilität von

**Unique Resource Identifier**  
 Code: f0c9e570-e4a3-4768-9b6f-6525d00676ce, Namespace: AT.0052

<http://inspire-geoportal.ec.europa.eu/validator2/>

# Weitere Tests - Interoperability Test

This indicator shows how interoperable a resource or group of resources are with respect to the INSPIRE Implementing Rules and the Technical Guidance documents;

A Spatial Data Set is considered interoperable if:

1. the resource metadata is complete
2. at least one View Service Layer portraying the dataset exists
3. at least one related View Service Layer has complete metadata
4. at least one related View Service Layer returned a preview image
5. at least one related Download Service Dataset is found
6. at least one related Download Service Dataset has complete metadata
7. at least one Spatial Object encoded with INSPIRE GML exists

For a group of documents, the indicator is an average across the resources contained in the group.

- Komplette Metadaten
- Viewservice mit min. einem Datensatz
- Viewservice mit kompletten Metadaten
- Preview image
- Downloadservice meldet einen Datensatz zurück
- Downloadservice mit kompletten Metadaten
- Wenigstens ein Objekt liegt in GML vor



# Schemaprüfung

```
- <gmd:identifier>
  - <gmd:MD_Identifier>
    - <gmd:code>
      <gmx:Anchor xlink:href="http://www.geoland.at/geonetwork/srv/en/thesaurus.download?ref=external.theme.inspire-theme">geonetwork.thesaurus.external.theme.inspire-theme</gmx:Anchor>
    </gmd:code>
  </gmd:MD_Identifier>
</gmd:identifier>
</gmd:CI_Citation>
```

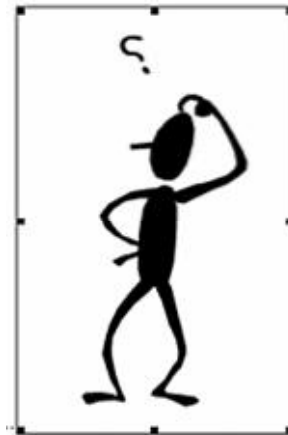


Mischen von alter und neuer TG  
Metadata

# HAUPTERKENNTNISSE QS METADATEN

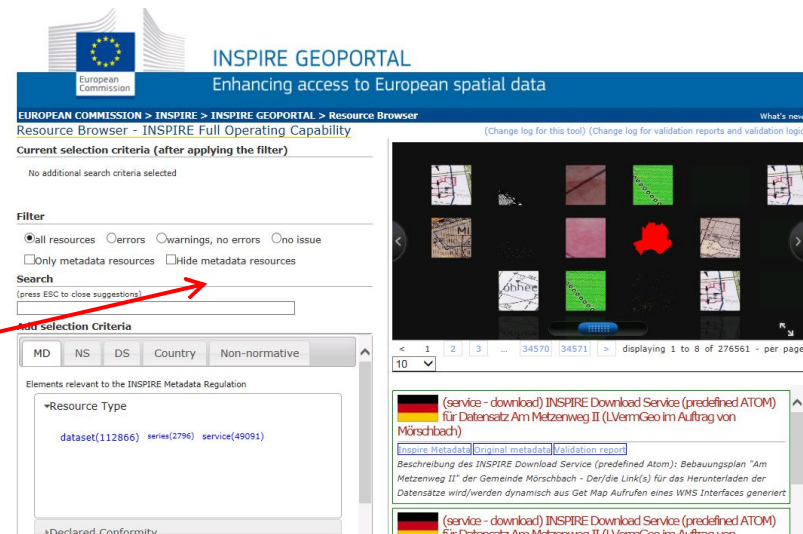
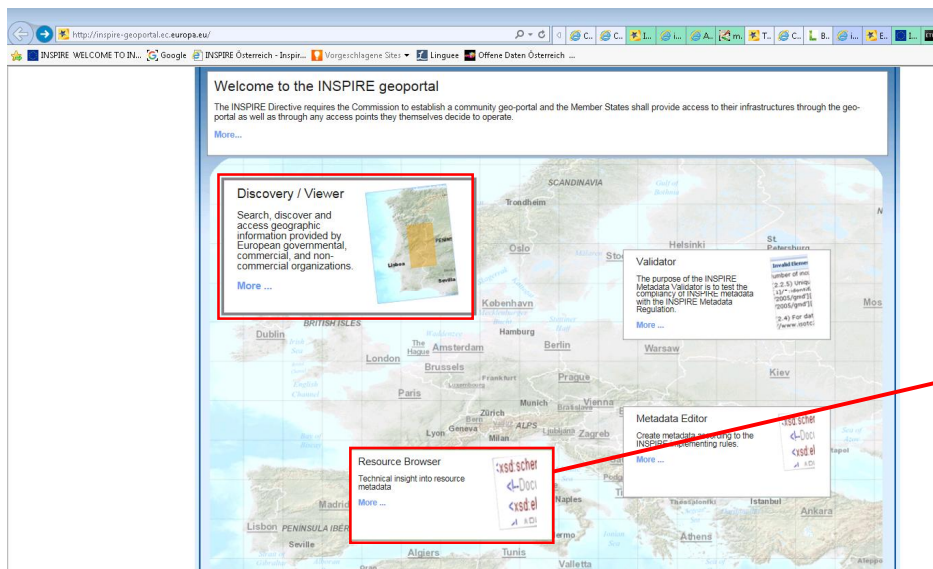
- | Schema Prüfung sollte an erster Stelle sein
  
- | Qualitative Prüfung (besonderes Augenmerk für Monitoring)
  - | Titel
  - | Annex Zuordnung
  - | Zuständige Stelle
  
- | Auffinden von strukturellen Fehlern, Software

- | Harvesting
- | Software
- | Eingabefehler/fehlende Einträge
- | Softwareversion
- | Manuelle Korrekturen
- | Editor
- | Interoperability – Zusammenspiel WMS/WFS





# VERFÜGBARKEIT - PORTALE



<http://inspire-geoportal.ec.europa.eu/>

# KONTAKT & INFORMATION

**Mag. Christine Brendle**

[christine.brendle@umweltbundesamt.at](mailto:christine.brendle@umweltbundesamt.at)

Ökosystemforschung & Umweltinformationsmanagement  
*Ecosystem Research & Environmental Information Management*  
T: +43-(0)1-313 04/3693  
F: +43-(0)1-313 04/3533

INSPIRE Workshop  
Wien | 29.11.2017