

National INSPIRE codelists and styles – The way to use INSPIRE?

INSPIRE Conference 2018

Coordination Office GDI-DE

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www.gdi-de.org | www.geoportal.de | wiki.gdi-de.org

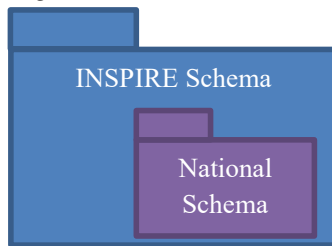


- The **European INSPIRE model** provides the framework for national and local implementation.
- There are reasons that justify the definition of the **INSPIRE codelists** and the **default cartographic styles** under cost-benefit considerations.
- In addition, there are **legal definitions in national laws**, declarations of cartographic representation and linguistic requirements in Germany, which must be taken into account in INSPIRE.
- It must be possible to consider such local peculiarities **as part of the national implementation** and make them usable at the European level.



- Some **theoretical aspects** of information and knowledge integration
- 4 different views

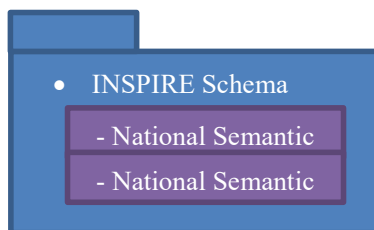
a) *Integration*



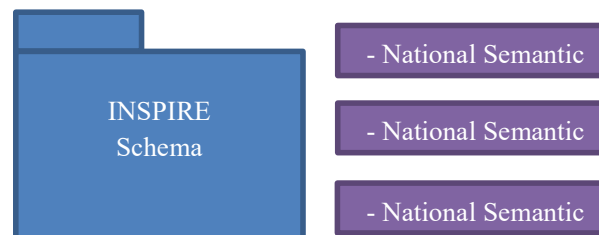
b) *Separation*



c) *Inclusion*



d) *Exclusion*



Codelist type (No 1089/2010, Art. 6):

- a) code lists whose allowed values comprise only the values specified in this Regulation;
- b) code lists whose allowed values comprise the values specified in this Regulation and narrower values defined by data providers;
- c) code lists whose allowed values comprise the values specified in this Regulation and additional values at any level defined by data providers;
- d) code lists, whose allowed values comprise any values defined by data providers.



Where, a data provider provides a value that is not specified in this Regulation, that value and its definition shall be made available in a register.

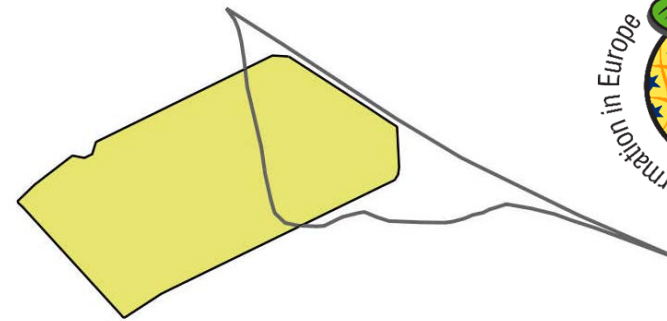
- DE codelists more detailed than INSPIRE codelists

XPlanGML		INSPIRE - ZoningElement
Codelist Value	Zoning	HILUCS Codelist Value
LandwirtschaftAllgemein	true	1_1_agriculture
Ackerbau	true	1_1_1_CommercialAgricultureProduction
WiesenWeidewirtschaft	true	1_1_1_CommercialAgricultureProduction
GartenbaulicheErzeugung	true	1_1_1_CommercialAgricultureProduction
Obstbau	true	1_1_1_CommercialAgricultureProduction
Weinbau	true	1_1_1_CommercialAgricultureProduction
Imkerei	true	1_1_1_CommercialAgricultureProduction
Binnenfischerei	true	1_4_2_ProfessionalFishing

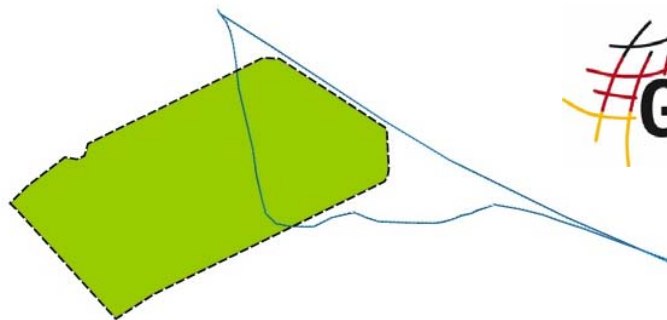


- DE regulations have different portrayal rules than INSPIRE

INSPIRE Portrayal Rules



PlanzVO 90, Germany



HILÜCS level 2	colour	red	Green	blue
1_PrimaryProduction	"yellow-green"	180	230	110
1_1_AgriculturalUse	"yellow"	230	230	110
1_2_Forestry	"green"	140	260	110
2_SecondaryProduction	"dark grey"	100	100	100
3_TertiaryProduction	"grey"	150	150	150
4_TransportNetworkdLogisticsAndUtilities	"purple"	180	120	240
4_1_4_WaterTraffic	"blue purple"	140	120	240
5_ResidentialAreasWithOtherCompatibleUse	"red"	240	120	100
6_OtherUses	"off-white"	220	220	220
6_3_1_LandAreasInNaturalUse	"green off-white"	200	255	200
6_3_2_WaterAreasInNaturalUse	"blue off-white"	200	200	255

12. Flächen für die Landwirtschaft und Wald

(§ 5 Abs.2 Nr. 9 und Abs. 4, § 9 Abs.1 Nr. 18 und Abs. 6 BauGB)

12.1 Flächen für die Landwirtschaft



GDI-DE Problem: which map would you like to use?

XPlanung

GML

GetCapabilities:

Legende

- XPlanung Gesamt
- RP_Plan
- RP_Bereich
- RP_Energieversorgung
- RP_Entsorgung
- RP_ErneuerbareEnergie
- RP_Grenze
- RP_IndustrieGewerbe
- RP_Luftverkehr
- RP_NaturschutzrechtlichesSchutzgebiet
- RP_Rohstoff
- RP_Schienerverkehr
- RP_SonstVerkehr
- RP_Strassenverkehr
- RP_Wasserschutz
- RP_Wasserverkehr
- RP_ZentralerOrt

INSPIRE

GML

Get View Service Metadata
(GetCapabilities + INSPIRE Extended Capabilities):

INSPIRE Metadata:

Legende

- SpatialPlan
- SupplementaryRegulation

Mockup XPlan und INSPIRE Service

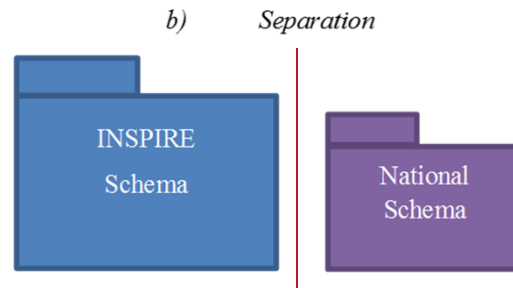
LROP Niedersachsen



Source: GDI-NI, Ministry of Food, Agriculture and Consumer Protection Lower Saxony (ML)

■ How can we solve this problem?

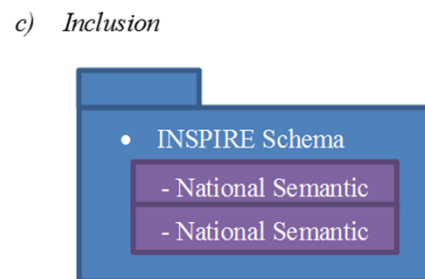
1. We continue to use our national models in addition to the INSPIRE data



⇒ INSPIRE will not be used at national and local level



2. We include the national semantic into global INSPIRE schema



⇒ Provide **national codelists + styles** in member states



- **StateLegalDefinitionsDesignationRecordValue**
- National codelist in national language=de and format=XML

<https://registry.gdi-de.org/register/codelist/StateLegalDefinitionsDesignationRecordValue?format=xml&language=de>

«codeList» StateLegalDefinitionsDesignationRecordValue
+Archäologisches Flächendenkmal nach § 2 (2) 4. LSADschG
+Archäologisches Kulturdenkmal nach § 2 (2) 3. LSADSchG
+Archäologisches Kulturdenkmal nach § 2 SächsDSchG
+Archäologisches Schutzgebiet nach § 19 ThürDSchG
+...

actual legal definition in federal state laws → new DE code list

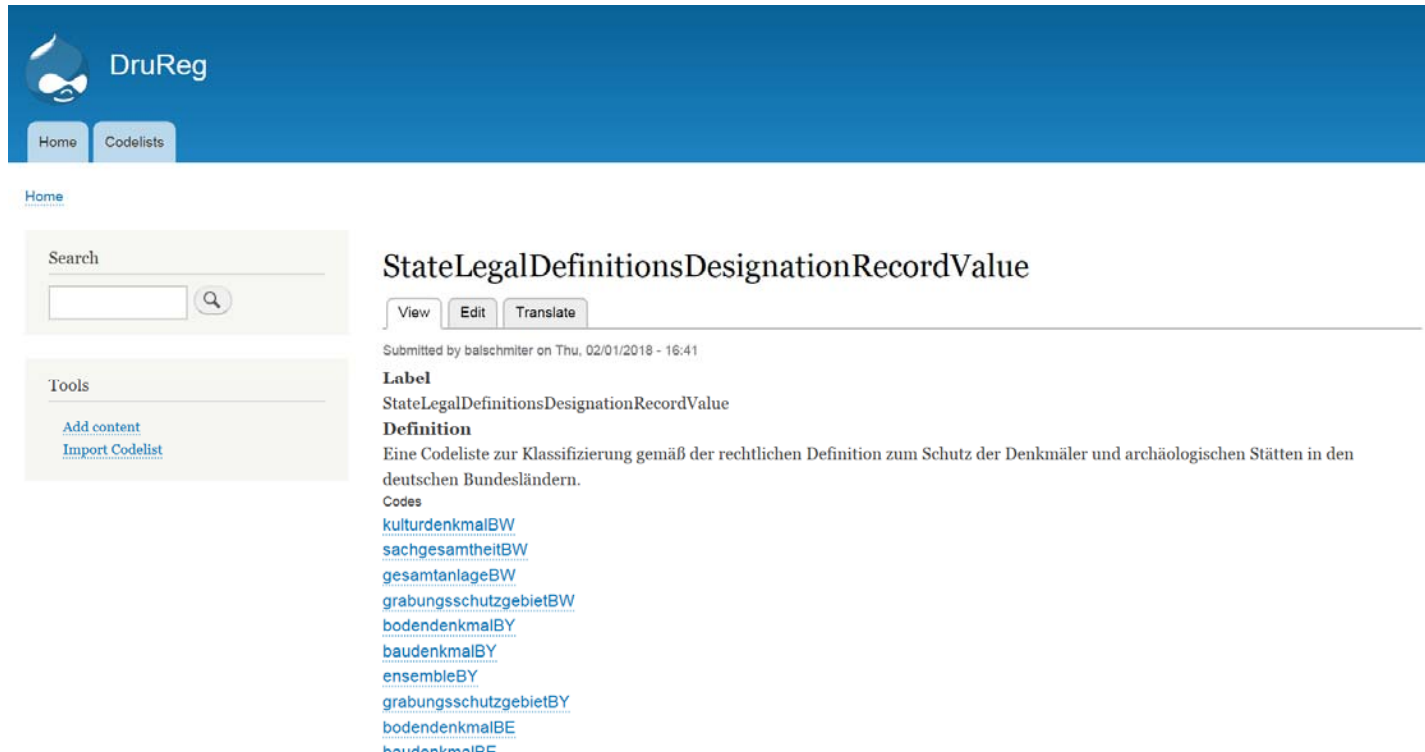


■ StateLegalDefinitionsDesignationRecordValue

```
<?xml version="1.0"?>
- <codelist xmlns="http://inspire.ec.europa.eu/codelist_register/codelist" id="https://registry.gdi-de.org/register/codelist/example1"
xsi:schemaLocation="http://inspire.ec.europa.eu/codelist_register/codelist http://inspire.ec.europa.eu/draft-schemas/registry/1.3/CodeList.xsd"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <thisversion>https://registry.gdi-de.org/register/codelist/StateLegalDefinitionsDesignationRecordValue:1</thisversion>
  <latestversion>https://registry.gdi-de.org/register/codelist/StateLegalDefinitionsDesignationRecordValue</latestversion>
  <language>en</language>
  <label xml:lang="de">StateLegalDefinitionsDesignationRecordValue</label>
  <definition xml:lang="de">Eine Codeliste zur Klassifizierung gemäß der rechtlichen Definition zum Schutz der Denkmäler und archäologischen Stätten in den
deutschen Bundesländern.</definition>
  <!-- <extensibility id="http://inspire.ec.europa.eu/registry/extensibility/open"><uriname>open</uriname></extensibility><theme
id="http://inspire.ec.europa.eu/theme/ps"><label xml:lang="en">Protected Sites</label></theme><applicationschema
id="http://inspire.ec.europa.eu/applicationschema/ps"><label xml:lang="en">Protected Sites</label></applicationschema><itemclass uriname="CodeList"><label
xml:lang="en">Code list</label></itemclass><status id="http://inspire.ec.europa.eu/registry/status/submitted"><label xml:lang="en">Submitted</label></status>-->
- <register id="https://registry.gdi-de.org/register/codelist/">
  <label xml:lang="de">GDI-DE Registry Codelist Register</label>
  - <registry id="https://registry.gdi-de.org/">
    <label xml:lang="de">GDI-DE Registry</label>
  </registry>
</register>
- <containeditems>
  - <value id="https://registry.gdi-de.org/register/codelist/StateLegalDefinitionsDesignationRecordValue/kulturdenkmalBW">
    <thisversion>https://registry.gdi-de.org/register/codelist/StateLegalDefinitionsDesignationRecordValue/kulturdenkmalBW:1</thisversion>
    <latestversion>https://registry.gdi-de.org/register/codelist/StateLegalDefinitionsDesignationRecordValue/kulturdenkmalBW</latestversion>
    <label xml:lang="de">Kulturdenkmal nach § 2 DSchG Baden-Württemberg</label>
    <definition xml:lang="de"/>
    - <itemclass uriname="CodeListValue">
      <label xml:lang="de">Code list value</label>
    </itemclass>
    <!-- <status id="http://inspire.ec.europa.eu/registry/status/submitted"><label xml:lang="en">Submitted</label></status>-->
  </value>
  - <value id="https://registry.gdi-de.org/register/codelist/StateLegalDefinitionsDesignationRecordValue/sachgesamtheitBW">
    <thisversion>https://registry.gdi-de.org/register/codelist/StateLegalDefinitionsDesignationRecordValue/sachgesamtheitBW:1</thisversion>
    <latestversion>https://registry.gdi-de.org/register/codelist/StateLegalDefinitionsDesignationRecordValue/sachgesamtheitBW</latestversion>
    <label xml:lang="de">Sachgesamtheit nach § 2 DSchG Baden-Württemberg</label>
    <definition xml:lang="de"/>
    - <itemclass uriname="CodeListValue">
      <label xml:lang="de">Code list value</label>
    </itemclass>
    <!-- <status id="http://inspire.ec.europa.eu/registry/status/submitted"><label xml:lang="en">Submitted</label></status>-->
  </value>
</containeditems>
</codelist>
```



■ User frontend



The screenshot shows the DruReg user interface. At the top left is the DruReg logo and navigation buttons for 'Home' and 'Codelists'. Below this is a search bar and a 'Tools' section with links for 'Add content' and 'Import Codelist'. The main content area displays a codelist entry for 'StateLegalDefinitionsDesignationRecordValue', including submission details, a label, a definition, and a list of codes for various German states.

StateLegalDefinitionsDesignationRecordValue

Submitted by balschmiter on Thu, 02/01/2018 - 16:41

Label
StateLegalDefinitionsDesignationRecordValue

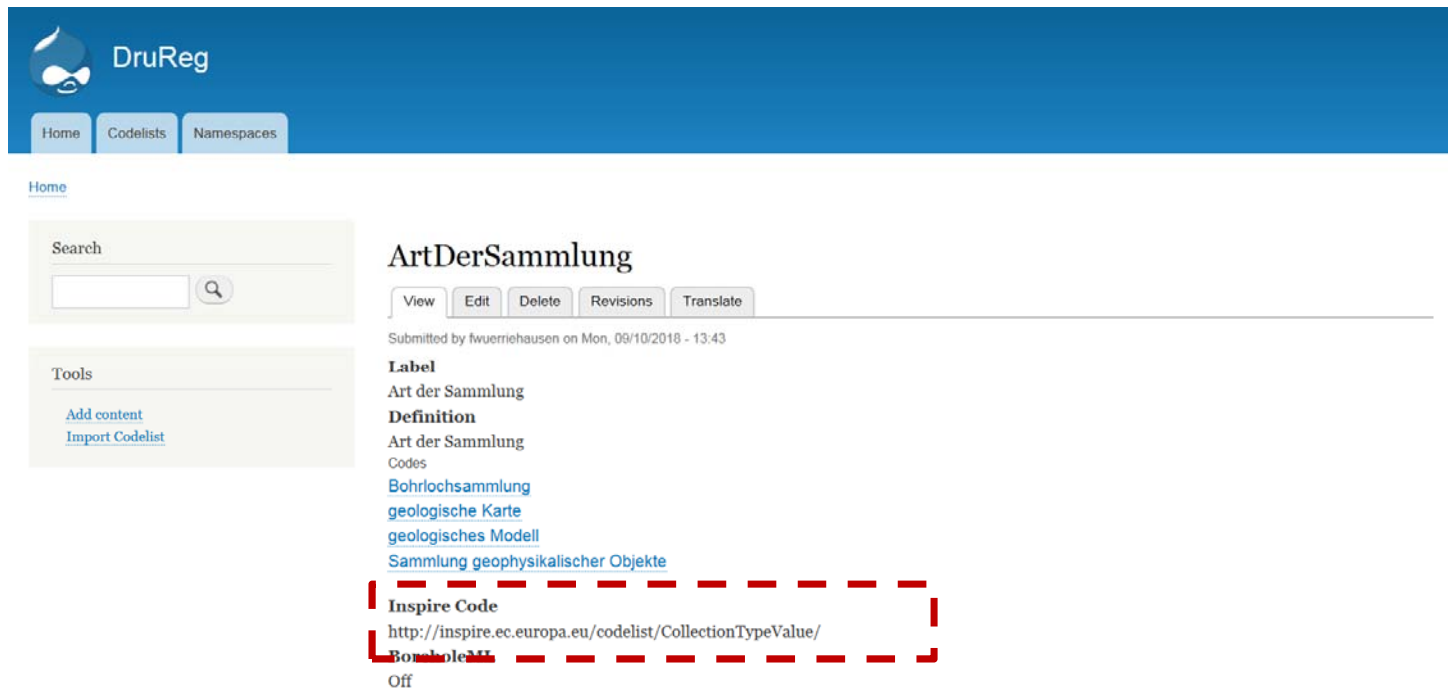
Definition
Eine Codeliste zur Klassifizierung gemäß der rechtlichen Definition zum Schutz der Denkmäler und archäologischen Stätten in den deutschen Bundesländern.

Codes

- [kulturdenkmalBW](#)
- [sachgesamtheitBW](#)
- [gesamtanlageBW](#)
- [grabungsschutzgebietBW](#)
- [bodendenkmalBY](#)
- [baudenkmalBY](#)
- [ensembleBY](#)
- [grabungsschutzgebietBY](#)
- [bodendenkmalBE](#)
- [baudenkmalRF](#)



- ... with reference to INSPIRE codelist



The screenshot shows the DruReg interface. At the top, there is a blue header with the DruReg logo and navigation tabs for Home, Codelists, and Namespaces. Below the header, there is a search bar and a 'Tools' section with links for 'Add content' and 'Import Codelist'. The main content area displays the entry for 'ArtDerSammlung', which includes a 'View' button, a 'Definition' section with a list of codes (Bohrlochsammlung, geologische Karte, geologisches Modell, Sammlung geophysikalischer Objekte), and an 'Inspire Code' section with a URL: <http://inspire.ec.europa.eu/codelist/CollectionTypeValue/>. The 'Inspire Code' section is highlighted with a red dashed box.



■ User frontend







Beispielstyle

es handelt sich hierbei lediglich um ein Beispiel zur Veranschaulichung der Funktionsweise

Styled Layer Descriptor

 [example.sld](#)

Scalable Vector Graphics

Attachment	Preview	Size
 hell.svg		1.61 KB
 unicorn.svg		4.95 KB

- National INSPIRE codelists and styles –
The way to use INSPIRE?
- It could be presented, how **national requirements** can be considered most effectively through a national registry.
- By **integrating national regulations into the INSPIRE framework**, the cost-benefit considerations and added value can be increased, also for **data providers and data users** at national and local level.
- The availability of national codelists and styles in GDI-DE Registry can **help to promote the use of INSPIRE!**



Many thanks for your attention!

Contact

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