



HAL
open science

Evaluation of INSPIRE implementation in France by computing indicators and analysing data with Daobs application

Etienne Taffoureau

► **To cite this version:**

Etienne Taffoureau. Evaluation of INSPIRE implementation in France by computing indicators and analysing data with Daobs application. INSPIRE Conference 2016, Sep 2016, Barcelone, Spain. hal-01360544

HAL Id: hal-01360544

<https://brgm.hal.science/hal-01360544>

Submitted on 4 Oct 2016

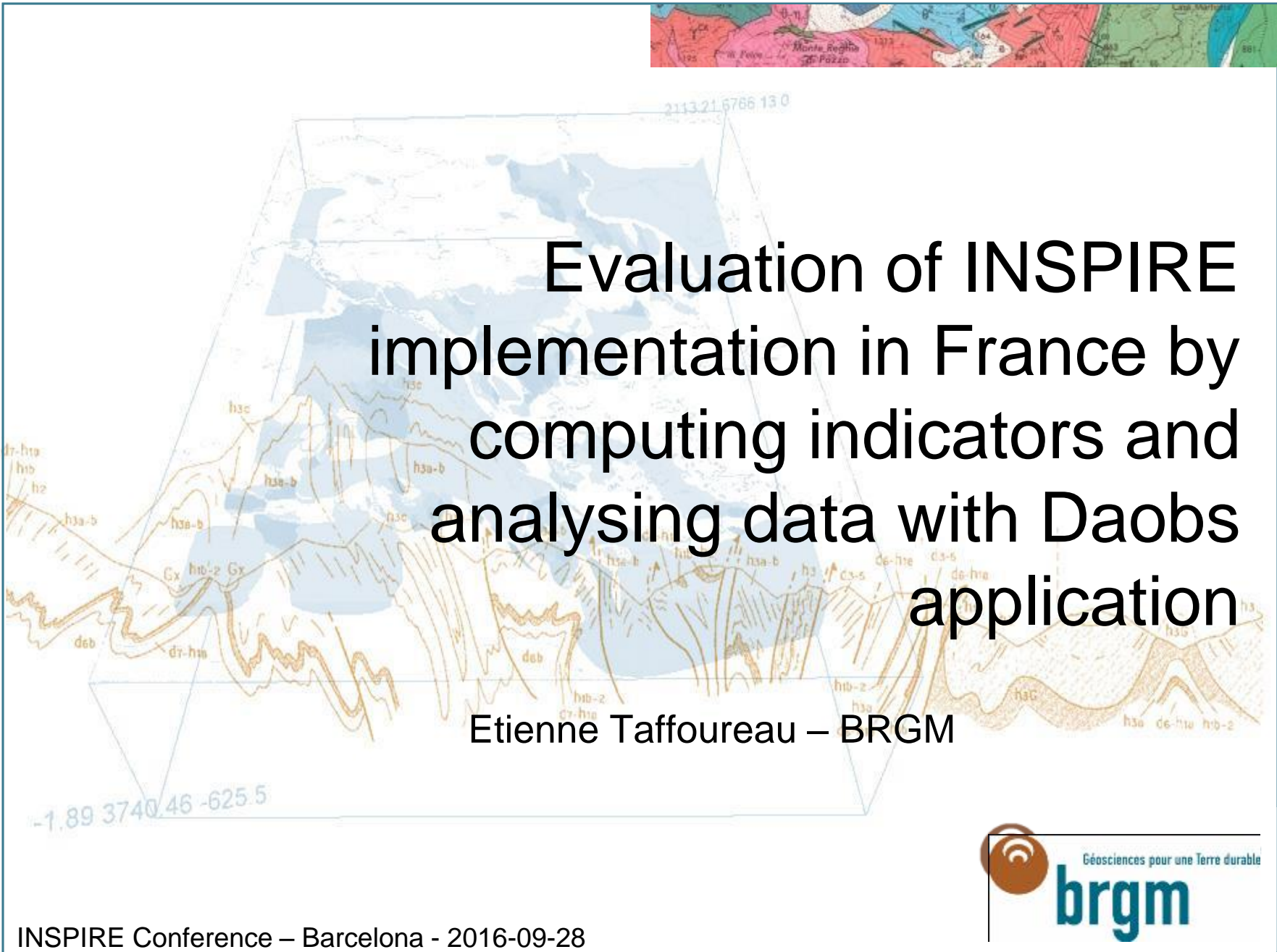
HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



Evaluation of INSPIRE implementation in France by computing indicators and analysing data with Daobs application

Etienne Taffoureau – BRGM



Context of DAOBS project

- > **DAOBS : a web application for creating & publishing dashboards**
- > **Developed in MIWP-16 (monitoring & reporting)**
 - Working group composed of experts from member states : FR, NL, DE, UK, IT, PL, ...
 - Conducted by European Environment Agency (EEA)
- > **European dashboard :**
 - <https://inspire-dashboard.eea.europa.eu/official>
- > **Based on Solr (search engine) & Banana (dashboard)**
- > **Published as open source (EUPL license) :**
 - <https://github.com/INSPIRE-MIF/daobs>

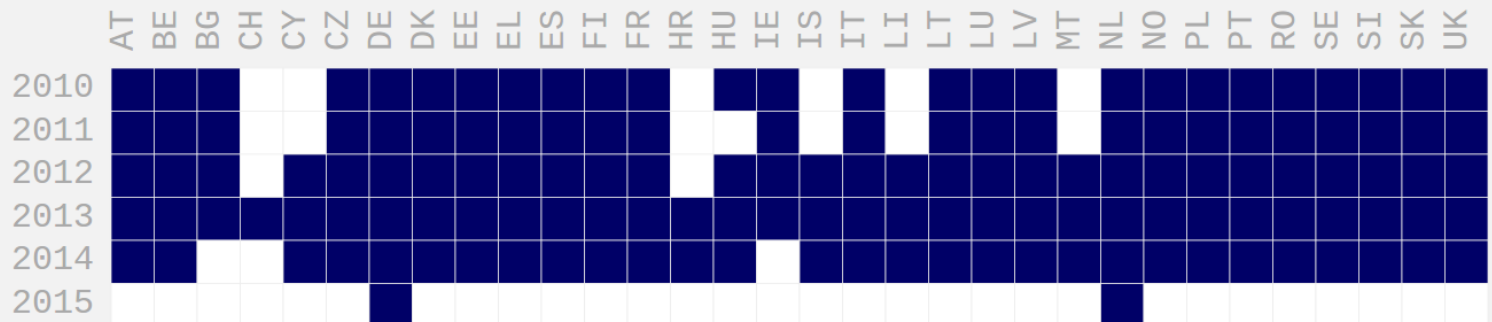
Objectives of DAOBS project

> Simplify INSPIRE reporting process

- Compute indicators from metadata catalogues (from MS)
- Provide XML file to European Commission

> Show evolution of indicators in INSPIRE dashboards

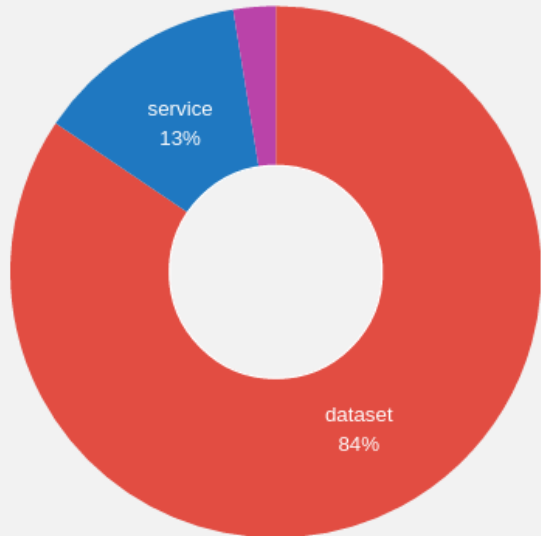
MONITORING REPORT AVAILABLE PER YEAR



Dashboard / Statistics by resource type

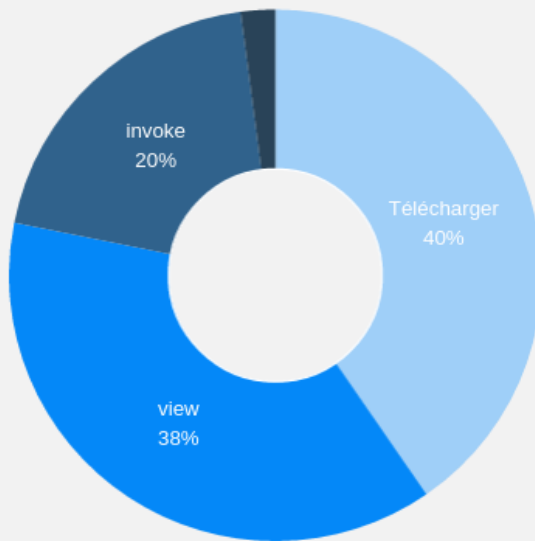
TYPE OF RESOURCES ? ⚙ ✕ TERMES

- dataset (25,700)
- service (3,950)
- series (780)
- feature (2)
- nonGeographicDataset (1)



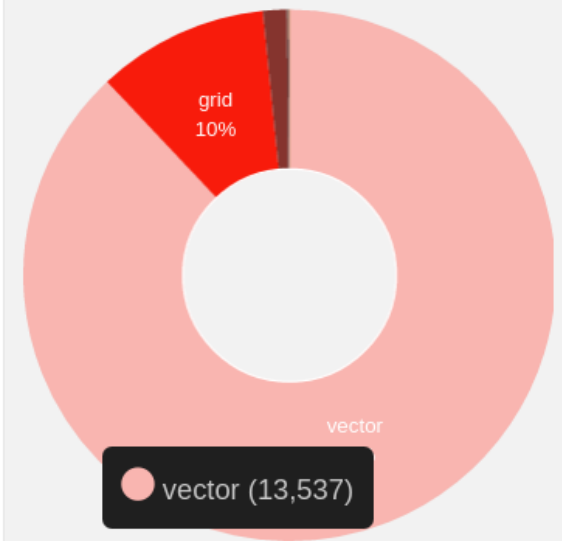
TYPE OF SERVICES ? ⚙ ✕ TERMES

- Télécharger (1,531)
- view (1,432)
- invoke (748)
- discovery (79)

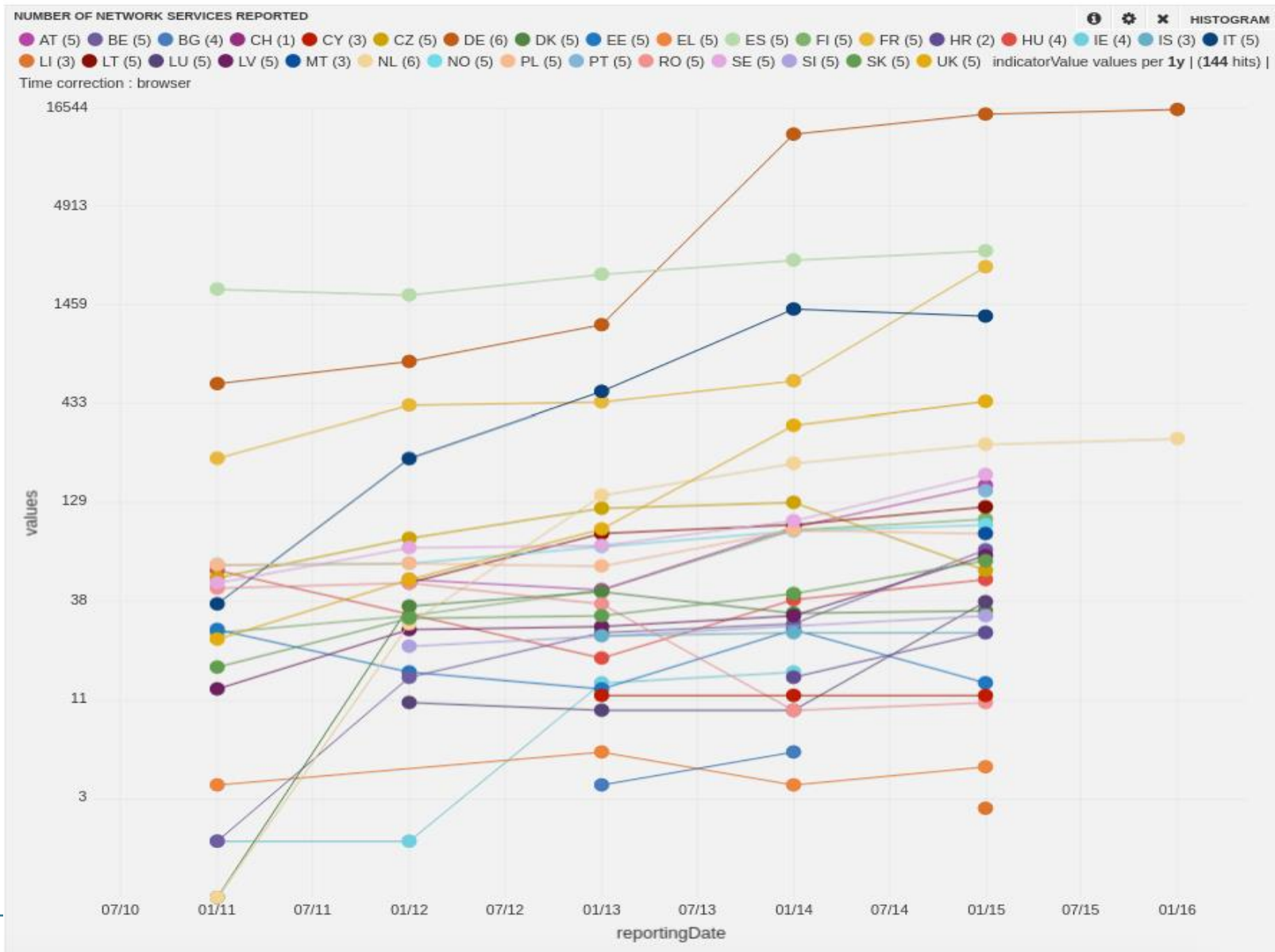


TYPE OF DATASETS ? ⚙ ✕ TERMES

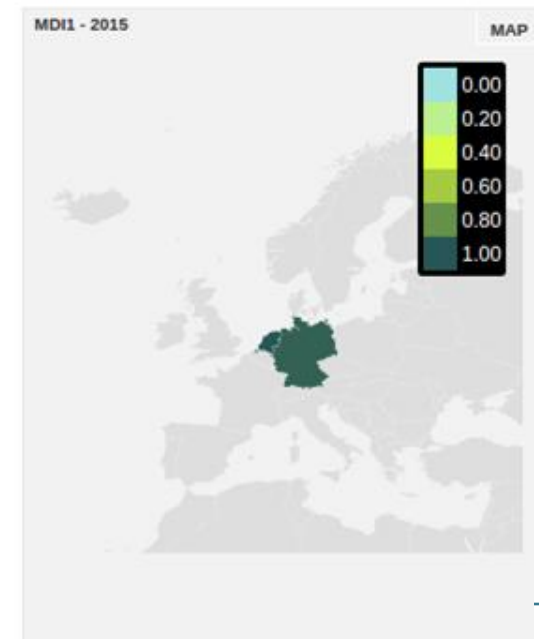
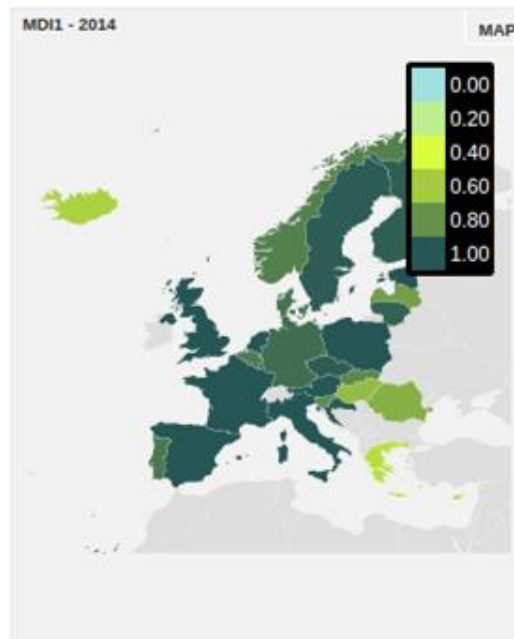
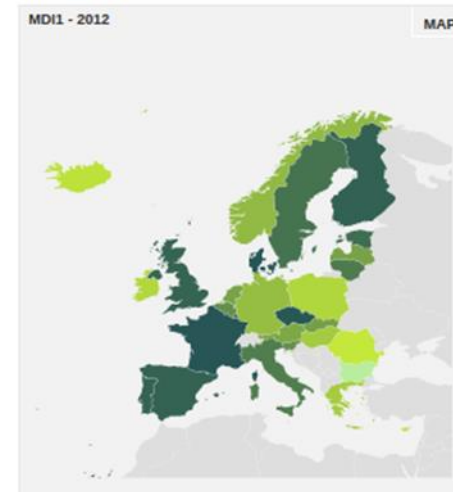
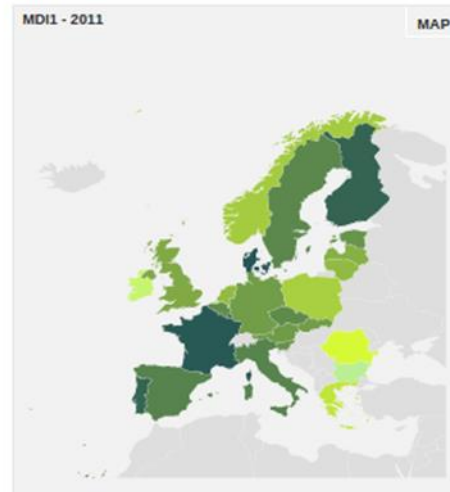
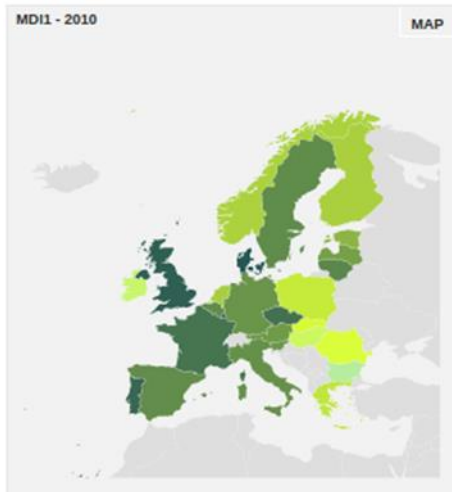
- vector (13,537)
- grid (1,602)
- textTable (223)
- tin (18)
- Vector (6)



Dashboard / Number of network services



Dashboard / Existence of metadata at european level

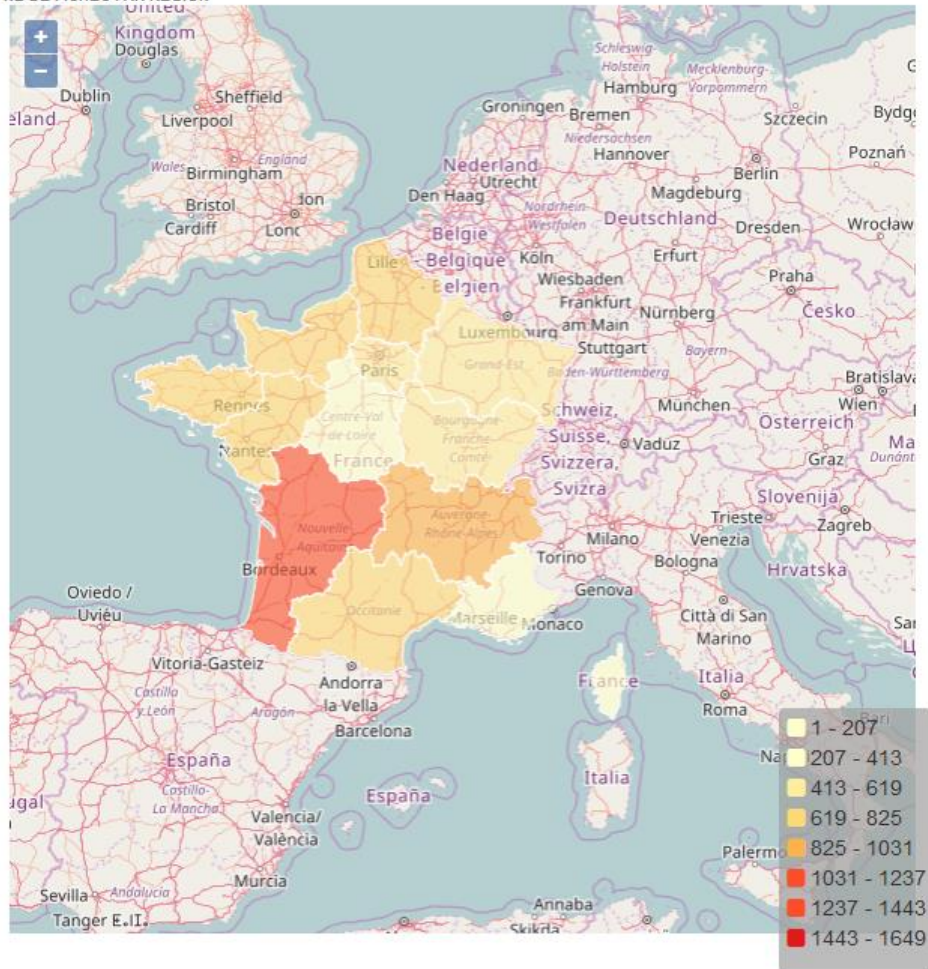


Dashboard / Implementation in France

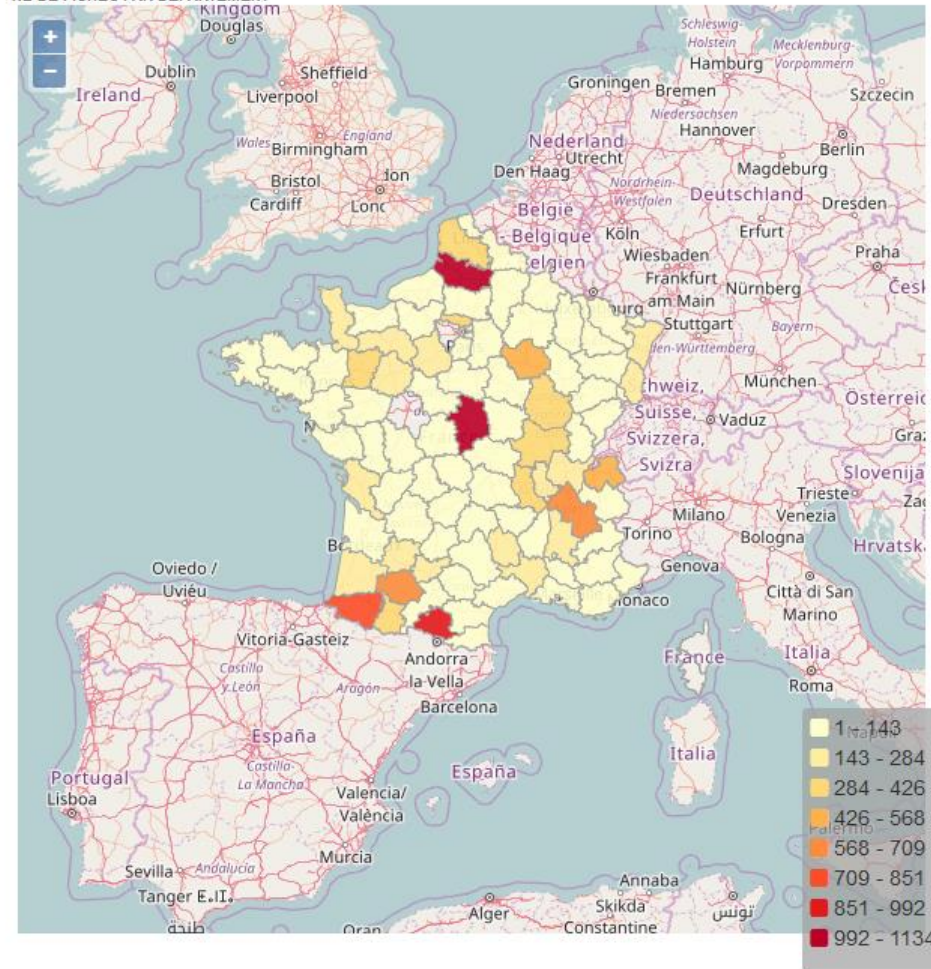
- > **DAOBS has been implemented in french infrastructure (Geocatalogue.fr)**
- > **The dashboard is an important tool for decision making**
- > **But, we need to have specific indicators :**
 - at local level (eg. regional maps)
 - by data producers
 - by SDI (eg. Sextant)
 - Number of open data
- > **...to have their evolution at different time-scales**
- > **...and the user interface in french!**
- > **So, we have evolved the dashboard**

Indicators at local level : Existence of metadata

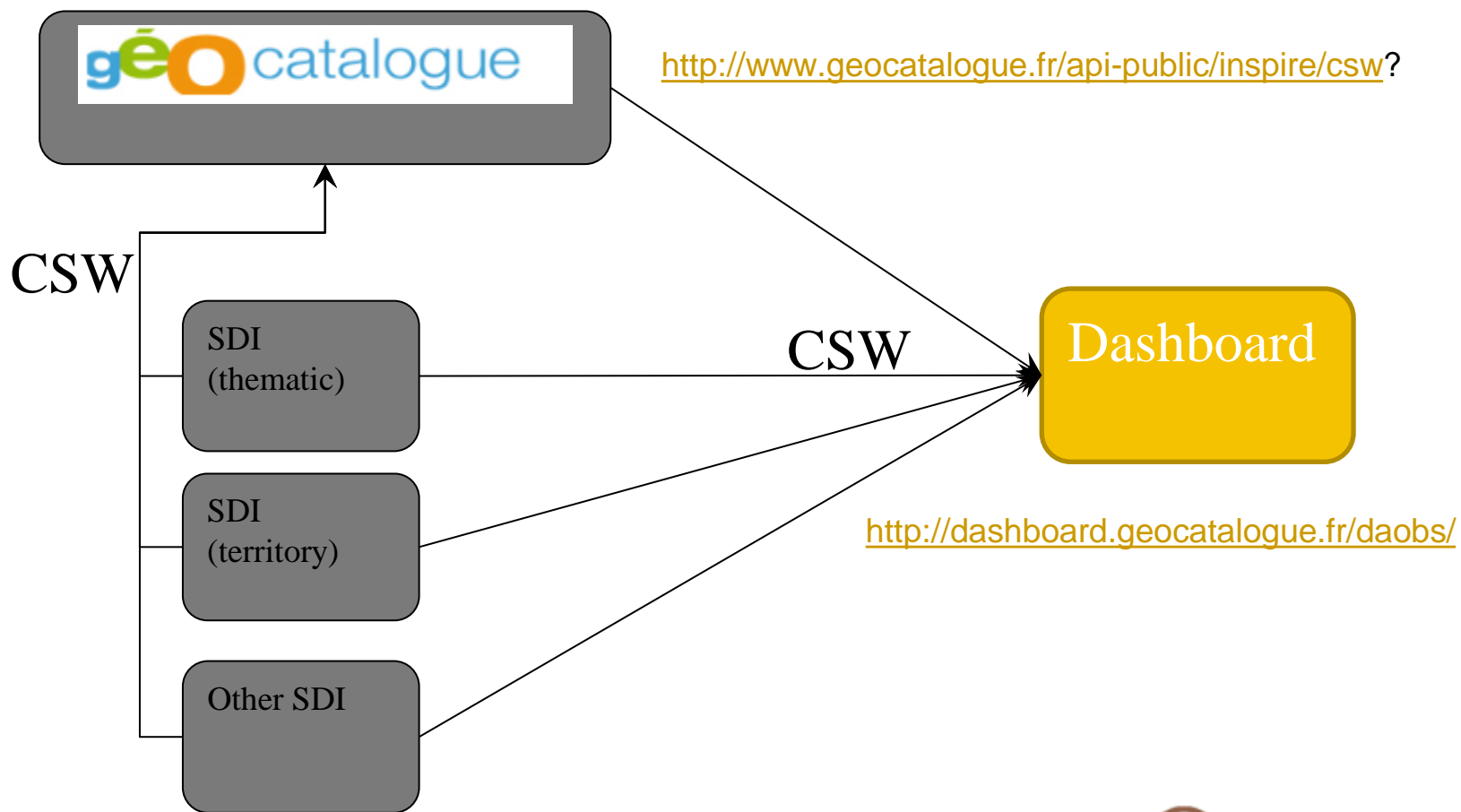
NB DE FICHES PAR RÉGION



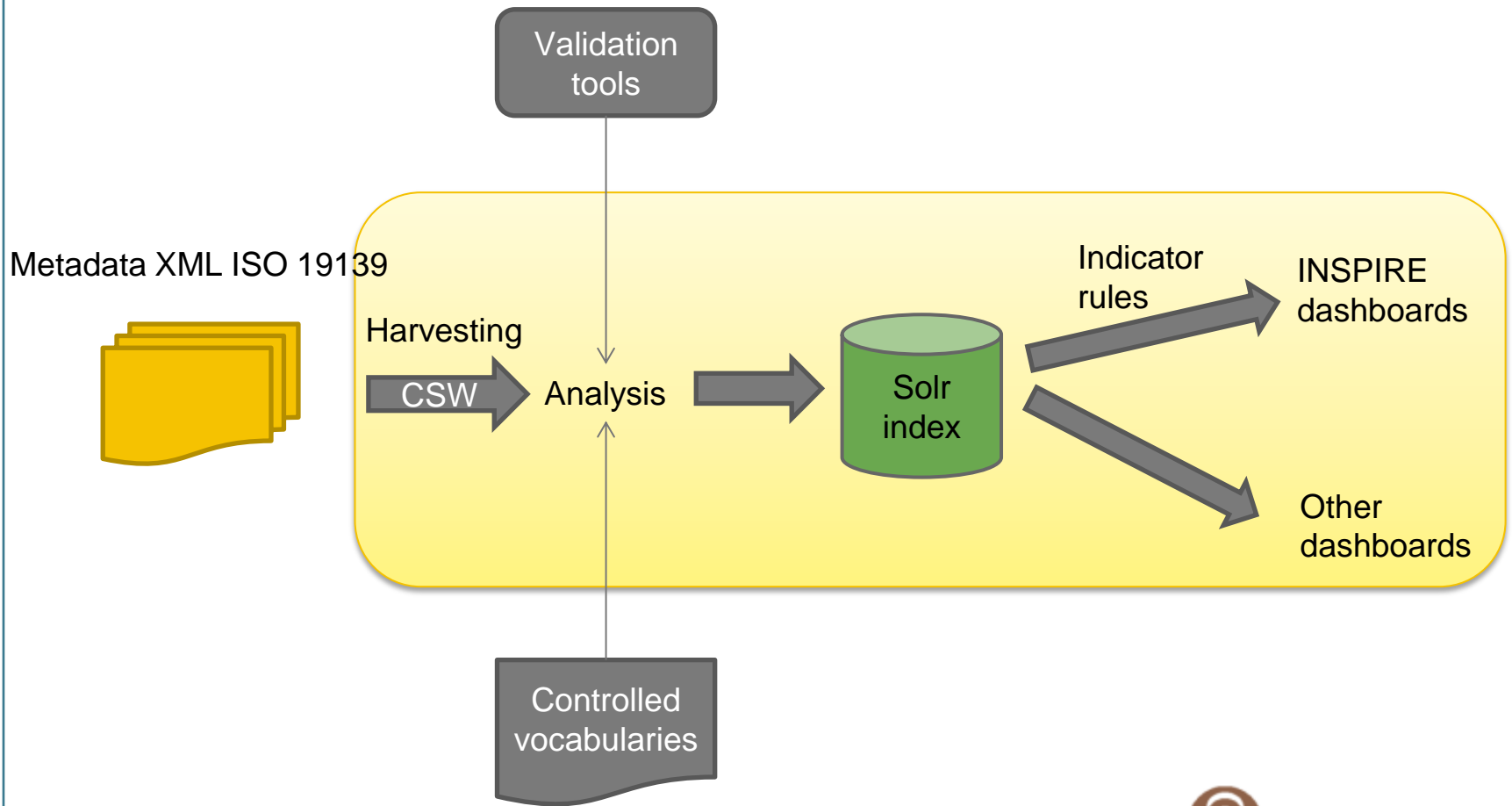
NB DE FICHES PAR DÉPARTEMENT



Dashboard / Harvesting



Dashboard / Analysis



Dashboard / Analysis

> **Each metadata element is stored in Solr index**

> **Dashboard use Solr fields :**

- From XML ISO 19139 metadata (e.g. gmd:title)
- Computed from metadata (e.g. isOpendata = yes/no)
- Link between metadata (recordOperatedBy)
- Synonyms from controlled vocabularies (e.g. producers)

Dashboard / Analysis

eg. INSPIRE codelists



Dashboard / Analysis

eg. Synonyms analysis

DDT 42

DDT42

DDT_42

DDT de la Loire

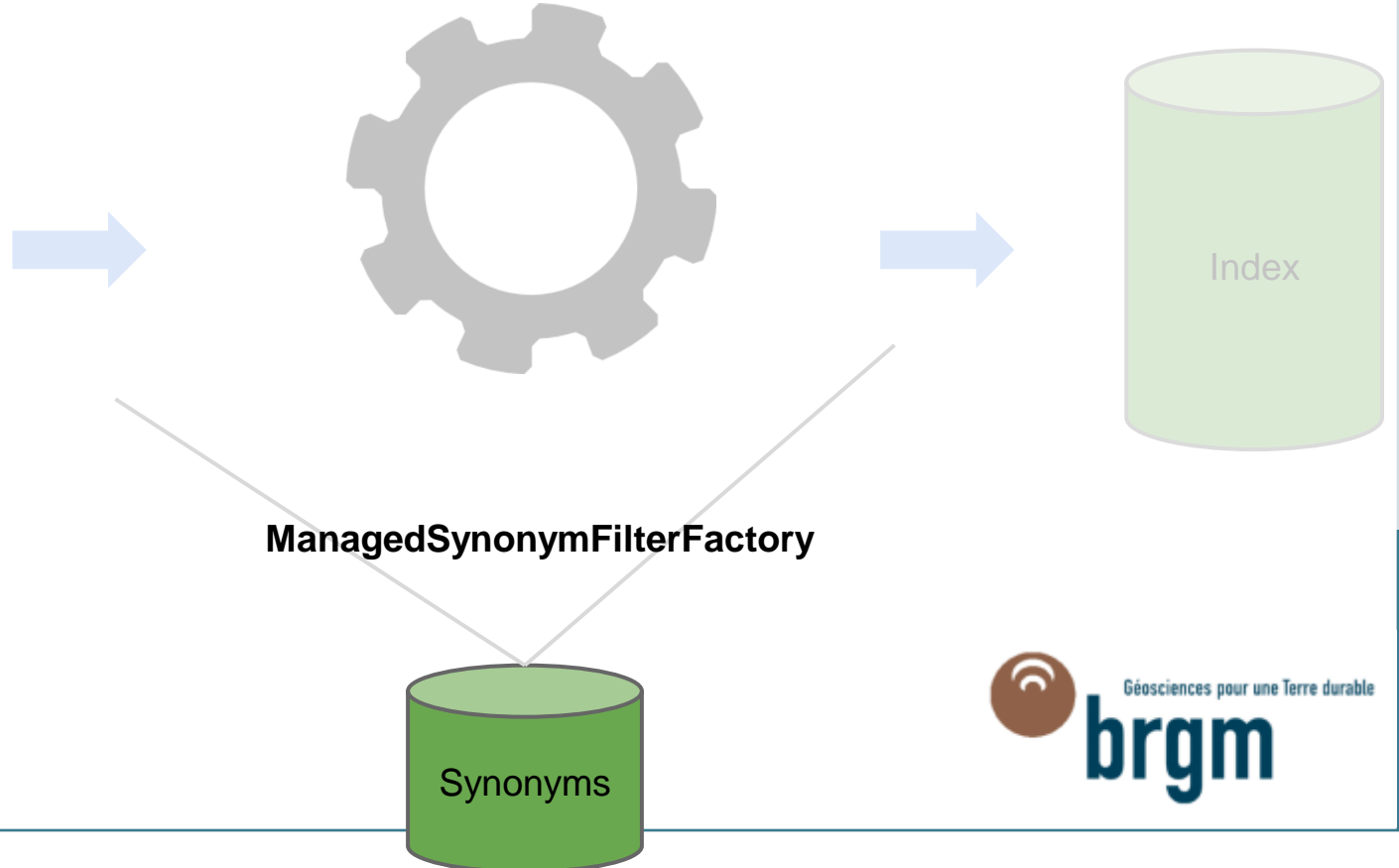
DDEA 42

DIREN de la Loire

ISO19139
metadata
record

➔ **Direction Départementale des
Territoires de la Loire (DDT 42)**

➔ Département de la Loire (42)

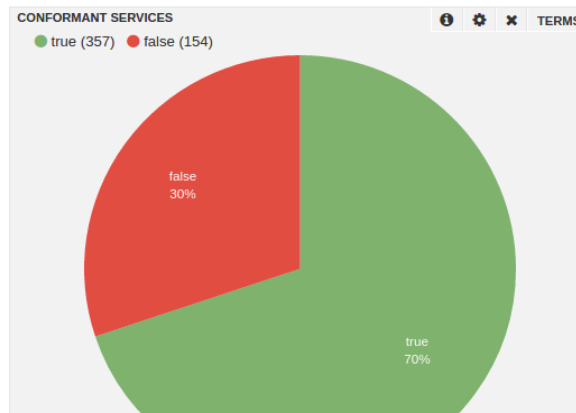
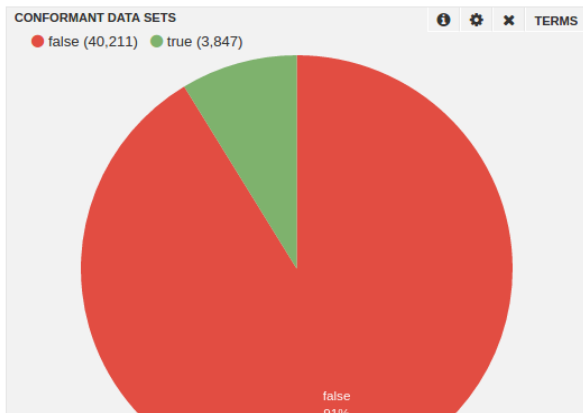
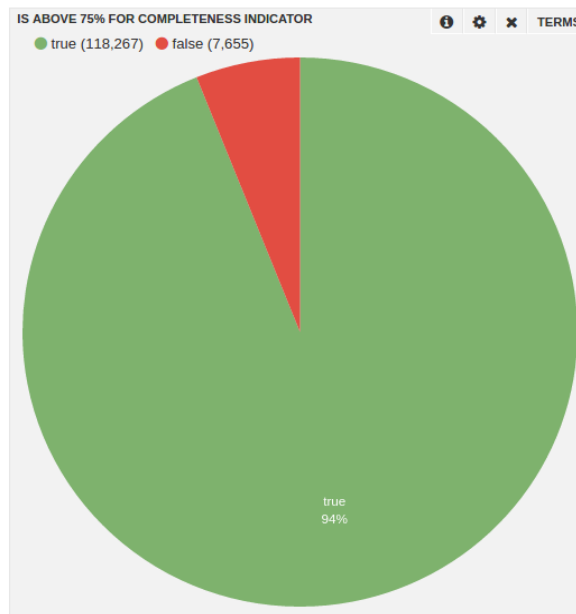
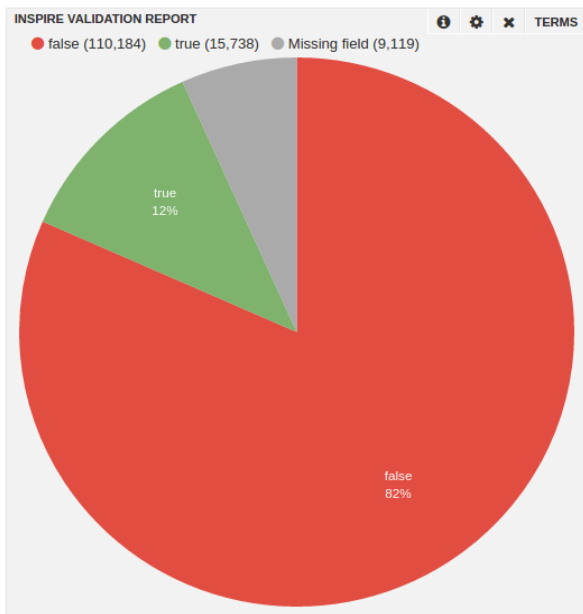


Dashboard / Analysis

> **Coupled with other applications**

- ETF for services validation
- JRC validator or Geocatalogue.fr for metadata validation

Dashboard / Validation report



Validation is computed using the [INSPIRE validator](#).

A record is considered valid for INSPIRE if completeness indicator is above 75% (see isAboveThreshold field).

Even if completeness indicator is 100%, a record may be displayed as invalid in the INSPIRE validation chart due to INSPIRE validation warnings (eg. if the URL of a coupled resource point to an invalid link).

Conformity of datasets and services is declared in the metadata records.

Dashboard / Service validation report

Service validation report



SEARCH ⓘ ⚙ × QUERY

● **

TOTAL HITS ⓘ ⚙ × HITS

598 Load

FILTERING ⓘ ⚙ ×

range must ⓘ ⚙ ×

field : etfCompletenessIndicator

from : -1

to : 100

range must ⓘ ⚙ ×

field : etfCompletenessIndicatorOptional

from : -1

to : 100

ETF MANDATORY ⓘ ⚙ × TERMS

● false (264) ● true (35)
● Missing field (0)

Value	Count	Percentage
false	264	88%
true	35	12%
Missing field	0	0%

ETF OPTIONAL ⓘ ⚙ × TERMS

● false (292) ● true (7)

Value	Count	Percentage
false	292	98%
true	7	2%

COMPLETENESS INDICATOR ⓘ ⚙ × TEXT

Note that the completeness indicator currently weighs all tests equally. Please, consider that failures in some tests may have much more impact as failures in other tests. So use the completeness Indicator with caution

VALID SERVICES PER ORGANISATION ⓘ ⚙ × TERMS

Organisation	Count
Beheer PDOK	29
Royal Netherlands Meteorological Institute (KNMI)	2
Alterra, Wageningen UR	2
TNO Geologische Dienst Nederland	1
Het Waterschapshuis	1

Dashboard / INSPIRE indicators

Choose monitoring [View report rules](#) **Contact details**

Choose reporting area **org**

Query filter **Email**

Contact informations are required when generating INSPIRE reporting to indicate report contact.

eg. to select only dataset use '+resourceType:dataset', to select based on point of contact use '+OrgForResource:RIVM'.

417 record(s) matching current filter.

[Preview](#) [Download](#) [Schedule \(not available yet\)](#)

Report on **Monitoring Indicators** generated for **NL** based on **417 record(s)**

The table below shows the list of variables and indicators computed for the selected area. It may also reports any errors encountered during computation.

	Name	Value
<input type="text" value="MDv"/>	<input type="text"/>	
MDv11	Number of spatial data sets for Annex I that have metadata	55
MDv12	Number of spatial data sets for Annex II that have metadata	7
MDv13	Number of spatial data sets for Annex III that have metadata	104
MDv14	Number of spatial data services that have metadata	255
MDv1_DS	Number of spatial data sets that have metadata	166
MDv21	Number of spatial data sets for Annex I that have conformant metadata	0
MDv22	Number of spatial data sets for Annex II that have conformant metadata	0
MDv23	Number of spatial data sets for Annex III that have conformant metadata	0
MDv24	Number of spatial data services that have conformant metadata	0
MDv2_DS	Number of spatial data sets for all Annexes that have conformant metadata	0

Configuration

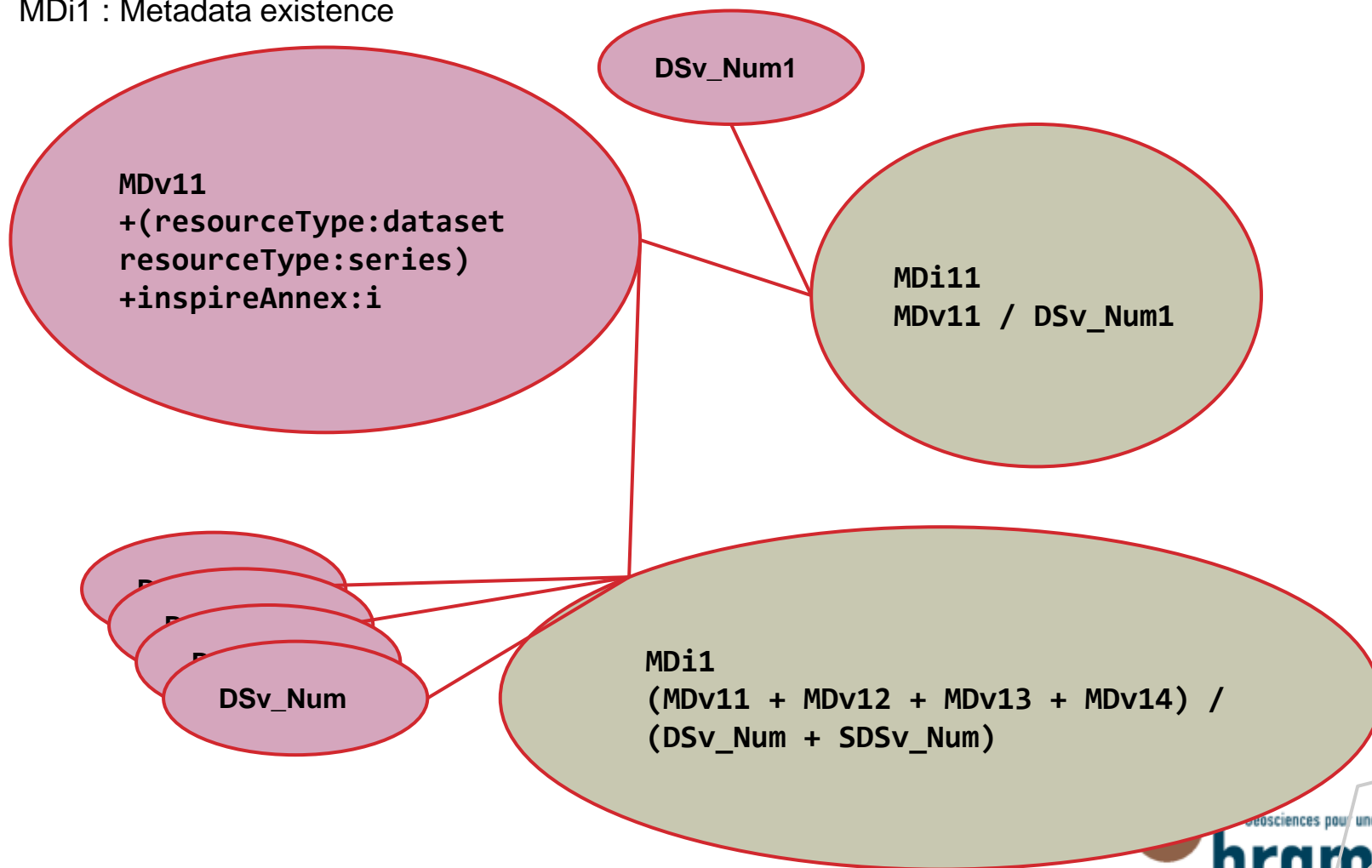
INSPIRE Monitoring



iosciences pour
rgm

Dashboard / INSPIRE indicators

MDi1 : Metadata existence



Conclusions & perspectives

- > MIWP-16 works leads to a prototype of DAOBS application & european “official” dashboards**
- > DAOBS has been improved and adapted in order to evaluate INSPIRE implementation and SDI deployment in France → very important tool for making-decision !**
- > Perspectives of evolution :**
 - Implementation of common validation tools
 - Improve harvesting
 - Compute indicators in « real-time »
 - Supervision of catalogues
 - Identify duplicate/similarity/differences between catalogues



Thank you for your attention

Etienne Taffoureau – BRGM

