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Implementation of an INSPIRE registry in France : state of progress

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Implementation of an INSPIRE registry in France : State of progress

INSPIRE Conference 2018, Antwerp

Etienne Taffoureau

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Framework

- **Article 10** of the Directive requires that Member States ensure that **any information, including data, codes and technical classifications**, needed for compliance with the Directive **are made available to public authorities or third parties**.
- INSPIRE includes only one legal obligation related to registers: **extensions by data providers of the code lists** mandated in Commission Regulation (EU) No 1089/2010 on interoperability of spatial data sets and services need to be published in registers.

- However, MS and thematic communities are setting up **registers for other purposes** as well, e.g. to have **a single repository of all organizations** in a MS responsible for implementing INSPIRE, including their unique identifiers. In general, registers are useful in all situations where, by a reference code rather than free text, in data exchange, ambiguities or inconsistencies can be avoided. Also registers can facilitate the internationalization of user interfaces by providing multilingual labels

- **This led to create of a French Registry within geocatalogue.fr**. This will provide Data Publishers with access to code lists and other reference data and schemas required at a FR level and not located at other sources, e.g. the EC INSPIRE geoportal.

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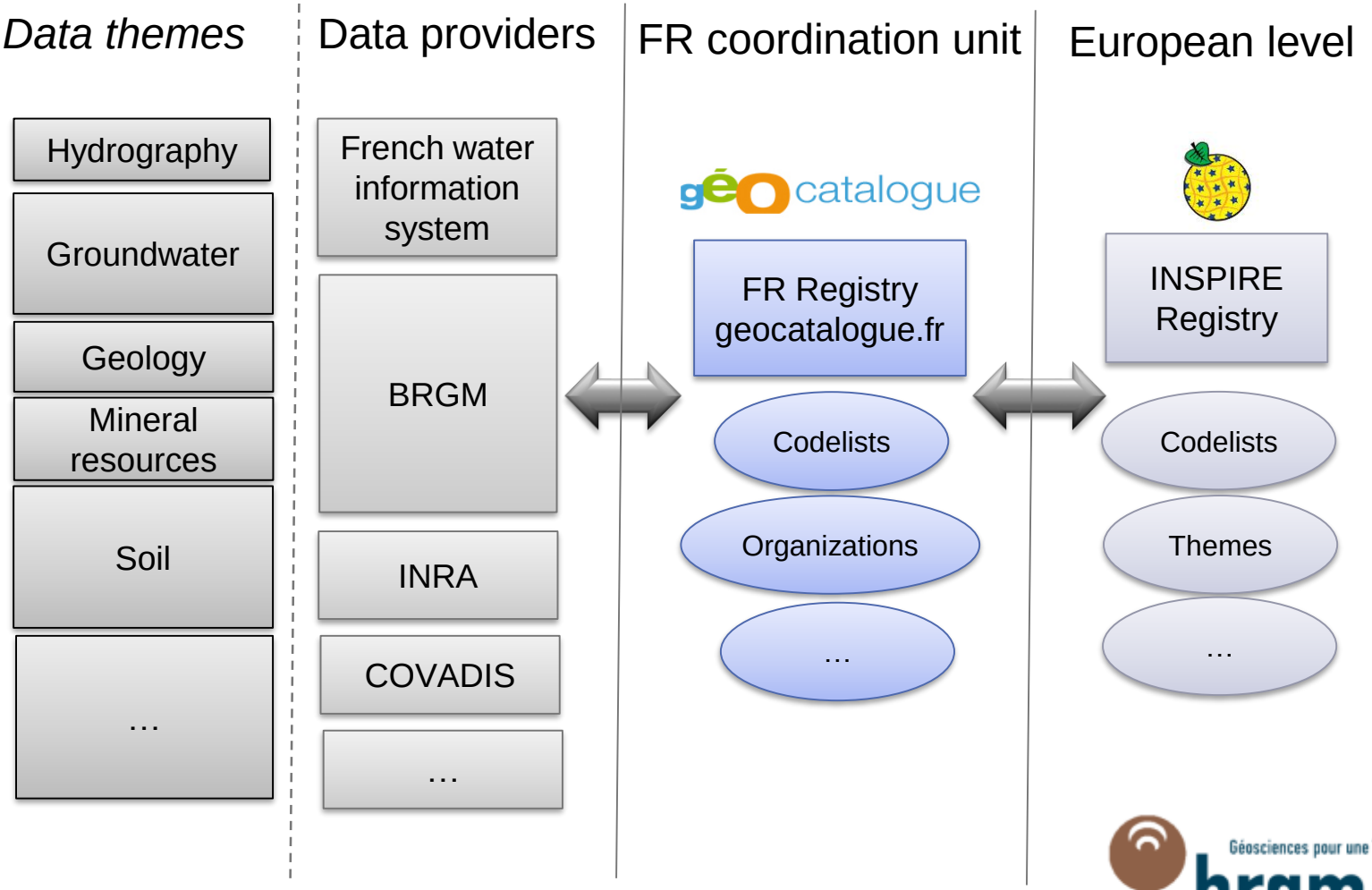
Implementation of a FR registry : organization



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Implementation of a FR registry : roadmap

> **2017 :**

- Tests of two open source softwares :
  - Re3gistry (https://joinup.ec.europa.eu/software/re3gistry)
  - UKGovLD (https://github.com/UKGovLD)

> **2018 :**

- Implementation of FR registry based on Re3gistry (http://registre.geocatalogue.fr)
- Publication of codelists on geology theme (borehole, lithology, …) and transport network (surface composition, etc.)
- Set up of registers for extended INSPIRE code lists (e.g. borehole purpose) and link to the INSPIRE register federation (http://inspire-regadmin.jrc.ec.europa.eu/ror/)

Issues / needs for register management

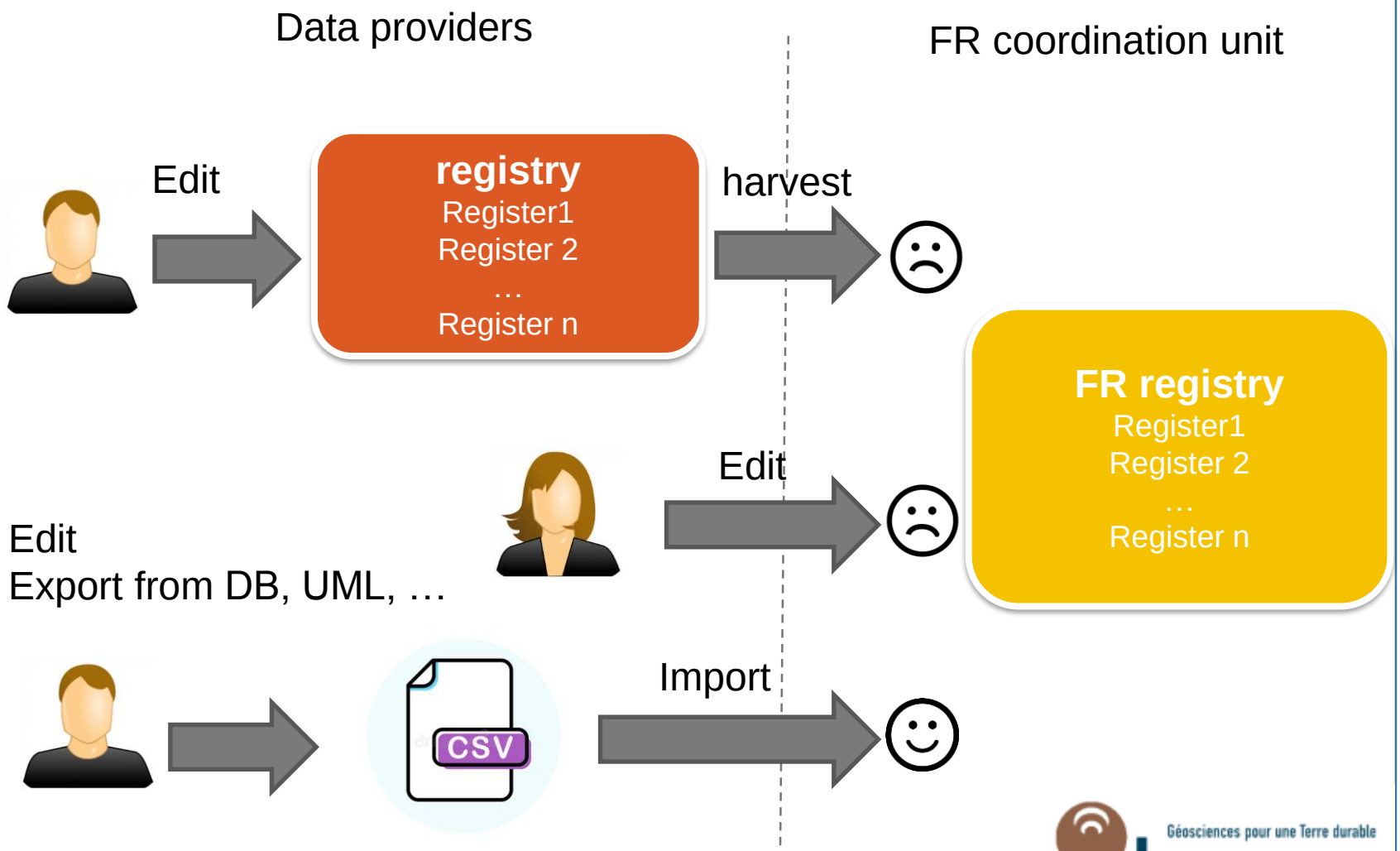
> An objective of the FR registry is to provide data providers a tool **to manage registers** (with URI « registre.geocatalogue.fr/[…] »)

- It needs editing functionalities and (simple) worflows for validate / publish codelists

> But some data providers are already managing registers in registries (with specific URI, e.g. data.geoscience.fr/[…])

- FR registry can be seen as a « register federation »
- It need for syncronisation mechanisms (harvest or distributed search ?)

Implementation of a FR registry : publication



Issues / needs for register access and use

> The registers have to be **searchable through a UI** but also **by applications** (« Machine to machine »)

- e.g. to use custom UI, to select values in an editing form, …
- Notifications when the content change (RSS, …)
- Specifiy output format (RDF, …) and protocol (SPARQL, …)
- Performance issues

> **We need to link registers with other vocabularies**

- Using a proper **linked data approach**
- Without re-declaring concepts across registers

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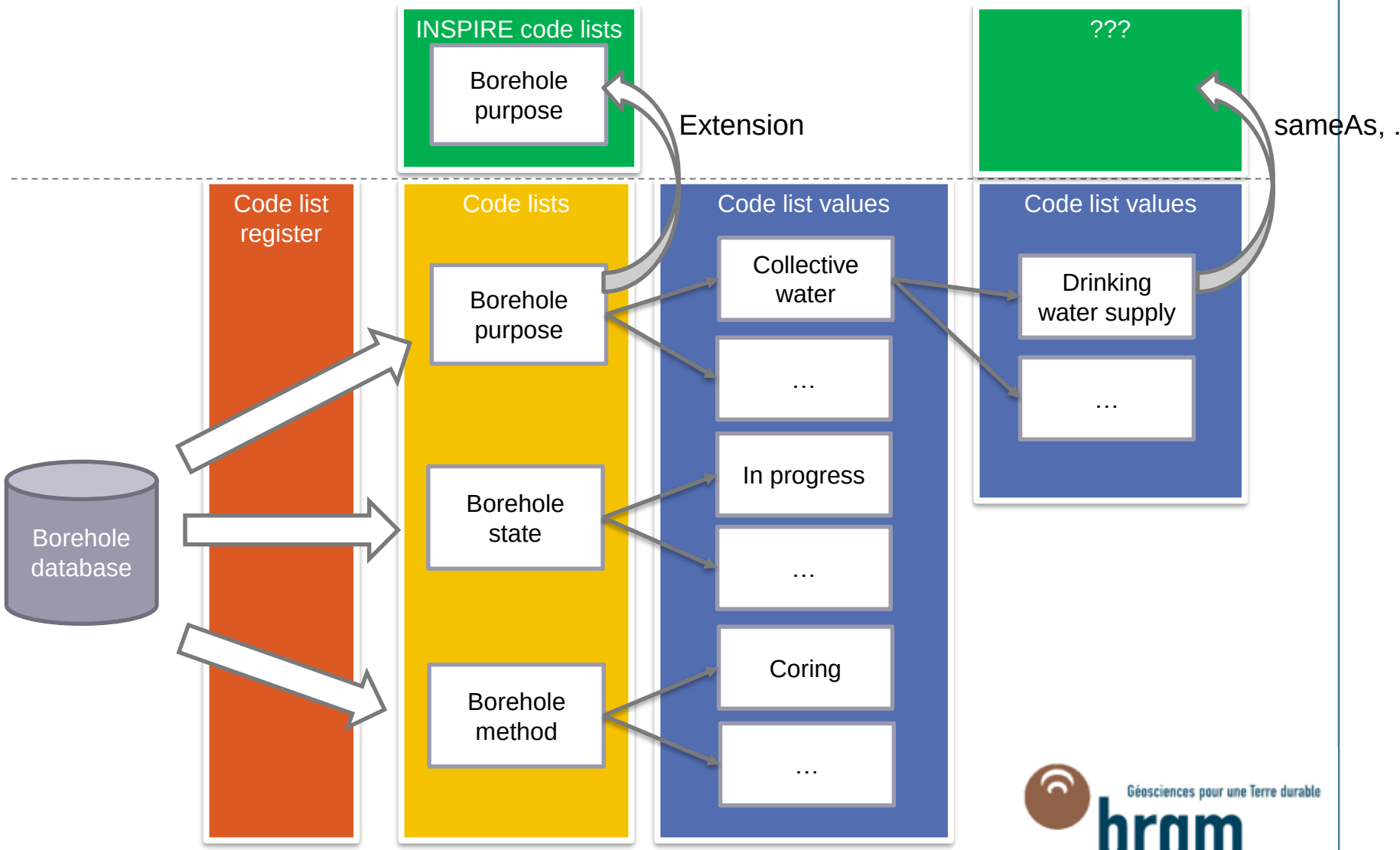
Structure of a register (« borehole »)



Overview of a codelist in FR registry (« Borehole purpose »)

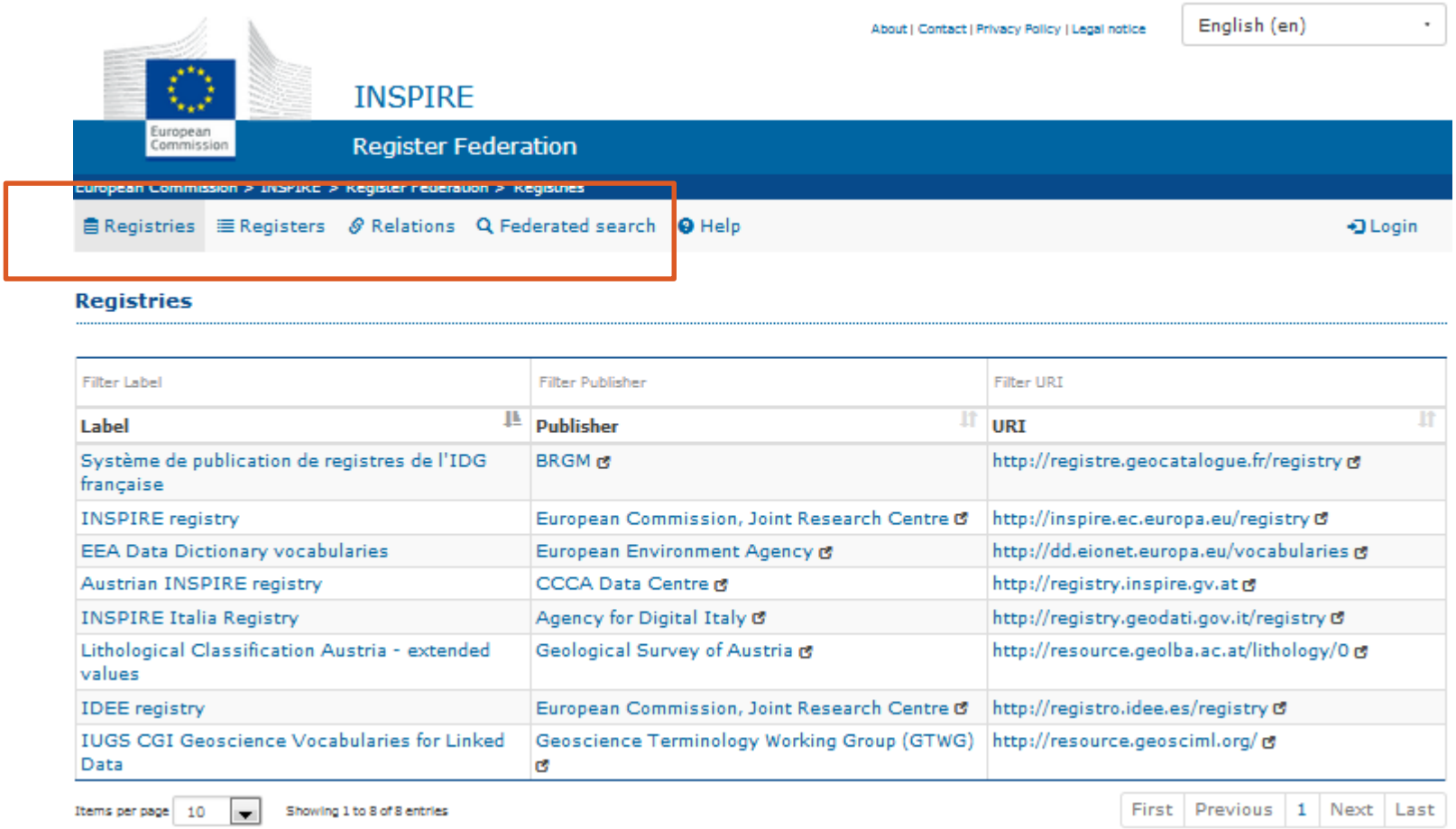
Thèmes:

Autres formats: XML Re3gistry | XML ISO 19135 | RDF/XML | JSON | Atom | CSV

Valeur de Liste de Codes

Filter Etiquette	Filter Parent	Filter Status
Etiquette	**Parent**	**Status**
ABRASIF	PRODUIT-BASE-INDUSTRIE	Validé
ABSORBANT	PRODUIT-BASE-INDUSTRIE	Validé
AEP	EAU-COLLECTIVE	Validé
AGRONOMIE	PRODUIT-BASE-INDUSTRIE	Validé
ANCIEN-AEP	EAU-COLLECTIVE	Validé
AQUIFERE	USAGES-EAU	Validé
BALLAST	VIABILITE	Validé
BOUE-FORAGE	PRODUIT-BASE-INDUSTRIE	Validé
CERAMIQUE	PRODUIT-BASE-INDUSTRIE	Validé
CHARGE	PRODUIT-BASE-INDUSTRIE	Validé
CHARGE-CAOUTCHOUC	CHARGE	Validé
CHARGE-PAPIER	CHARGE	Validé
CHAUFFAGE		Validé
CHAUSSEE	VIABILITE	Validé
CHAUSSEE-RIGIDE	CHAUSSEE	Validé
CHAUX	LIANT	Validé
CIMENT	LIANT	Validé
COMBUSTIBLE	PRODUIT-BASE-INDUSTRIE	Validé
CONSTRUCTION		Validé
COUCHE-BASE	VIABILITE	Validé
COUVERTURE	CONSTRUCTION	Validé

Overview of registries in the INSPIRE register federation



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Conclusion and perspectives

> **FR Registry (based on Re3gistry) respond to the obligation of publishing INSPIRE code lists**

> **But it have to connect to other tools (like ukgovld) to foster a linked data approach and not a tool approach on the registers and register federation topics**

> **And we need to improve the system in two ways :**

- Register management (technical but also organizational issues)
- Register access and use (technical issues)

> **Planned in 2018 – 2019 :**

- Upgrade Re3gistry v1.3 to v2 (early 2019)
- Publication of codelists in other themes (Utility and Government services, Land use, Land cover, etc.)

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Thank you for your attention

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