GEOBS: TOWARD AN OBSERVATORY PROTOTYPE OF THE 65 FRENCH SDIs

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1. Context
2. Goals and scientific positioning
3. Research questions
4. Observatory prototype
5. Preliminary results
6. Outlook and conclusion
International context: democratization of geographical information

GIS GIS SDIs
Standalone ICT Network Web

2007 VGI
International context: multiplication of stakeholders

OpenStreetMap

Google

IGN INSTITUT NATIONAL DE L'INFORMATION GÉOGRAPHIQUE ET FORESTIÈRE
French context: numerous SDIs (multi-level and multi-thematic)

Number of subnational SDIs identified in 2009 and 2011
EUROGI/eSDI-net project (EUROGI, 2014)
French context: complexity of the informational restructuring

January 2017
INSPIRE Directive:

Monitoring follows a quantitative approach every year
List of spatial data sets and services
Indicators to evaluate the Conformity and the Accessibility of metadata and data sets

Even if Reporting covers more qualitative aspects (every 3 years), almost no analysis of data use and relevance
Goals: Understand new ways to produce and manage environmental knowledge by analysing the (re)positioning of public authorities in the environmental sector.

SDIs:
As a research object
As sociotechnical systems (Akrich, 1993)
→ better understanding of the flows and the governance of environmental information
GEOBS: research questions

Question 1: How SDIs influence the ways the environment is represented

Question 2: How SDIs help to manage geographical information flows

Question 3: How SDIs facilitate the ways geographical information are used and appropriated by public bodies
GEOBS: Observatory prototype of the 65 French SDIs based on 3 axis

February 2015

2015 2016 2017

Content Analysis

Strategy Analysis

Use Analysis

OBSERVATORY PROTOTYPE
Preliminary results: Content analysis (Axis 1)

Geocatalogs [geonetwork]
SDIs

Corpus of metadata [fichiers XML]

Analysis [CSV et GeoJSON]

**Scraping by Python**

**Query by XQuery**

**Python**

**Who?**

**What?**

**Where?**

**When?**

**PostGIS**

**QGIS**

**Graphics**

**Maps**

**PIGMA, PEGASE, GeoLimousin**

http://www.pigma.org


http://www.geolimousin.fr
Preliminary results: Content analysis (Axis 1)

Who?

- Governmental bodies
- Public bodies
- Territorial authorities
- Private companies
- NGOs
- Associations
- Research organizations

PIGMA

GEOLIMOUSIN

PEGASE
Preliminary results: Content analysis (Axis 1)
Preliminary results: Content analysis (Axis 1)

What?
Preliminary results: Content analysis (Axis 1)
Preliminary results: Content analysis (Axis 1)

AQUITAINE: PIGMA
N = 3134

LIMOUSIN: GÉOLIMOUSIN
N = 504

POITOU-CHARENTESES: PÉGASE
N = 966
Preliminary results: Content analysis (Axis 1)

March 2010 – March 2015
Quand ? Quelle temporalité de montée en charge ?
Outlook: Strategy analysis (axis 2)

Data collection:
Web site analysis & Interviews with SDI administrators about: SDIs goals, policy, vision
Data Analysis: matrix analysis

Rebai et al. (2013)
Outlook: Use analysis (axis 3)

Data collection: online survey and Interviews with SDI users about: usefulness, effective use, information Effectiveness, etc.

Data Analysis: Integrated methodology that combines, among others, statistical and social network analysis

Georis-Creuseveau et al. (2014)
Conclusion

Observatory prototype ➔ bring greater visibility to institutional geographical information

Integrating content, strategic and use-based approaches ➔ flows of geographical information into perspective

Monitoring the changes in SDIs evolution

Bring some answers concerning the new stakes of environmental governance
THANKS FOR YOUR ATTENTION

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http://www-juem.univ-brest.fr/pops/projects/geobs

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