

eENVplus National Workshop
18th September 2013, Leuven

INSPIRE implementation in the Brussels Region: a collaborative and open approach



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INSPIRE in the Brussels Region : the whole story

15 th May : INSPIRE Directive

11st December : workshop INSPIRE at IBGE-BIM



Settlement of a regional committee and working groups

Legal aspects

- Federal cooperation agreement
- Decree related to the geographical information in the Brussels-Capital Region -"GeoBru decree"
- Executive order (proposal)



Geobru decree (18th November 2010)

- Integration of the European Directive objectives
- Collaboration between the concerned public authorities
- Brussels specificities
 - **Enlargement to reference data produced within the Brussels Region**
 - **UrbIS confirmed as the mapping reference**
 - **Brussels geoportal implementation**
 - **Brussels metadata profile = ISO + specific fields**
 - **Creation of the Geobru committee**
 - Coordination of the INSPIRE implementation within the BCR
 - Coordination with the Belgian Inspire Coordination Committee

Executive order (proposal)

- Responsibilities of the partners
 - **IBGE (environment) : european and national coordination**
 - **IBSA (statistics) : regional coordination**
 - **CIRB (IT) : technical aspects**
- Functioning of the committee
 - **Composition**
 - **Missions**
 - **Reporting**
 - **Information exchange (Economic and Social Council, the Environment Council)**

- CIRB
 - **Geoportal implementation and maintenance in accordance with procedures established by the GeoBru Committee**
 - **Ensure the operation of the Geoportal**
 - **Provide material and technical assistance to public authorities**
- **Ensures the update of UrbIS data and the implementation of web services**

GeoPortal : project governance 2010



Geobru
steering committee

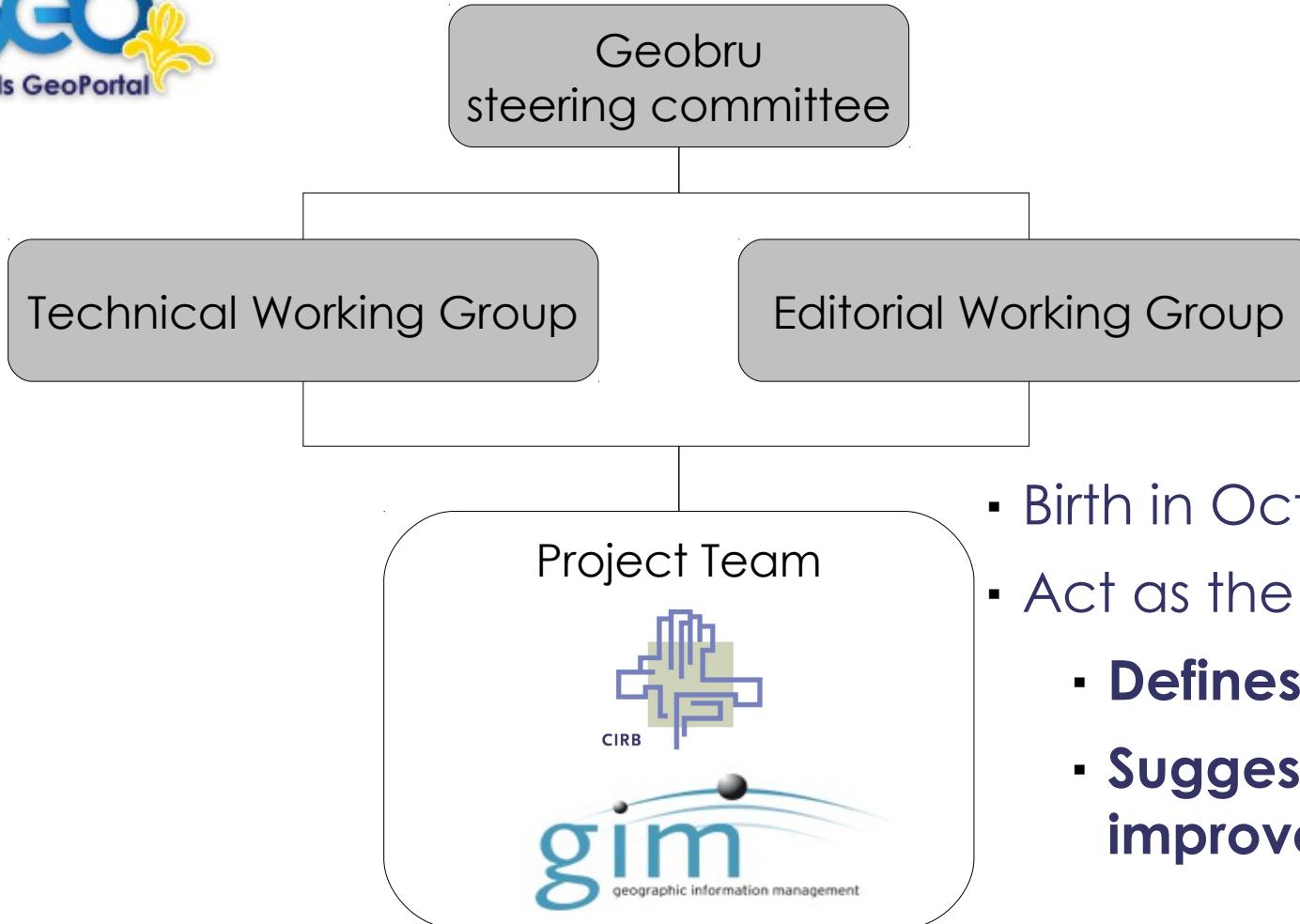
Technical Working Group

- Birth in June 2010
- Act as the client
 - **Represents all the stakeholders**
 - **Defines the technical and functional requirements**
 - **Validates the project deliverables**

GeoPortal : project governance 2011



GeoPortal : project governance 2012



- Birth in October 2012
- Act as the user
 - **Defines the content**
 - **Suggests improvements**

GeoPortal – requirements analysis

GeoPortal – requirements analysis

- 07/2010 to 02/2011
 - **Specifications analysis**
 - INSPIRE constraints
 - Functionnal requirements shortlist
 - Benchmark of geoportail initiatives
 - **Approach to the market for a technical solution**
 - Request For Information (RFI) procedure
 - 36 Geo-ICT System integrators and Product vendors contacted
 - 13 responses received : Cap Gemini, Imagem (ERDAS), ESRI, GeoCAT, Geosolutions, GIM, Intergraph, Metrico, NSI, Projections, SIGGIS, Spacebel, STAR-APIC
- Call for tender process could not be continued

GeoPortal – solutions analysis

- Based on RFI Responses and alternative OSS Portal
- Following criteria :
 - Use of Open Standards
 - Using components released under Open Source Software license
 - Using as much as possible software components with which the CIRB has experience and has the in house competences
 - Maximum of functionality out of the box
 - Capitalization of the work already performed
 - Modularity in design and Service Oriented Architecture design
- Short list of 4 products
 - Installed, configured and tested
 - Evaluated against 170 + criteria in functional, standard, compliance, technical, experience at CIRB, license categories

GeoPortal – solutions selection

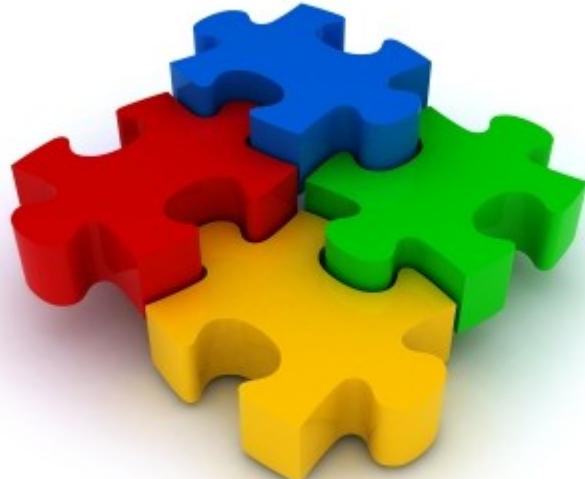
- Open Source softwares solution

Portal/CMS Functionality : GeoNode + Django CMS

Discovery Service : GeoNetwork

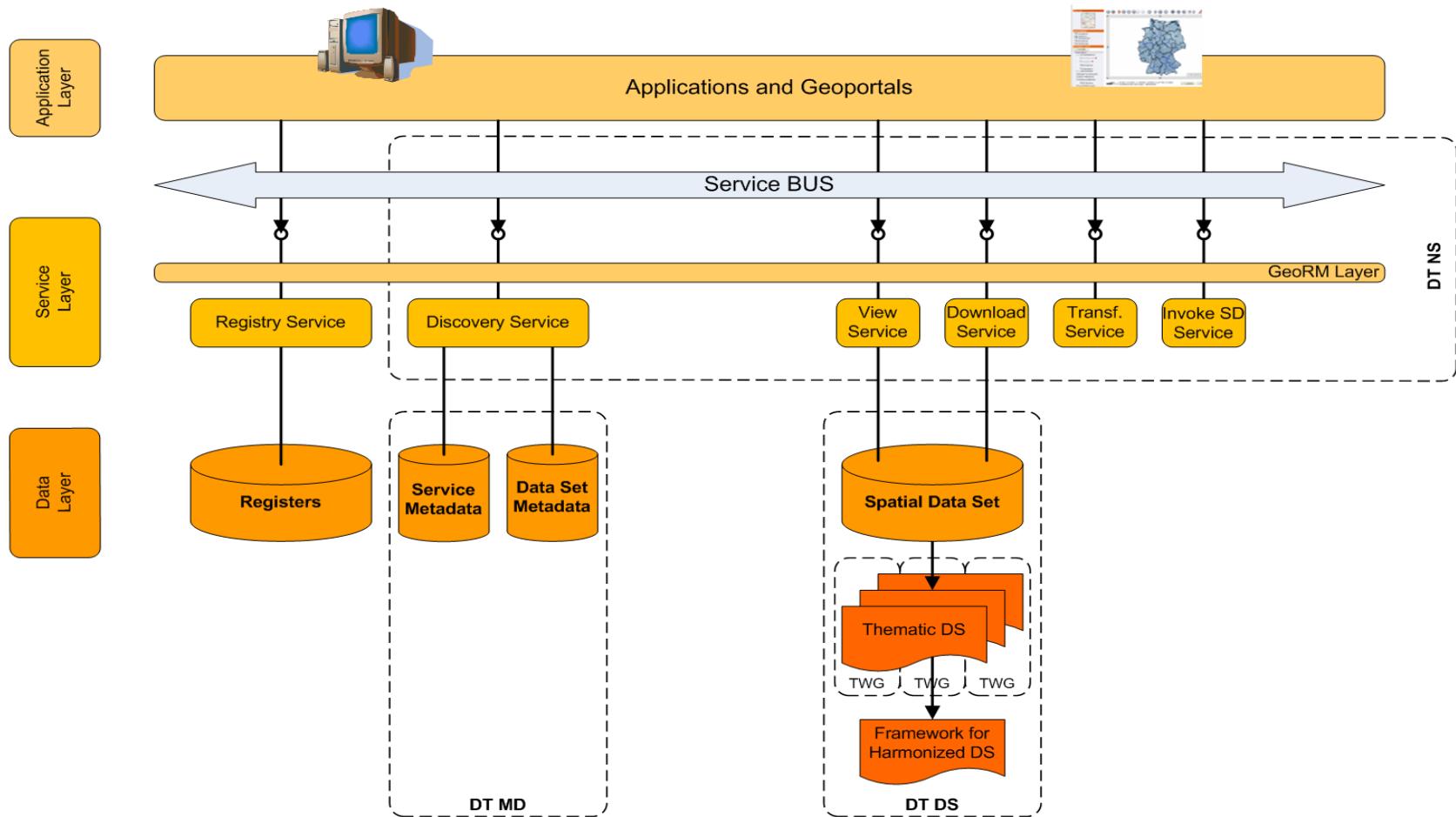
View and Download Services: GeoServer

WebGIS Client : GeoNode Viewer (GeoExt + ExtJS + Openlayers)



GeoBru Portal – Architecture (I)

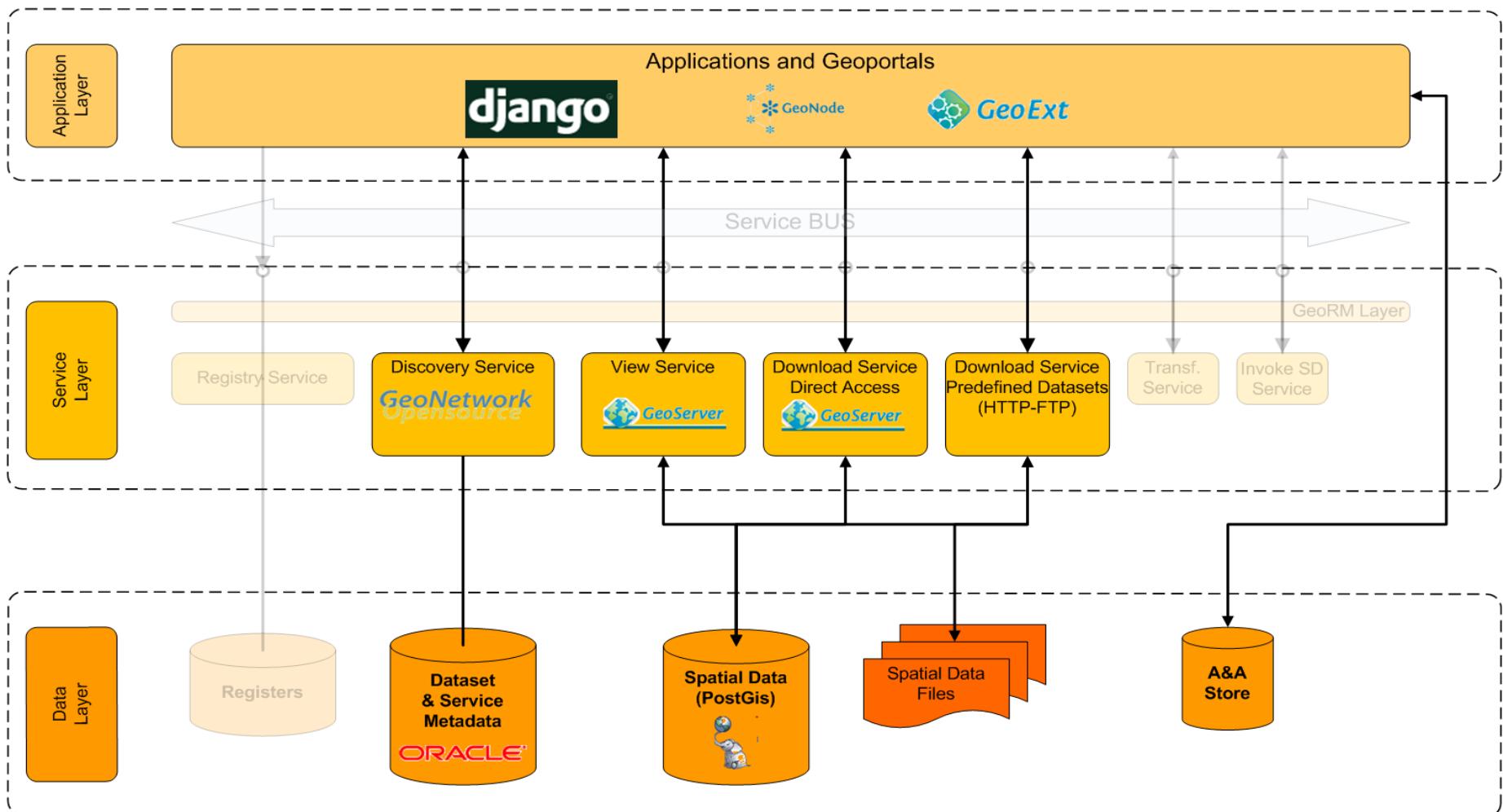
INSPIRE High Level Architecture



From INSPIRE Network Services Architecture (D3.5), 19-07-2008

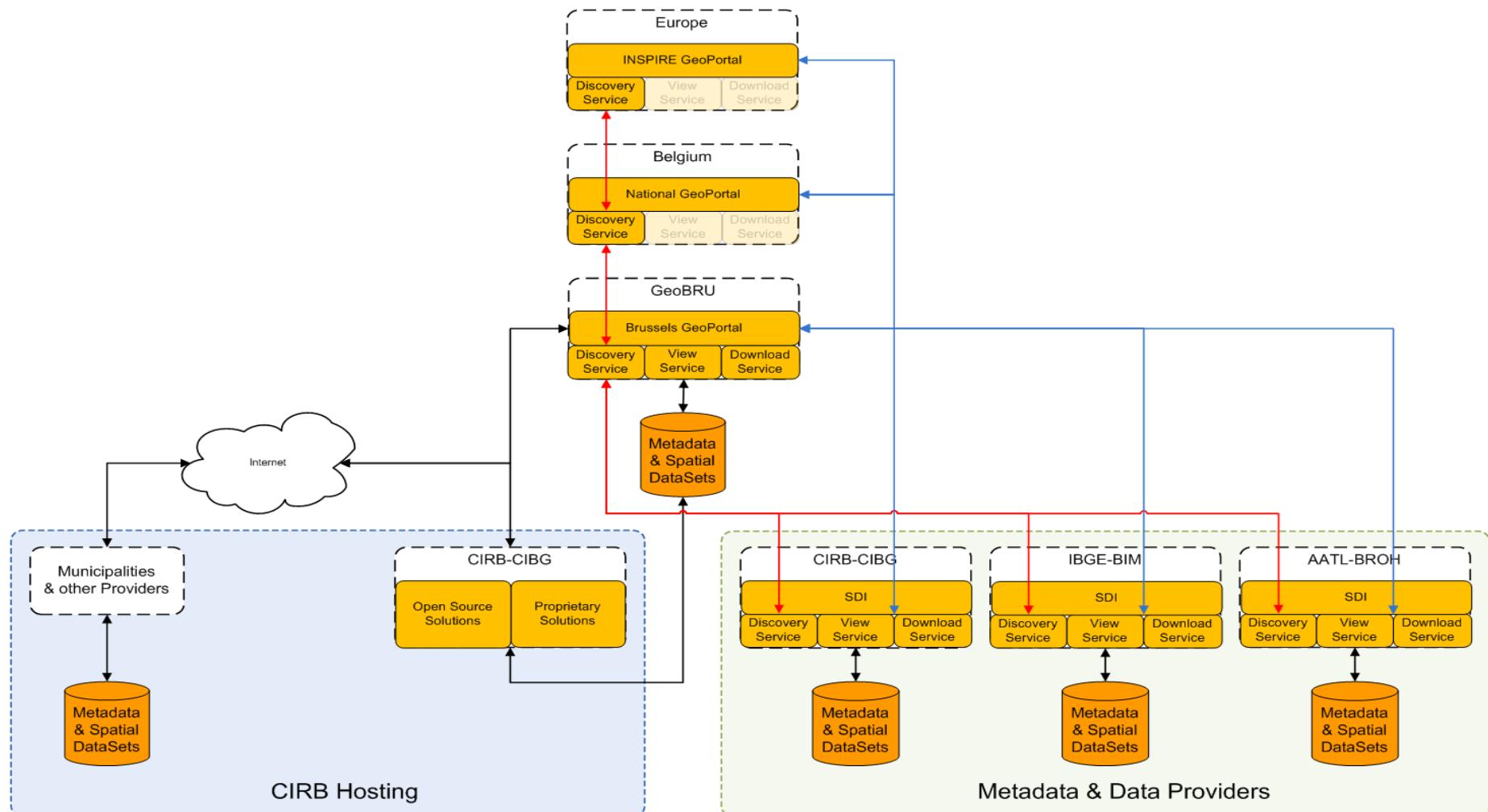
GeoBru Portal – Architecture (II)

GeoBru High Level Architecture

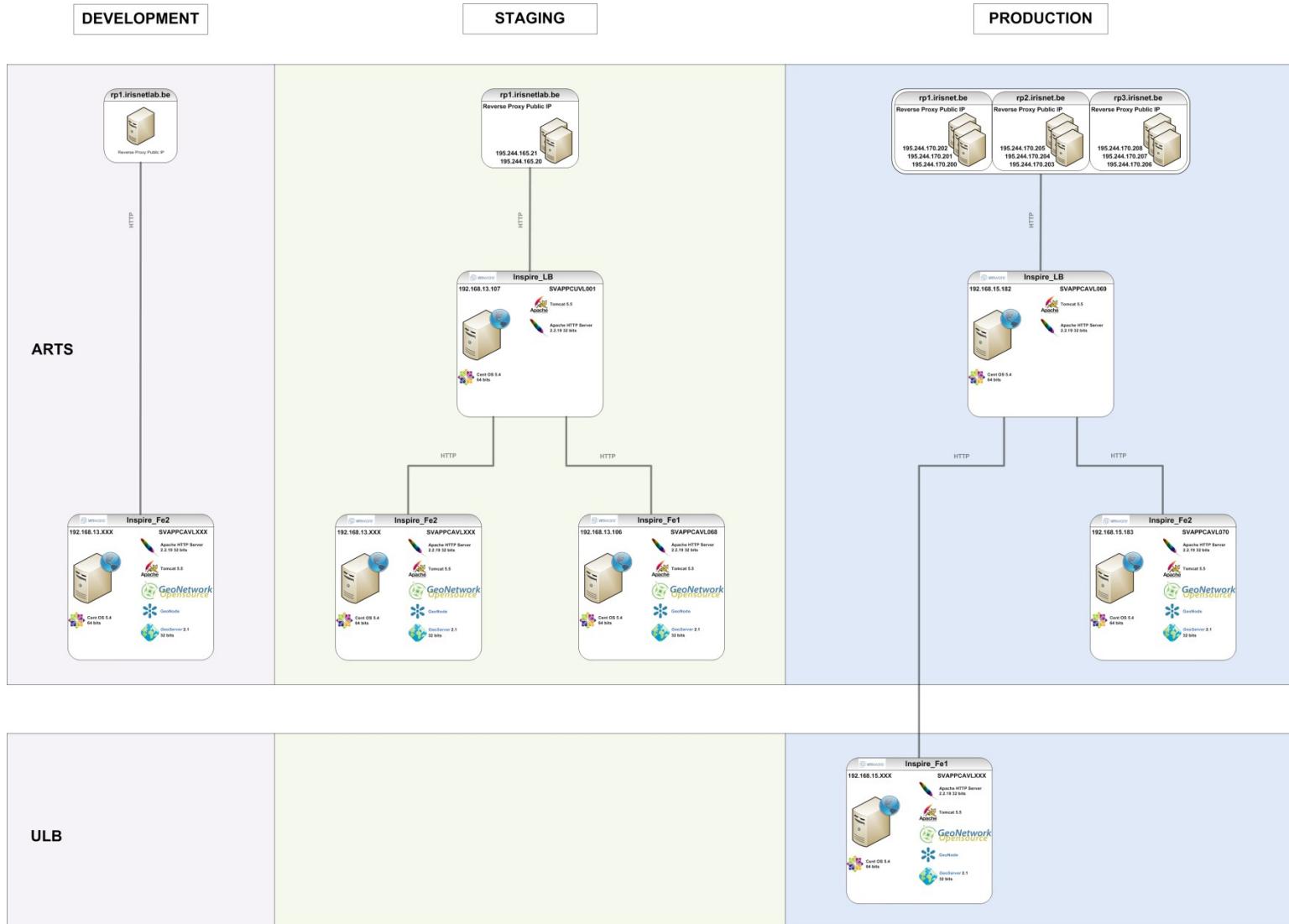


GeoBru Portal – Architecture (III)

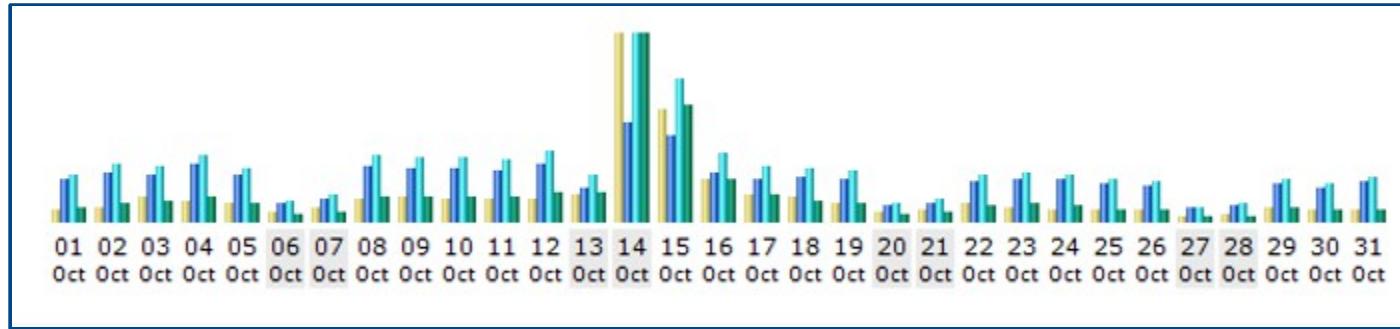
GeoBru – Connecting Remote Services



Infrastructure



Is it performant ?



Election week-end – Oct. 2012

- 1 millions hits in 48 hours
- 100.000 hits in 1 hour

Release 1

- Release 1
 - On staging environment 06/2012
 - Initial assembly and setup software components
 - Pages : Home, Maps, Map creation, Catalog, Service, About

Release 2

- Release 2
 - On staging environment 12/2012
 - Complete deployment
 - Load-balancing excepted Geonetwork
 - Upgrade Geonetwork & metadata updates
 - User management & access control
 - Maps creation & publishing
 - Search maps & global search
 - Improvements design & functionalities

Release 3

- Release 3
 - On staging environment 06/2013
 - Geonetwork 2.8 upgrade
 - Improvements functionalities
 - Map publication mechanism**
 - User's registration**
 - Data source identification**
 - Upload and publish data on Geoportal**
 - Improvements design
 - Content of the Geoportal : Editorial Board & Editor
 - Pages content**
 - Geoportal partners metadata**



Portal home page



FRANÇAIS | NEDERLANDS | ENGLISH

CONTACT | S'INSCRIRE | SE CONNECTER



En développement

CARTES

CATALOGUE

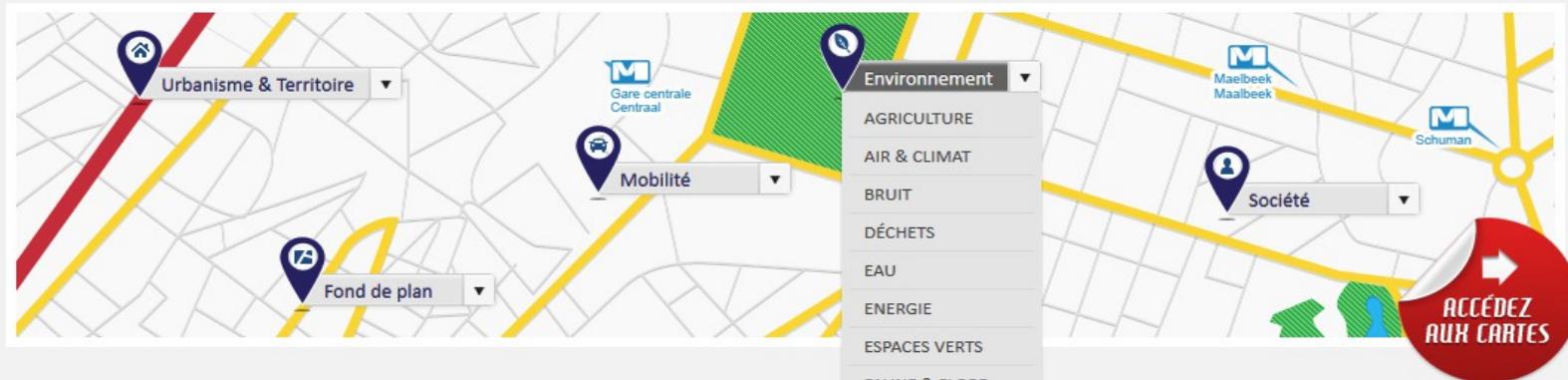
WEB SERVICES

A PROPOS

AIDE/FAQ

LIENS

Géoportail de la Région bruxelloise



The screenshot shows a map of Brussels with several layers visible, each represented by a pin and a dropdown menu:

- Urbanisme & Territoire**: Shows a red diagonal band.
- Mobilité**: Shows a yellow diagonal band.
- Fond de plan**: Shows a blue location marker.
- Environnement**: Shows a green area and has a dropdown menu with the following items:
 - AGRICULTURE
 - AIR & CLIMAT
 - BRUIT
 - DÉCHETS
 - EAU
 - ENERGIE
 - ESPACES VERTS
 - FAUNE & FLORE
 - POLLUTION
 - SOL & SOUS-SOL
- Société**: Shows a blue location marker.
- Maelbeek/Maalbeek**: Shows a blue location marker.
- Schuman**: Shows a blue location marker.

A red button on the right side of the map says "ACCÉDEZ AUX CARTES" with a white arrow pointing right.

Des centaines de données géographiques officielles fournies par les différentes institutions bruxelloises (Bruxelles Environnement, Centre d'Informatique pour la Région Bruxelloise, Ministère de la Mobilité, Région Bruxelles-Capitale, STIB, etc.).

Ce portail vous permet de:

ACTUALITÉS

26 avril 2013
[Comment créer Actualités](#)

Metadata Catalog page

Catalogue de données et services

Le catalogue vous offre la possibilité de :

- Consulter l'inventaire des données géographiques disponibles en utilisant différents critères de recherche
- Visualiser ou télécharger les fiches de métadonnées associées sous différents formats (pdf, zip,...)

Recherche

Rechercher des données géographiques sur:

RECHERCHER **RÉINITIALISER** **AVANÇÉE**

Metadata Catalog page

Catalogue de données et services

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Recherche

Rechercher des données géographiques sur:

Quoi

Mot-clé:	<input type="text" value="Sélectionner un mot-clé"/>
Thème INSPIRE:	<input type="text" value="Sélectionner un thème"/>
Organisme:	<input type="text" value="Sélectionner un organisme"/>
Représentation graphique:	<input type="text" value="Sélectionner une représentation graphique"/>
Type de ressource:	<input type="text" value="Sélectionner un type de ressource"/>

Quand

Date de mise à jour des métadonnées	
du:	<input type="text"/>
au:	<input type="text"/>
Étendue temporelle (données/services)	
du:	<input type="text"/>
au:	<input type="text"/>

RECHERCHER **RÉINITIALISER** **SIMPLE**

Maps page

Cartes

Composer une carte



Créez votre carte en ajoutant des couches provenant des partenaires GeoBru ou autres et sauvez cette carte dans le Portail GeoBru.

[CRÉER UNE CARTE](#)



Chercher une carte

RECHERCHER THÈME

Exemple: environnement, envi, ...

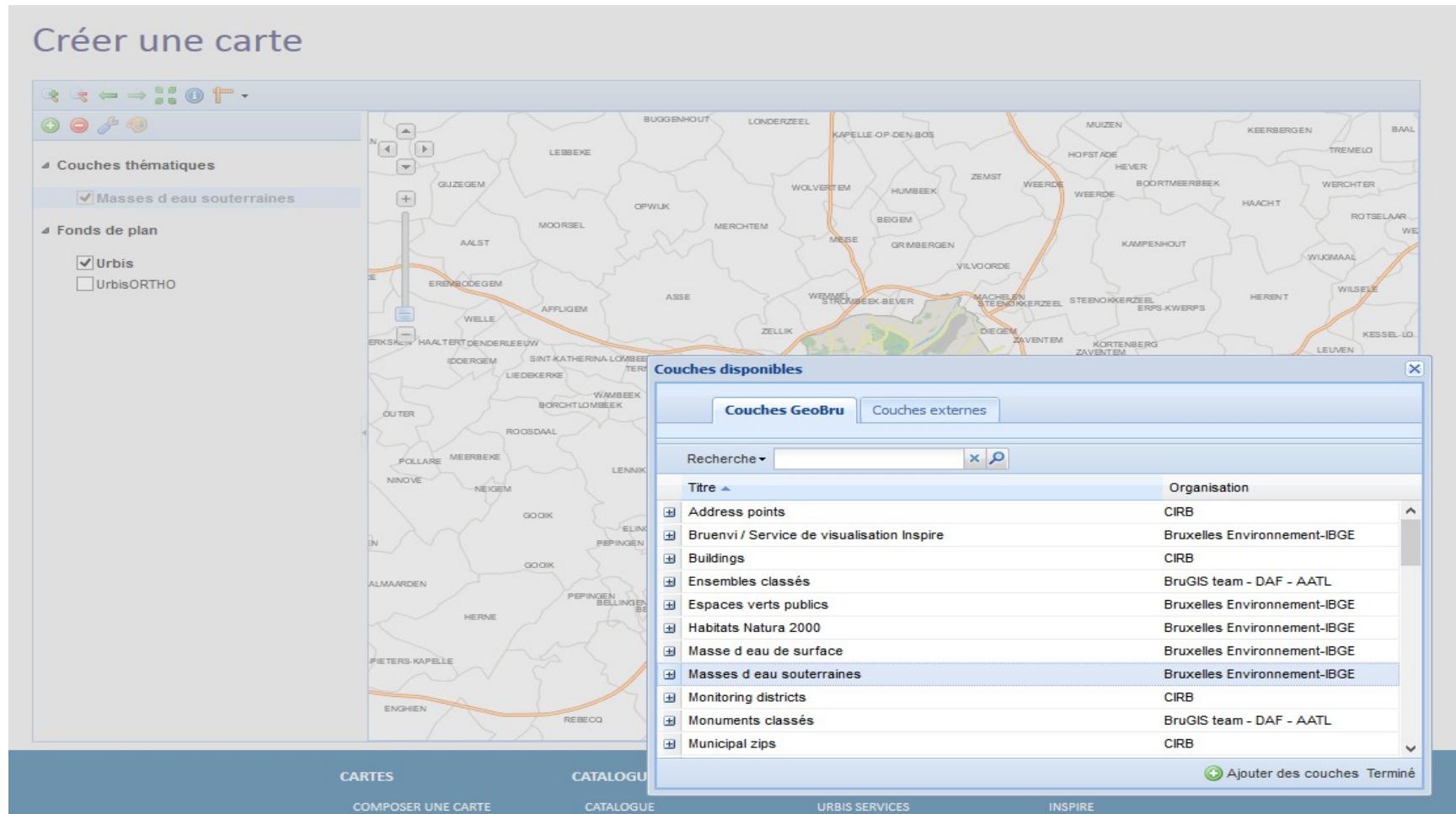
[RECHERCHER](#)

LISTE DES CARTES DISPONIBLES

Thème	Sous thème	Titre	Description
Fond de plan	Photos & images	BruGIS ↗	Le site cartographique de la Région de Bruxelles-Capitale
Fond de plan	Photos & images	Permis d'urbanisme ↗	L'Aménagement du Territoire et l'Urbanisme en Région de Bruxelles-Capitale

Maps creation page

Créer une carte



Couches thématiques

- Masses d'eau souterraines

Fonds de plan

- Urbis
- UrbisORTHO

Couches disponibles

	Couches GeoBru	Couches externes
Recherche ▾	<input type="text"/>	<input type="button"/>
Titre ▾	Organisation	
<input checked="" type="checkbox"/> Address points	CIRB	
<input checked="" type="checkbox"/> Bruenvi / Service de visualisation Inspire	Bruxelles Environnement-IBGE	
<input checked="" type="checkbox"/> Buildings	CIRB	
<input checked="" type="checkbox"/> Ensembles classés	BruGIS team - DAF - AATL	
<input checked="" type="checkbox"/> Espaces verts publics	Bruxelles Environnement-IBGE	
<input checked="" type="checkbox"/> Habitats Natura 2000	Bruxelles Environnement-IBGE	
<input checked="" type="checkbox"/> Masse d'eau de surface	Bruxelles Environnement-IBGE	
<input checked="" type="checkbox"/> Masses d'eau souterraines	Bruxelles Environnement-IBGE	
<input checked="" type="checkbox"/> Monitoring districts	CIRB	
<input checked="" type="checkbox"/> Monuments classés	BruGIS team - DAF - AATL	
<input checked="" type="checkbox"/> Municipal zips	CIRB	

Ajouter des couches Terminé

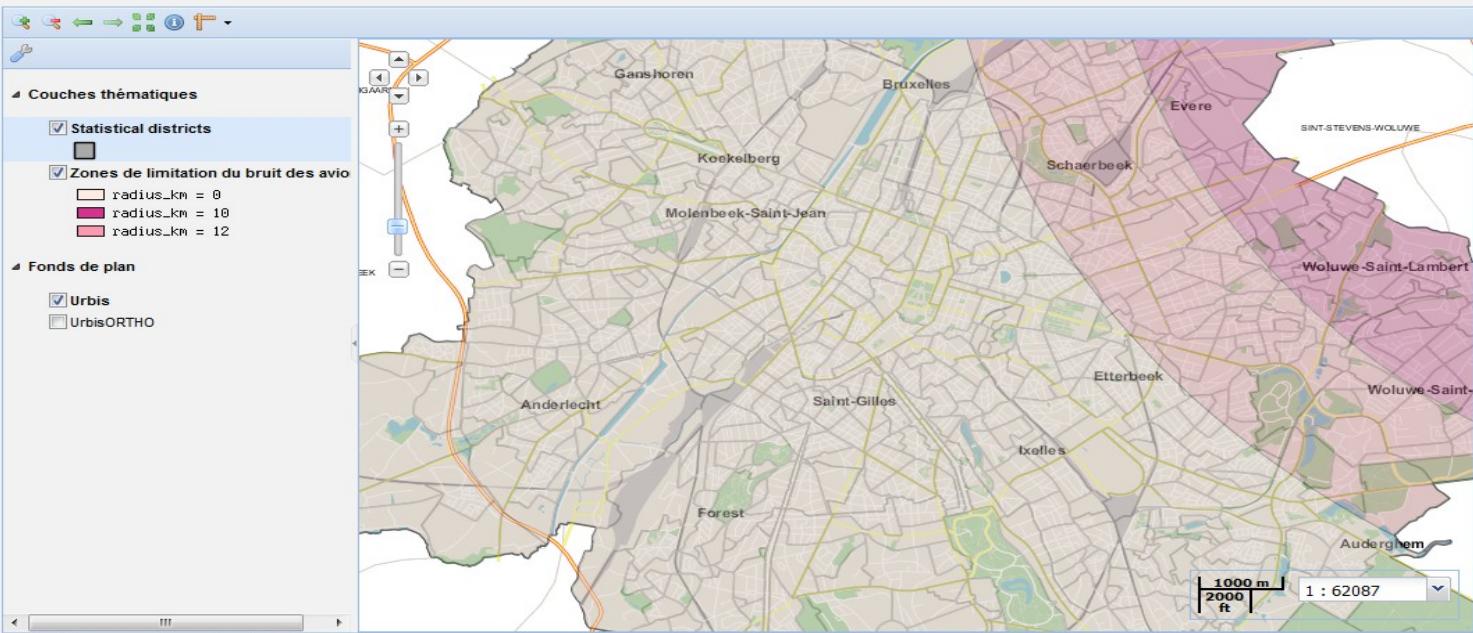
CARTES **CATALOGUE**

COMPOSER UNE CARTE CATALOGUE URBIS SERVICES INSPIRE

Maps management page

Description: Zones de limitation du bruit des avions par quartiers statistiques

Origine des données: Bruxelles Environnement-IBGE, CIRB



Couches thématiques

- Statistical districts
- Zones de limitation du bruit des avions
 - radius_km = 0
 - radius_km = 10
 - radius_km = 12

Fonds de plan

- Urbis
- UrbisORTHO

Realized by means of Brussels Urbis ©

INTÉGRER SUR UN SITE WEB

AUTORISATION

PUBLIER

GÉRER CETTE CARTE

DÉPLACER

DUPLIQUER

SUPPRIMER

MODIFIER

MODIFIER LE TEXTE

Next : Release 4

- Complete deployment staging + production
- Load-balancing & Fail-over
- Improvements design & new regional graphical line
- Content of the Geoportal : Editorial Board & Editor

Pages content

FAQ & On line help

Metadata

Maps



Collaborative and open approach

- Bottom-up approach
 - **No constraints from a cartographic agency**
 - **No political pressure**
- Project leaded by several administrations
 - **Concerned by INSPIRE**
 - **And/or interested by the concepts of sharing data**
- Pragmatic approach
 - **All the partners are involved in the decisions**
 - **We use AGILE methodologies**
- Collaborative through
 - **The steering committee**
 - **The working groups (legal, technical, editorial)**
 - **The workshops (geo-parties, metadata encoding)**

Perspectives

- Validation by Ministerial Cabinets – November
- Geoportal deployment : Q4 2013 – Q1 2014
- Geoportal enrichment 2014
- Open Data



Contacts

- Geoportal
 - Questions? contact@geobru.irisnet.be
 - Content? redaction-redactie@geobru.irisnet.be
- GIS, UrbIS, Open Data
 - @eauquiere 
 - <http://be.linkedin.com/in/auquiere> 
 - eauquiere@hotmail.com



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