



INSPIRE - Infrastructure for Spatial Information in Europe

**GEOSPATIAL
WORLD
FORUM**



25-29 MAY 2015
LISBON CONGRESS CENTER, PORTUGAL



isogeo



CATALOGUING GEODATA

A prerequisite to INSPIRE
compatibility & Open data Strategy

Mathieu Becker
mathieu.becker@isogeo.fr
+33 6 15 95 00 06



AFIGÉO
Association Française pour
l'Information Géographique

Vice-President



ENSG
Géomatique

GIS Teacher

1

Good morning everybody and thanks for coming.

For those of you who don't know me, my name is Mathieu Becker. I'm the founder and CEO of Isogeo, a French software company specialized in geodata management since 2009 (and become the leader in France).



- Our Vision



- Isogeo Platform



- User case



- Questions

This morning, I'm going to talk to you about :

> Our vision of data management, especially in the Inspire and open data context

> Then, I'll go on to tell you about the Isogeo Platform

> And finally I'll show you how it works based on one user case

I'll be pleased to answer any question you have at the end of my presentation.



Complexity or opportunities ?

OPEN DATA



INSPIRE



WEB

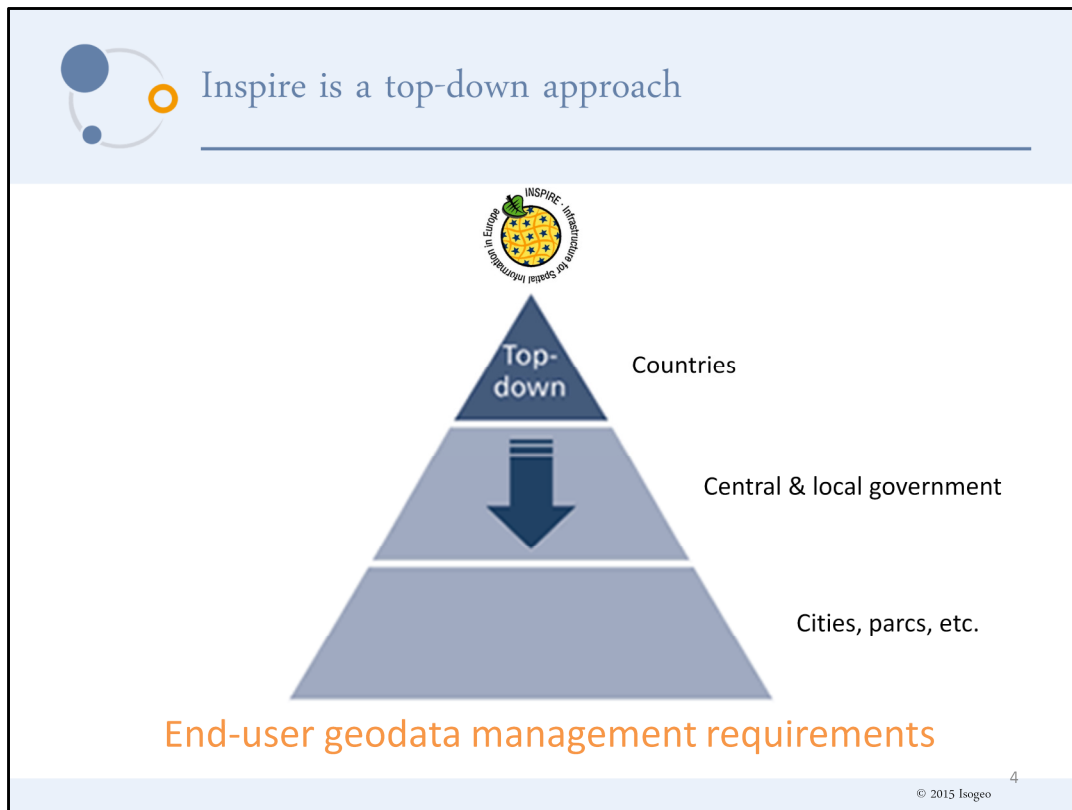


© 2015 Isogeo

3

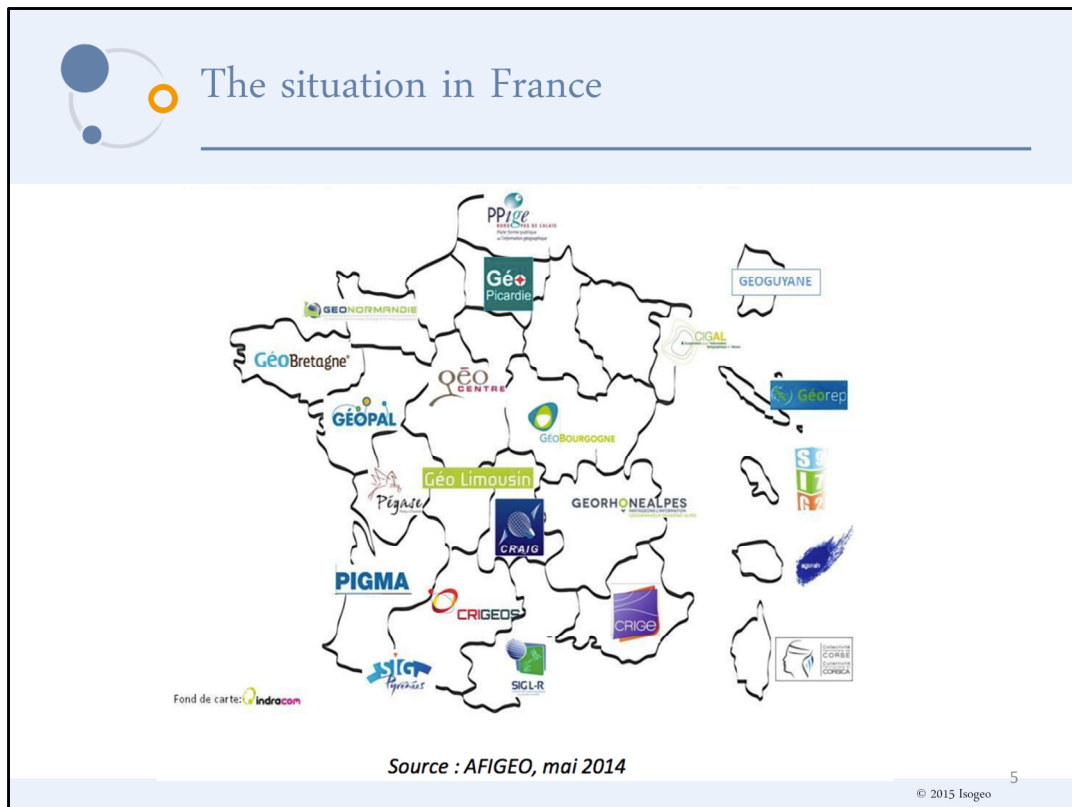
Let's start with our vision and our approach to geodata management.

The main question is how to respond quickly and effectively to the complex European directive Inspire. At the same time we have to be aware all the opportunities and challenges created by open data **and the web in general..**



Since the introduction of the Inspire directive, the European countries have been required to take a top-down approach to implementing data management solutions.

By this, I mean that all SDI Architecture is led by central and local government decisions, rather than by end-user geodata management requirements.



As you can see from this map, in France for example, we have around 30 different SDIs. All of them are led and supported by main public organizations, such as Régions and Départements. In most cases, they are subsidized by Europe.

The end-users involved in the Inspire directive, such as cities, national parks, firestations have to register and document their data on these obligatory platforms.



Finally, the ROI is minimal...

1. Time consuming and done to comply with Inspire
1. The inventory can not be used internally
1. Difficult to control any updating process

INFLEXIBLE & USER-UNFRIENDLY

© 2015 Isogeo

6

This is typically a top-down approach. The return of investment is minimal for several reasons:

- > Firstly, it is time consuming and carried out (done) to comply with the requirements of Inspire
- > Secondly, the inventory or catalogue can not be used internally
- > And thirdly it is difficult to control any updating process .

We, at Isogeo, consider this traditional top-down approach both inflexible and user-unfriendly.

Isogeo has reversed this approach

End-user geodata management requirements

7
© 2015 Isogeo

Isogeo has reversed this approach.
For us, everything starts with the requirements of the end-user with a bottom-up approach **to Inspire, Open data and so on..**



End-user requirements

- Where is the data I need ?
- Is it up to date?
- Are there any legal restrictions I should be aware of?
- To what extent can I share it with suppliers, partners and others?
- Etc..

the requirements of the end-user are questions such as:

>Where is the data I need?

>Is it up to date?

>Are there any legal restrictions I should be aware of?

>To what extent can I share it with suppliers, partners and others?



- Our Vision



- Isogeo Platform



- User case



- Questions

Let me show you how Isogeo has created a better way to manage your data



Isogeo is a ready-to-user collaborative Platform which aims to simplify the access to geodata and **his management**.

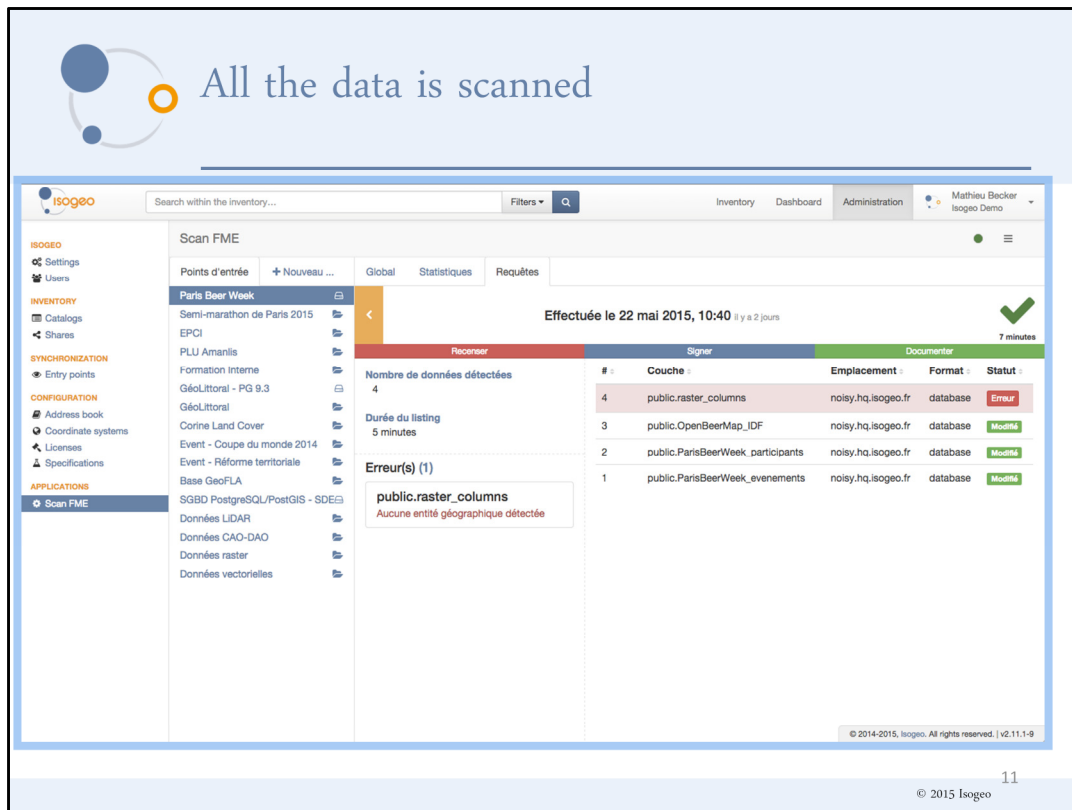
Firstly, all the data, whatever the format, is scanned and a comprehensive and up-to-date inventory is created. During this stage it is important to note that the inventory is automatically pre-documented in terms of technical information such as the type and number of features, attributes, scope and so on.

Secondly the inventory can be documented by the end-user in terms of conditions of use, contacts, history, genealogy of the data. Isogeo has developed powerful tools to ensure that this can be performed by non GIS specialists.

As part of the documentation process, the comprehensive, up-to-date and documented inventory can be organized into different catalogues.

If you look on the right side of the slide you will see the final stage, the sharing process: the return of your investment.

In a few clicks your catalogues can be shared internally, with partners and the local Inspire Platform or a specific portal for open data.



Let me show you some screen shots of the Isogeo Platform.

The SCAN create metadata directly from the data...

And an inventory is created

The screenshot displays the Isogeo web application interface. At the top, there is a search bar and navigation tabs for 'Inventory', 'Dashboard', and 'Administration'. The user is identified as 'Mathieu Becker' in an 'Isogeo Demo' environment. Below the navigation, there is a '+ Create' button and a status message 'The selection is empty'. The main content area shows a list of five datasets, each with a globe icon, a title, and various metadata fields. The datasets are:

- Bars, pubs et brasseries artisanales d'Open Beer Map - Île de France - mai 2015** (public:OpenBeerMap_IDF). Metadata: Isogeo Demo, Dataset (vector), PostGIS, WGS 84, Open Data, A, Compilateur, Événementiel. Actions: open data, OpenStreetMap, données ouvertes, Paris Beer Week, 2015. Resource creation date: 05/18/2015 6:30 PM.
- Participants et organisateurs de la Paris Beer Week - Île de France - 2015** (public:ParisBeerWeek_participants). Metadata: Isogeo Demo, Dataset (vector), PostGIS, WGS 84, Open Data, A, Compilateur, Événementiel. Actions: open data, données ouvertes, Paris Beer Week, 2015. Resource creation date: 05/18/2015 6:30 PM.
- Localisation des événements de la Paris Beer Week - Île de France - 2015** (public:ParisBeerWeek_evenements). Metadata: Isogeo Demo, Dataset (vector), PostGIS, WGS 84, Open Data, A, Compilateur, Événementiel. Actions: open data, données ouvertes, Paris Beer Week, 2015. Resource creation date: 05/18/2015 6:30 PM.
- LA_DEFENSE_BATI (LA_DEFENSE_BATI)**. Metadata: Isogeo Demo, Dataset (vector), Shapefile, A, Compilateur. Resource creation date: 05/12/2015 12:15 PM.
- Service WMS de Corine Land Cover**. Metadata: Isogeo Demo, Service, Corine Land Cover. Resource creation date: 05/12/2015 12:15 PM.

At the bottom right of the interface, there is a copyright notice: '© 2014-2015, Isogeo. All rights reserved. | v2.11.1-9' and a page number '12'.

And a comprehensive and up-to-date inventory

A powerful tool to document

pubs format:postgis catalog:44d17764368a45aa8423f2335d73742b Filters Q Inventory Dashboard Administration Mathieu Becker Isogeo Demo

← Tag

Bars, pubs et brasseries artisanales d'Open Beer Map - Île de France - mai 2015 (public:OpenBeerMap_IDF)

Isogeo Demo Dataset (vector) PostGIS WGS 84 Open Data A Compléter Endormentiel

open data OpenStreetMap données ouvertes Paris Beer Week 2015

Edit

Identification History Geography Quality Attributes TOS Resources Contacts Advanced Metadata

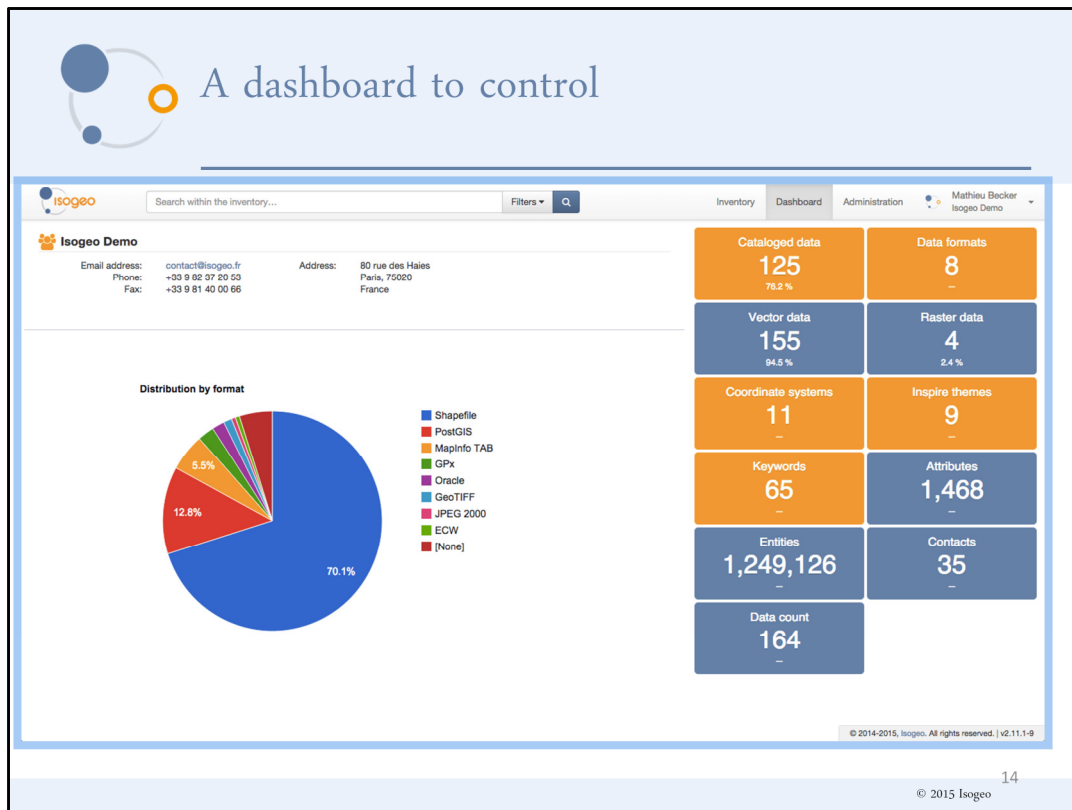
Attributes

Name	Alias	Type	Description	Language
BEERS	Bières pression	varchar(80)	Indique les bières qui sont disponibles à la pression en se basant sur l'attribut 'brewery=' d'OpenStreetMap qui est notamment utilisé dans le cadre du projet OpenBeerMap.	FR
BREWER	Micro-brasserie	varchar(80)	Indique si l'établissement brasse de la bière artisanale sur place ou pas.	FR
id	Identifiant	serial_PRIKEY	Identifiant unique dans le jeu de données	FR
NAME	Nom	varchar(80)	Nom de l'établissement	FR
OSM_ID	Identifiant OpenStreetMap	varchar(80)	Identifiant de l'objet dans la base de données d'OpenStreetMap	FR
TYPE	Type	varchar(80)	Typologie des établissements :	FR

© 2014-2015, Isogeo. All rights reserved. | v2.11.1-9

13
© 2015 Isogeo

There you can see the user-friendly interface to document your data



The dashboard is very interesting to have a good overview of your data asset

The screenshot displays the Isogeo web application interface. At the top left, there is a logo consisting of three blue circles of varying sizes. To its right, the text 'The sharing process' is displayed in a blue serif font. Below this, the application's header includes a search bar with the text 'Search within the inventory...', a 'Filters' dropdown, and navigation tabs for 'Inventory', 'Dashboard', and 'Administration'. The user's name 'Mathieu Becker' and 'Isogeo Demo' are visible in the top right corner.

The main content area is divided into several sections:

- Left Navigation Menu:** Contains categories like 'ISOGEO', 'Settings', 'Users', 'INVENTORY', 'SHARES', 'SYNCHRONIZATION', 'CONFIGURATION', and 'APPLICATIONS', each with sub-items.
- Inventory List:** A table showing various catalog entries with their names and the number of catalogs associated with them. For example, 'Démonstration (interne)' has 6 catalogs.
- Applications Section:** Titled 'Applications' with a 'Renew the security token' warning. It contains a 'CSW' table listing services like 'Catalogue public', 'Corine Land Cover', and 'Evénementiel' with their respective URLs and status icons.
- Catalogs Section:** A list of catalogs such as 'Catalogue public', 'Corine Land Cover', 'Evénementiel', and 'Exemple', each with a status indicator.

At the bottom right of the interface, the page number '15' and the copyright notice '© 2015 Isogeo' are visible.

The final process allows you to share your catalogues at a glance

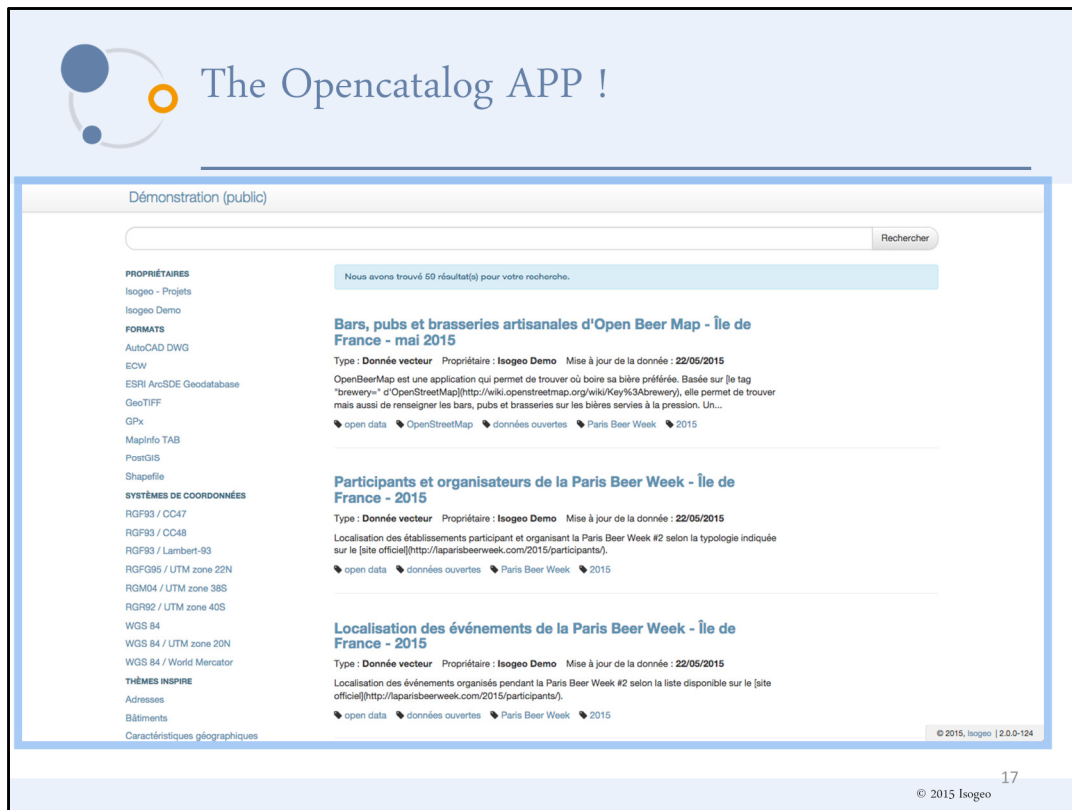


INSPIRE Compliant

This XML file does not appear to have any style information associated with it. The document tree is shown below.

```
<<Capabilities xmlns:ows="http://www.opengis.net/ows" xmlns:xlink="http://www.w3.org/1999/xlink" xmlns="http://www.opengis.net/cat/csw/2.0.2" version="2.0.2">
  <ows:ServiceIdentification>
    <ows:Title>Catalogue public</ows:Title>
    <ows:Abstract>
      A catalogue service that conforms to the OpenGIS Catalogue Service specification version 2.0.2.
    </ows:Abstract>
    <ows:Keyword>
      <ows:Keyword>CSW</ows:Keyword>
      <ows:Keyword>Isogeo Demo</ows:Keyword>
      <ows:Keyword>geospatial</ows:Keyword>
      <ows:Keyword>catalog</ows:Keyword>
    </ows:Keyword>
    <ows:ServiceType>CSW</ows:ServiceType>
    <ows:ServiceTypeVersion>2.0.2</ows:ServiceTypeVersion>
  </ows:ServiceIdentification>
  <ows:ServiceProvider>
    <ows:ProviderName>Isogeo Demo</ows:ProviderName>
    <ows:ServiceContact>
      <ows:ContactInfo>
        <ows:Phone>
          <ows:Voice>+33 9 82 37 20 53</ows:Voice>
          <ows:Facsimile>+33 9 81 40 00 66</ows:Facsimile>
        </ows:Phone>
        <ows:Address>
          <ows:DeliveryPoint>80 rue des Haies</ows:DeliveryPoint>
          <ows:City>Paris</ows:City>
          <ows:PostalCode>75026</ows:PostalCode>
          <ows:ElectronicMailAddress>contact@isogeo.fr</ows:ElectronicMailAddress>
        </ows:Address>
      </ows:ContactInfo>
    </ows:ServiceContact>
  </ows:ServiceProvider>
  <ows:OperationMetadata>
    <ows:Operation name="GetCapabilities">
      <ows:DCP>
        <ows:HTTP>
          <ows:Get xlink:href="http://api.isogeo.com/services/ows/s/c502e8f7c9da4c3aacdf3d905672d54c/c/2552d8aea0084451ae8ad7b630d4ac99/Q48vPfiI1s1bdwbkWRfJLk7XMo4G0"/>
          <ows:Post xlink:href="http://api.isogeo.com/services/csw/s/c502e8f7c9da4c3aacdf3d905672d54c/c/2552d8aea0084451ae8ad7b630d4ac99/Q48vPfiI1s1bdwbkWRfJLk7XMo4G0/GetCapabilities">
            <ows:Constraint name="PostBrowsing">
              <ows:Value>XML</ows:Value>
            </ows:Constraint>
          </ows:Post>
        </ows:HTTP>
      </ows:DCP>
    </ows:Operation name="sections">
      <ows:Value>ServiceIdentification</ows:Value>
      <ows:Value>ServiceProvider</ows:Value>
      <ows:Value>OperationMetadata</ows:Value>
      <ows:Value>Filter Capabilities</ows:Value>
    </ows:Operation name="sections">
  </ows:OperationMetadata>
</Capabilities>
```

With Inspire requirements like CSW



Or with partners and suppliers through the Opencatalog Application, a mini web site hosted and supported by the Isogeo Platform.



- Our Vision



- Isogeo Platform



- User case



- Questions

I would like to finish by showing you a user case which illustrates the capabilities of our platform.

Plaine Centrale Urban Community and the city of Créteil

3 Challenges

- to facilitate access to the geodata internally for every employee.
- to comply with Inspire requirements
- And to initiate an open data project.

The screenshot shows the 'Créteil GEO OPEN DATA' portal. At the top, there is a search bar with the text 'thématique, texte...' and a 'VALIDER' button. Below the search bar, there are navigation tabs: 'ACCUEIL', 'LE SIG C'EST QUOI', 'DATAS', 'OUTILS', and 'FORMATIONS'. The main content area is divided into two sections: 'TOUS LES AGENTS' and 'AGENTS HABILITÉS'. Under 'TOUS LES AGENTS', there are icons for 'SIG', 'SIG Cadastre', 'SIG Parcs & Jardins', 'SIG Environnement', 'SIG Habitat', 'SIG Hygiène publique', and 'SIG Elections'. Under 'AGENTS HABILITÉS', there are three data entries:

- Limites administratives : découpage des communes de Plaine Centrale**
Limites administratives des communes de Plaine Centrale - 2009
Propriétaire : Plaine Centrale & Ville de Créteil
Type : Données vecteur
- Election : Bureau de vote - Ville de Créteil**
Localisation des bureaux de vote pour les élections départementales du 22 et 29 mars 2015.
Propriétaire : Plaine Centrale & Ville de Créteil
Type : Données vecteur
- INSEE.LOGEMENT_IRIS**
Propriétaire : Plaine Centrale & Ville de Créteil
Type : Données vecteur

Geospatial World forum

19

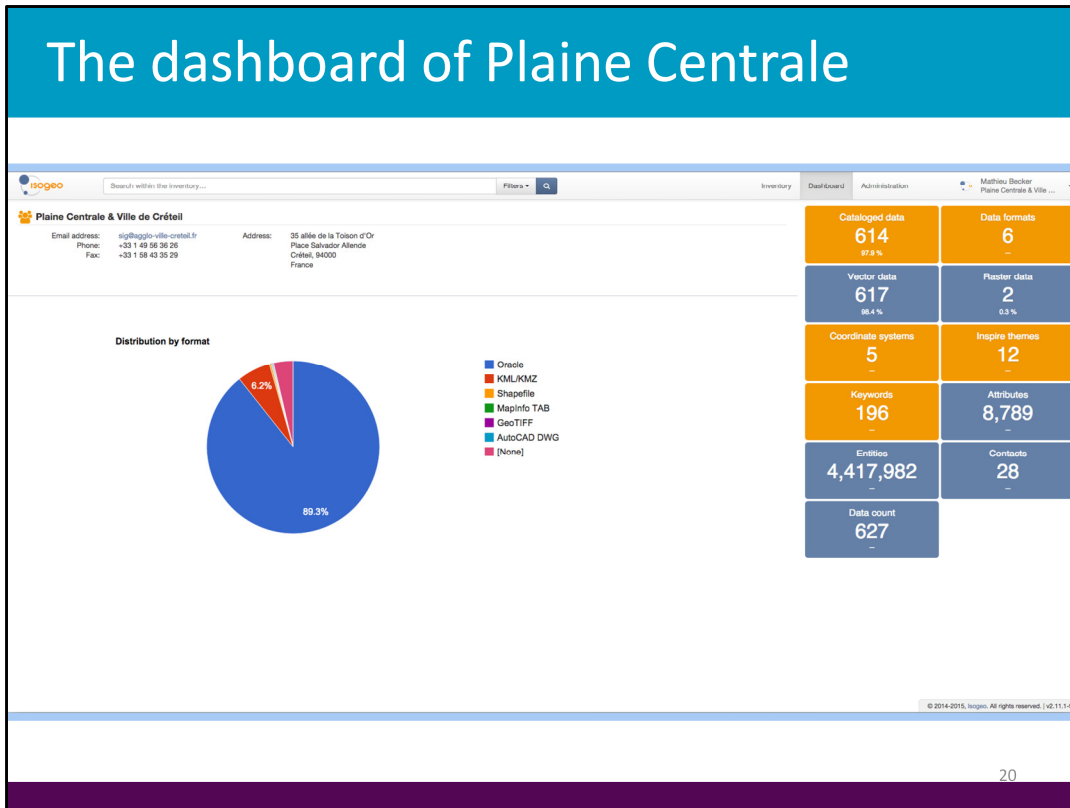
In 2014 we delivered a geodata management solution for Plaine Centrale Urban Community and the city of Créteil near Paris.

There were 3 challenges:

- to facilitate access to the geodata internally for every employee.
- to comply with Inspire requirements
- And to initiate an open data project.

Using the Isogeo Platform, this organization is now able to carry out these three separate tasks with one single effective solution. In the past, it would have been completed through three separate and time consuming projects.

The dashboard of Plaine Centrale



Let me show you some screen shots of the solution

On the dashboard of Plaine centrale, you can see an overview of his data asset.

There have 627 data in X different formats which represent more than 4 millions of vector objects.

1 solution for several uses

- 1 Portal for internal user
- 2 open data portal
- 1 Opencatalog for sharing with HERE
- An other one for the University
- Opencatalogs for suppliers



- Time saving
- Easy access to geodata
- A dashboard to manage the GIS
- Third-party applications



In conclusion

- User-centric approach
- Based on customer needs
- User-friendly and flexible
- Allowing to share catalogues adequately
- Inspire & open data compliant

In conclusion, Isogeo has developed a user-centric approach of geo-data management : based on customer needs.

Our software Platform is user-friendly, flexible and allowing to share inventories adequately... and YES it does Inspire and open-data !



GEOSPATIAL™
WORLD
FORUM 



25-29 MAY 2015
LISBON CONGRESS CENTER, PORTUGAL



Mathieu Becker
mathieu.becker@isogeo.fr

Thank you and see you to the Isogeo stand for demonstrations

+33 6 15 95 00 06

23