



Conférence INSPIRE FRANCE

Bart De Lathouwer, OGC

16 November 2015, Paris, France

Agenda

- **presentation du projet** du point de vue de l'utilisateur
 - 4 PME et Agence Gouv.
- Focus sur le “Table Join Service” **TJS**

Développer et étendre les applications métier

- Usage de la plate-forme ELF et des données officielles, par les membres du consortium ou par des tiers
 - **Emergency Mapping** (Ithaca)
 - **Assurance et réassurance** (Europa)
 - **Statistiques santé** (Geonovum & Geodetic Institute of Slovenia)
 - **Immobilier** (WirelessInfo)

Développer et étendre les applications métier

- Emergency Mapping (Ithaca)
 - Solution EM pour UE
 - ECPM, DG's & Agences
 - Challenges:
 - Non homogènes, incohérentes, incomplètes; pas officielle et la qualité varie, les bâtiments, les réseaux hydrographiques et la couverture terrestre
 - Contraintes de licences, des limitations de l'accès
 - E.L.F. fournira des ensembles de données cohérentes, basée sur des normes internationales
 - Plus précis, délai de livraison minimal
 - Inclure des thèmes non-INSPIRE

Développer et étendre les applications métier

- Assurance et réassurance (Europa)
 - l'évaluation des risques des catastrophes naturelles des contrat existants et futurs
 - Access par interface Web et API
 - visualiser des facteurs affectant les risques et les indicateurs de risques sur une carte

Code postal ou par adresse

Info

- Flood risk at 50m. Score: 15**
 - River
 - 1.3% (1 in 75 years)
 - Surface Water
 - 1.3% (1 in 75 years)
- Flood risk at 100m. Score: 15**
 - River
 - 1.3% (1 in 75 years)
 - Surface Water
 - 1.3% (1 in 75 years)
- Ground risk at 50m. Score: 13**
 - Collapsible Deposit
 - Class B
 - Running Sand
 - Class B
 - Compressible Ground
 - Class A
 - Shrink Swell
 - Class B
 - Landslide
 - Class B
- Ground risk at 100m. Score: 13**
 - Collapsible Deposit
 - Class B
 - Running Sand
 - Class B
 - Compressible Ground
 - Class A
 - Shrink Swell
 - Class B
 - Landslide
 - Class B

Policies

Risk Overlays

Other Overlays

Map Dashboard Batch

Risk Insight

Map Satellite OS Colour OS Grey

© 2012 Europa Technologies, JBA Risk Management. Contains Ordnance Survey data © Crown copyright and database right 2012

Risk Insight v0.1 © 2012 Europa Technologies Ltd.
Contains Ordnance Survey data © Crown copyright and database right 2012
Flood data: © JBA Management Ltd. 2008-2012

Located: 112 Yew Tree Lane, Liverpool, L12 9HW, United Kingdom

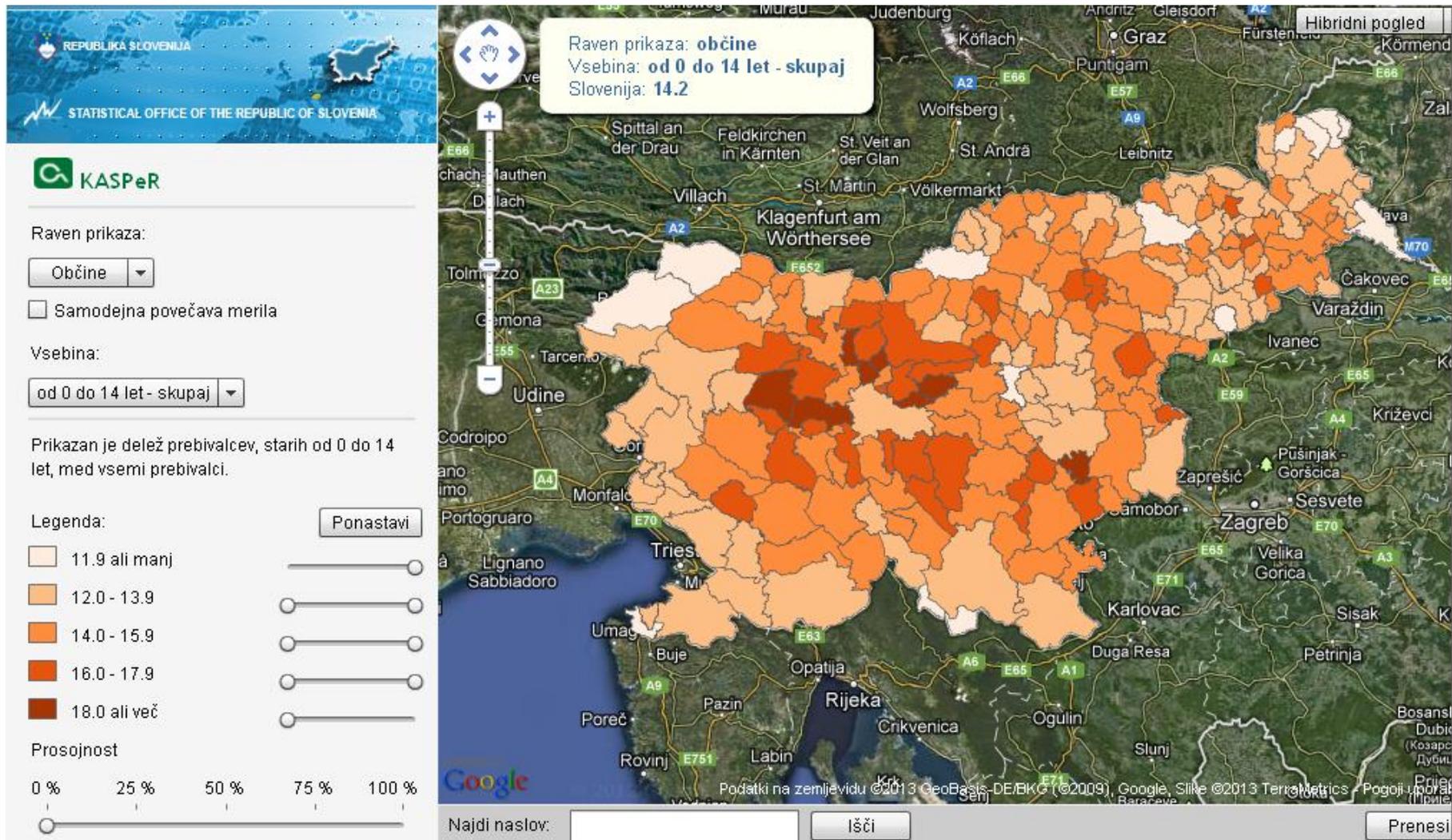
ELF EUROPEAN LOCATION FRAMEWORK

Messages

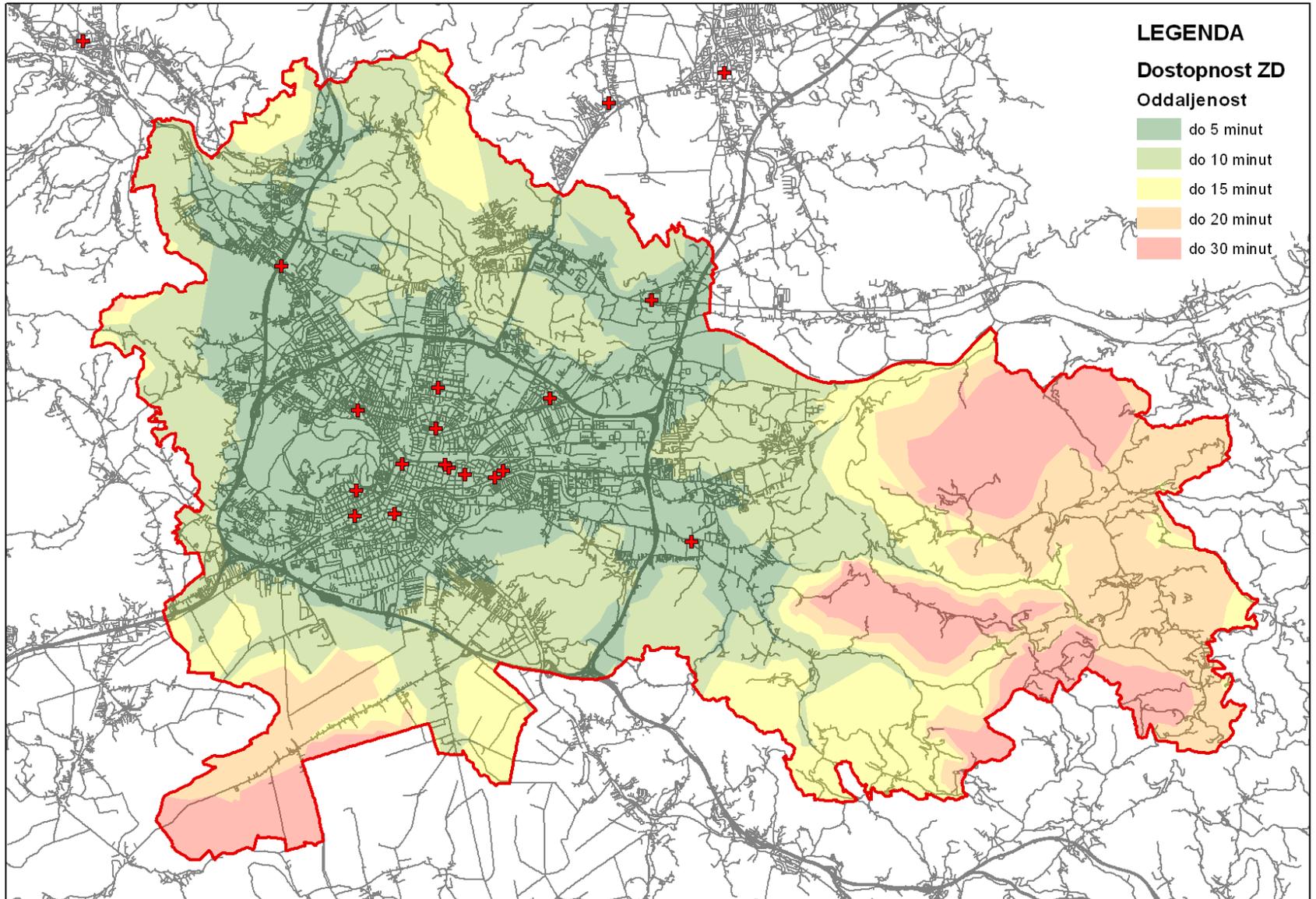
Développer et étendre les applications métier

- **Statistiques santé (Geonovum + SLO)**
 - Problèmes santé sont liés à la localisation et la répartition spatiale
 - Lieu: site géographique, région ou grille statistique
 - Fournir un système géospatial d'indicateurs de la santé
 - Connectez des données santé aux données spatiales
 - En utilisant OGC « Table Joining Service »

Visualisation de l'occurrence d'une maladie



Quelle est la distance à l'hôpital le plus proche?

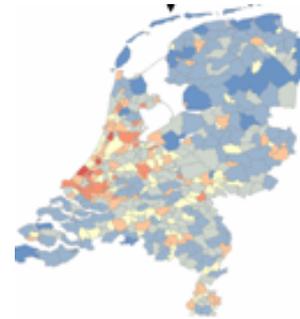


Développer et étendre les applications métier

- Immobilier (WirelessInfo)
 - Planification urbaine
 - Infrastructure Tpt, régionales, urbaines et plans zonaux
 - Connectez des données non-géospatiales aux données spatiales
 - Challenges:
 - Qualité des données / la fiabilité et la disponibilité des données
 - E.L.F. amènerait
 - La généralisation des données et « edge-matching »

Introduction « Table Join Service »

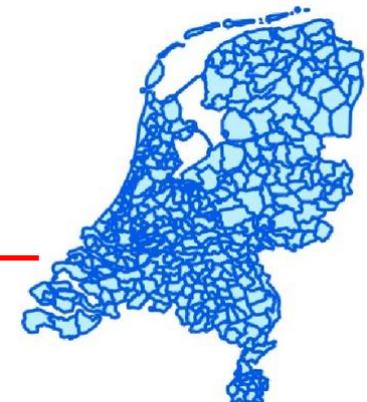
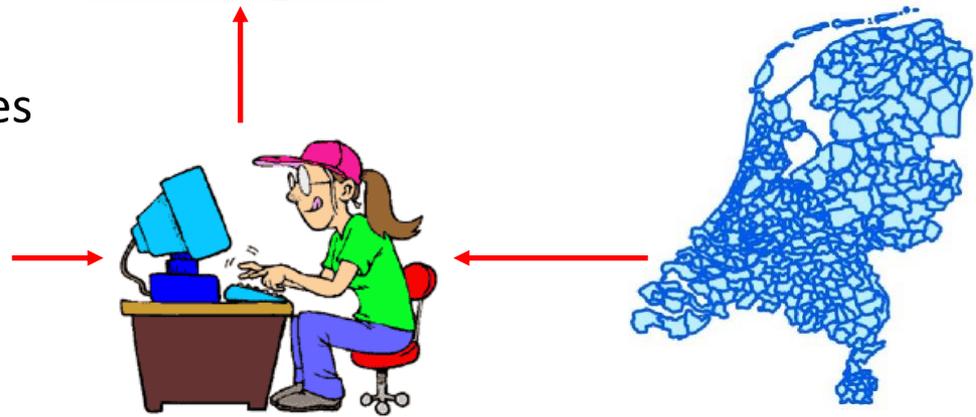
applications



Données spatiales

Données tabulaires

pc4	wpld	woonplaats	adressen	gemeente
5371	3254	Ravenstein	1469	Oss
5371	3256	Deursen-Dennenburg	231	Oss
5371	3257	Huisseling	183	Oss
5371	3263	Overlangel	187	Oss
5371	3259	Dieden	79	Oss
5371	3262	Neerloon	78	Oss
5371	3260	Demmen	74	Oss
5371	3261	Neerlangel	28	Oss
5371	3264	Keent	22	Oss



Introduction « Table Join Service »

applications



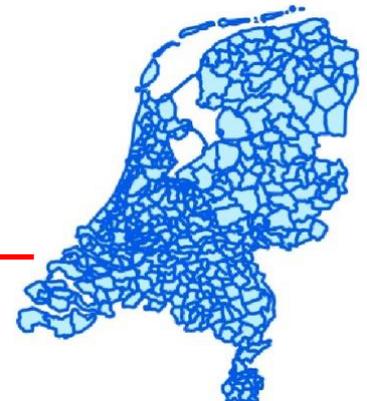
Données spatiales

Données tabulaires

pc4	wpld	woonplaats	adressen	gemeente
5371	3254	Ravenstein	1469	Oss
5371	3256	Deursen-Dennenburg	231	Oss
5371	3257	Huisseling	183	Oss
5371	3263	Overlangel	187	Oss
5371	3259	Dieden	79	Oss
5371	3262	Neerloon	78	Oss
5371	3260	Demmen	74	Oss
5371	3261	Neerlangel	28	Oss
5371	3264	Keent	22	Oss

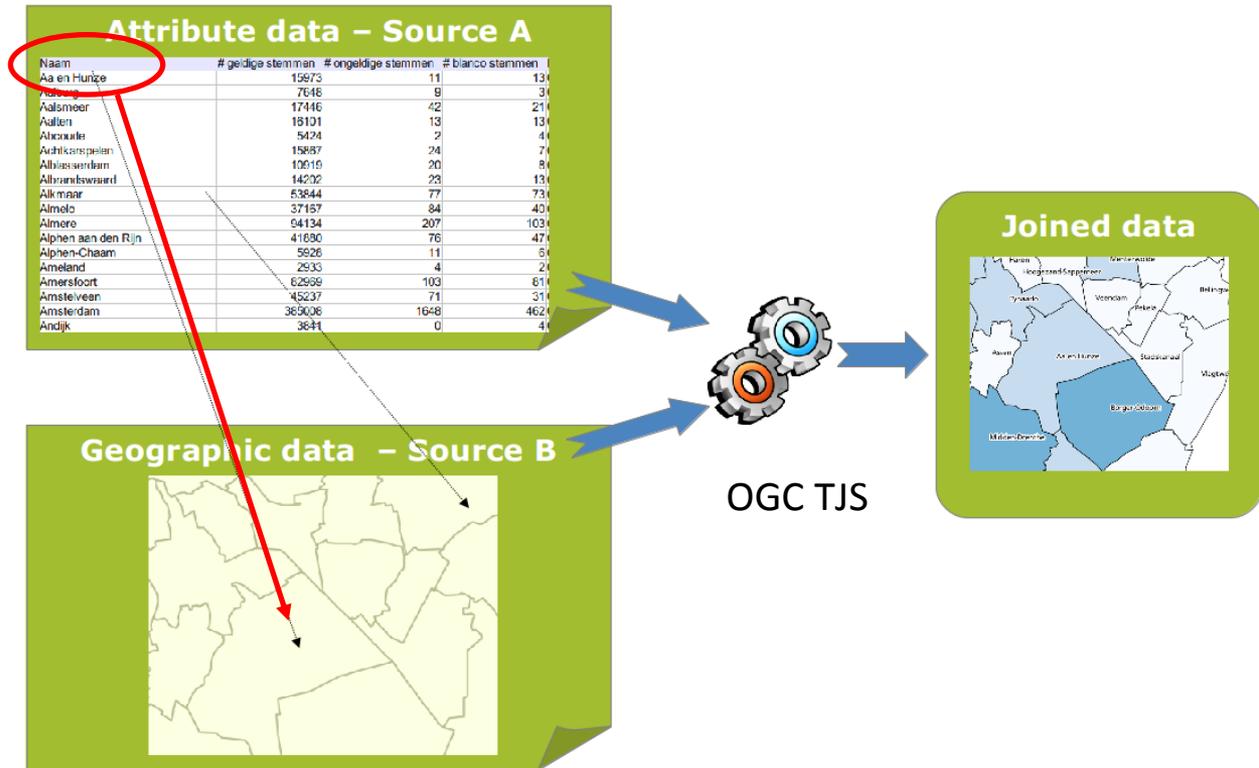


TJS

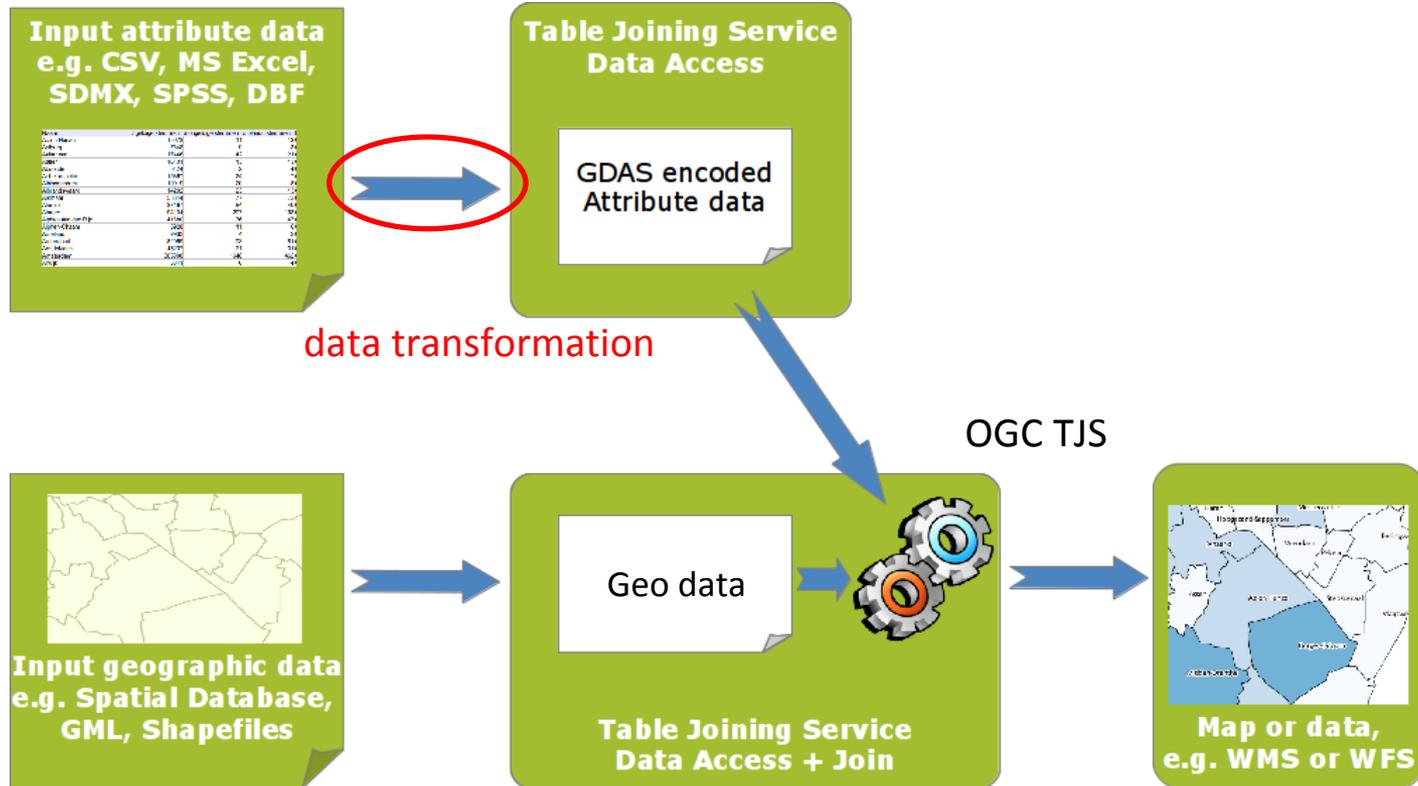


TJS et id uniques (clefs)

**Clefs
uniques**

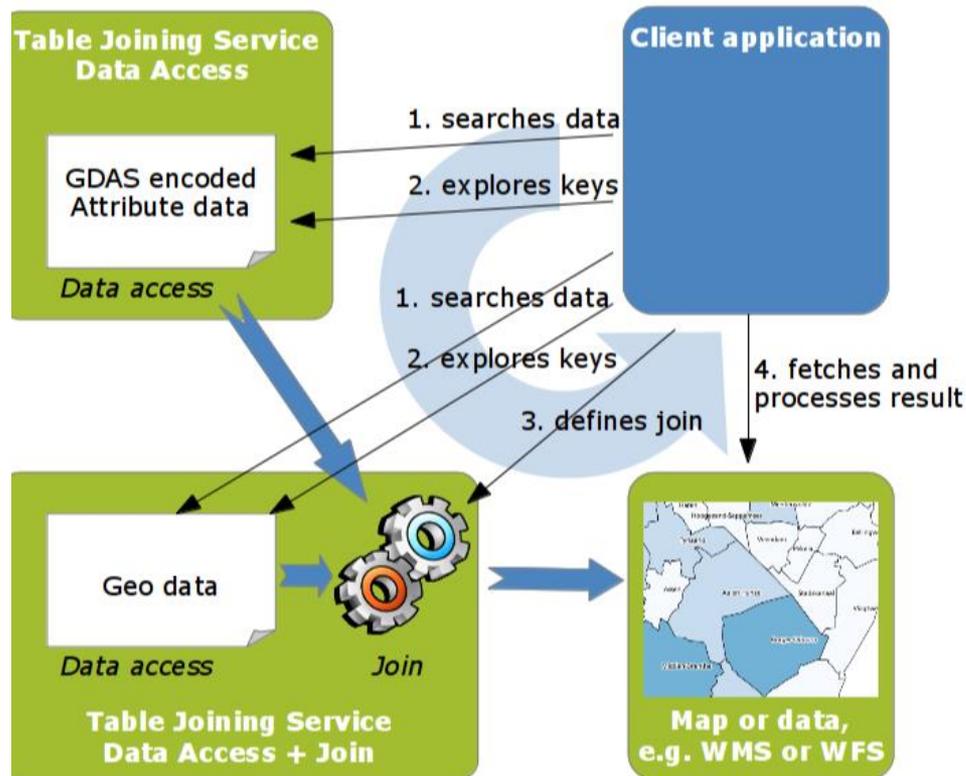


TJS et le format GDAS (XML)



Application client et opérations TJS

Données tabulaires



Données géospatiales

Operations TJS

Service Discovery

- GetCapabilities

Data Access

- DescribeFrameworks
- DescribeDatasets
- DescribeData
- GetData

Data Joining

- DescribeJoinAbilities
- DescribeKey
- JoinData

Health Statistics Data Tables (EuroStat)

One Reference Geo-Information Source for Europe

APPLICATIONS MENU

Overview

Health Statistics

Real Estate

Insurance

Emergency Mapping

SEARCH

Health Statistics



As an example of the ELF in action, this part of the project, led by the Geodetic Institute of Slovenia and Kadaster of Netherlands will develop an application for visualising geo-statistics and providing the basis of a geo-statistical reference framework, dealing specifically with the INSPIRE theme of Human Health and Safety.

Human health analysis starts with information on the geographical distribution of such areas as allergies, cancers, and respiratory diseases. For this purpose, health data from environmental, health or statistical agencies will be linked to administrative and/or statistical units using the ELF platform as the authoritative reference of geo-information.

UPCOMING EVENTS

European Forum for Geostatistics

Sofia, Bulgaria
Wednesday, October 23, 2013 to Friday, October 25, 2013

Esri EMEA User Conference

Munich, Germany
Wednesday, October 23, 2013 to Friday, October 25, 2013

TWITTER

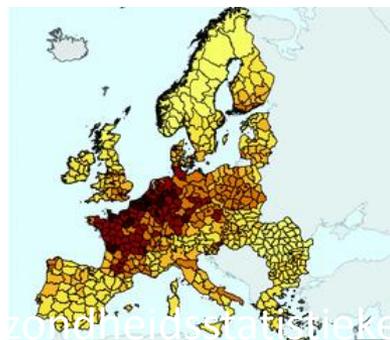
Tweets

Follow

ELF Project 28 Aug
@ELFProjectEU

Presentation of the ELF - European Location Framework on [@slideshare](#) [slideshare.net/ajakobsson](#) at #iccDD2013 via [@AnttiJakobsson](#)

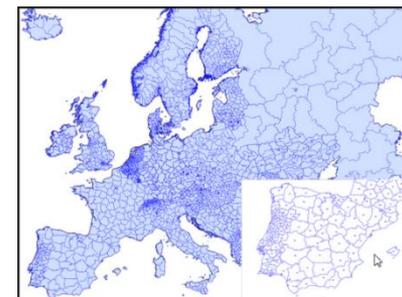
European Regional Health Statistics (EuroStat)



pc4	wpld	woonplaats	adressen	gemeente
5371	3254	Ravenstein	1469	Oss
5371	3256	Deursen-Dennenburg	231	Oss
5371	3257	Huisseiling	188	Oss
5371	3263	Overlangel	187	Oss
5371	3259	Dieden	79	Oss
5371	3262	Neerloon	78	Oss
5371	3260	Demen	74	Oss
5371	3261	Neerlangel	28	Oss
5371	3264	Keent	22	Oss



TJS



EuroboundaryMap

Eurostat's health statistics (>300 tables)

Regional Health Statistics (EuroStat)

The screenshot displays the Eurostat website interface for Regional Health Statistics. The top navigation bar includes the European Commission logo, the Eurostat logo with the tagline "Your key to European statistics", and a search bar. The main content area is divided into several sections:

- Home / Statistics:** A navigation bar with "Home" and "Statistics" buttons.
- Statistics by theme:** A list of categories including "Statistics A - Z" and "Browse / Search database".
- Search and Navigation:** A section titled "Browse / Search Database" with a search input field and a "Search in tree" button. Below it, a "Navigation tree" shows a hierarchical structure of data categories.
- Data Navigation:** A section titled "Data Naviga" with a "Here" link and a "Database I" button.
- General and Regional Data:** A section titled "General" with a "Euro" button and a "Regio" button. Below it, a list of regional data categories is shown, including "Re" (Region) and "Re" (Region).

The right-hand side of the page displays a detailed list of regional health statistics, organized into two main categories:

- Regional health statistics (reg_hlth)**
 - Causes of death (reg_hlth_cdeath)**
 - Causes of death by NUTS 2 regions - crude death rate per 100 000 inhabitants - annual data (hlth_cd_acdr)
 - Causes of death by NUTS 2 regions - absolute Number, 3 years average - total (hlth_cd_ynrt)
 - Causes of death by NUTS 2 regions - absolute Number, 3 years average - males (hlth_cd_ynrm)
 - Causes of death by NUTS 2 regions - absolute Number, 3 years average - females (hlth_cd_ynrf)
 - Causes of death by NUTS 2 regions - crude death rate per 100 000 inhabitants, 3 years average - total (hlth_cd_ycdrt)
 - Causes of death by NUTS 2 regions - crude death rate per 100 000 inhabitants, 3 years average - males (hlth_cd_ycdrm)
 - Causes of death by NUTS 2 regions - crude death rate per 100 000 inhabitants, 3 years average - females (hlth_cd_ycdrf)
 - Causes of death by NUTS 2 regions - standardised death rate per 100 000 inhabitants, 3 years average (hlth_cd_ysdr1) (Important note)
 - Health care: resources and patients (non-expenditure data) (reg_hlth_care)**
 - Health personnel by NUTS 2 regions (hlth_rs_prsrg)
 - Hospital beds by NUTS 2 regions (hlth_rs_bdsrg)
 - Hospital discharges by diagnosis and NUTS 2 regions, in-patients, total number - total (hlth_co_disch1t)
 - Hospital discharges by diagnosis and NUTS 2 regions, in-patients, total number - males (hlth_co_disch1m)
 - Hospital discharges by diagnosis, NUTS 2 regions, in-patients and total number - females (hlth_co_disch1f)
 - Hospital discharges by diagnosis and NUTS 2 regions, in-patients, per 100 000 inhabitants - total (hlth_co_disch2t)
 - Hospital discharges by diagnosis and NUTS 2 regions, in-patients, per 100 000 inhabitants - males (hlth_co_disch2m)
 - Hospital discharges by diagnosis and NUTS 2 regions, in-patients, per 100 000 inhabitants - females (hlth_co_disch2f)
 - Hospital discharges by diagnosis and NUTS 2 regions, day cases, total number - total (hlth_co_disch3t)
 - Hospital discharges by diagnosis and NUTS 2 regions, day cases, total number - males (hlth_co_disch3m)
 - Hospital discharges by diagnosis and NUTS 2 regions, day cases, total number - females (hlth_co_disch3f)
 - Hospital discharges by diagnosis and NUTS 2 regions, day cases, per 100 000 inhabitants - total (hlth_co_disch4t)
 - Hospital discharges by diagnosis and NUTS 2 regions, day cases, per 100 000 inhabitants - males (hlth_co_disch4m)
 - Hospital discharges by diagnosis and NUTS 2 regions, day cases, per 100 000 inhabitants - females (hlth_co_disch4f)
 - In-patient average length of stay (days) by NUTS 2 regions - total (hlth_co_inpstt)
 - In-patient average length of stay (days) by NUTS 2 regions - males (hlth_co_inpstm)
 - In-patient average length of stay (days) by NUTS 2 regions - females (hlth_co_inpstf)

Formats Input & Output

Tabular data

Regional health statistics
(EuroStat)

Input: SDMX REST API

Spatial framework data

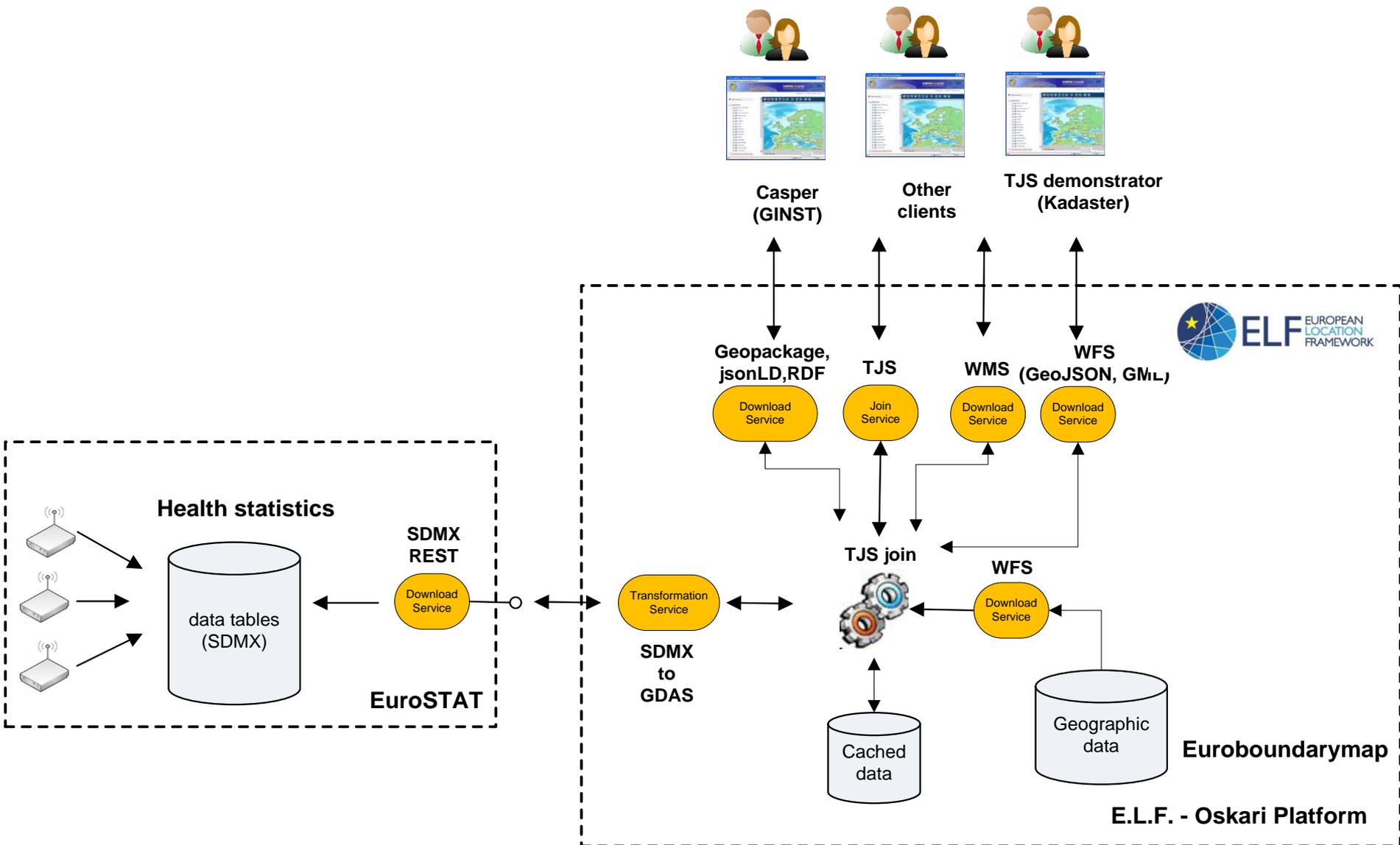
Euroboundarymap
(EuroGeographics)

Input: WFS

TJS-based joined data Output

WMS, WFS (GeoJSON, GML), Geopackage, JSONLD, RDF

Architecture: déploiement final



Une petite démo?

- <http://213.136.91.254/tjs/>

Merci

- bdelathouwer [at] opengeospatial.org

