INSPIRE IMPLEMENTATION ON METROPOLITAN LEVEL – CASE STUDY: MUNICIPALITY OF THESSALONIKI

Simos Misirloglou

INSPIRE CONFERENCE 2014 - Aalborg

ΔΗΜΟΣ ΘΕΣΣΑΛΟΝΙΚΗΣ

Starting Point of the Technology in MoT…

The initial project was regarded the *« Development of a GIS in the Municipality of Thessaloniki »* and the main purpose was the upgrade of the geospatial information and service to the citizens by means of web services and technologies such as Web Gis.

Next …

Where is Municipality of Thessaloniki …

- 790,824 citizens – 2011
- 2nd Municipality of Greece - after Athens
- 541,957 users of GIS, from 1/1/2009 – 12/6/2014
- 42,06 % new users
- A big interest for geodata – think of new approach by means of GIS/SDI platform.

Municipality of Thessaloniki (MoT)

ΔΗΜΟΣ ΘΕΣΣΑΛΟΝΙΚΗΣ

G.I.S. Municipality of Thessaloniki (2009)

1st Apps
Apps for Digital Urban Planning.

2nd Apps
Apps for Acts Settling

3rd Apps
Apps for Tour Guide.

4th Apps
Apps for Acts Adjustment

5th Apps
Apps for Building Conditions and Land Use.

Municipality of Thessaloniki (MoT)

ΔΗΜΟΣ ΘΕΣΣΑΛΟΝΙΚΗΣ

Among other applications that was created since 2009

Mobile GIS (smart phones)

Internal GIS for several purposes

(2009)

.

.

.

(present day)

Thus, the MoT has become creator, owner and user of a large amount of geospatial datasets.

ΔΗΜΟΣ ΘΕΣΣΑΛΟΝΙΚΗΣ

Data Sets such as …

- Coordinate Systems
- Municipal Boundaries
- Cadastre Parcels
- Street names
- Transportation Net
- Orthophotos
- Buildings
- Land Uses

etc ….

ΔΗΜΟΣ ΘΕΣΣΑΛΟΝΙΚΗΣ

Mobile GIS for smart phones

Link for iOs

http://phobos.apple.com/WebObjects/MZStore.woa/wa/viewSoftware?id=547388095

Link for Android

https://play.google.com/store/apps/details?id=gr.thessaloniki.mobilegis

ΔΗΜΟΣ ΘΕΣΣΑΛΟΝΙΚΗΣ

INSPIRE first thoughts …

In order to address

- administrative,
- urban planning and
- environmental issues,
- increase government transparency and accountability,

the MoT has been an early adaptor of open data initiative.

ΔΗΜΟΣ ΘΕΣΣΑΛΟΝΙΚΗΣ

INSPIRE thoughts …

The adoption of the INSPIRE's provisions has become more than a necessity, in order to serve,

- public (citizens, public authorities, private sector) demand.

Additionally, the Greek regulatory framework for the generation, management, and dissemination of geospatial information (Law No.3882/2010) mandates the Directive's implementation.

INSPIRE – Municipality of Thessaloniki (MoT)

ΔΗΜΟΣ ΘΕΣΣΑΛΟΝΙΚΗΣ

- **Use:**
  - **Open standards,**
  - **Incorporating all the components of a typical SDI (data, services, metadata, data & service sharing, monitoring & reporting),**
  - **Municipality users' needs**

- **Development is entirely based on Free and Open Source Software (FOSS) and an open (multi-tiered) architecture approach.**

- **Sixty (60) datasets.**

ΔΗΜΟΣ ΘΕΣΣΑΛΟΝΙΚΗΣ

- Open standards.

- Municipality of Thessaloniki's internal procedures on the management of geospatial information are restructured

- The System is enriched with sophisticated tools.

- The implementation of the SDI, as a Service Oriented Architecture (SOA), followed the Waterfall model, involving:

  - User requirement capture and analysis
  - Development of the metadata system
  - Data preparation
  - Development of network services
  - Implementation of the GeoPortal
  - Data uploading and deployment of services.
  - Development of reporting and monitoring mechanisms.

ΔΗΜΟΣ ΘΕΣΣΑΛΟΝΙΚΗΣ

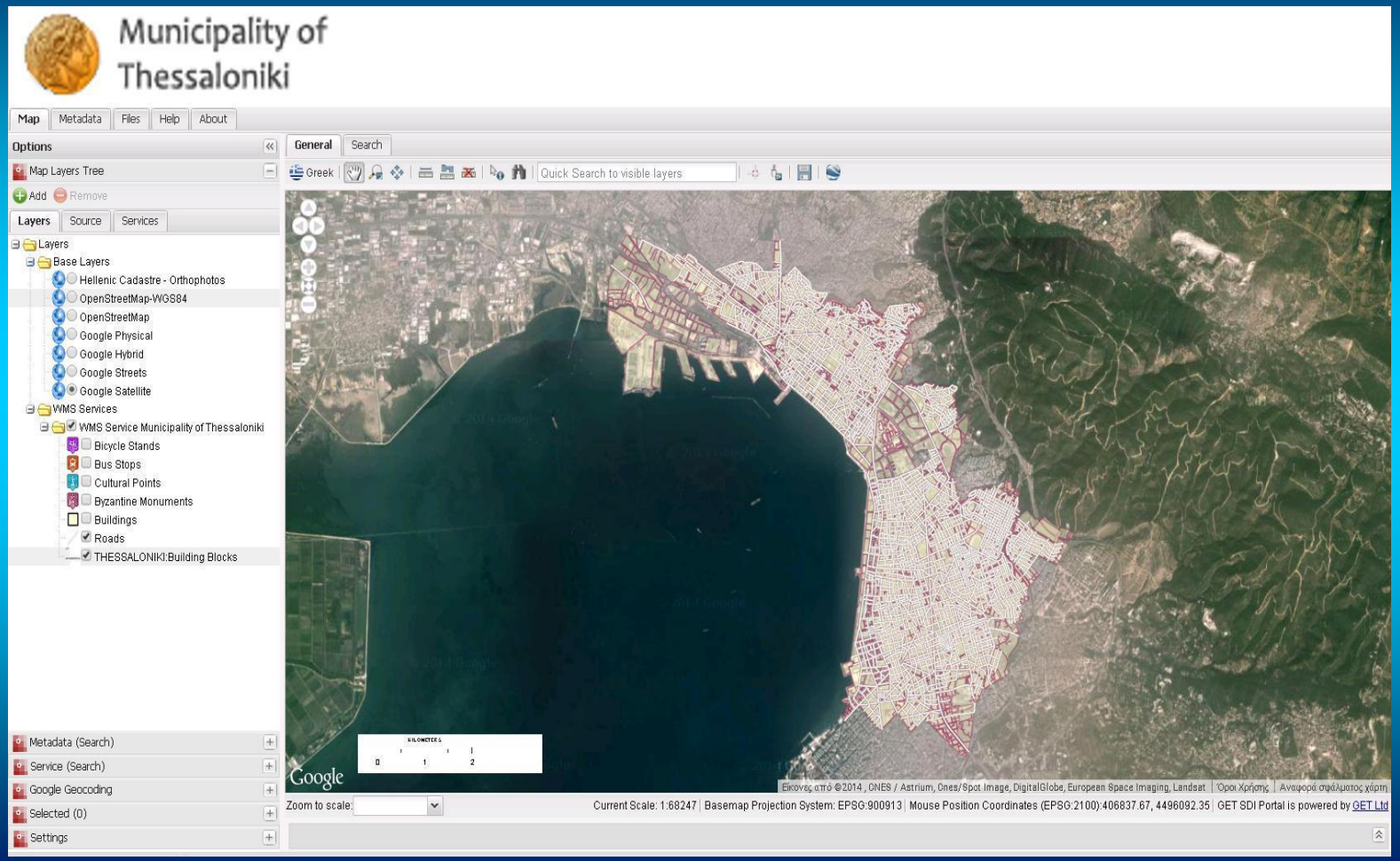
- The development of the Geospatial Map is based on the GET SDI Portal ® (FOSS), which was developed and is distributed by GET Ltd under the General Public License v3.

- Main features of the application are:

  - Visualisation of Municipality of Thessaloniki's and third-party organisations' geospatial data
  - Search for specific Municipality of Thessaloniki geospatial information, based on either spatial criteria or their business logic.
  - Discovery of data and services using Municipality of Thessaloniki's and third-party organisations' metadata catalogues.

ΔΗΜΟΣ ΘΕΣΣΑΛΟΝΙΚΗΣ

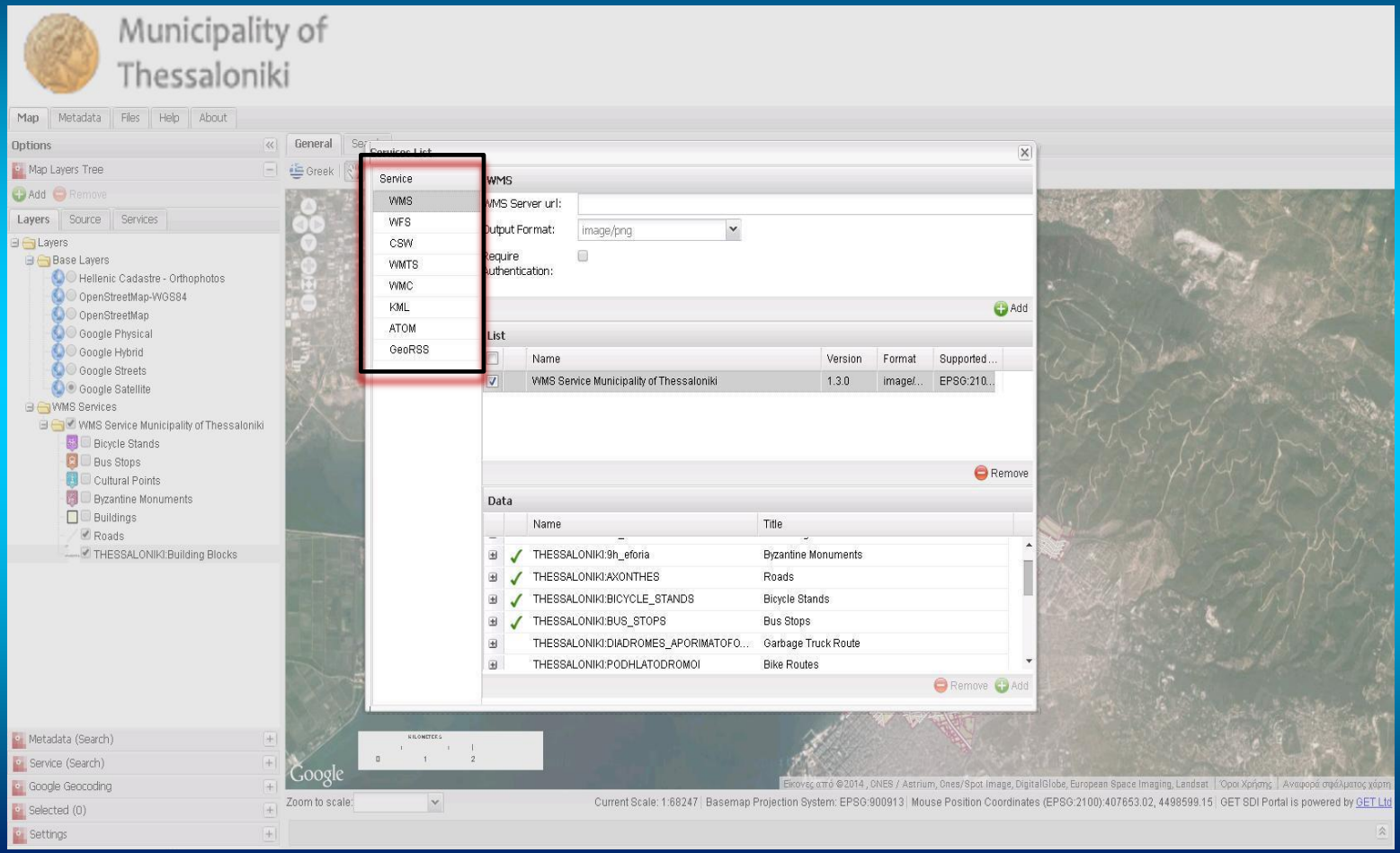
INSPIRE Geospatial Map



INSPIRE – Municipality of Thessaloniki (MoT)

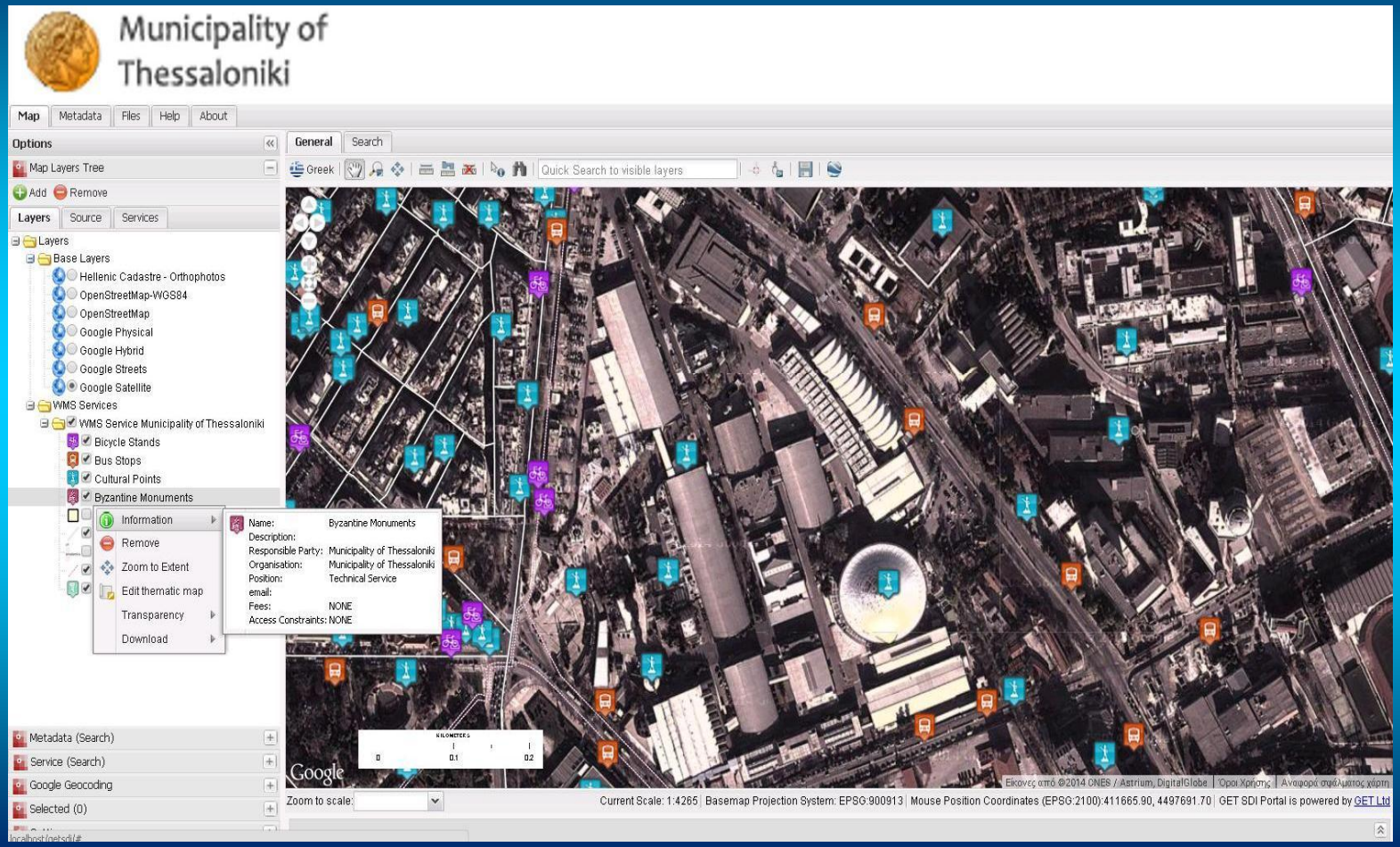
ΔΗΜΟΣ ΘΕΣΣΑΛΟΝΙΚΗΣ

“Web services” developed include: a) Discovery Service, b) View Service, c) Download Service, d) Transformation (CRS)



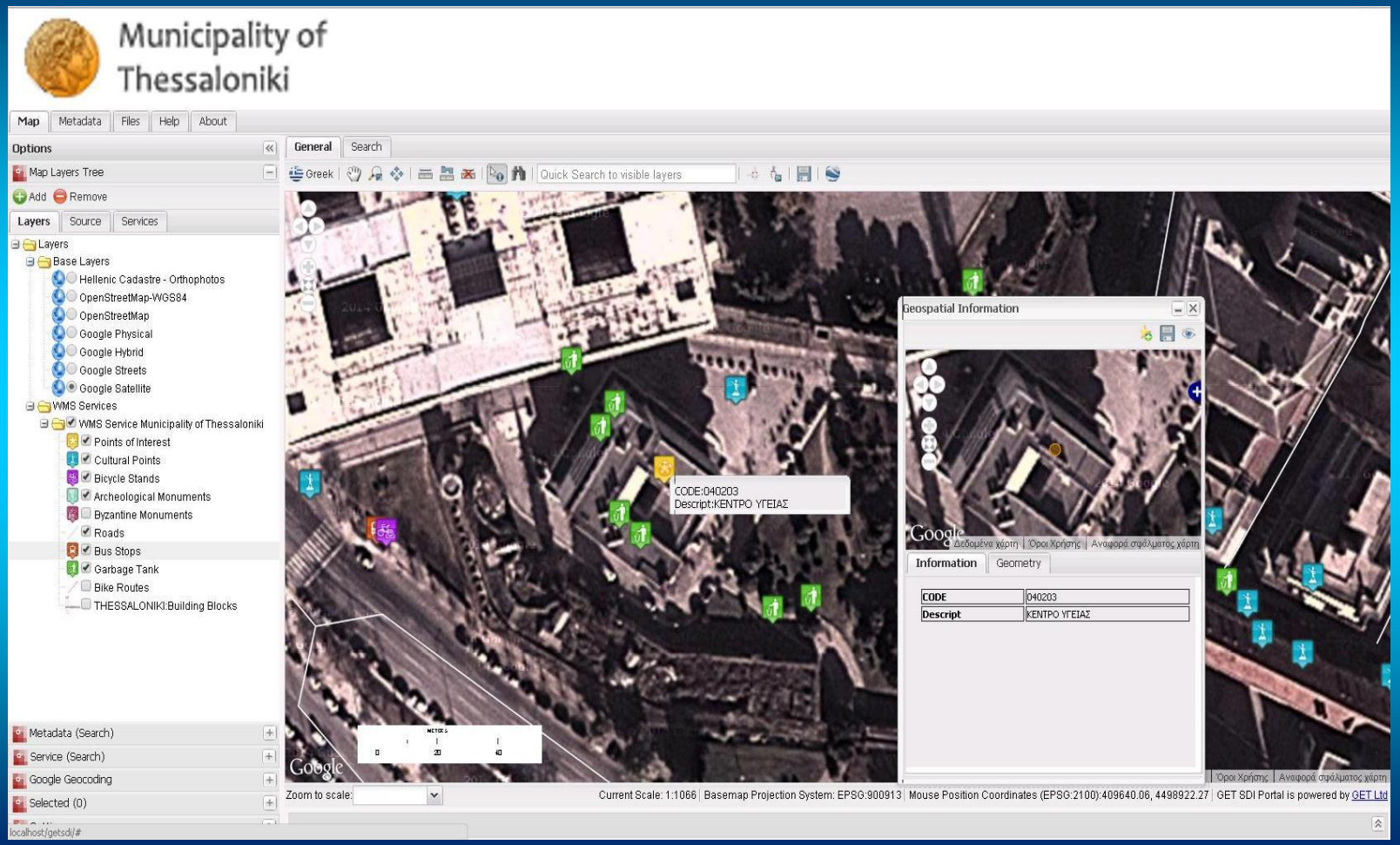
ΔΗΜΟΣ ΘΕΣΣΑΛΟΝΙΚΗΣ

"Information" from WMS Service



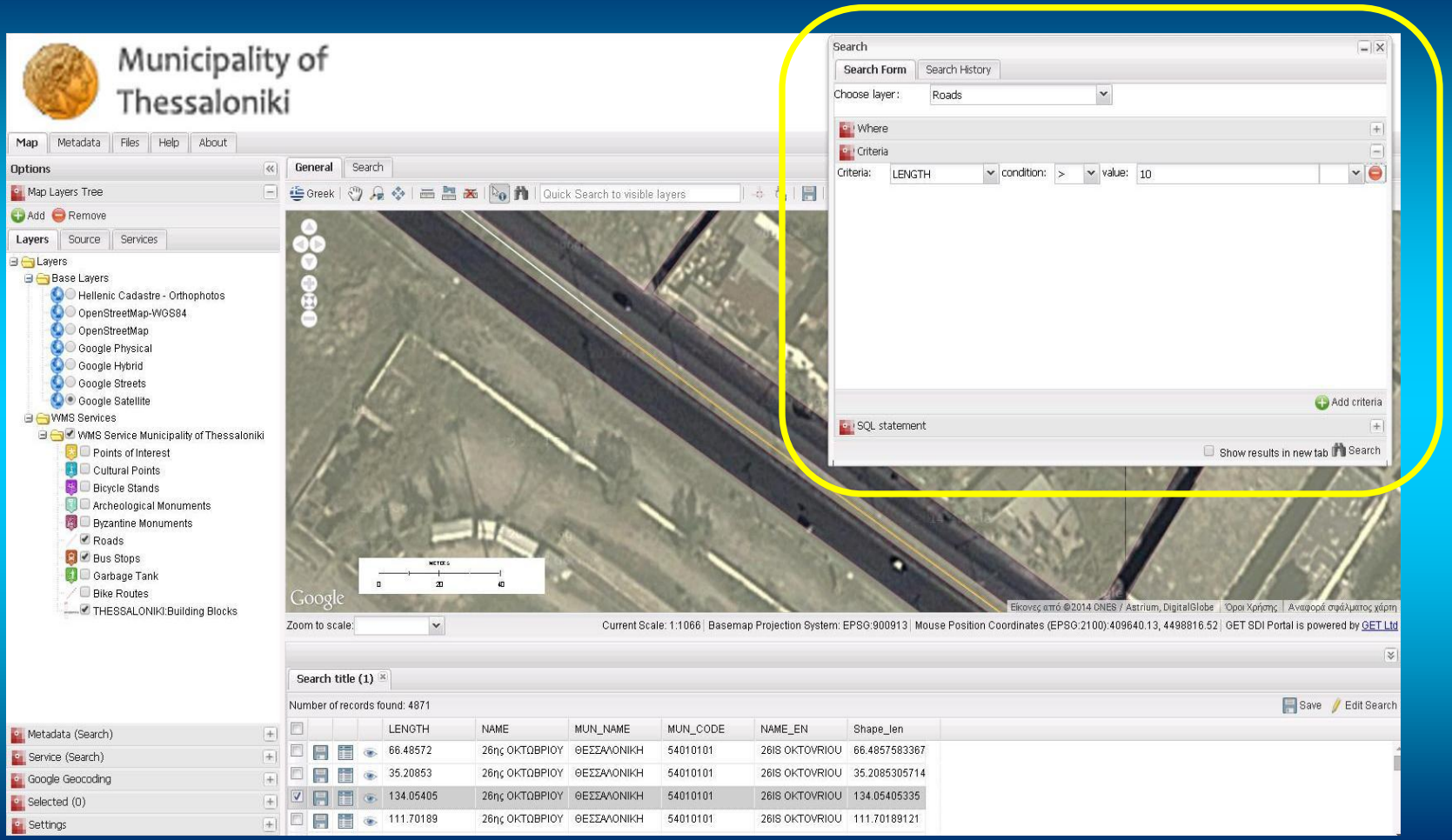
ΔΗΜΟΣ ΘΕΣΣΑΛΟΝΙΚΗΣ

Snap shot from “Geospatial Info”



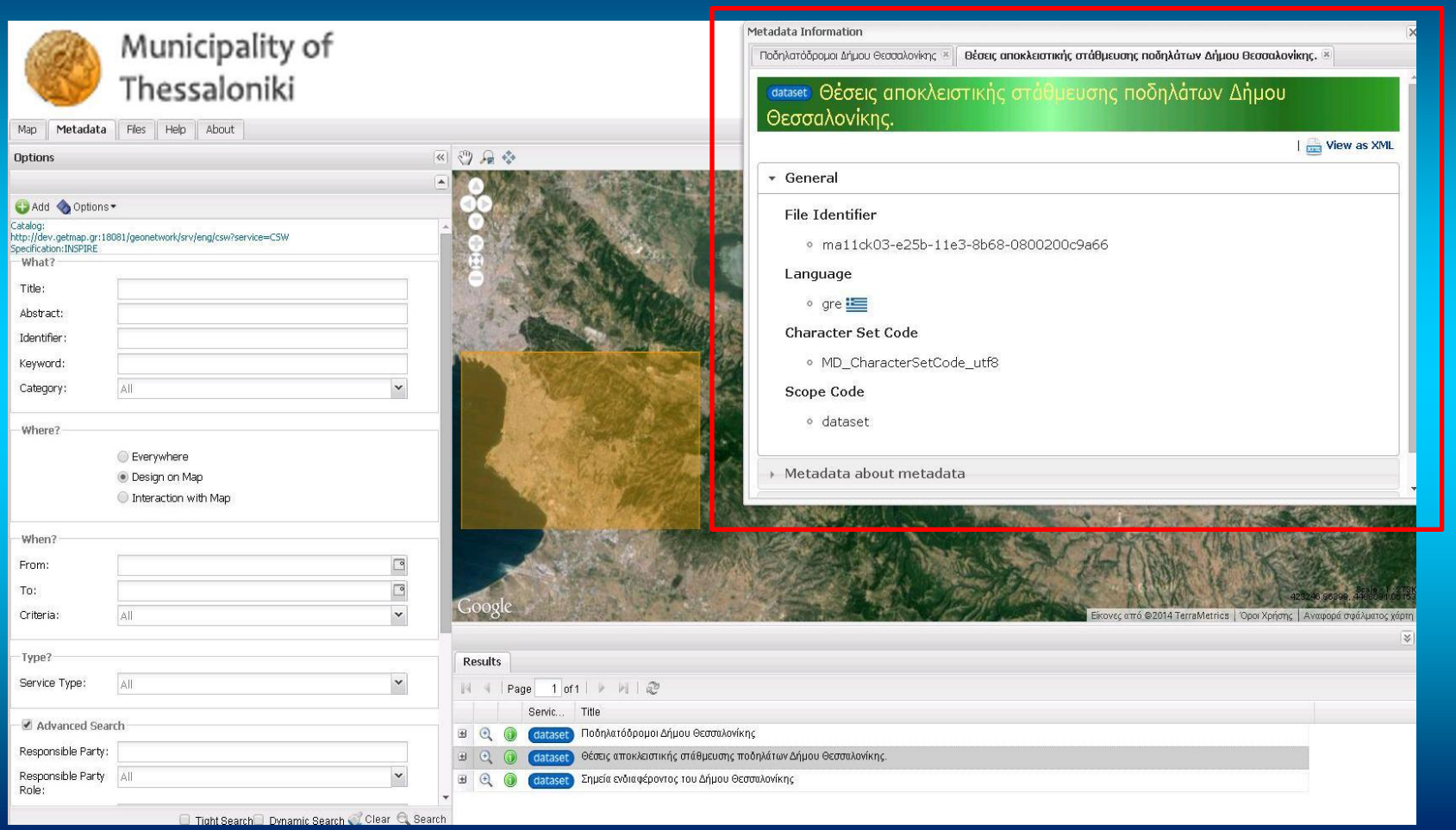
ΔΗΜΟΣ ΘΕΣΣΑΛΟΝΙΚΗΣ

“Search” form



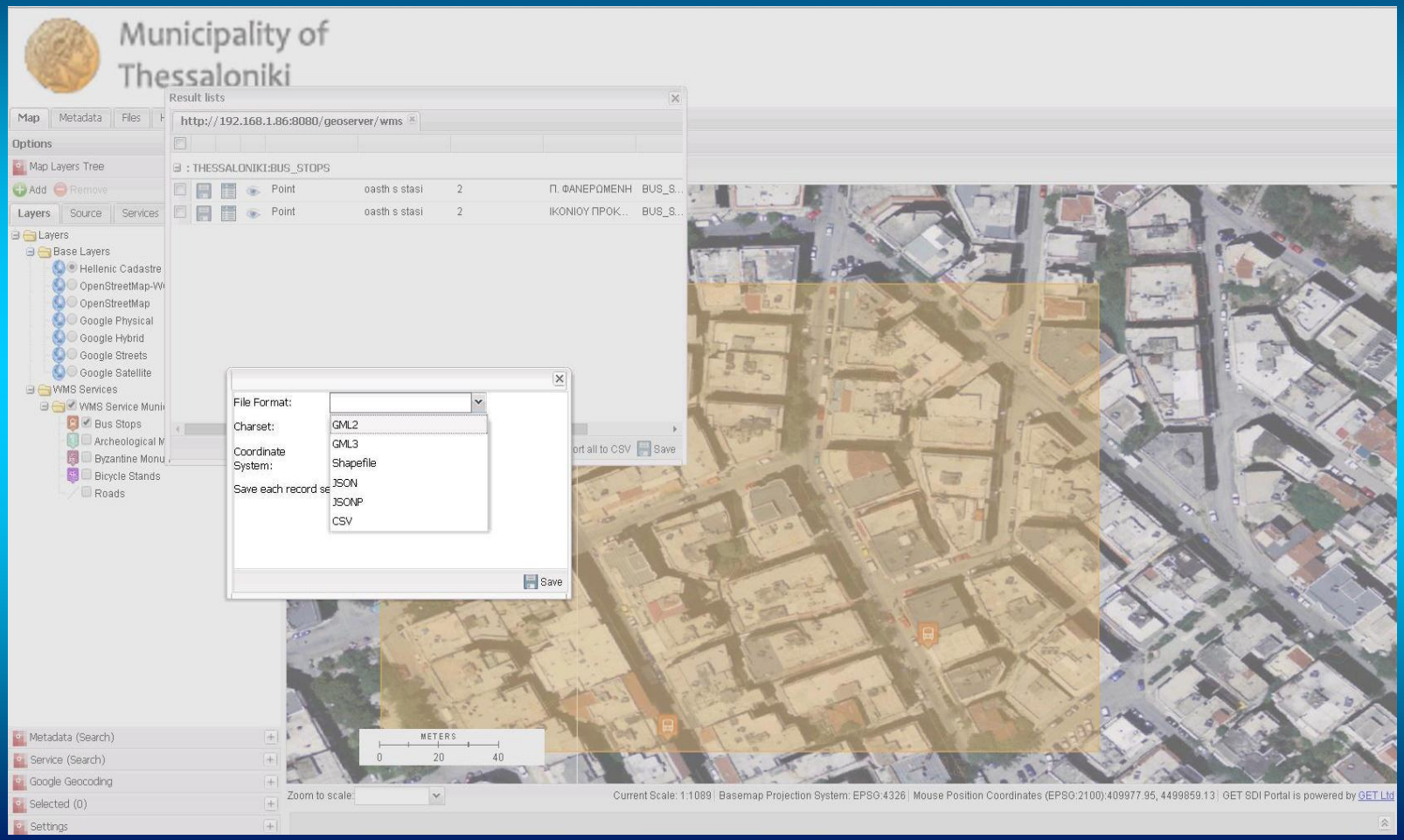
ΔΗΜΟΣ ΘΕΣΣΑΛΟΝΙΚΗΣ

"Metadata" of spots for bicycles parking



ΔΗΜΟΣ ΘΕΣΣΑΛΟΝΙΚΗΣ

“Search and Save” results in order to serve innovative Administrative Operations…..



ΔΗΜΟΣ ΘΕΣΣΑΛΟΝΙΚΗΣ

Some more effort need to be spent:

- Data conformance (scheduled for Q1 2015)
- IT infrastructure reformation and upgrade to serve increasing needs
  - Server consolidation,
  - Transposition to virtual environments for resource saving
  - Cloud services under investigation

but the crucial part has been decided: the willing of the Authority to fulfil that goal.

At the end of the whole project, the geoportal will be appended on the existing Web Gis portal http://gis.thessaloniki.gr, providing a single end point for all geospatial resources

ΔΗΜΟΣ ΘΕΣΣΑΛΟΝΙΚΗΣ

Expectations :

- **Less transactions with physical presence in Municipality**
- **Decrease time of acquiring geospatial data**
- **Increase the possibilities to cooperate with the adjacent Municipalities**

INSPIRE IMPLEMENTATION ON METROPOLITAN LEVEL – CASE STUDY: MUNICIPALITY OF THESSALONIKI

Thank you for your attention