

JOINT RESEARCH CENTER - E&I WORKSHOP

INSPIRATION results and benefits for the Agency for Real Estate Cadastre



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REPUBLIC OF MACEDONIA**

Wednesday, 29 January 2014



Project INSPIRATION

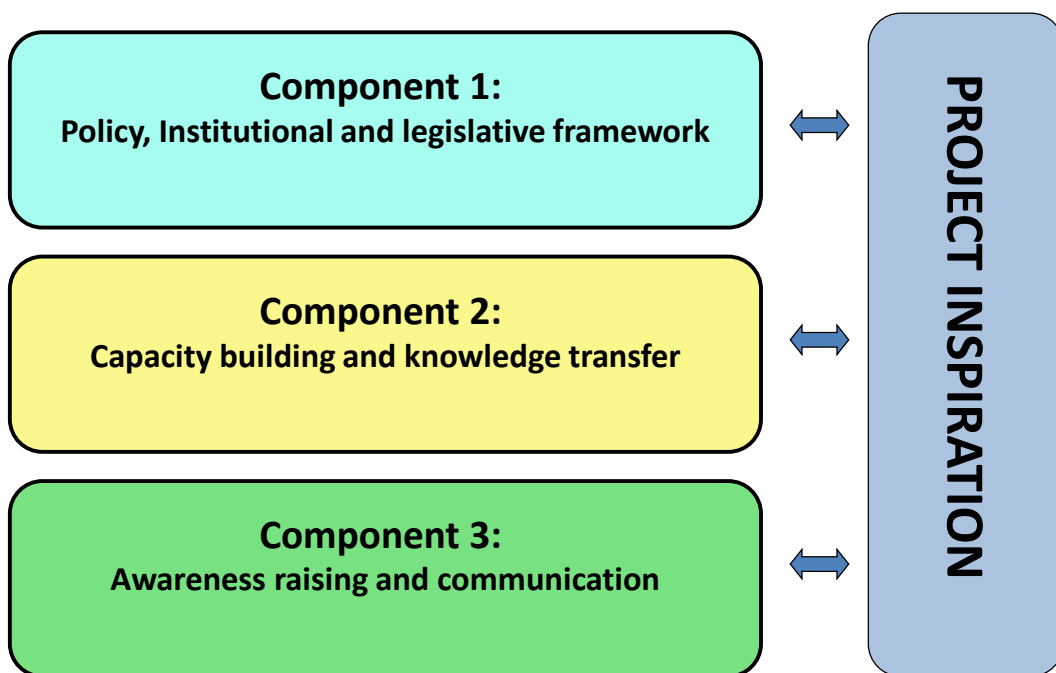
- **AIMS:** To promote Spatial Data Infrastructure (SDI) and further coordinate its implementation in the seven countries from Western Balkans in order to prepare beneficiaries to meet with the objectives of the Inspire Directive

- **BENEFICIARIES:**

- **First beneficiaries:** Cadastral and mapping Agencies in the Balkan region
- **Secondary beneficiaries:** Universities providing education in surveying, geodesy and geomatics; Ministries of Environment;
- **Tertiary beneficiaries:** NSDI stakeholders, e.g. other governmental institutions, especially Ministries of Agriculture (LPIS), Statistical offices, Local authorities, commercial sector, research organizations e.t.c.



Project components



Component 1: Policy, Institutional and legislative framework



2012

- Government of R.M. adopted the information for NSDI strategy
- WG for preparation of NSDI law is established



2013

- preparation of NSDI law
- open debate for NSDI law
- law for NSDI is in adoption procedure



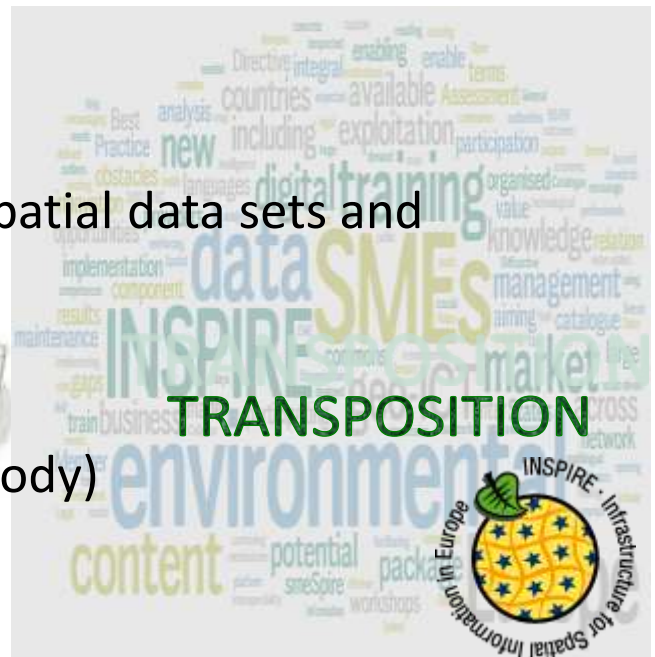
2014

- Government of R.M. adopted the NSDI law

Component 1

NEW NSDI LAW-GENERAL OVERVIEW

- 
- I. General provisions
 - II. Metadata
 - III. Interoperability of spatial data sets and services
 - IV. Network services
 - V. Data-sharing
 - VI. NSDI Governance (body)
 - VII. Final provisions



Component 1

CHAPTER I: GENERAL PROVISIONS



- NSDI (what are the benefits and objectives)
- NSDI (what is to be established, relation with INSPIRE and e-government)
- Guarantee from stakeholders for the **latest version of data sets**
- The law shall apply only to the **reference set**
- The law is also to regulate services which refer to non spatial data included in spatial data sets
- Definitions of general terms (definitions)
- **Sets of data:**
 - conditions to fulfil
 - definitions of thematic scope (Annexes 1,2,3)

Component 1

**ANNEX 1**

- Coordinate reference systems; Geographical grid systems; Geographical names; Administrative units; Addresses; Cadastre parcels; Transport networks; Hydrography; Protected sites.

**ANNEX 2**

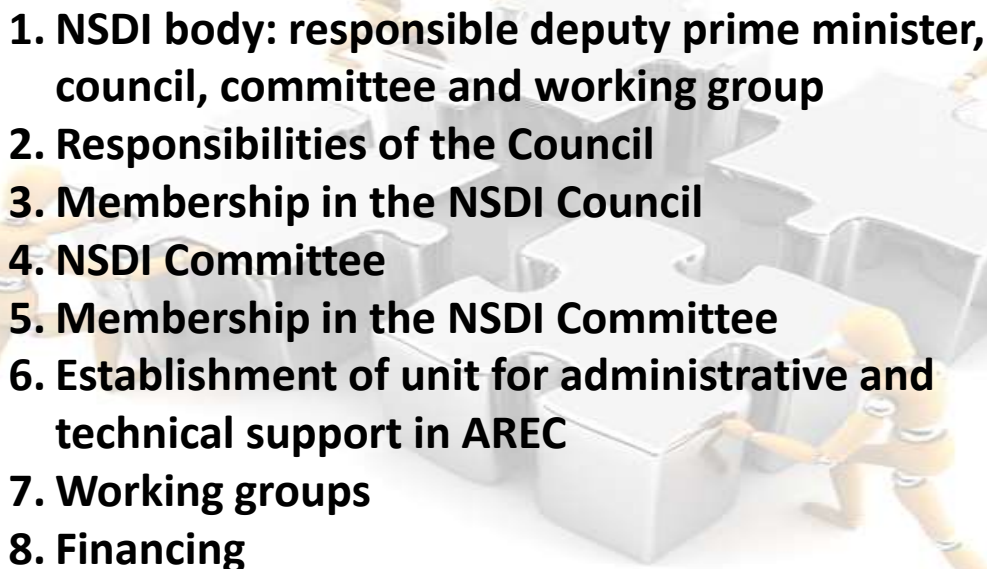
- Elevation;
- Land cover;
- Ortho imagery;
- Geology.

**ANNEX 3**

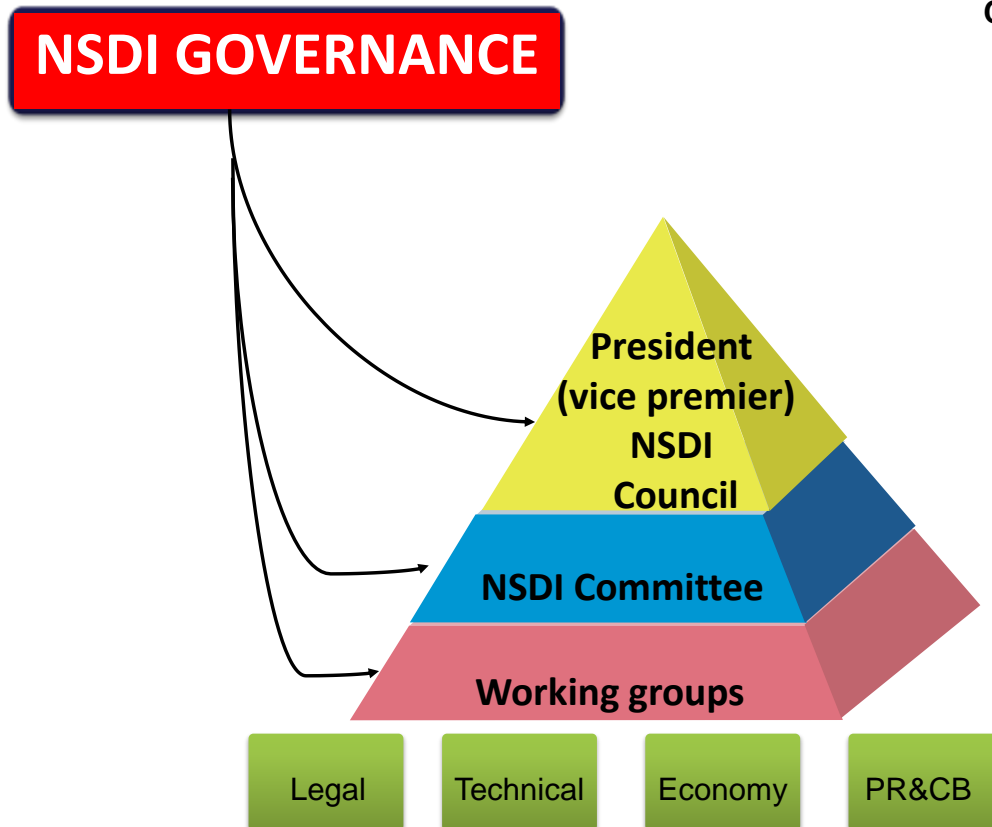
- Statistical units; Buildings; Soil; Land use; Human health and safety; Utility and governmental services; Environmental monitoring facilities; Production and industrial facilities; Agricultural and aquaculture facilities; Population distribution-demography;- Area management/restriction,... units-Natural risk zones; Atmospheric conditions; Metrological geographical features; **Oceanographic geographical features**; **Sea regions**; Bio-geographical regions; Habitats and Biotopes; Species distribution; Energy resources; Mineral resources.

Component 1

CHAPTER VI: NSDI GOVERNANCE (coordination and complementary measures)

- 
- 1. NSDI body: responsible deputy prime minister, council, committee and working group**
 - 2. Responsibilities of the Council**
 - 3. Membership in the NSDI Council**
 - 4. NSDI Committee**
 - 5. Membership in the NSDI Committee**
 - 6. Establishment of unit for administrative and technical support in AREC**
 - 7. Working groups**
 - 8. Financing**

Component 1



Component 2: Capacity building and knowledge transfer

Awarded proposal application

05.03.2013, Regional Conference, Durres, Albania



Component 2

Territorial coverage

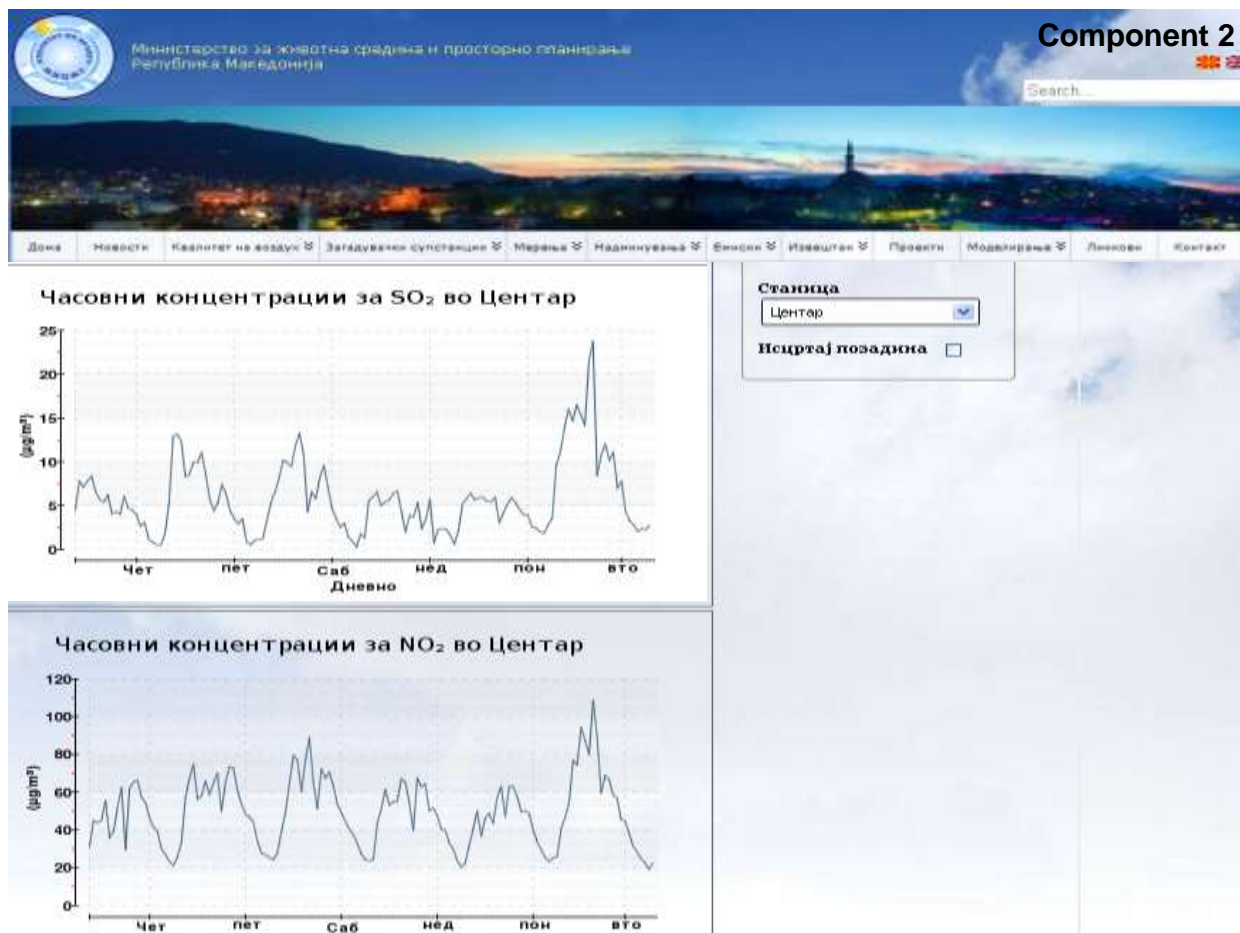


- Most populated region with more than 150 inhabitants per 1 km²
- **The surface area is 1,812 square kilometers, consisted of 17 municipalities**
- Most industrial polluters and high degree of generated waste

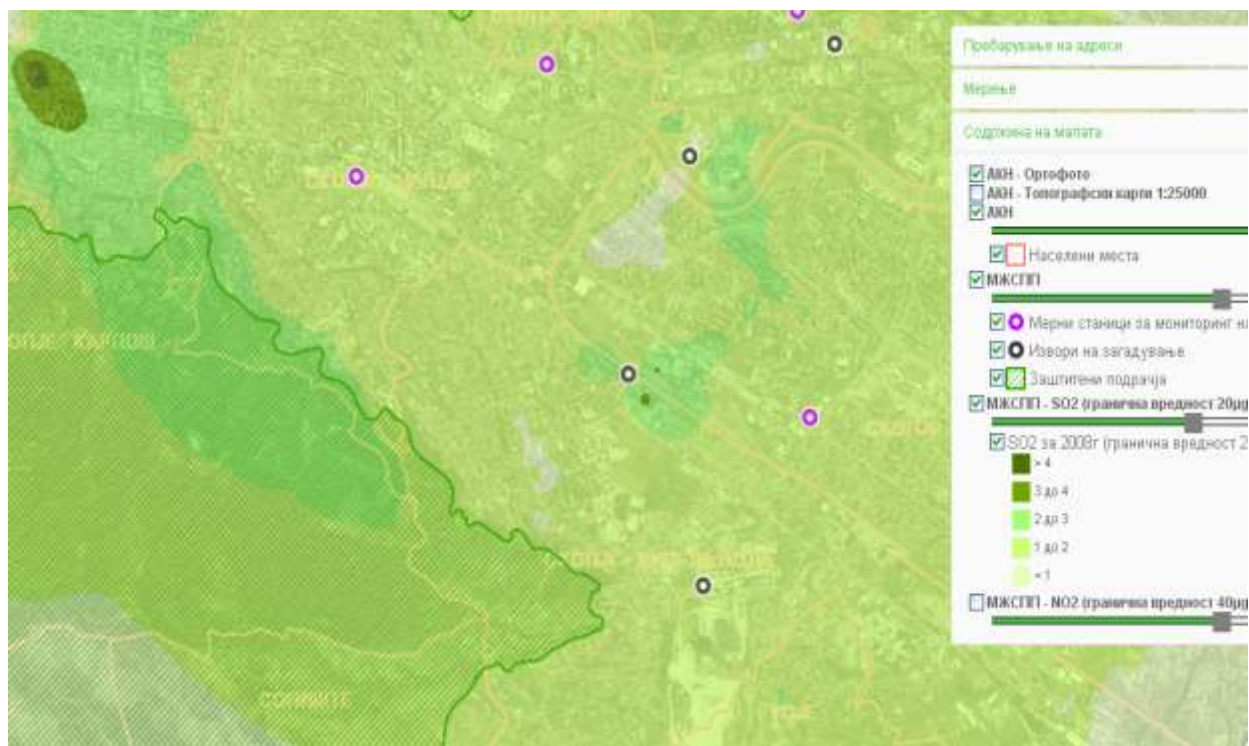


Component 2

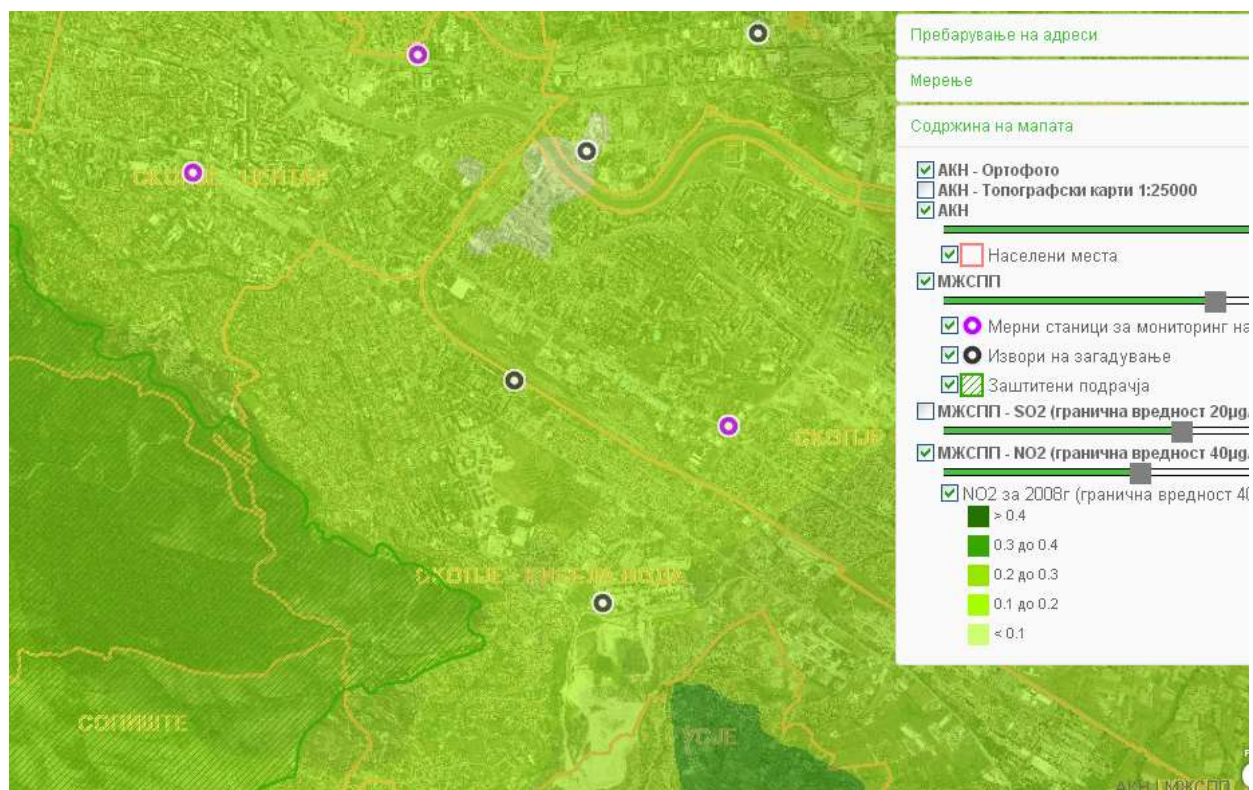
AREC data: ortophoto and administrative units



Component 2

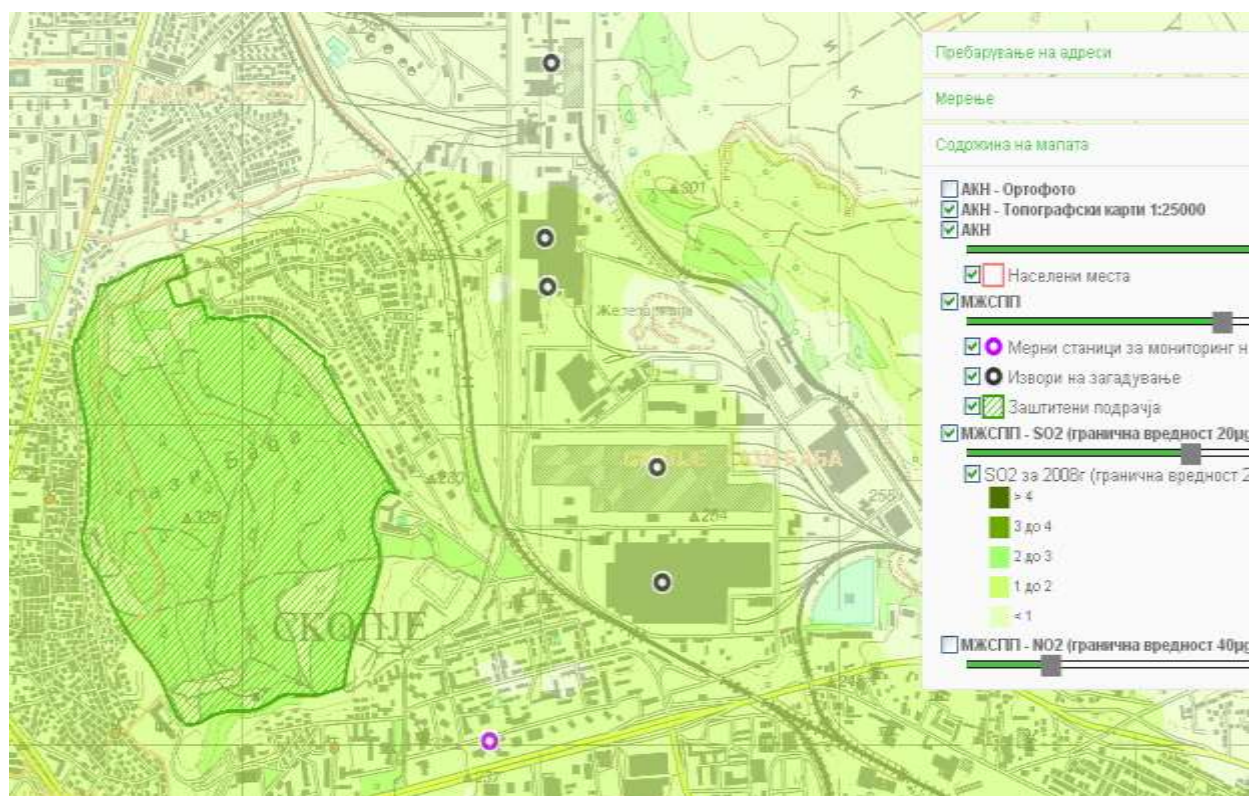
MOEPP data: Sulfur dioxide-SO₂

Component 2

MOEPP data: nitrogen dioxide-NO₂

Component 2

AREC data: topographic maps scale 25000



Component 2

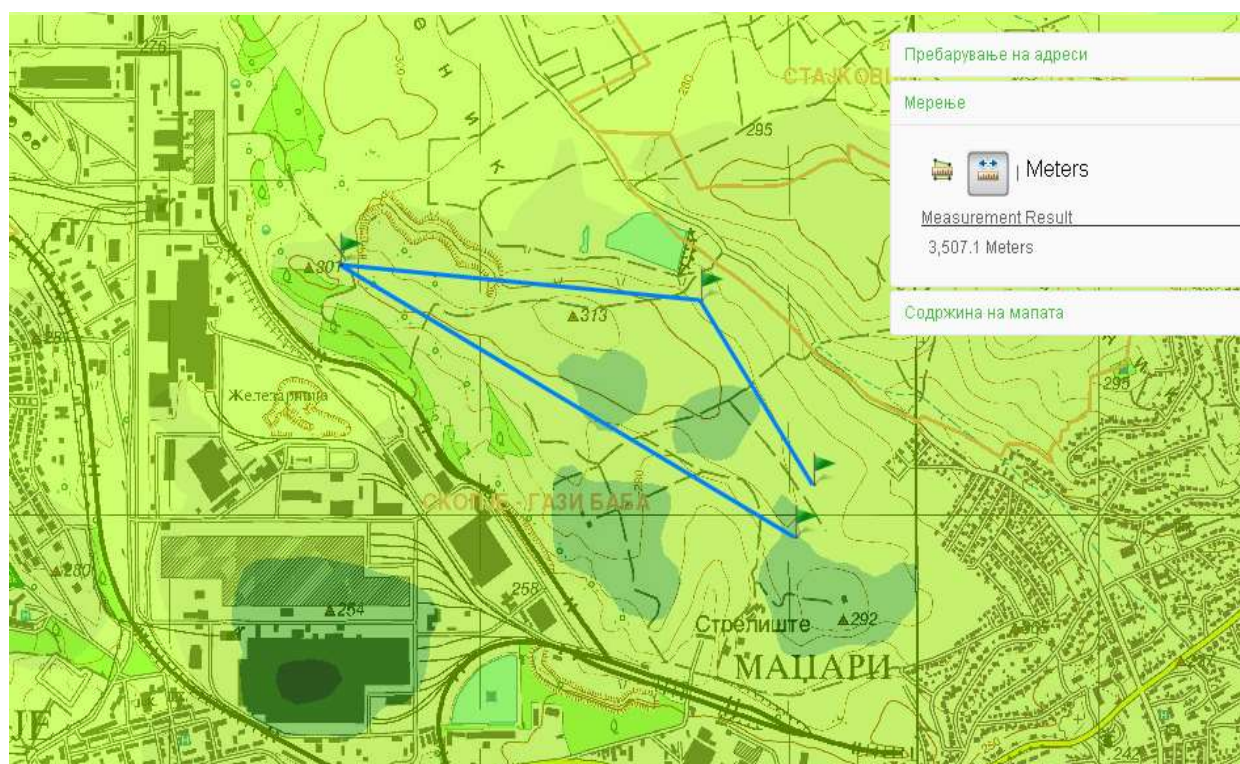
AREC data: cadastre parcel and buildings



Component 2

Accomplished Results

<http://inspiration.katastar.gov.mk/inspiration>



What are the advantages of this approach?

Component 2



Solution according to the NSDI



Standardized structure of data



Defined responsibilities



Real data



Mash up of data



INSPIRE compliance



Component 2

Benefits

- ✓ Provides the information to the citizens and other users on the level of pollution in the Skopje region
- ✓ Have a positive contributions of raising awareness about how we can protect the environment
- ✓ Promotes the opportunities and benefits offered by the NSDI and INSPIRE, as a result of the mash up of data and information from different sources – institutions



Component 3: Awareness raising and communication

- Two national workshops: 8-9 October 2012 and 22-23 of April 2013
- International INSPIRE meeting 24 April 2013



Component 3

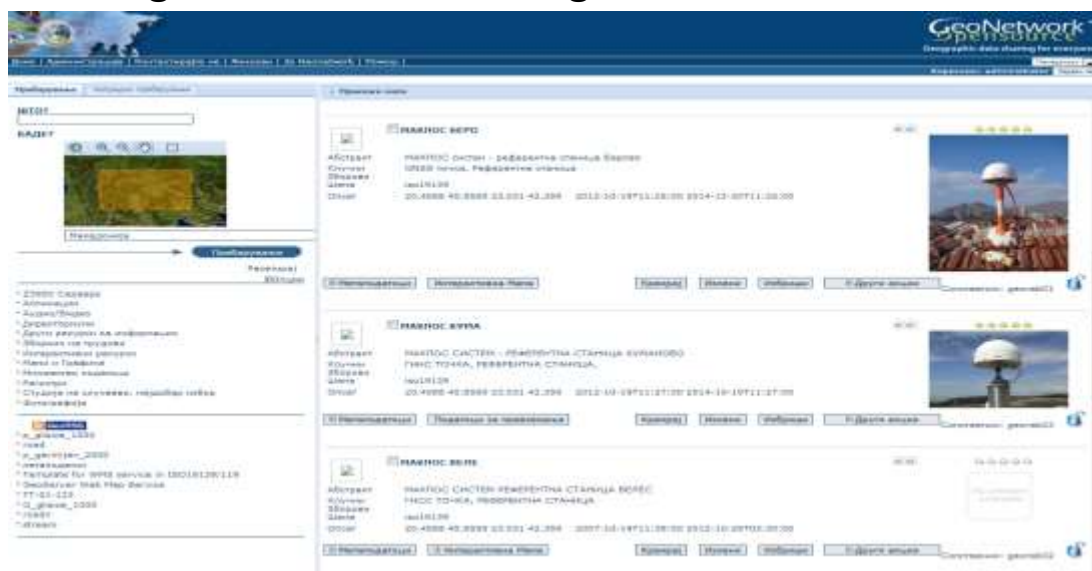
Awareness raising

- NSDI / INSPIRE brochure, National report
- NSDI / INSPIRE Video Film is available



AREC ACHIVEMENTS - METADATA EDITOR/CATALOGUE

- Translation of GEONETWORK on Macedonian language
- Training AREC staff for using metadata editor
- Training stakeholder for using metadata editor

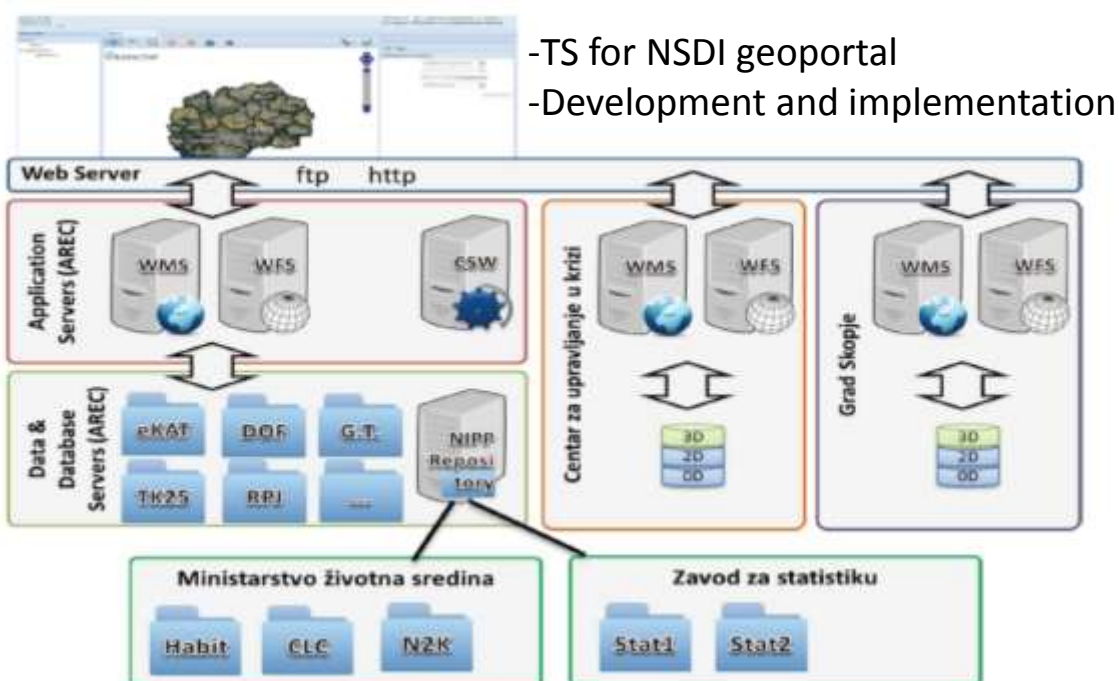


<http://mdeditor.katastar.gov.mk:8080/geonetwork/srv/mkd/main.home>



AREC CURENT SITUATION- DEVELOPMENT OF NSDI GEOPORTAL

GENERAL NSDI ARCHITECTURE



-TS for NSDI geoportal

-Development and implementation

Thank you for your attention

