E-Governing and SDI
Open Data case in Macedonia

INSPIRE Conference 2017
Data Driven Economy in Central and Eastern Europe. Challenges and Perspectives
Joint WB/FAO/UNECE/JRC Workshop
Kehl, 5 September

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GDi

Creating Efficiencies. Stimulating Growth.

Telco, Energy, Natural resources, Government
E-Governing and SDI - Open Data case

- Open Data Environment
- Legislative, Implementation and Maturity of Open Data
- Potentials for further development
Open Data Environment

In reflection to the concepts of Open Data strategy:

- Open Data availability growth
- Re-use as business driver
- Existing technical solutions
- Portals in production phase
- ESRI solutions – AGOL, Hub, A4I
- GDi Ensemble for Smart Communities
Overview

Legislative

Implementation

Maturity

• Since February 2014, legally mandated
  – Public institutions produced data availability and openness
  – Limitations for sensitive data
  – Metadata
  – Portal
  – Up-to-date state
  – Governing by Ministry of Informatic Society and Administration

• Law on NSDI which transposes INSPIRE Directive and underlying standards
Overview

Legislative – OPEN DATA

Implementation

Maturity

• Regulated formats
  – CSV
  – XML
  – JSON
  – Web services – API
  – XLS(X)
  – DB direct approach (MS SQL Server, MySQL, Oracle DB)

• Through HTTP(S), FTP protocols or VPN communication
Overview

Legislative – NSDI

Implementation

Maturity

• Data themes – Annexes I-III
• MD/Data structuring standards
• Data exchange standards
• Coordinative body
• National Geoportal
Overview

Legislative

Implementation

Maturity

National Geoportal
nipp.katastar.gov.mk
Overview

Legislative

Implementation

Maturity

National Geoportal
nipp.katastar.gov.mk

74 services published

< 10% INSPIRE compliant (all by AREC)

> 90% OGC Web Services

structured by national/institutional standards from 10 different institutions

Open for view, semi-open for download

Reusability ?
Overview

Legislative

Implementation

Maturity

Open Data Portal
www.otvorenipodatoci.gov.mk
E-Governing and SDI - Open Data case

Overview

Legislative

Implementation

Maturity

25 institutions
154 active datasets
2015 downloads

http://www.otvorenipodatoci.gov.mk
Overview

Legislative

Implementation

Maturity

• Pros
  – Will and means for opening data
  – Wide spectrum of sectors
  – All active datasets

• Cons
  – Outdated
  – Partial
  – Require intensive postprocessing
Legislative
Implementation
Maturity

- EU commission portal for MD harvesting across Europe
- Jun 2017 Report on EU neighboring countries

Overview
EU countries Open Data maturity overview

Open Data Readiness - Policy
- 68% Presence Policy
- 50% National Coordination
- 76% Licensing Norms
- 56% Use of Data

Portal Maturity
- 61% Usability
- 60% Reusability of data
- 79% Spread of data across domains

Open Data Readiness - Impact
- 42% Political
- 26% Social
- 51% Economic

Source: https://www.europeandataportal.eu/en/dashboard#tab-overview
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Overview

Legislative

Implementation

Maturity

Open Data maturity overview

- Political awareness high, institutional low
- Formal national coordination
- Implementation according to EU requirements
- Legislative acquired and implementation ongoing
- Portal available
- Reusability low
- Maturity level: moderate
Skopje flooding 2016 case: Copernicus emergency management service + AREC + Gdi

Status before flooding.
Skopje flooding 2016 case:
Copernicus emergency management service + AREC + Gdi

Flooded area mapped and published as web services within 2 days
Skopje flooding 2016 case: Copernicus emergency management service + AREC + Gdi

Flooded area combined with AREC data for crisis management.
Potentials for further development

unsaturated market, based on the mandatory factors with low market orientation

• Cluster open data producers regarding
  – Legal ground
  – Institutional engagement domain
  – Technical competences
  – Open data availability

• Cluster needs assessment
• Offer support for the clusters
• Monitor and foster growth
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