

Urban Ecological Landuse

Planning:

ecological land use planning indicators to
monitor good urban planning practices

Direcção-Geral do Território

Kick-off Meeting, January 24th-25th 2013

- Develop a prototype integrating web services implementation related with building environmental quality Indicators namely indicators that help understanding the relation between water and air quality evolution and growing urban and recreation land use near a water catchment.
- Build environmental quality indicators to monitor water and air quality impact during a time period.
 - The indicators are extracted through a set of GIS web services built to help the user understand water and air quality evolution and its relation with human activities and urban growth.
- The aim of the pilot is evaluate fitness for purpose of different available official datasets to deal with urban landscape evolution and how these different datasets evaluate the impact in water quality. The data sets cover similar time periods and include soil use legal classification, cartographic based housing evolution datasets and thematic land use maps reporting urban land use.

- Administrative units
- PDM (Municipal Director Plan)
- CRUS (Carta de Regime de Uso de Solo)
- COS'90 - Land Use map from 1990
- COS 2007 - Land Use Map from 2007
- Orthophotomaps of the study areas for the same periods
- Housing and demography official statistics
- Official water and air quality indicators

- WMS:
 - CAOP
 - COS'90
 - COS2007
 - CRUS

- WFS:
 - CAOP
 - COS'90
 - COS2007
 - CRUS

eENVplus Stakeholders involved

■ Data providers:

- DGT - Direcção-Geral do Território (CAOP, CRUS, Ortos),
- INE - Instituto Nacional de Estatística (Statistical information),
- APA (Environment Agency),
- Municipalities involved (PDM)

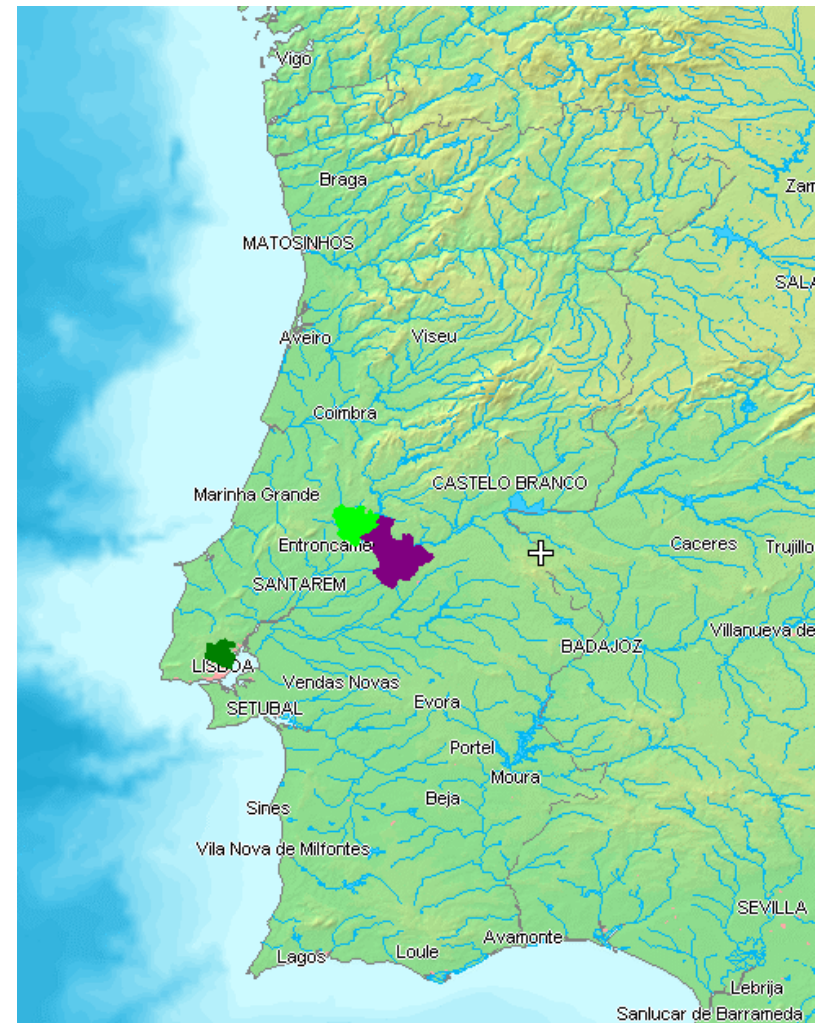
■ System developers:

- DGT - Direcção-Geral do Território

■ Users:

- Municipalities (Loures, Abrantes, Tomar) and
- citizens

- Tagus river basin (Spain and Portugal):
 - Test sites: 3 municipalities in Portugal
 - Abrantes
 - Tomar
 - Loures



■ Use Cases

- Delineation of study areas
- Evaluate urban and rural growth
- Evaluate and document data accuracy
- Evaluate spatial planning impact on urban growth
- Evaluate urban growth impact on air and water quality
- Integrate statistical data (time series)
- Evaluate urban and rural growth impact on water and air quality

Server Side

OS (Windows, Linux)	Windows
Architecture (x86, x64)	x86
Requested Memory (RAM e HD SPACE)	4Gb RAM/100Gb HD
Application Server (Apache V X.X, Tomcat, IIS,...)	Apache 2.2, jetty
Application Service (GeoServer, MapServer, GeoNetwork...)	MapServer, GeoServer
Database (Oracle, MSSQL,...)	Postgre/PostGIS
Dependency Lib (GDAL, Java,...)	GDAL,java,Geotools, OGR, etc
Custom Code	

Client Side

OS (Windows, Linux)	Windows
Architecture (x86, x64)	X86
Requested Memory (RAM e HD SPACE)	4Gb RAM, ? HD
Client App (Browser Internet - Custom App)	Browser internet / openlayers/geoext
Thesaurus (db, rdf, skos, ...)	-
Dependency Lib (GDAL, Java, Ajax...)	GDAL, java, Geotools, OGR, etc

Thank you

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