eENVplus

WP7
Pilot EP10
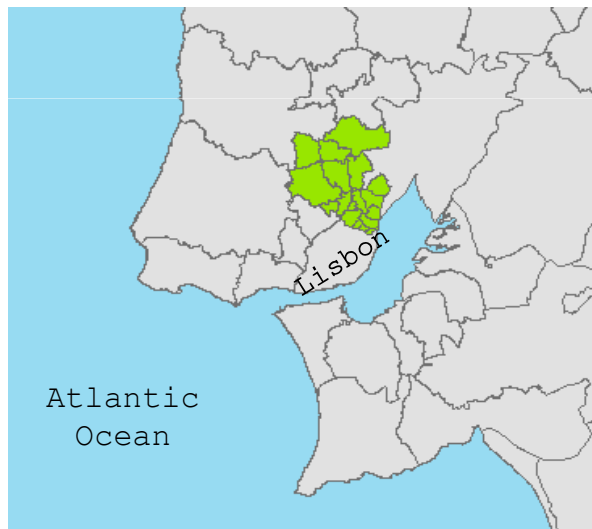# State of progress
Evolution

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Pilot demonstration

- **eENVplus Project:**
  - ☐ The objective is to create an open and interoperable infrastructure capable to integrate existing infrastructures according to the requirements of Inspire and international standards.

- **Objective of the Portuguese pilot:**
  - ☐ To create an application to monitor land cover changes between different dates for an area defined by the user and to develop a prototype integrating web services for data used to build indicators and monitor urban dynamics.
  - ☐ To evaluate the fitness of available datasets to monitor the pattern of urban growth and the adequacy of these datasets to evaluate urban growth sustainability combined with socio-economic evolution and environmental pressures.

Pilot analysis

[Live Demo | Portuguese pilot](#)

■ Loaded and Validated

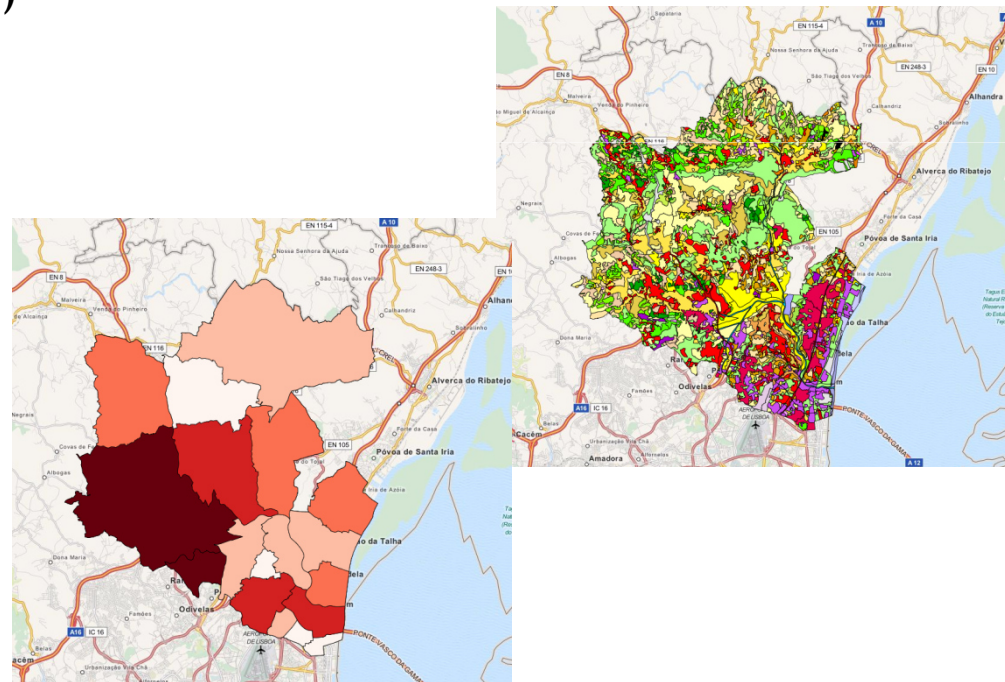| INPIRE Data Theme	Content	Metadata
I. 4. AU: Administrative units	CAOP	ISO 19115
III. 4. LU: Land use	CRUS	ISO 19115
II. 2. LC: Land cover	COS 90, COS 2007, COS 2010	ISO 19115

The spatial data correspond to several **INSPIRE data themes** and are organized by administrative units for the study areas. It covers land use, land cover and administrative units, all harmonized according to the INSPIRE implementing rules

Metadata on eENVplus catalogue

```
                        ┌─────────────────────┐    ┌─────────────────────┐
                        │  INSPIRE Theme      │    │  Land use; Land     │
                        │  Register           │────│  cover;             │
                        │                     │    │  Administrative     │
                        │                     │    │  units              │
                        └─────────────────────┘    └─────────────────────┘
                        ┌─────────────────────┐    ┌─────────────────────┐
                        │                     │    │  Land cover map;    │
                        │  EARTh              │────│  Territorial        │
  ┌──────────────┐      │                     │    │  planning;          │
  │  eENVplus    │──────│                     │    │  Boundaries         │
  │  Thesaurus   │      └─────────────────────┘    └─────────────────────┘
  │              │      ┌─────────────────────┐    ┌─────────────────────┐
  └──────────────┘      │                     │    │                     │
                        │  Agrovoc            │────│  Natural            │
                        │                     │    │  resources          │
                        └─────────────────────┘    └─────────────────────┘
                        ┌─────────────────────┐    ┌─────────────────────┐
                        │                     │    │                     │
                        │  Eurovoc            │────│  Planning; Urban    │
                        │                     │    │  planning;          │
                        └─────────────────────┘    └─────────────────────┘
```

![eENVplus]

■ Harmonized data published on eENVplus client

- land cover datasets: COS 1990, COS 2007, COS 2010 (each dataset has a different nomenclature)

- land use dataset (CRUS)

- administrative units (CAOP)

eENVplus

- **Data model**
  - Full and formal description of data models
    - Lists of features and attributes
    - Code lists
    - Feature relations (UML diagrams)

- The following application schemas were used:

  - ☐ LandCoverNomenclature
  - ☐ LandCoverVector

  - ☐ PlannedLandUse
  - ☐ LandUseNomenclature

  - ☐ AdministrativeUnits

Experience/exploitation

- Use of the developed geoportal and tools in other projects enriching and maintaining them with actual geospatial data and main results.

- Promotion of the pilot in meetings and social web based networks focusing the aim of dissemination in the field of GIS; SDI; Data management, land use planning and natural resources management.

- Training initiatives at universities, internally and at municipalities
    - data harmonization will be the central point and will be very useful in the Portuguese context.

Actions to be performed for closing/still open issues

■ **List of actions**

❏ Upgrade schema (landCoverVector) from v3.0 to v4.0

❏ Use HALE 2.9.2 in order to replace gml:CompositeSurface which is not compliant to Article 12 of the IR with geometries from the simpleFeatures profile.

❏ Replace the LC class of the LC unit (<lcv:class> elements of the gml file) presently with only a coded value (e.g. '3.1.1') by the full reference

    ❏ xlink:href=http://inspire.ec.europa.eu/codelist/LandCoverClassValue/3.1.1

❏ Voidable attributes.

❏ Work towards full Inspire compatibility of metadata.

❏ Improvements to the pilot interface.

Thank you

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