

Preparation of the project “Feasibility for a European Wide Harmonised Object Oriented Data Model” under the umbrella of B4G. The SIOCOR Project

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CORINE LAND COVER National and Regional LC/LU DBs

- Currently the countries prepare their third Corine land cover set. In 2007 we will have 1990, 2000 and 2006 snapshots across whole Europe.
- On the other hand several national institutions have already their own inventories in an adequate level of scale and accuracy.



INSPIRE

- According to the **INSPIRE** directive, land cover and land use data shall be maintained **at the most appropriate level** and it should be possible to combine land cover data from different sources across the European Community (Interoperability and harmonization).
- Several countries started to discuss and to build up harmonized data bases in their countries (e.g. SIOSE, DE-cover).
- In a further step it must be assessed **how these national approaches fit into the European scheme** and can deliver further and more detailed information.



SIOSE

- **SIOSE**, the national data base on land cover / land use Spain is based on an **object-oriented conceptual data model, based on ISO TC211 and OCG standards**, and reached by consensus between regional and national thematic experts on land cover/use issues.
- This data base is able to **join** the CLC nomenclature as well as land cover/use classes required at National and Regional nomenclatures.



❖ Backgrounds and References



Normalized and interoperable Conceptual Data Model of Land Occupation

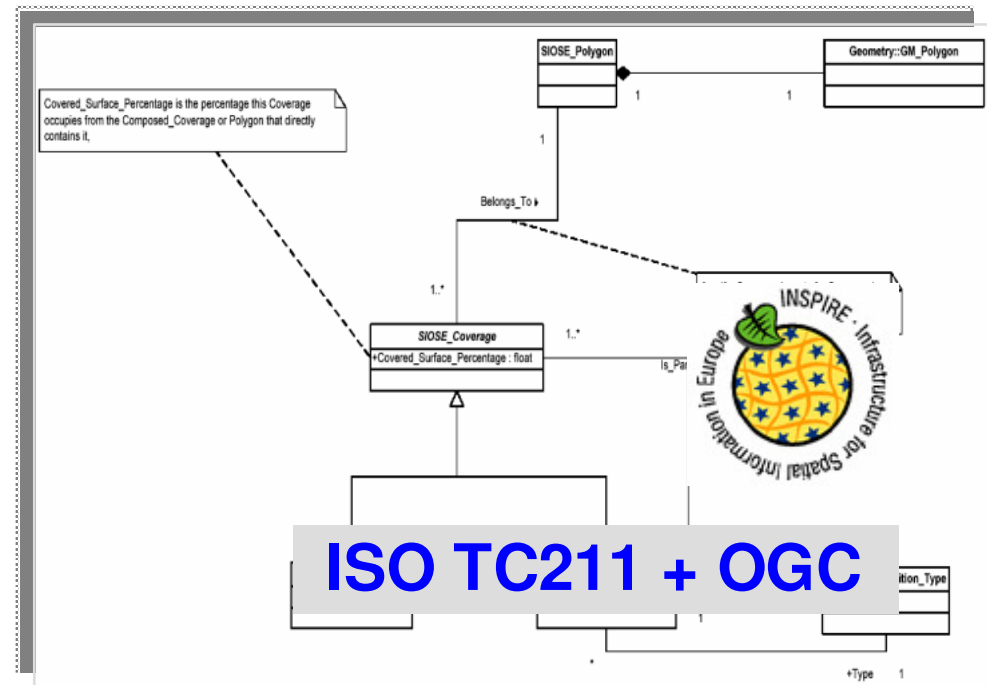
Multi-criteria: distinguishing concepts such as land cover and land use.

Multi-parameter: Several attributes for a unique polygon.

Object - Oriented: Using UML to define the Entity – Relationship Model

Can be easily extended in future

Reached by consensus



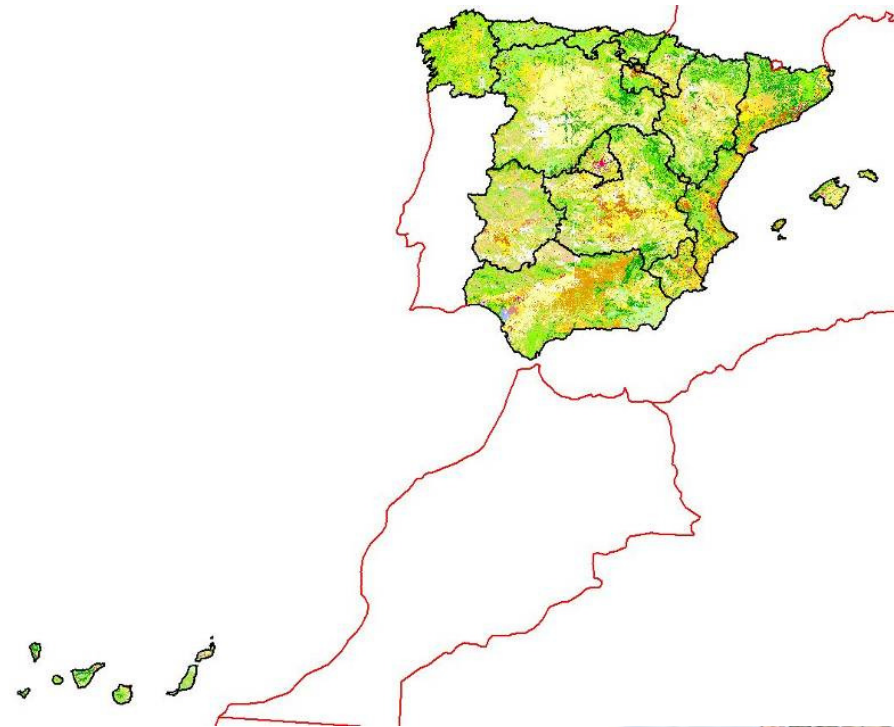
Andalusian Land Cover / Land Use Database

- Land use and land cover information is a key data set for the Andalusian Regional Government.
- This program goes far beyond CORINE Land Cover, creating a compliant but **more detailed database**, both thematically and geometrically (scale 1:25.000, 112 hierarchical classes, up to level 6, and 0.5 hectares MMU), that is updated at least each 4 years.



SIOCOR

- The **SIOCOR** project can deliver an example how national data can be integrated in European data sets and can validate the Spanish approach and their European relevance.



SIOCOR

The SIOCOR project will have a three step approach:

First step: from Regional land cover and reference data to SIOSE (National Land Cover).

- [IGN Spain \(SIOSE National Team\) + Regional government Andalusia.](#)

Second step: from SIOSE (National Land Cover) to European Land Cover (CORINE Land Cover), as a test for interoperability and generalization of LC/LCU OO Databases

- [ETC LUSI - IGN Spain \(SIOSE National Team\)](#)

Third step: second step test extended to other national LC/LU National databases and inventories.

- [ETC LUSI](#)

Fourth step CLC2006 - Recommendations for deriving changes

- [ETC LUSI](#)



❖ The SIOCOR Project : Results and outcome



The project can provide detailed information regarding:

- **Interoperability** of land cover and use information at Regional, National and European levels.
- How SIOSE **OO Data Model** fulfils the INSPIRE needs
- Gives **recommendations** for further initiatives to harmonize national and European data
- The project provides also technical input to the European **wide discussion** on environmental data management, national responsibilities and European contributions.





Thank you for your kind attention

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