**REGIONE AUTONOMA DELLA SARDEGNA**
ITALY

LOCAL AUTHORITY FOR MUNICIPALITIES, FINANCES AND URBAN PLANNING
REGIONAL DEPARTMENT FOR CARTOGRAPHY AND INFORMATION SYSTEMS

INSPIRE – Practical Examples from Sardinia (Italy)

Application of Recent Directives and Guidelines in Public Administration: the SITR-IDT of Autonomous Region of Sardinia (Italy)

SITR-IDT: the Spatial Data Infrastructure of Regione Sardegna
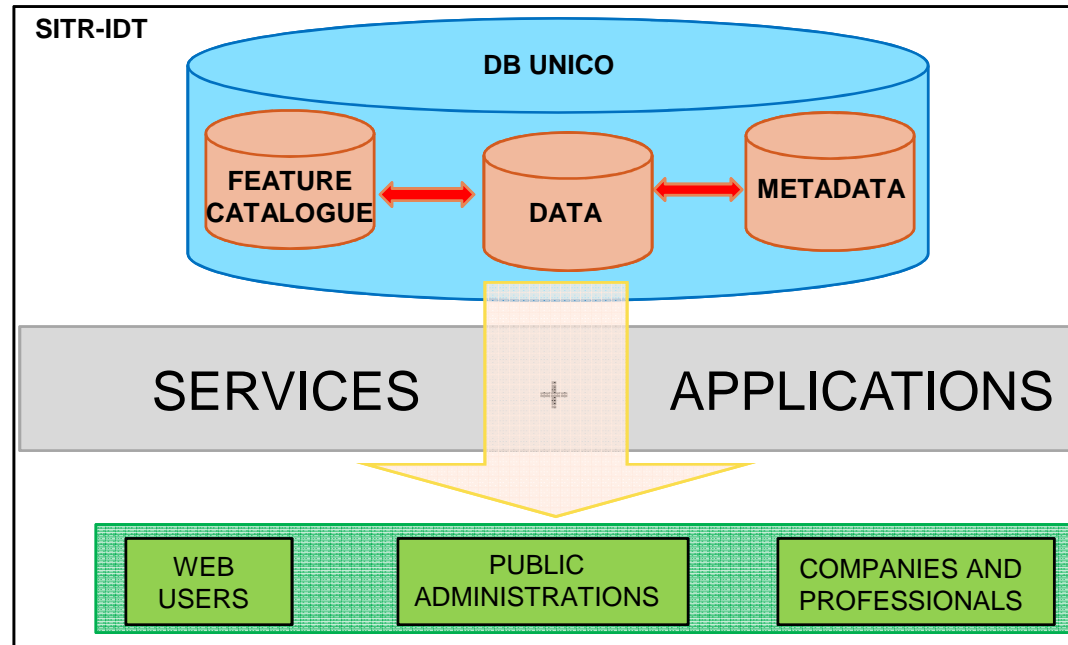
The Territorial Information System of Sardinia (SITR) is a federated architecture unitary system based on the sharing and interoperability. It is constituted by geographic data, service, procedures and technologic infrastructural resources.

SITR-IDT Spatial Data Infrastructure

- **Goals:**
  - > creating and managing the government official spatial database and the related technologic infrastructure, services and application necessary for data access;
  - > allowing users and companies to use spatial data and services in a simple and free way;
  - > allowing users to work with shared, common and always updated data;
  - > creating an information system support for urban and landscape planning management at regional and local level

Data sharing according to INSPIRE

• SITR-IDT was projected and created according to data sharing principles expressed by the INSPIRE Directive

• Development of INSPIRE services for the SDI access by external users

• Important development of interoperability systems for data access by means of web or desktop clients

SITR- IDT Architecture
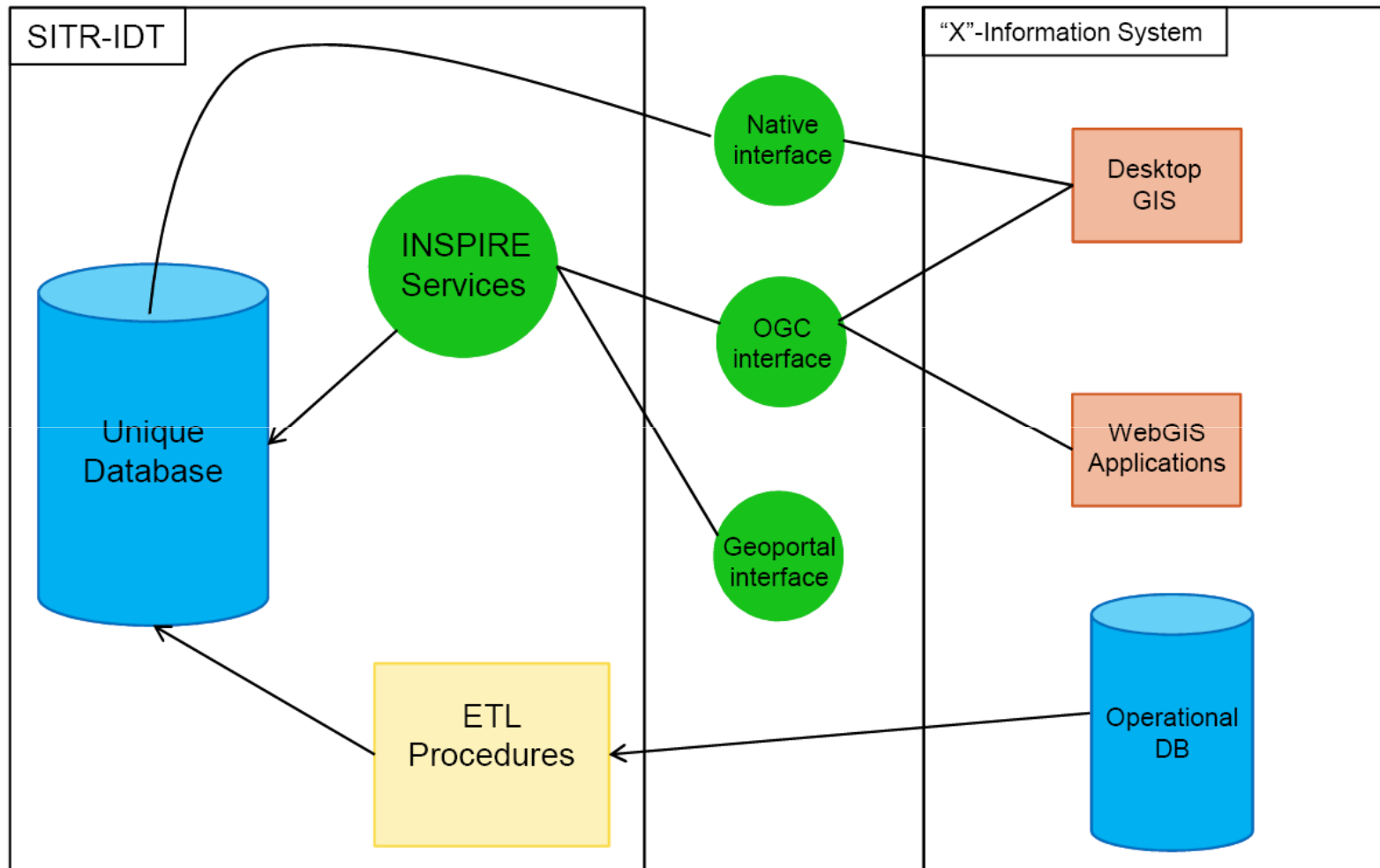
SITR- IDT Architecture – DB Unico
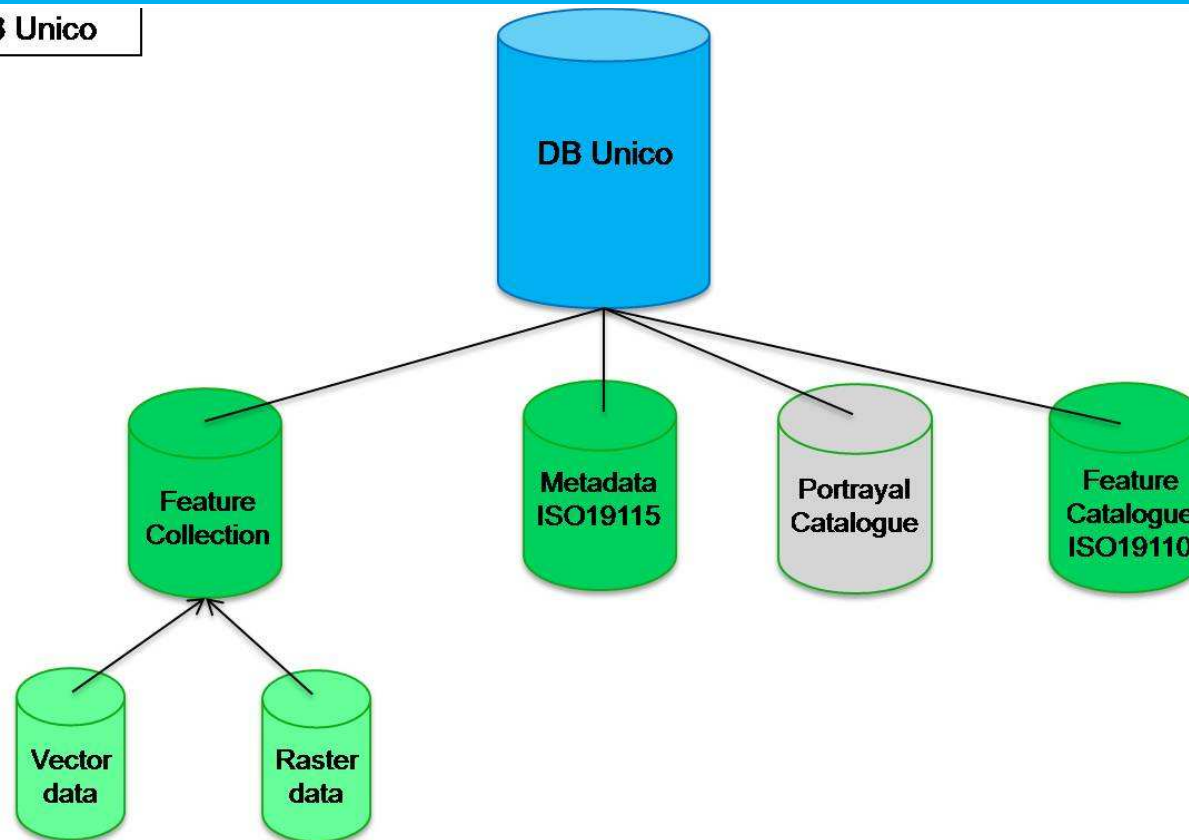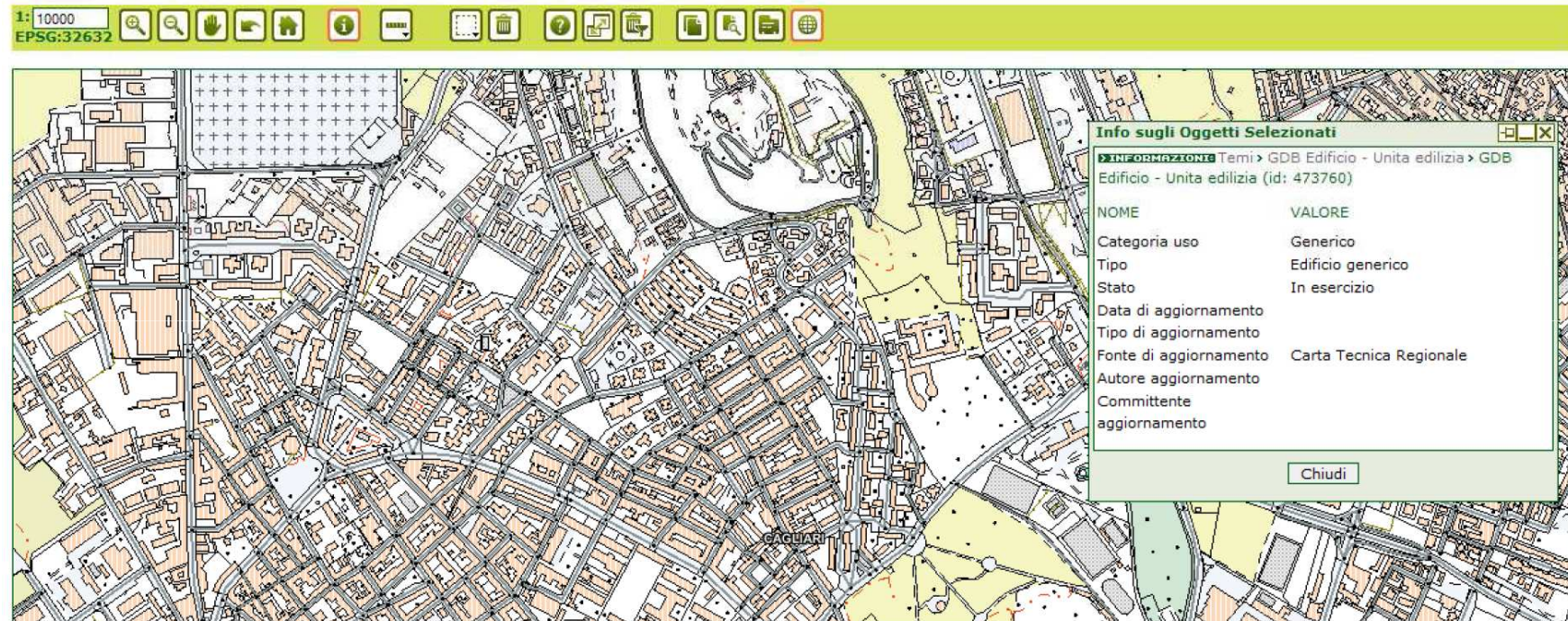
DB Unico: a single spatial database, accessible through interoperability services (e.g. OGC services), whose data are standardised and loaded by means of specific ETL (extract-transform-load) procedures

DB Unico – Feature collection - Vector data: example

DB Unico – Feature collection – Coverage data: example

Feature collection - Management: Repository manager

Tool for managing and cataloguing data. It's designed to interface the database with SITR-IDT applications.
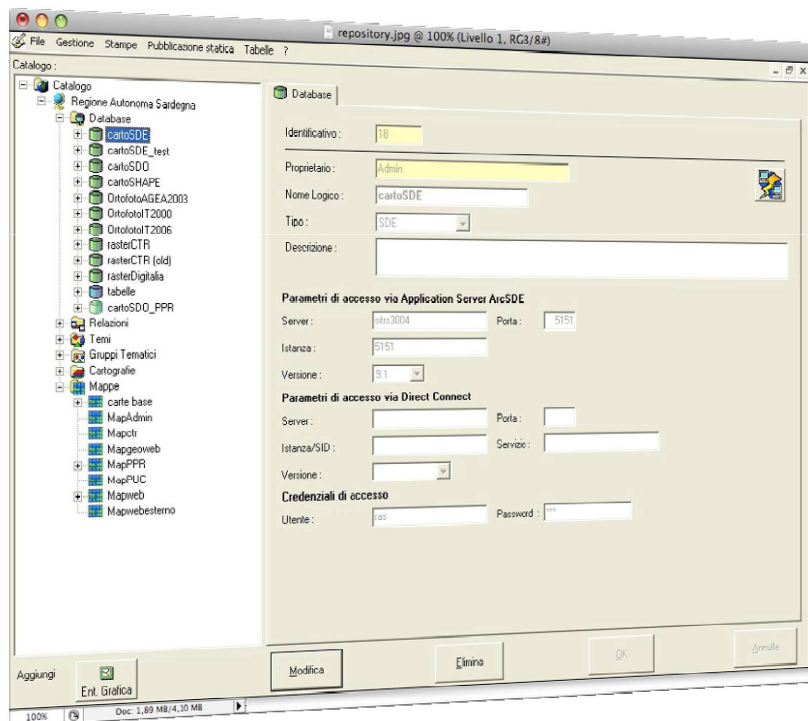
Catalogue manager
For managing cartographies, thematic
groups and themes

Rights manager
For managing profiles,
users and applications
advanced functions

Metadata ISO19115 - Management: Metadata manager
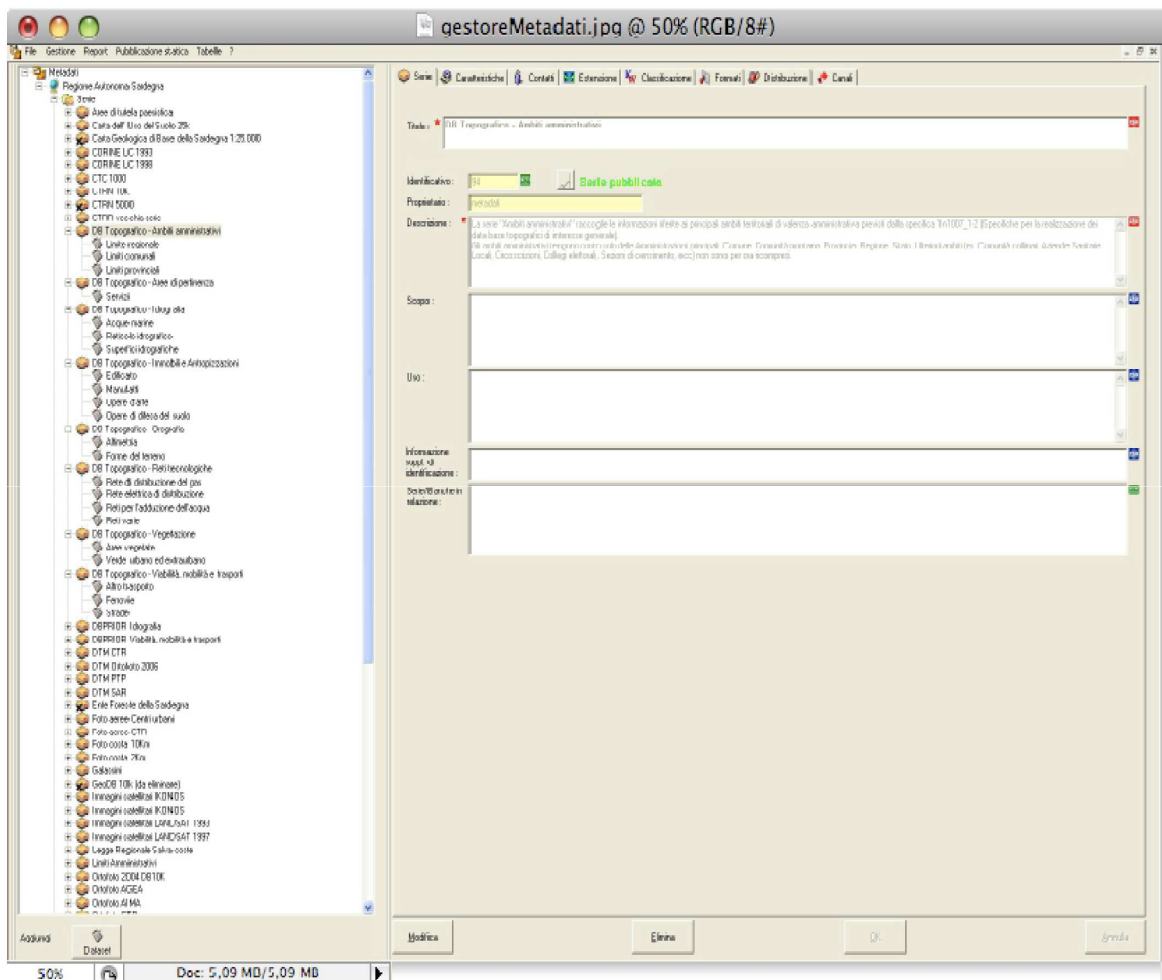
Feature Type ISO19110 - Management: Feature Catalogue

SITR- IDT Architecture – INSPIRE services
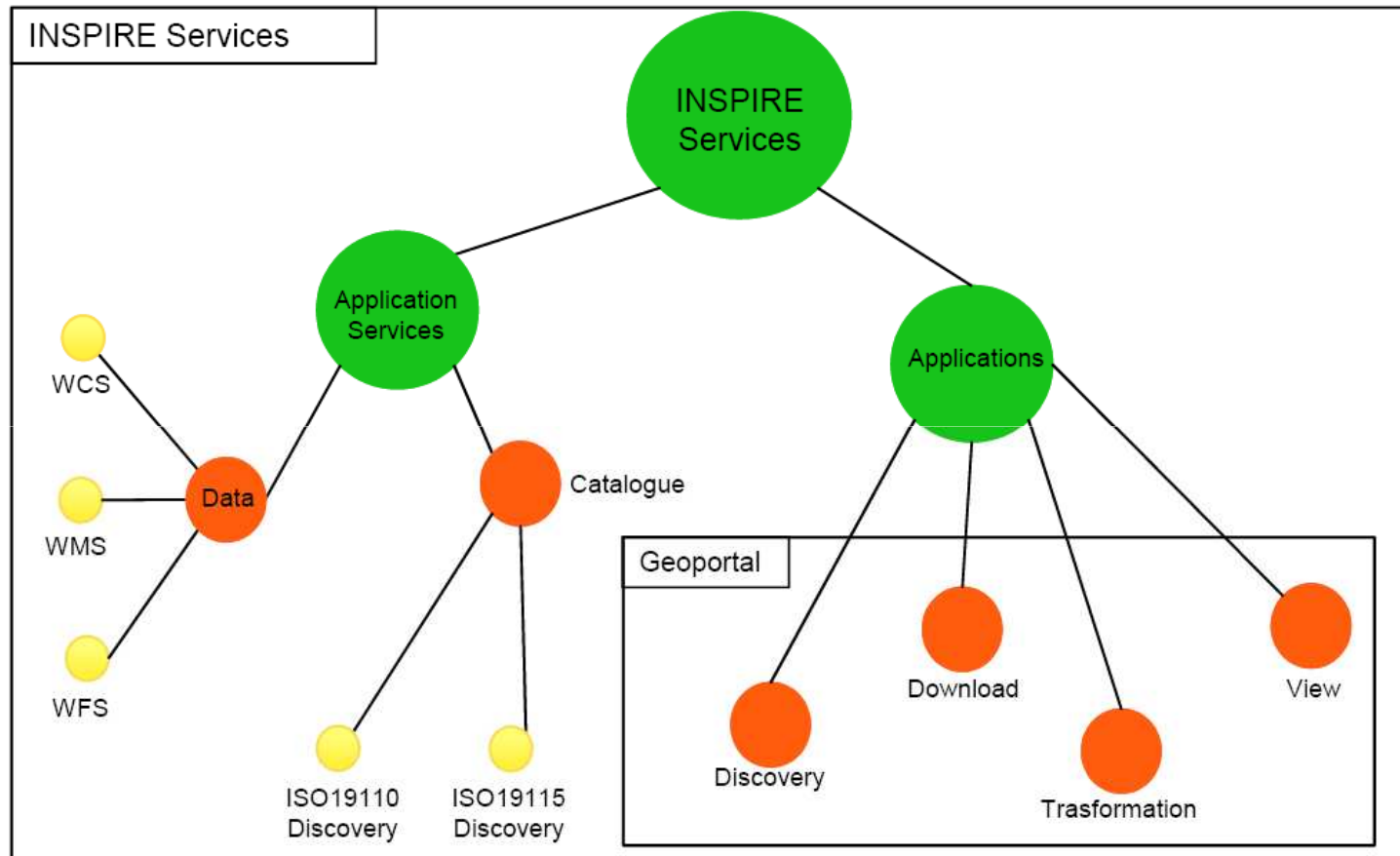
Geoportal – www.sardegnaterritorio.it

The geoportal of the SITR SDI

Access point to the INSPIRE services:

- **view**: several navigators;
- **discovery**: Regional catalogue for spatial data;
- **download**;
- **transformation**;
- **WMS, WFS**;
- feature catalogue.

View service – Sardegna 2D and WMS services

Professional cartographic navigator, like a GIS allows to view maps and vector data, and to query them.

Several versions, customized according to the different
users:
- Sardegna2D;
- Sardegna2D PPR;
- Sardegna2D Topographic DB;
- Sardegna2D Toponyms.
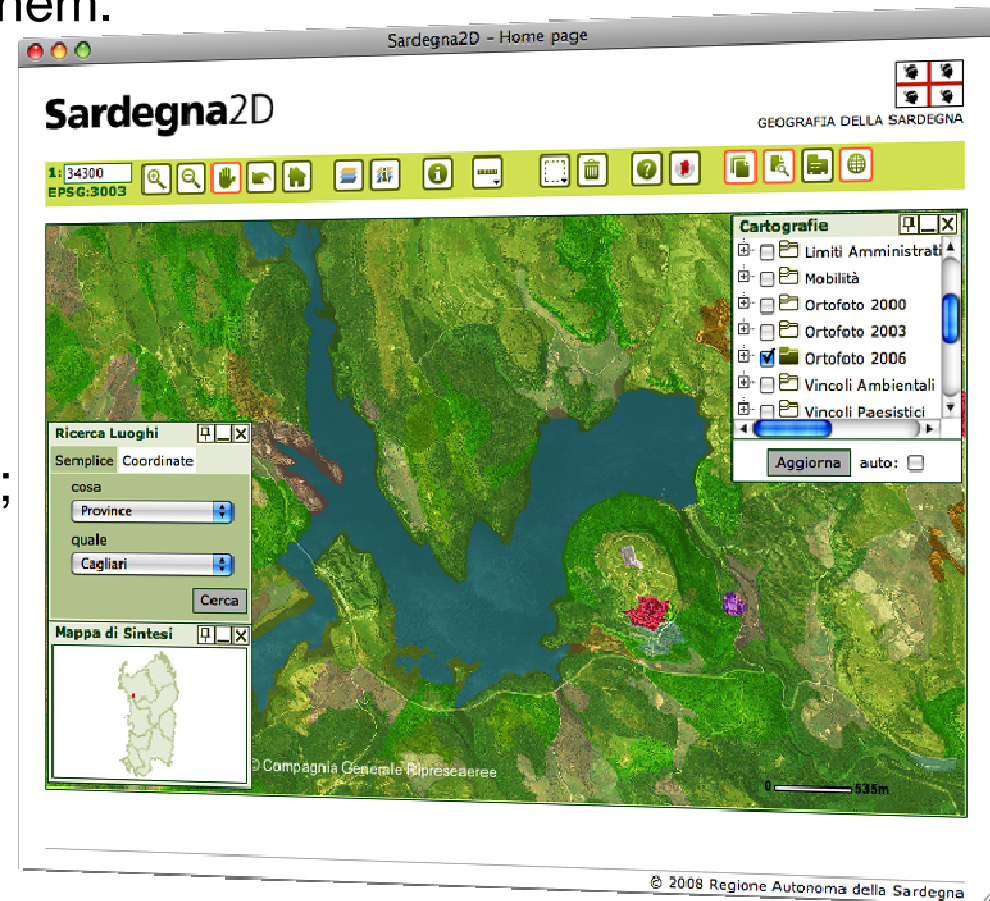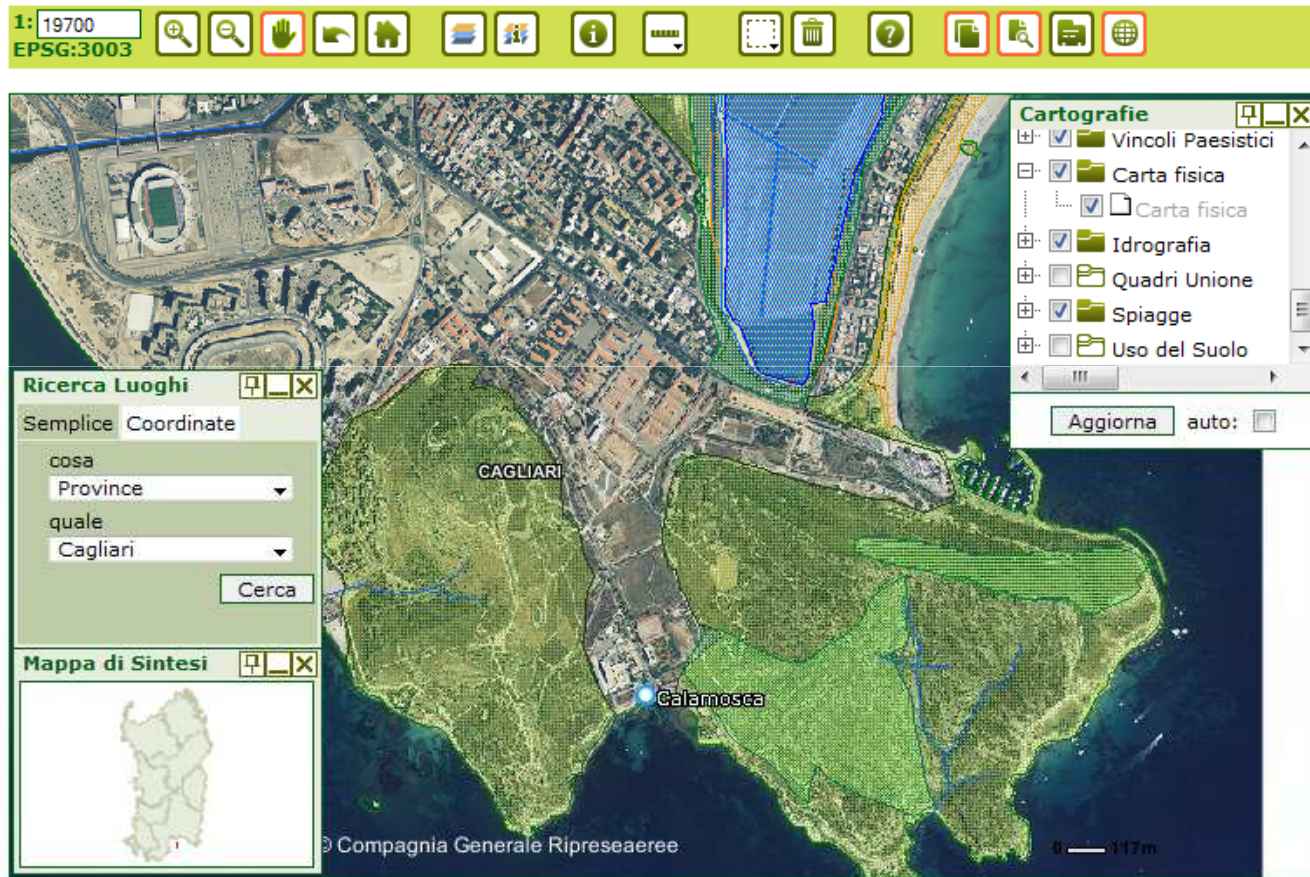
View service – Sardegna 2D

View service – Toponyms Search

View service – www.sardegnamappe.it

Simplified, user-friendly cartographic navigator. Made with TMS technology and exposed by means of OpenLayers libraries.

Further functionalities: R.O.J.A. - http://webgis.regione.sardegna.it/roja/

Transformation – Coordinates conversion

Based on Italian National
Military Institute
topographic points, it has
great precision in
conversion.
Allows transformation
between different CSC of
a point or of a shapefile.

Discovery service – Metadata catalogue

Based on metadata ISO19115, constitutes the Regional Catalogue for Spatial Data. Point of access to the whole Spatial Data Infrastructure.

Regional Catalogue for Spatial Data

OGC Services

OGC Service – Web Feature Service

OGC Service – Web Map Service

www.sardegnaterritorio.it

Michele Beneventi: mbeneventi@sardegnait.it

Luisa Manigas: lmanigas@regione.sardegna.it

Daniela Pani: progettoscus@regione.sardegna.it

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