

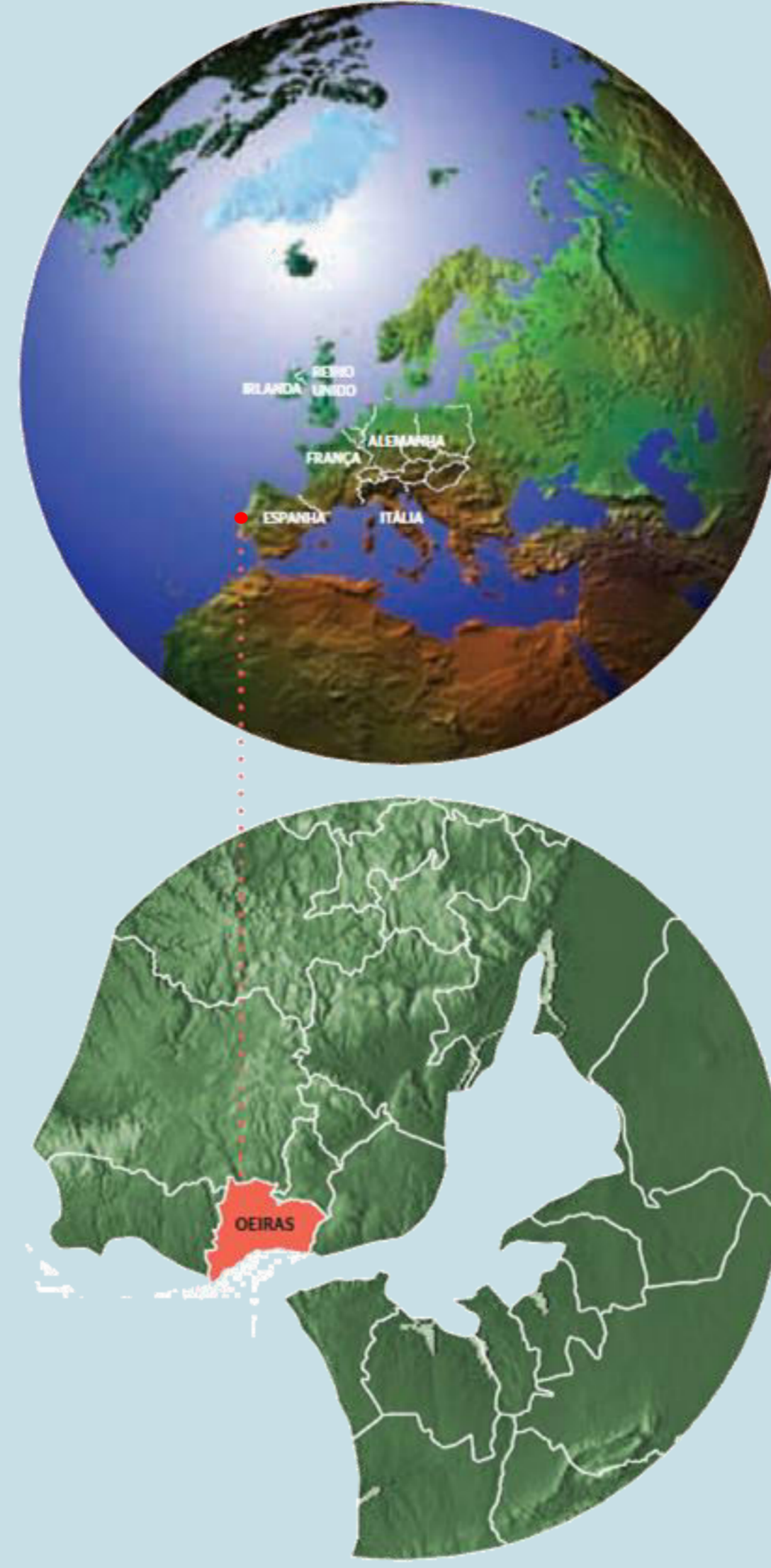
Oeiras Pilot: Underground Scenario

Pilot Leader: Município (Oeiras Municipality)

Overview

GeoSmartCity contributes to the Smart City implementation by establishing a cross-platform, re-usable and open hub able to publish open geographic information and to provide specialized services based on open standards.

The GeoSmartCity cross-platform toolkit and operational methodology allow further integration of third-party data (open or restricted) as well as crowd-sourced data. The potentiality of the toolkit will be demonstrated through the development of 11 operative and re-usable pilot cases in the frame of two scenarios: Green-Energy scenario, to facilitate diffusion and management of renewable energy within cities, and Underground scenario, to support integrated management of underground utility infrastructures.



General Information

- Population: 172.120 in the Municipality of Oeiras
- Surface: 45km², the Oeiras municipality is located in the region of Lisbon and Tagus Valley and is part of the Lisbon Metropolitan Area (total of approx. 2.821.800 inhabitants).

Oeiras lies on the north bank of the Tagus River, is bordered on the North and West by the municipalities of Sintra and Cascais, the east by the municipalities of Lisbon and Amadora and south by the the river Tagus, giving a river front with about 9 km long.

Description of the pilot deployment:

Dimensional schematic drawing of the elements of the networks in Oeiras City already exists with pre-existing geographical bases.

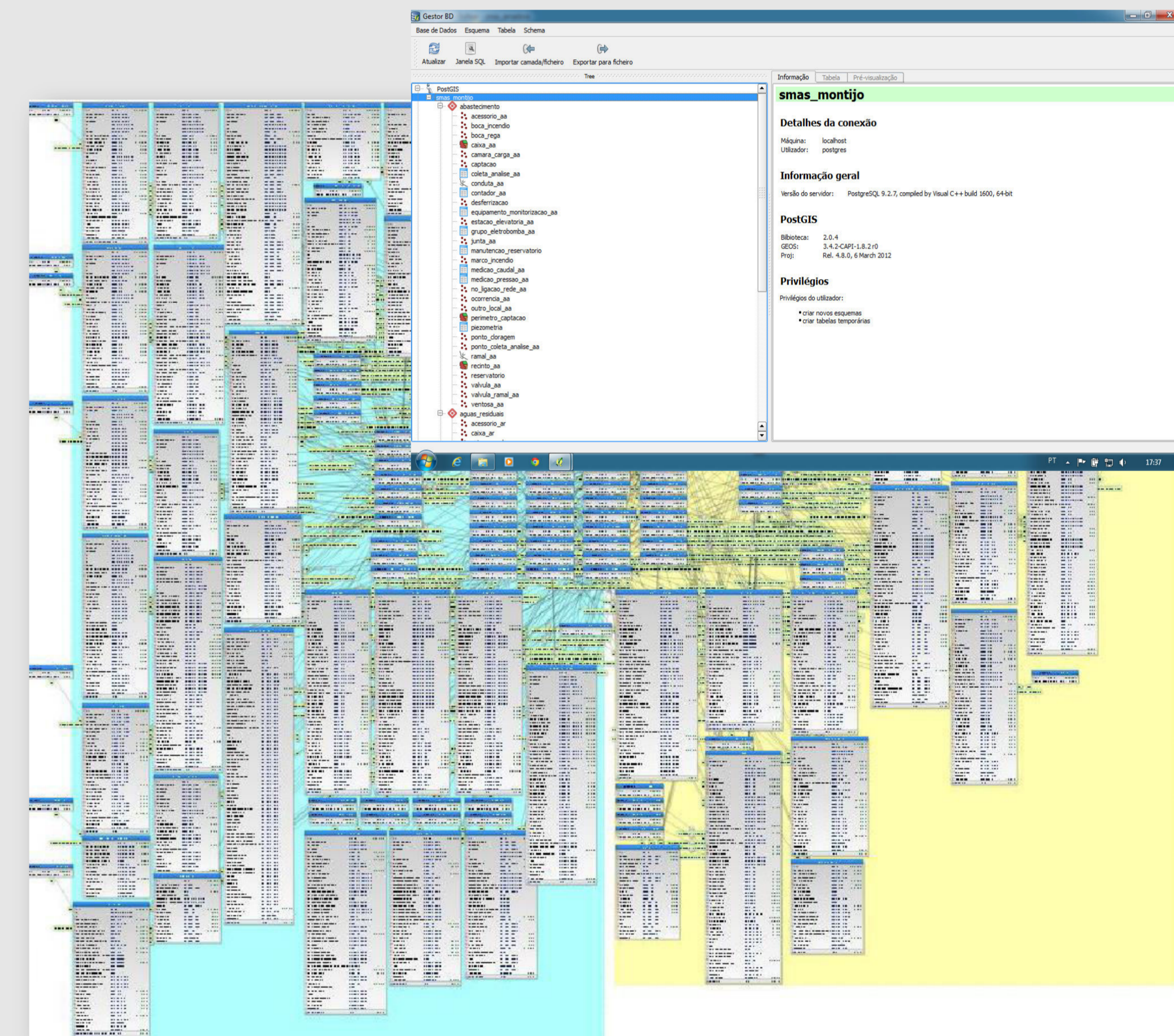
The possibility of crossing this information with roads, urban areas and plots, or Instruments of Spatial Planning ensures interoperability between different areas and is a current necessity for all stakeholders involved in underground utility infrastructures.

The existing data model for a few layer subset will be extended for other layers and will be integrated in the platform.

Objective

This project aims at producing and sharing with connection efficiency the geographical information essential for sustainable planning and monitoring of the underground utilities and infrastructures in the City of Oeiras.

On the other hand, this is the opportunity to perform smart governance, creating a better coordination and management of utility networks and underground infrastructures.



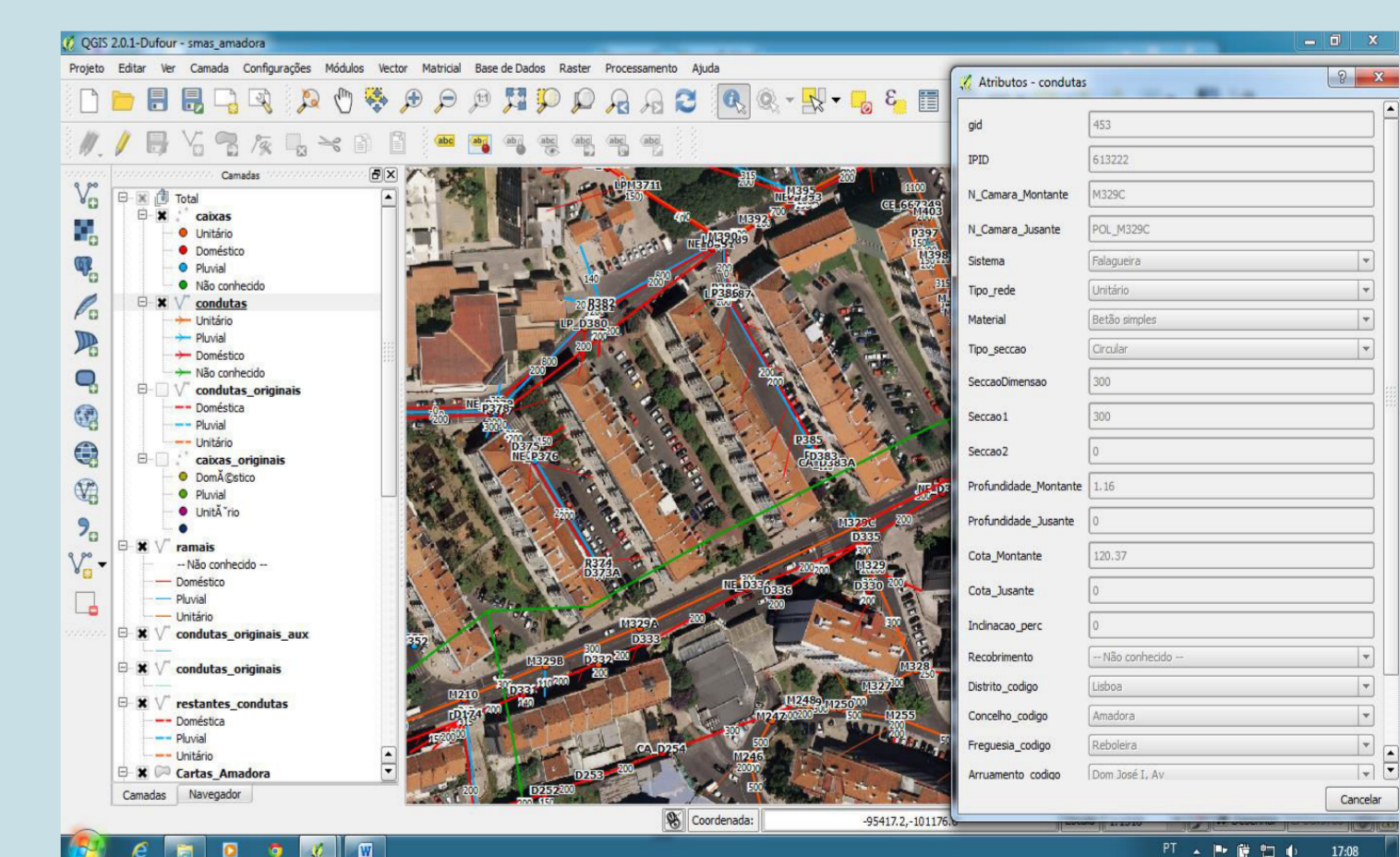
Sewer network data model example

Specific Data sources used for the scenario:

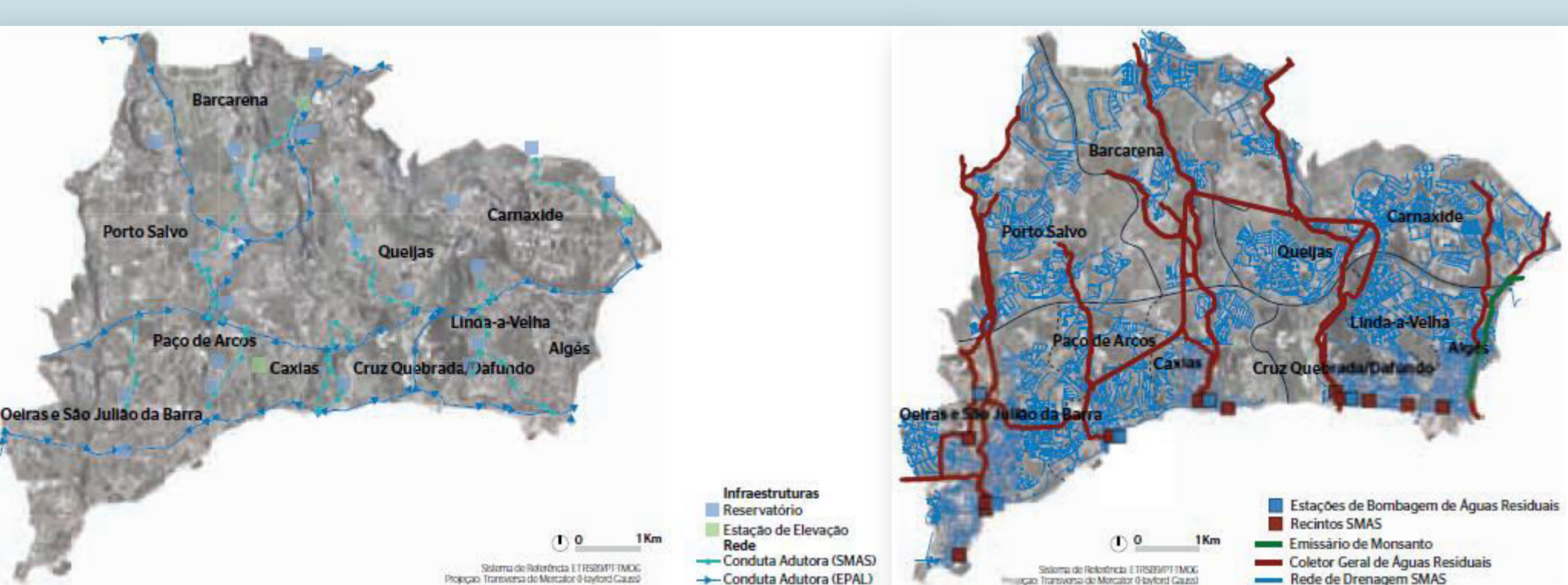
- ✓ Water Networks
- ✓ Sewer Networks
- ✓ Gas Networks
- ✓ Electricity network
- ✓ Telecommunication networks

Stakeholders

- Public Administration - Municipality
- Office parks
- Utility Companies (e.g. water and sewer company)
- Service Companies (e.g. management of roads...)
- Environmental Agencies
- Civil Protection
- Citizens



Sewer network desktop example



Oeiras water and sewer network