

## Flanders Region Pilot: Underground Scenario

Pilot Leader: VMM

### 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: 6.350.765 in the Flanders Region
- Surface: 13.522 km<sup>2</sup>

Flanders is a highly urbanised region in the north of Belgium. Almost the complete region (20%) can be categorised as “urban”. The region contains several larger (Ghent, Antwerp) and medium-sized cities (Bruges, Aalst, Kortrijk, Sint-Niklaas, Mechelen, Hasselt, Genk, Leuven, etc.).

### Description of the pilot deployment:

The division of powers with regard to the development of sewage systems in Flanders is complex and spread across different administrative levels. In order to ensure that efforts are optimally harmonised, it is very important that policy information regarding the expansion of sewage systems is available to all actors on all levels.

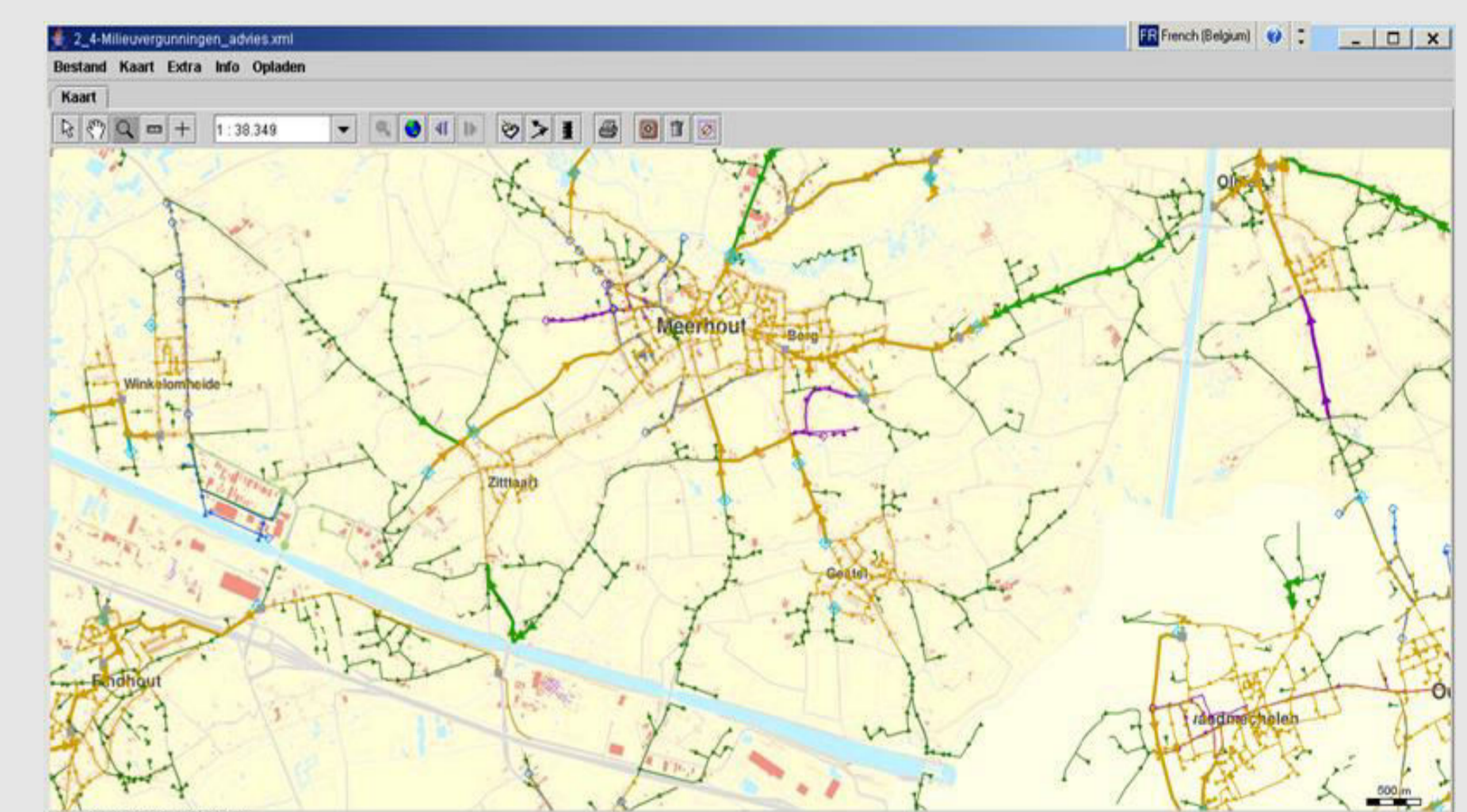
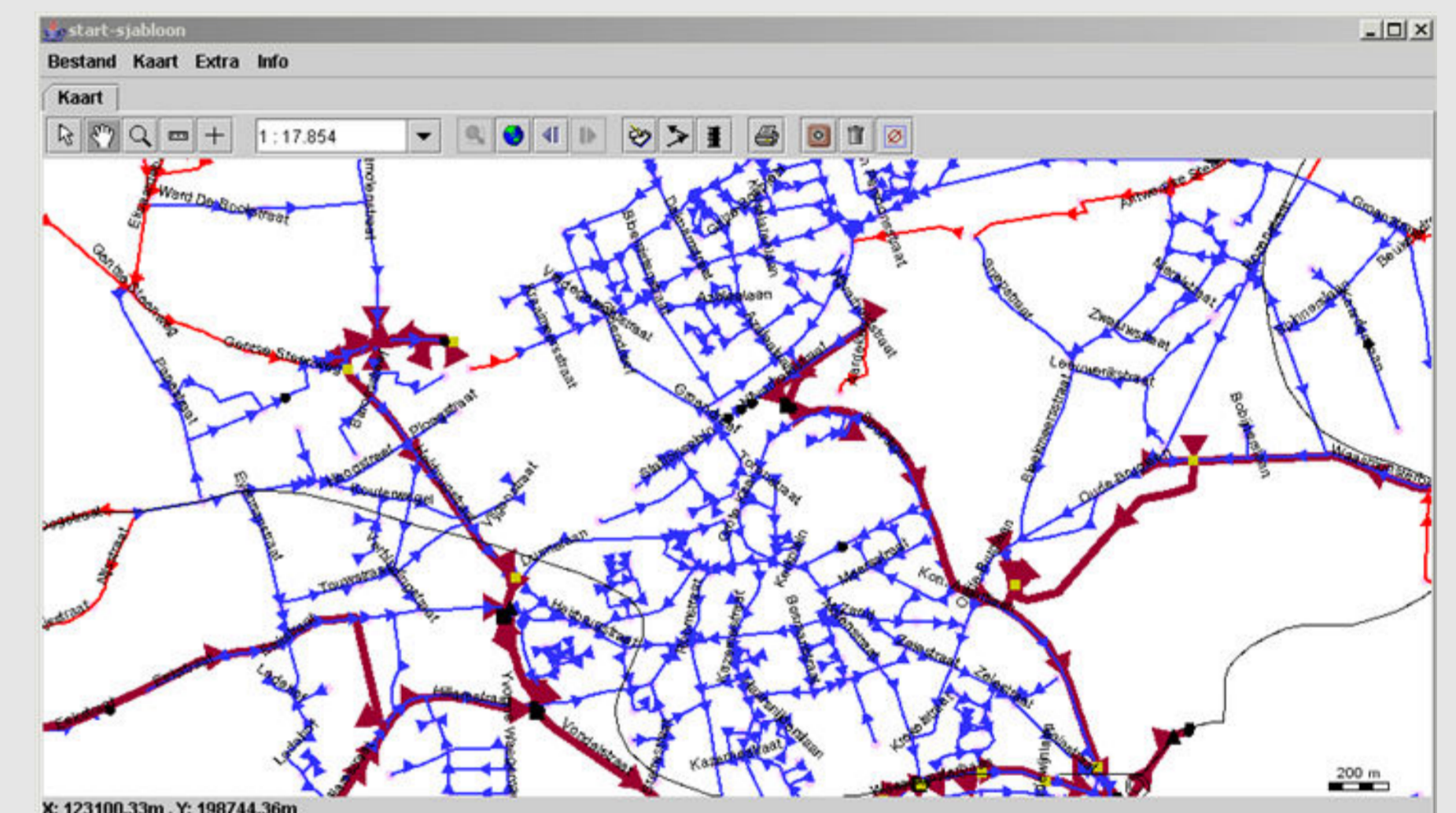
The VMM is responsible for the policy regarding the development of sewage systems and is the administrator of the mid-scale Flemish sewage database. This database contains all information on sewer networks and wastewater treatment infrastructure in Flanders.

The sewage database is made INSPIRE-compliant, and in the next step the VMM wants to unlock the information in the database to all stakeholders concerned by means of INSPIRE compliant web map and web feature services (WMS & WFS).

### Objective

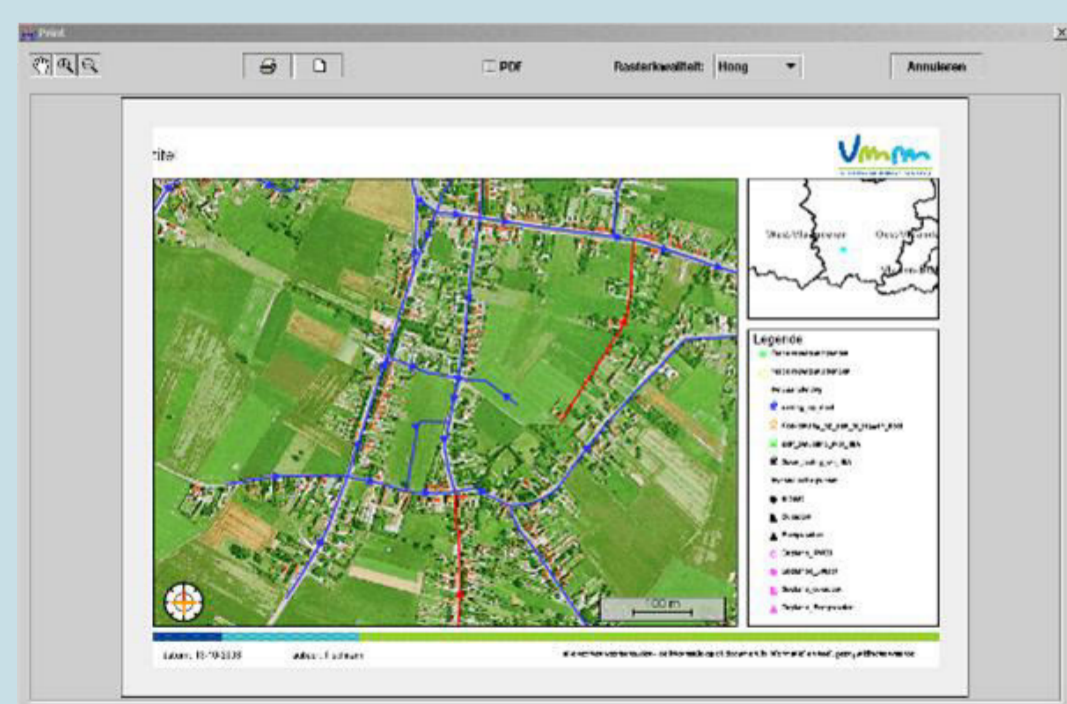
The objective of the pilot is to integrate more detailed information available from other stakeholders in the VMM database and disseminate also these data in an INSPIRE-compliant way. In consultation with the stakeholders the exchange of sewage-systems information will be standardised, based on INSPIRE specifications on utility services.

Next to this, a mobile application with a GPS functionality will be set up to facilitate the management in real-time. Through this application, the employees of the VMM can report their on-field-checks in real-time. This will lift the internal cooperation to a higher standard. Local authorities can also make use of the developed mobile application to make the real-time management feasible anytime and anywhere. Through the pilot we also want to find out the possibilities of setting up a crowd sourcing tool.



### Specific Data sources used for the scenario:

- ✓ Sewage Network in Flanders
- ✓ Hydrography



### Stakeholders

- Flemish Environment Agency VMM
- Local Authorities
- Administrators of Sewage Systems
- Aquafin
- AGIV

