

GeoSmartCity

*open geo-data for innovative services and user applications
towards Smart Cities*

CIP ICT-PSP Project n. 621150

Start date 01-03-2014, duration 36 months

GeoSmartCity implements a platform to share and public geographical open data coming from different sources, such as Public Administrations, Multi-utilities, Companies and Crowd-sourcing.

The platform includes specialized web services to integrate public geographical data with other geo-referenced data (public or private) useful for the smart management of urban infrastructures and public services in the context of the **Smart City** initiative and the **Digital Agenda** for Europe.

Partnership



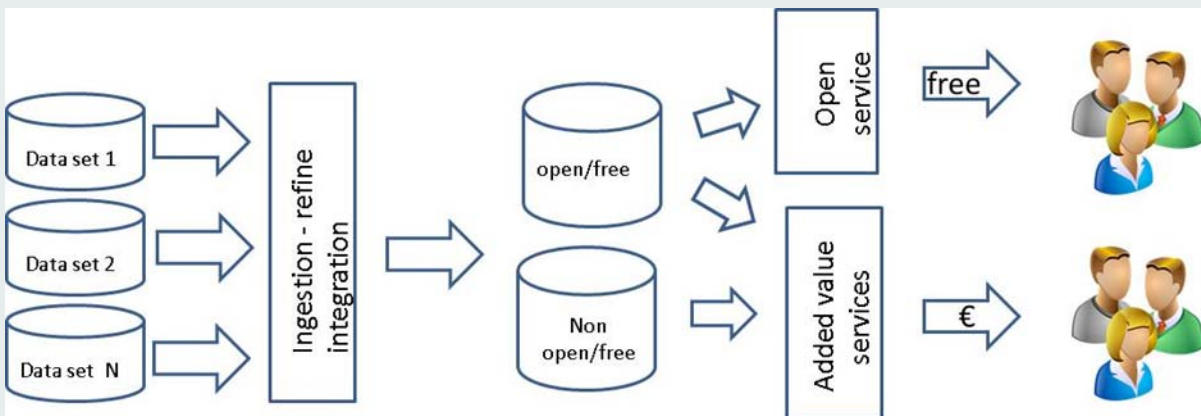
COMUNE DI GENOVA



- Support Cities to ‘open’ their data to professionals and citizens
- Establish a cross-platform, re-usable, able to publish open-(GI) data, in an urban context, but with a European dimension
- Provision of tools and facilities to integrate GI data/info with open data
- Framework and services to integrate proprietary/restricted data with open (GI) data of the City

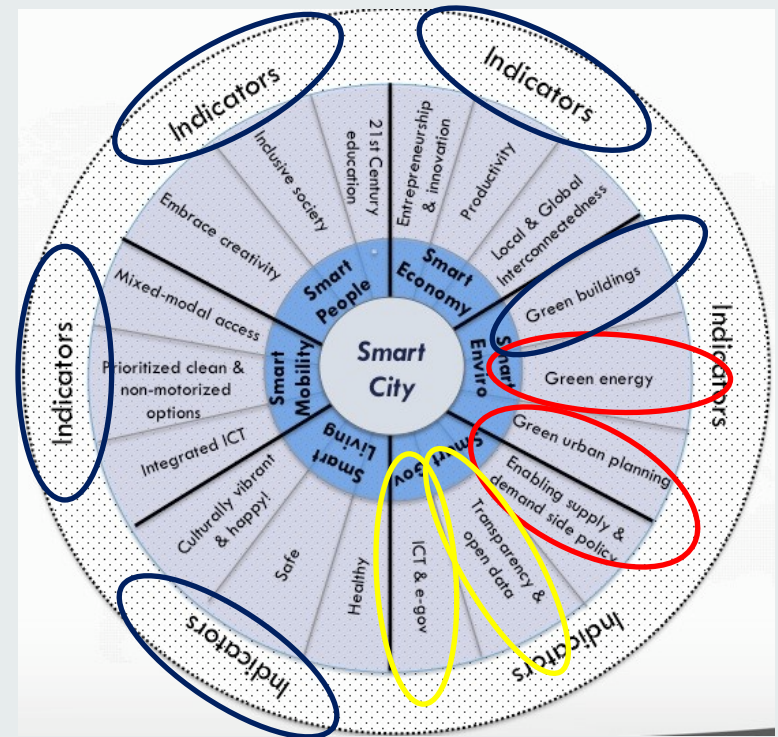


- Open infrastructure to build new business model for PAs and SMEs
- PPP (Public Private Partnerships): collaborative management of Open(GI) data
- Integration of restricted data in a secure way

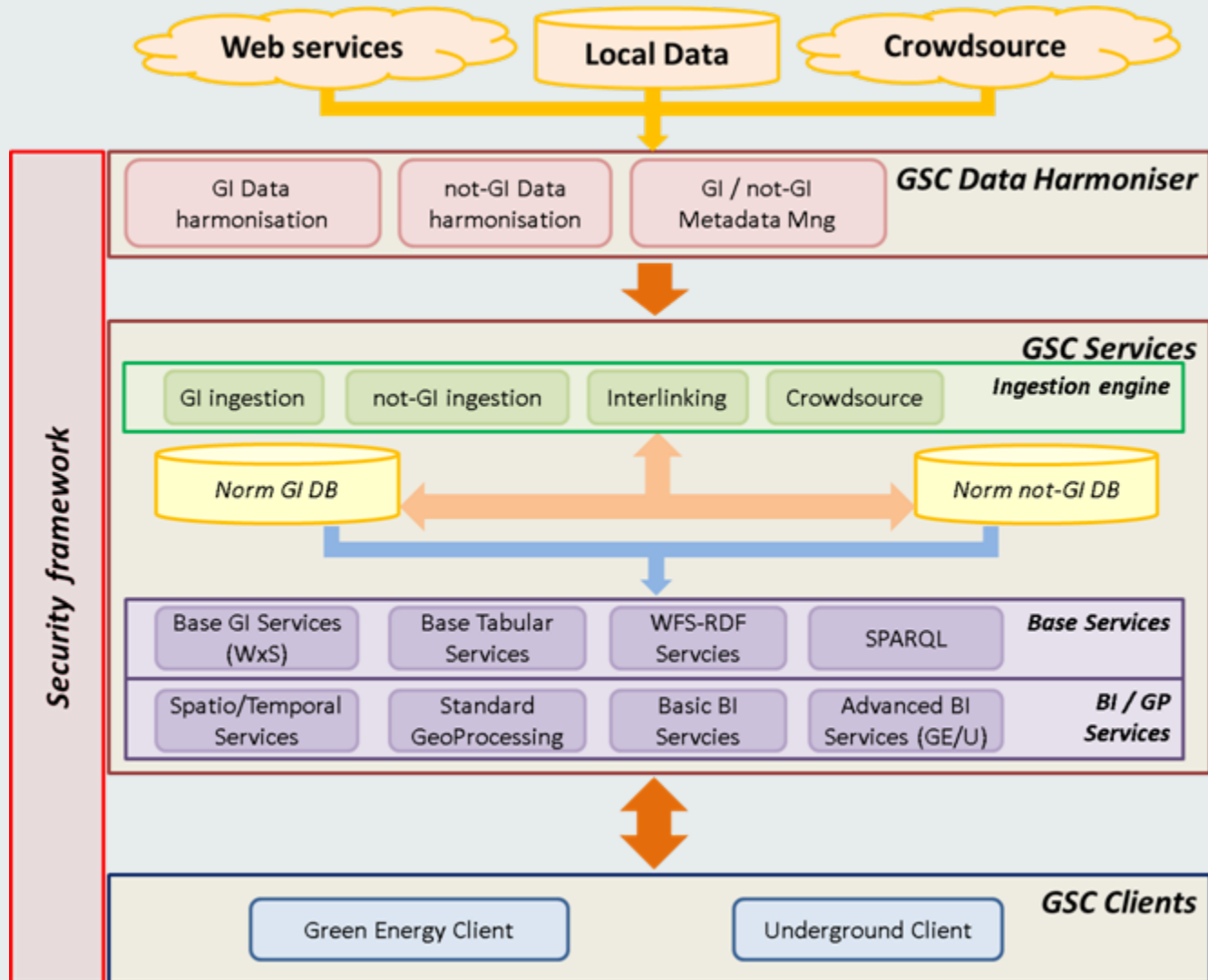


- Open infrastructure extendable to different SmartCity contexts

- Two application scenarios:
 - ✓ Green Energy (5 pilot cases)
 - ✓ Underground (6 pilot cases)

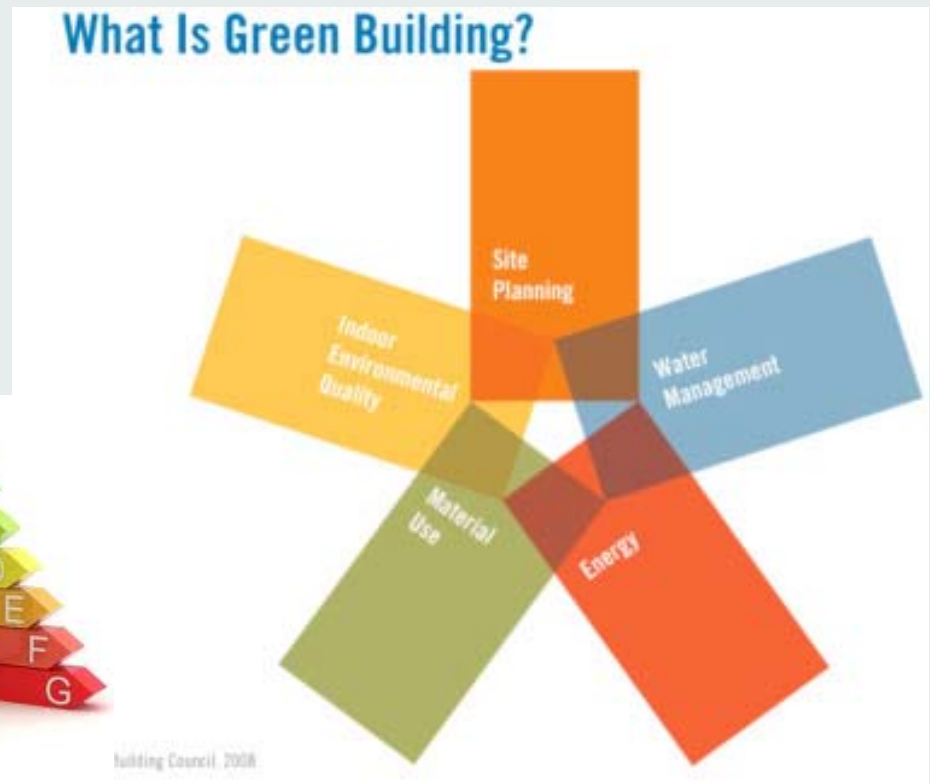


- Harmonised environment to integrate different operational protocols and standards, based on existing infrastructures
- Re-use of specialized services based on open standards
- Integration of new base/specialized services
- Ingestion and data integration engine composed by:
 - Harmonised data storage (based on GI standard, open data format)
 - a set of ingestion and data relation services:
 - Ingestion toolkit of GI data (open/restricted)
 - Ingestion toolkit of not-GI data (open/restricted)
 - Refine and reconcile toolkit to link and interconnect data
 - Crowd-sourcing base services based on location services



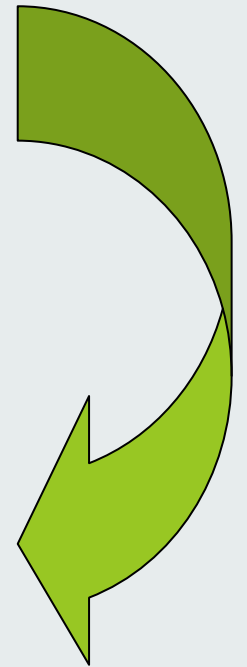


- “The Covenant of Mayors” to increase energy efficiency and use of renewable energy sources on their territories (> 6.000 signatories for over 190 Mln people).
- Sustainable Energy Action Plan (SEAP) → CO2 reduction target by 2020
- Related information:
 - Buildings
 - Environmental info
 - Energy Infrastructure
 - Planning
 - Smart grids



The 2020 climate and energy package:

- A 20% reduction in EU greenhouse gas emissions from 1990 levels;
- Raising the share of EU energy consumption produced from renewable resources to 20%;
- A 20% improvement in the EU's energy efficiency.



- Reducing greenhouse gas emissions by at least 40%***
- Increasing the share of renewable energy to at least 27%***
- Increasing energy efficiency by at least 27%***

From: http://ec.europa.eu/clima/policies/2030/index_en.htm

Objectives:

- To provide the PAs with instruments for the definition and management of their “smart energy” policies
- Support the process of energy transition (traditional to renewable) and to provide the needed knowledge
- Demonstrate the importance of data integration to optimize and improve the use of energy resources: real time sensors (enviro/climate/energy consumption), smart metering, smart grid
- To activate and test, on real use cases with high added value, new public-private collaborations
- To create an environment which favours the economic development at territorial level by exploiting the opportunities from the energy transition and the ICT potentiality

5 pilot cases (IT, GR, PT, FI, ES)

- Different infrastructure under the same area
- Unconnected information for the management of assets and systems (damages during maintenance activities)
- Environmental ← impact → infrastructure
- Safety and security



Objectives: enforce the dialogue between utility companies and Public Administrations to improve the sharing of underground data and the data flow toward and from the Public Administration.

Benefits:

- access to updated data, to speed up the planning process, the development and the control of works
- Integration of underground data with territorial data to search for pipelines located in risk zones (hydrogeologic, hydraulic, seismic...) and that need a specific monitoring
- Availability of Apps and Augmented Reality in the daily management of utility networks and to optimize emergency interventions
- Involvement of citizens which are asked to signal, through their smartphones, possible failures of the utility networks (crowd-sourcing)

6 pilot cases (ES, IT, PT, BE, CZ, PL)



See more in the next presentations...

11:15 - 12:00	<ul style="list-style-type: none"> - Application scenarios and Pilots (Underground and Green Energy) – María Cabello (TRACASA) - The GeoSmartCity technical approach (SINERGIS-AVINET)
12:00-12:30	<p>Underground data model</p> <ul style="list-style-type: none"> - The GeoSmartcity Underground Data model and Data harmonization– Giacomo Martirano (Epsilon Italia) - Flemish Data model for the Utilities-Sewage – Katia Beringhs (VMM)
13:30 -14:30	<p>National Belgian experience towards Smart Cities</p> <ul style="list-style-type: none"> - Philippe De Maeyer (University Ghent) - Open data and e-strategy - Bart Rosseau (City of Ghent) - “Ghent in Multi-D” – Mario Matthys (City of Ghent)
14:30 - 15:00	<p>Networking and conclusions</p> <ul style="list-style-type: none"> - Exploitation towards Thematic Communities, Training Framework and stakeholders involvement (GISIG) - Discussion and workshop conclusions