i-SCOPE

interoperable Smart City services through an Open Platform for urban Ecosystems
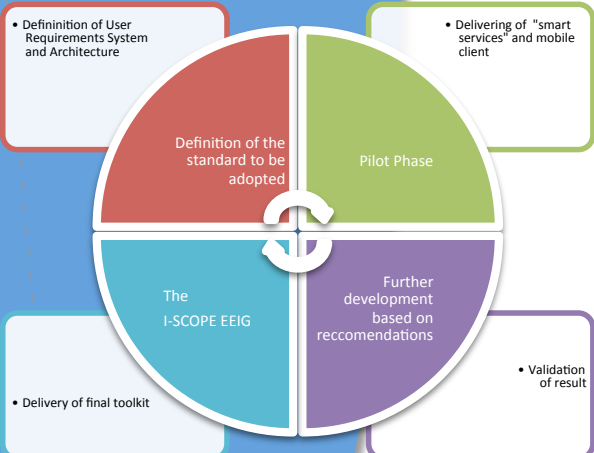
The product:

I-SCOPE aims at delivering an open source toolkit for 3D smart city services based on 3D Urban Information Models (UIM), created from accurate geospatial information. The smart services proposed address the following three scenarios: 1) Improved inclusion and personal mobility of aging people and diversely able citizens; 2) Energy dispersion & solar energy potential assessment; 3) Noise mapping & simulation.

- Defininition of User Requirements System and Architecture
- Delivering of "smart services" and mobile client

Definition of the standard to be adopted

Pilot Phase

The I-SCOPE EEIG

Further development based on reccomendations

- Delivery of final toolkit
- Validation of result

Project coordinator
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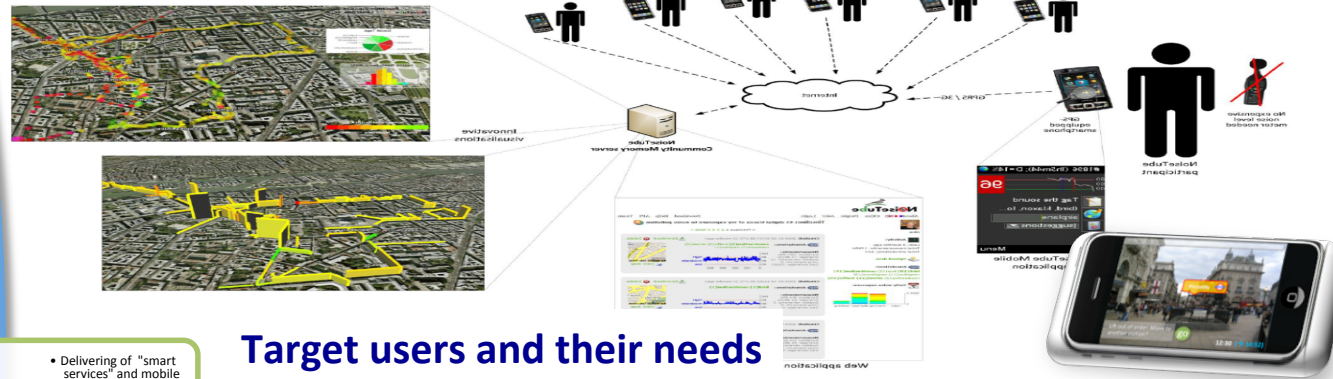Fax: +39 0461 283398
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Project website
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Type of project
Competitiveness and Innovation FP
ICT PSP
Pilot Type B

Target users and their needs

1) Diversely-abled citizens needing customised routing instructions. Specifically:
- a) mobility impaired users or people with limited ambulation requiring barrier-free routing functionalities;
- b) visually impaired users who cannot read maps and need voice-based semantically rich routing instructions.

2) City administrations that need to define policies in terms of heat dispersion and solar potential at urban level. **Professionals** who need to have high precision solar potential assessment.

3) City administrations needing to assess noise through simulation as well as existing mapping data in order to create noise maps according to EU Directive 2002/49/EC.

4) Citizens, who can access real-time data as well as accumulated maps on areas and time-scales of interest.

Initial develop. | Further develop. | Pilot phase (in operat. scenario) | Pilot (final)

First integrated system (alpha) | **Pilot (beta)** ready to be tested in operat. scenario | Further develop. according to results of pilot

Technology: i-SCOPE integrates a
number existing technologies as federation of interoperable web-services which will ensure interoperability through support of OGC standards. Smart services will be accessible via a web-based 3D client as well as through mobile applications used to crowd source environmental data from the citizens. To do so i-SCOPE implements technology as Location-Based Service, and develops trustable, secure privacy schemes to ensure the highest level of protection of users' information. Finally i-SCOPE will use ultrafast internet technologies (two fiber-optic regional-scale networks).

ICTPSP
ICT Policy Support Programme