



interoperable Smart City services through an Open Platform for urban Ecosystems

OVERVIEW

Cities are true magnets, attracting people to their bright lights and great working and living opportunities. At the present, more than half of the world's population lives in urban areas and the cities are groaning under the weight of their expansion. The growth of urban population is closely related to higher air pollution, water and energy shortages, traffic congestions, lack of necessary infrastructure etc. Smart Cities are the way forward to ensure superior connectivity, healthy and comfortable lifestyles.

A concept of Smart City refers to sustainable urban growth that places strong emphasis on technology, as well as social and environmental capital in raising the citizens' quality of life. It brings together technology, government and society to enable smart mobility, smart governance, smart economy, smart environment and smart living. Smart Cities are all about collaboration, sharing and transparency. Open data and sharing information are key enablers of urban *smartification*. In a Smart City, millions of messages are exchanged on a daily basis by thousands of devices such as mobile phones, weather stations etc.



The i-SCOPE project uses the potential of ICT and collected information in order to improve the decision-making on issues related to urban planning, policy design and city

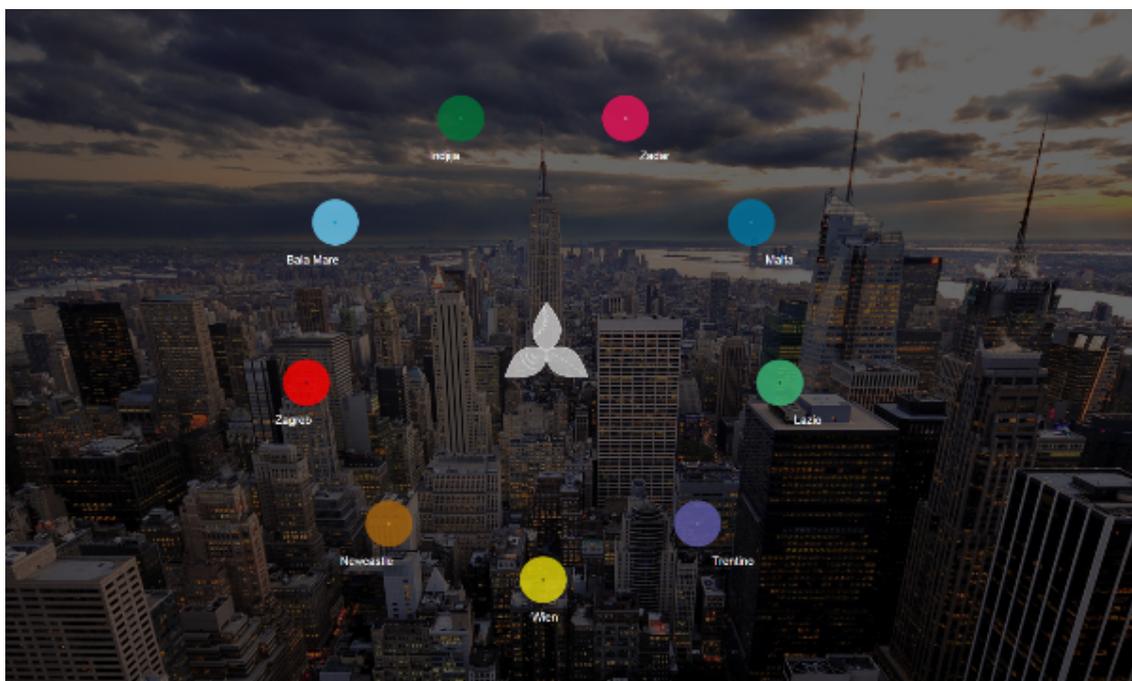
governance. The project delivers an open platform on the top of which it develops three Smart City services that address improved inclusion and personal mobility of elder and diversely abled citizens, optimization of energy consumption, and environmental monitoring through a real-time environmental mapping service.

PROJECT PROGRESS

During the last six months, the first trials and validation cycle were completed and the alpha version of the applet was tested and improved. Deployment and validation of all involved pilots was also performed. All suggestions collected from the pilot partners and various testers have been used to improve the public platform.

The i-SCOPE consortium has also been very active in disseminating the project results achieved so far and trying to involve a wide community of stakeholders. The partners have given a lot of presentations and published a number of articles in local, national and international magazines. A new video tutorial has been recorded and published in order to explain and demonstrate the operation mode of each functionality available in the i-SCOPE web client.

Additionally, the i-SCOPE project has been taken up in the [SciStarter](#) repository of citizen science projects.



VISIT THE i-SCOPE WEB PLATFORM

WATCH THE i-SCOPE PLATFORM TUTORIAL

KEY PAST EVENTS

i-SCOPE PROJECT AT STATUS WORKSHOP

Within the South East Europe “[STATUS](#)” project, Fondazione GraphiTech organized a workshop on the theme of “Urban Planning – Large Scale Modelling” held on 8 September 2014 at Museo Alto Garda in Riva del Garda (Italy). Nearly 60 researchers and professionals from Italy, Ireland and USA attended, discussed and provided their expertise on the aspects of developing integrated geographical information systems, localization and crowdsourcing solutions as well as innovative visualizations and tools for urban and territorial development.

The workshop, accredited by the Order of Architects, Planners, Landscape architects and Conservators of the Province of Trento, was very successful and it was a great opportunity to present the i-SCOPE project and its achievements.



NGMAST 2014 INTERNATIONAL CONFERENCE

The i-SCOPE project was presented on the 8th International Conference on Next Generation Mobile Apps, Services and Technologies, held from 10-12 September 2014 in Oxford (UK). The presentation entitled “SmartCity – the marriage of geography and ICT for a secure and private society – can it work?” gave a wide overlook on cities as architecture, as social centers, as hubs in general. The focal point was on planning, transport, infrastructure, the roles of government and citizen, and business in general. Through these issues, the roles of standards and education have also been highlighted.

INTERNAZIONALE FESTIVAL IN FERRARA

Fondazione GraphiTech, together with the University of Ferrara, Mapability association and Sinergis, participated to the workshop on the theme of “Smart city, accessibility and participation”, organized within the Internazionale festival in Ferrara (Italy) on 3 October 2014. The application for mapping the architectural barriers, developed within the i-SCOPE project, was presented at the workshop.

Architectural Barriers Survey is an application for mobile devices that allows citizens to collaborate with the public administration in order to create a database of all the architectural barriers in a city by uploading pictures and comments. It aims to improve inclusion and mobility of disabled citizens within cities. The application is available for free on [iTunes](#).

Internazionale festival in Ferrara is a three-day festival organized by the weekly magazine Internazionale. Workshops, conferences, exhibitions, documentary screenings, concerts and other cultural activities attracted over 70,000 visitors.



i-SCOPE WENT TO DUBLIN: WEB SUMMIT 2014

i-SCOPE project was promoted at the Web Summit 2014, the leading technology-industry conference centered on internet technology, held from 4-6 November 2014 in Dublin (Ireland). This year's event was wholly dedicated to the people and companies behind developing the technology that is fundamentally changing the way we live.

Host to over 22,000 attendees from CEOs and founders of tech start-ups to players in global technology industry and related industries, the Summit was a great opportunity to promote the i-SCOPE concepts, services and platform.



7TH DAYS OF PASSIVE HOUSE IN CROATIA

The City of Zagreb, Zadar County and Geofoto organized the i-SCOPE presentation and workshop as a part of the event "7th Days of Passive House", held from 7-9 November 2014 in five different cities in Croatia. The event involved experts in the fields of construction, architecture, energy and related industries following the trends of construction of passive and low-energy houses. Attendees had the opportunity for professional dialogue, acquiring the latest information and knowledge about the very low energy or almost zero building - nearly zero energy building (nZEB) and the establishment of business contacts. Special attention was given to the topics related to airtightness testing with thermovision cameras and explaining both methods of testing and certification of passive houses.

The i-SCOPE project, its achievements, and beta version of the services were presented, and a workshop with participants was organized. Impressions were very positive and participants were pleasantly surprised with the i-SCOPE outcomes and technology that stands behind them.



TEDXTRENTO EVENT

Fondazione GraphiTech was an official partner of TEDxTrento event, which took place at the Social Theater in Trento on 22 November 2014. This year's theme was "Creativity and Diversity", and there were speakers with different backgrounds who shared their ideas on the stage. The aim was to involve and engage the territory and key actors of innovation sector in order to create new projects and communities of innovators. The i-SCOPE project was presented during the event and gained a lot of interest.



i-SCOPE AT THE IEEE EVENT “TRENTO E IL TRENTINO, CITTÀ E COMUNITÀ INTELLIGENTI AL SERVIZIO DEL CITTADINO”

A couple of months ago, the Institute of Electrical and Electronic Engineers (IEEE) selected Trento among the top ten smartest cities in the world. Each of selected cities was invited to develop a project about a specific area and to share its achievements with IEEE and other cities. Trento has to identify technological and innovative solutions to improve citizens' quality of life. In order to achieve this objective, the Municipality of Trento, University of Trento, Trento Rise and IEEE organized the event called “Trento e il Trentino, città e comunità intelligenti al servizio del cittadino”, on 12 December 2014 in Trento. The event involved the city system of higher education and research, as well as companies and institutions with research centers located in the area. It was the occasion for the exchange of information and ideas, as well as for presentation of on-going projects related to smart cities. GraphiTech gained a lot of interest with the presentation of its on-going i-SCOPE and SUNSHINE projects, their research results and expected final outcomes.



WORKSHOP IN ATHENS

Nearly 90 people attended the workshop organized from 8-14 January 2015 in Athens (Greece). The first three days were introducing to geospatial information and GIS, spatial databases, open source geodata, openstreetmap data, QGIS and open source software interoperability, ways to contribute to the open source community, routing services in general and the i-SCOPE routing service specifically. The last two days of the workshop presented the geodata.gov.gr geoportal and showed OGC

services (CSW, WMS, WFS), presented the available APIs to access the geoportal Data API and the Mapping API, and tutored on coding and contributing to the GRASS GIS community. The workshop was completed successfully and several people were interested in the i-SCOPE routing service.



i-SCOPE PRESENTATIONS

The i-SCOPE consortium continuously disseminates the project idea and results on conferences and meetings. Here are listed some of the conferences and events where the i-SCOPE project has been presented in the last six months:

- The paper on the theme of “Orchestration Support for Participatory Sensing Campaigns” has been presented at the 2014 ACM International Joint Conference on Pervasive and Ubiquitous Computing (authors: E. D’Hondt, J. Zaman, E. Philips, E. Gonzalez Boix, W. De Meuter), held from 13-17 September 2014 in Seattle (USA).
- The City Office for Energy, Environment and Sustainable Development of the City of Zagreb has presented the i-SCOPE project and its objectives on the final conference of the project "RES-Renewable energy for a brighter future", organized by the Technical School Ruđer Bošković on 10 October 2014 in Zagreb (Croatia).
- The i-SCOPE routing service for disabled people was presented during the EURO CITIES Social Affairs Forum in Newcastle on 21 October 2014.
- The i-SCOPE project was presented on CPEXpo and EC Security Research Conference 2014 held from 9-11 December 2014 in Genoa (Italy).

The project consortium has been very active in promoting the i-SCOPE project and its outcomes in local, national and international media:

- The i-SCOPE NoiseTube app has been presented on "[The Guardian](#)" website on 12 September 2014.
- The i-SCOPE project has been presented in a specialized magazine called "[Gradimo Zadar](#)" ("Building Zadar") in autumn edition of 2014.
- Geofoto and Zadar County have promoted the project and invited citizens to test the i-SCOPE platform publishing a number of articles in Croatian local and national newspapers and specialized magazines in November and December of 2014.
- The i-SCOPE project has been presented on the city portal [Wien.at](#) on 13 November 2014 as well as in the "[Wien.at](#)" printed media on 17 December 2014.
- An article reporting the release of pilot service for solar energy calculation "[Web application prototype for calculation of roof solar energy potential](#)" was issued on Zadar County official website on 14 January 2015.

UPCOMING ACTIVITIES AND EVENTS

NOISETUBE MOBILE

NoiseTube Mobile for Android v.2.0. will be released and available to install on Google play.

i-SCOPE WORKSHOP IN ZADAR (CROATIA)

Zadar County will organize a workshop entitled "i-SCOPE workshop: how to calculate roof solar potential?" as a part of Zadar County Open Days. It will be held on 24 April 2015 in Zadar County Hall.

i-SCOPE AT ZAGREB SCIENCE FESTIVAL

i-SCOPE project will be presented at the 13th Zagreb Science Festival which will be held from 20-25 April 2015 at the Zagreb Technical Museum.

ZAGREB ENERGY WEEK

Zagreb Energy Week will be organized from 11-16 May 2015. Presentation of the i-SCOPE project will contribute to highlighting the issue of sustainable development among citizens, as well as decision makers.

THE CONSORTIUM



i-SCOPE PROJECT

interoperable Smart City services through an Open Platform for urban Ecosystems

The project is supported by the CIP/ICT Policy Support Programme Pilot Type B of the EC

Call Identifier: CIP-ICT-PSP-2011-5

Start date: 15 January 2012

Duration: 42 months

Project coordinator: Raffaele De Amicis

Fondazione GraphiTech

Via alla Cascata 56/C - 38123 Trento (Italy)

T.: +39 0461 283395 | F.: +39 0461 283398

Email: coordinator@iscopeproject.net

Newsletter editor: Ružica Bukša Tezzele

Fondazione GraphiTech

Via alla Cascata 56/C - 38123 Trento (Italy)

T.: +39 0461 283394 | F.: +39 0461 283398

Email: ruzica.buksa@graphitech.it

Project website:

www.iscopeproject.net

FOLLOW US



Copyright 2015 i-SCOPE. All rights reserved.

