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Eurisy: Bridging space and society

Dominique Tilmans, Eurisy President

United Nations/United Arab Emirates High Level Forum
"Space as a driver for socio-economic sustainable development"
20 – 24 November 2016, Dubai, United Arab Emirates

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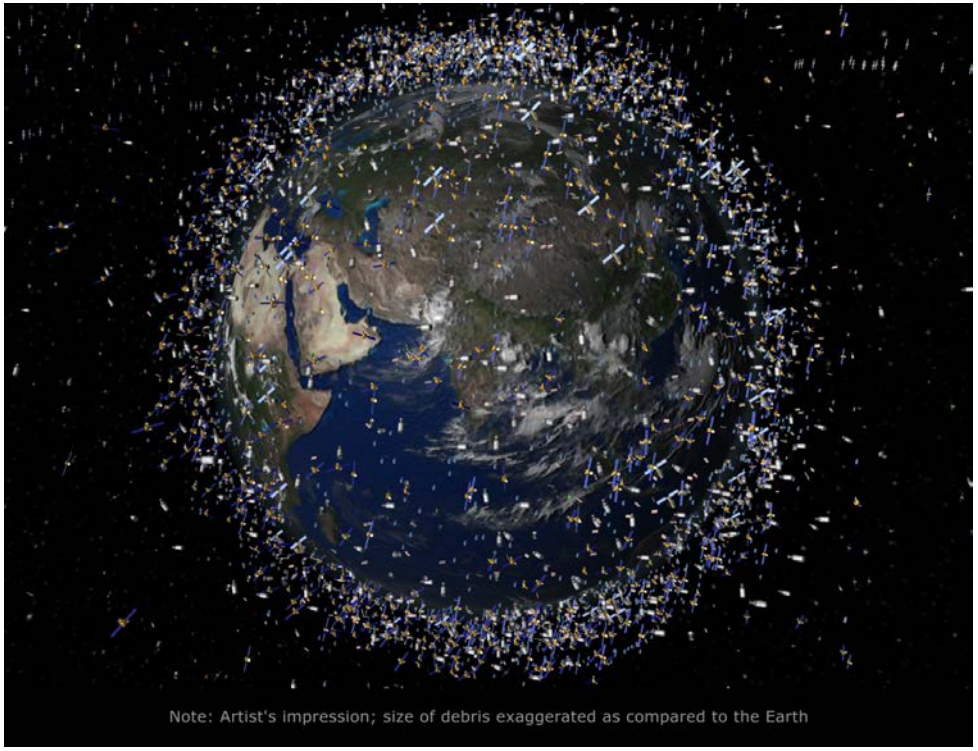
1 100 active satellites are currently orbiting around the Earth…..



… Providing information that can be useful in a number of sectors

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Satellite applications can contribute to the achievement of all SDG for 2030

Why isn't their potential fully exploited?

Lack of available usable data

Difficulties to procure satellite-based services (availability , infrastructure and costs)

Lack of accessible communication

Eurisy works for the democratisation of space-based services

Non-for-profit funded in 1994

Based in Paris

Members: governmental space agencies and offices

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Full Members

Associate Members

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OUR OBJECTIVES

Communicating on available satellite-based services

Mapping available satellite-based services

Collecting direct testimonials from user organisations: public administrations, private companies and NGOs

Raising awareness on services which are already operational

Understanding users' needs, challenges and motivations

Giving feedback to decision makers to accelerate the uptake of the services

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HOW DO WE WORK?

Growing pool of 200 direct testimonials from 38 countries

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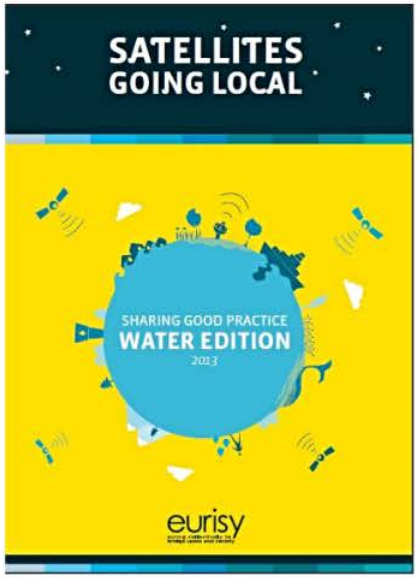
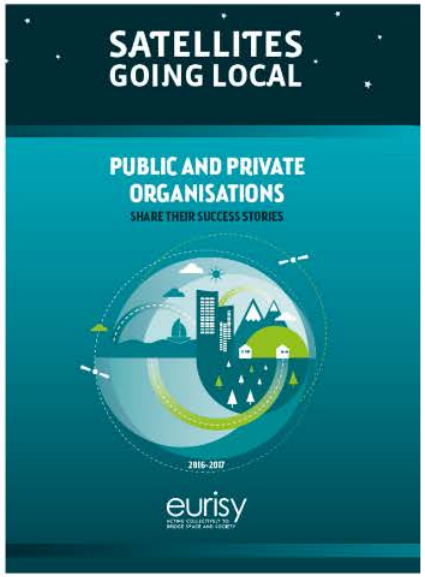
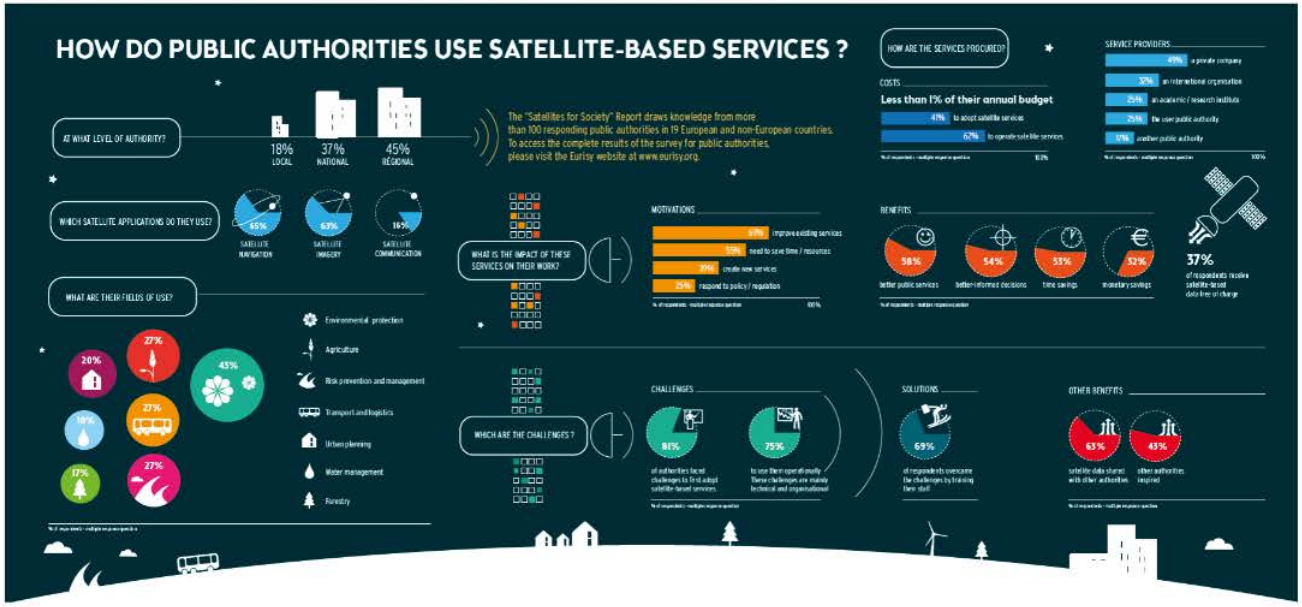
Publications based on direct end-user testimonials







Survey for public authorities

Awareness raising events

In collaboration with space organisations and user communities

Eurisy conferences

Collaboration in partners' events

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Database of user testimonials

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Database of user testimonials

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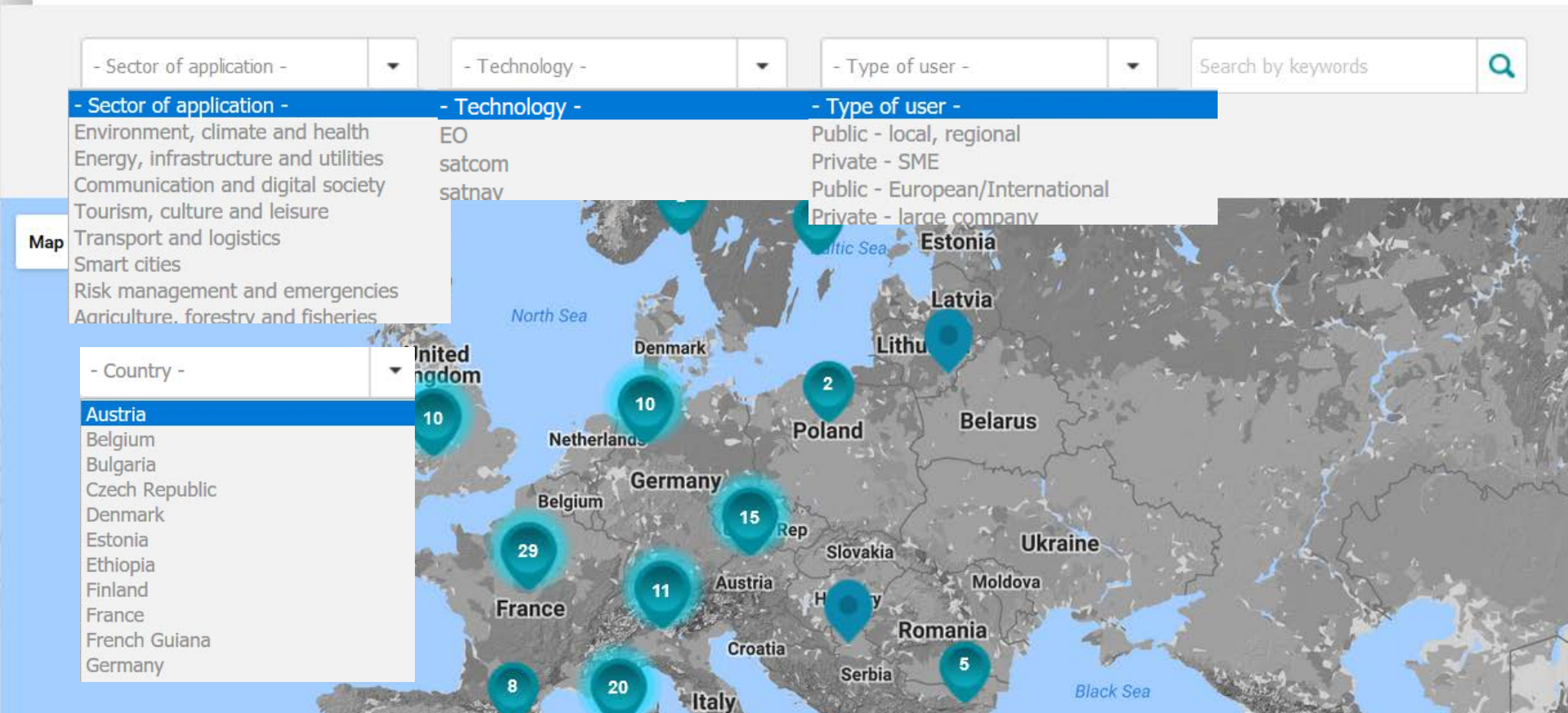
Database of user testimonials

Welcome to Europe's largest resource of pioneering users' testimonials on operational satellite applications

Pioneering public authorities, agencies and SMEs from across Europe share their hands-on experience, to inspire their peers to follow suit. It is not about the technology; it is about how end-users make it work for them.



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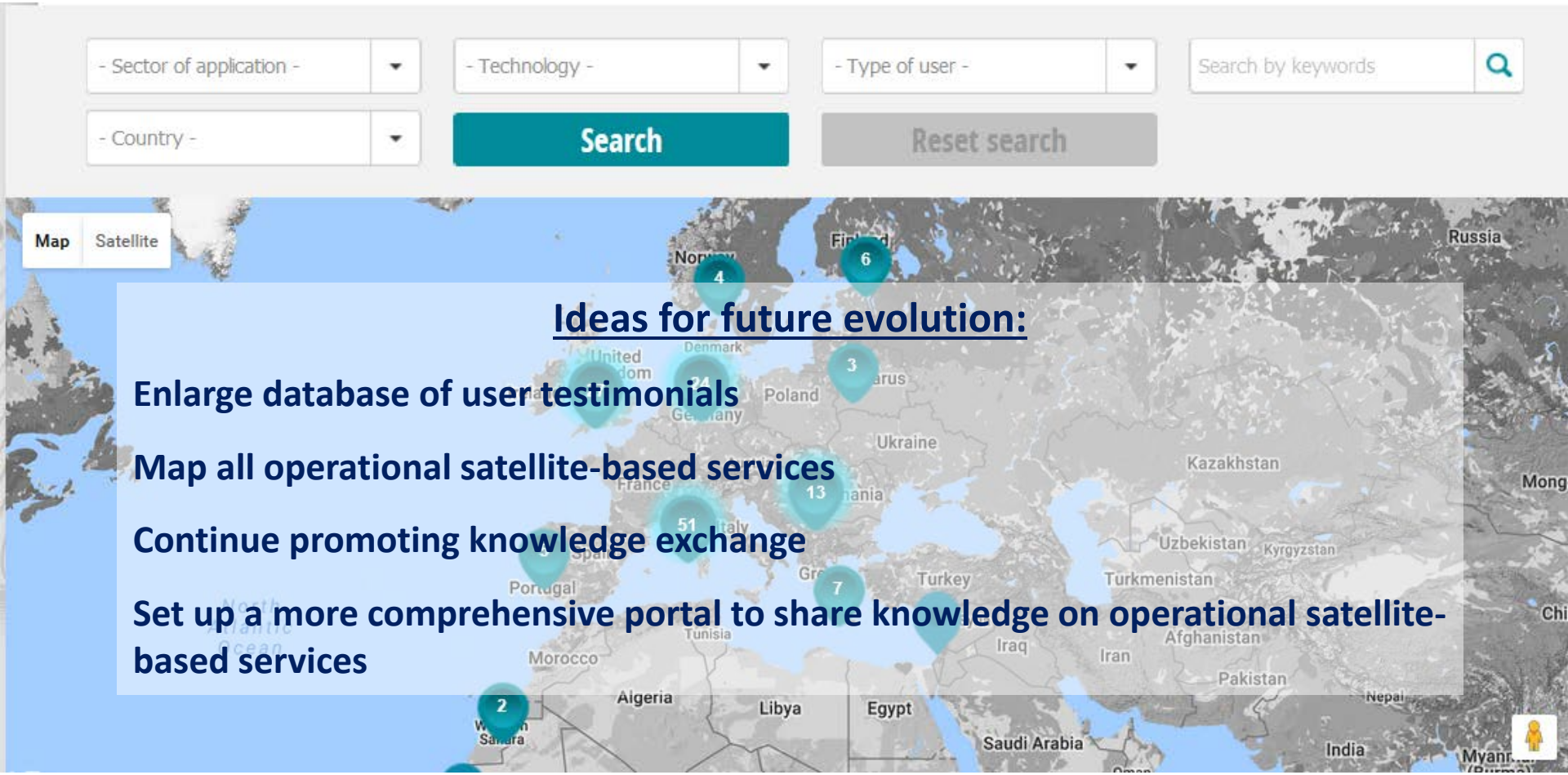
Database of user testimonials



Ideas for future evolution:

- Enlarge database of user testimonials
- Map all operational satellite-based services
- Continue promoting knowledge exchange
- Set up a more comprehensive portal to share knowledge on operational satellite-based services

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FUTURE ACTIVITIES

Conference on Satellite Applications for Health and Ageing

Satellite data and signals can help ensuring healthy lives and promoting well-being for all at all ages

3 GOOD HEALTH AND WELL-BEING

Indicative sub-themes:

- Remote and autonomous healthcare
- Healthy lifestyle promotion
- Urban planning and mobile reporting for safety and accessibility
- Epidemics monitoring and prevention
- Remote assistance and guidance to the elderly and persons with disabilities
- Reactivity, mobility, communication and coordination in emergency contexts

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FUTURE ACTIVITIES

Satellite-based services in use to build smart sustainable cities: a case study analysis

Objectives:

- Identify areas in which satellite-based services can make cities inclusive, safe, resilient and sustainable
- Analyse success stories
- Evaluate the transferability of good practices in other cities.

DIMENSIONS

- Environment and climate change
- Integral urban development
- Governance

DELIVERABLES

- List of available satellite applications
- 9 Case Study Reports
- User Forum to discuss transferability

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FUTURE ACTIVITIES

Satellite-based services in use to build smart sustainable cities: a case study analysis

Goal 11: Make cities inclusive, safe, resilient and sustainable

Satellite applications can contribute reaching many of the targets of SDG 11.

How? Let's have a look at some examples.....

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Satellite-based services in use to build smart sustainable cities

11 SUSTAINABLE CITIES AND COMMUNITIES

City of Diemen (The Netherlands): Coping with soil resilience with the support of satellite imagery

26,000 inhabitants

The soil can sink up to two cm per year.
The municipality has to heighten the entire public space about once every 20 years as a preventive measure.
This operation is very costly.

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Satellite-based services in use to build smart sustainable cities

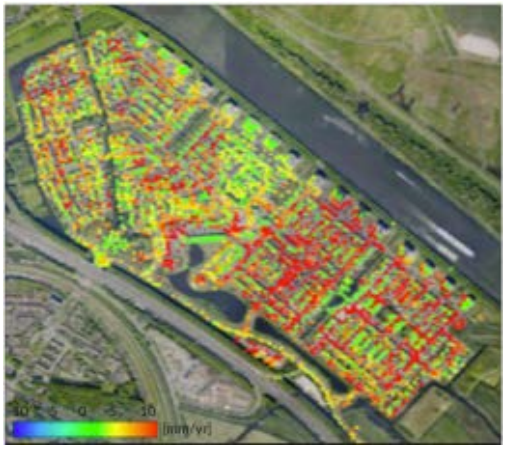
11 SUSTAINABLE CITIES AND COMMUNITIES

City of Diemen (The Netherlands): Coping with soil resilience with the support of satellite imagery

Gemeente Diemen

In 2011, the Department of Infrastructure ordered a **city-wide deformation map based on satellite imagery** from a local company.

Over 100 radar images recorded by ESA satellites from 1992 to 2010 were used.



The map shows subsidence in millimetres for specific locations, allowing the Municipality to prioritise maintenance where most needed.

The map cost EUR 10.000

To assess soil resilience with field measurements would have cost ten times more

SDG 11 Target: By 2030, significantly **reduce the number of deaths and the number of people affected** and substantially decrease the direct economic losses relative to global gross domestic product caused **by disasters, including water-related disasters**, with a focus on protecting the poor and people in vulnerable situations

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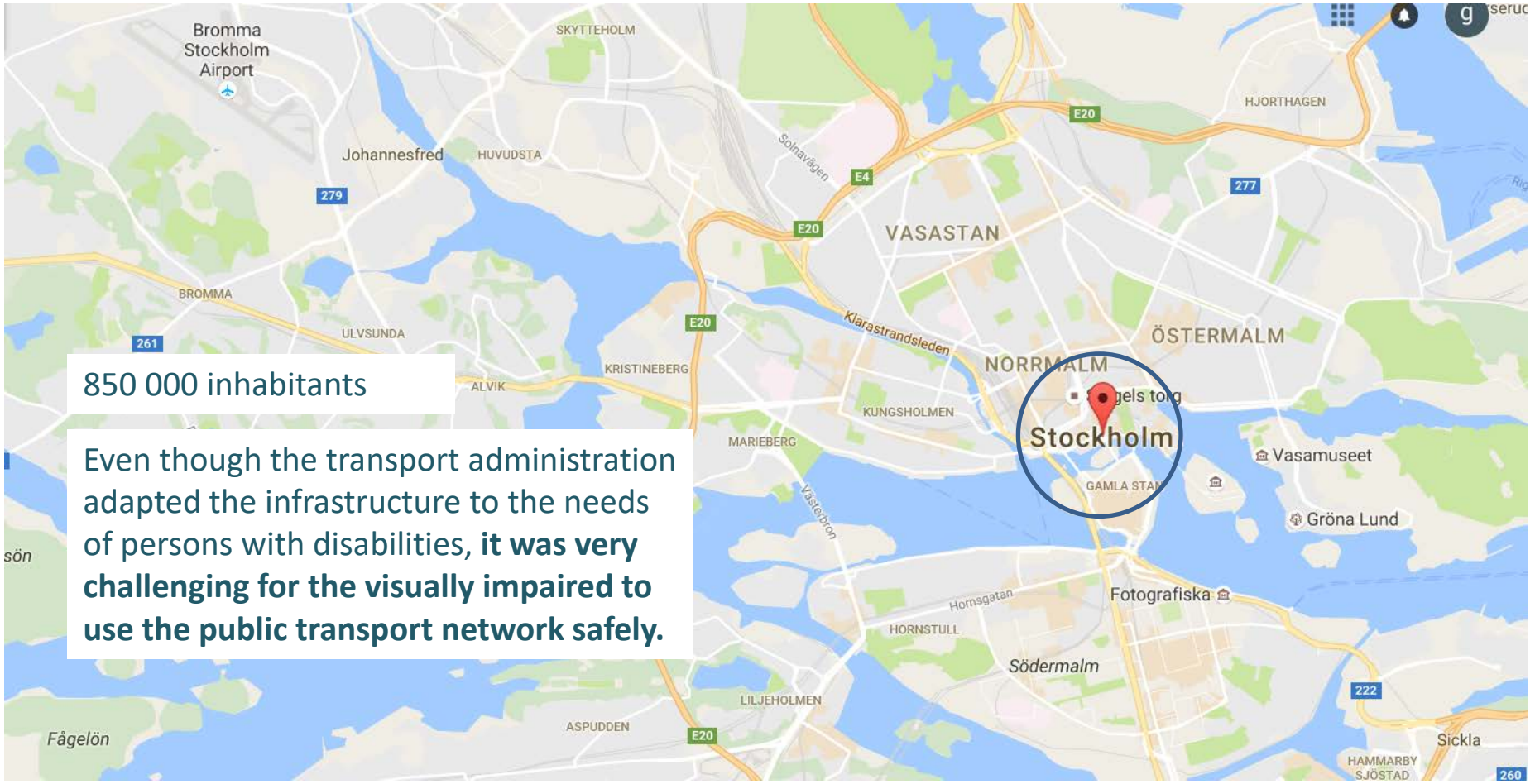
Satellite-based services in use to build smart sustainable cities

11 SUSTAINABLE CITIES AND COMMUNITIES

Stockholm (Sweden): Improving accessibility for persons with disabilities with the support of satellite navigation



850 000 inhabitants

Even though the transport administration adapted the infrastructure to the needs of persons with disabilities, **it was very challenging for the visually impaired to use the public transport network safely.**

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Stockholm (Sweden): Improving accessibility for persons with disabilities with the support of satellite navigation

Stockholms stad

The city's Traffic Administration, in collaboration with other entities developed **e-Adept**

By means of a **mobile phone**, a **GPS receiver** and other navigational equipment, the device can communicate with the City's local road database in which a digital pedestrian network is stored.

The pedestrian network gives the user guidance on the whereabouts of pedestrian crossings, excavation works, steps and other things which people need to be told or warned about along the way.

SDG 11 Target: By 2030, provide access to safe, affordable, **accessible and sustainable transport systems for all**, improving road safety, notably by expanding public transport, with special attention to the **needs of those in vulnerable situations**, women, children, persons with disabilities and older persons

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Satellite-based services in use to build smart sustainable cities

11 SUSTAINABLE CITIES AND COMMUNITIES

… Some more applications of satellite information and services …

Environment and climate change

Sat Nav to tack and plan bin collection

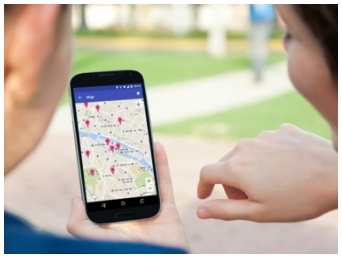
EO to measure Urban Heat Islands

Integral urban development

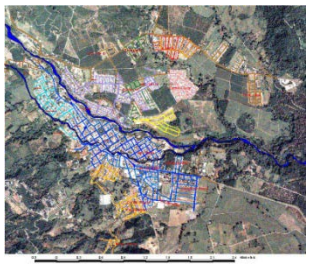
Sat Nav for intermodal transport

Satellite imagery to monitor green volume

Governance



Sat Nav for collective urban planning



EO data to enhance cadastral transparency

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To reach the SDG we must use all available tools

Satellites provide us with information and enables services which were unimaginable 20 years ago

To fill the gap between space and society we need to improve our communication on operational satellite-based services to public and private users and facilitate procurement

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Thank you!

Contact us to know more about Eurisy's activities and exchange your experience

www.eurisy.org

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