Eurisy: Bridging space and society

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

... Providing information that can be useful in a number of sectors
It’s obvious: Satellite applications can contribute to the achievement of all SDG for 2030

But: Why isn’t their potential fully exploited?

> Lack of available **usable data**
> Difficulties to procure satellite services (availability, infrastructure, costs,...)
> Difficulties to draw up specifications.
> 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
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
HOW DO WE WORK?

Growing pool of 200 direct testimonials from 38 countries

Environment, climate and health
Energy, infrastructure and utilities
Communication and digital society
Tourism, culture and leisure

Transport and logistics
Smart cities
Risk management and emergencies
Agriculture, forestry and fisheries
Survey for public authorities
Awareness raising events

In collaboration with space organisations and user communities

Eurisy conferences

Collaboration in partners' events
Database of user testimonials

Pioneering local and regional authorities and SMEs from across Europe already use satellite applications in their daily job. For the last seven years Eurisy has been collecting testimonials on how satellite applications have helped them in practice. Click on the map to see some success stories!

http://www.eurisy.org/
Forest company Vojvodinăsucme: sustainable forest management and reforestation through satellite imagery

The forest company

Located in Northern Serbia, the Vojvodina region spans over 2,150,000 ha. It is predominantly a flat farming region. Forest covers 7% of its surface, i.e. about 154,000 ha.

Vojvodinăsucme is the public entity in charge of 65% of the region’s forests and forest land, of which over half are protected areas. It manages four forestry estates along with a fifth section dedicated to hunting tourism.

As the forests are mainly concentrated around river basins, the organisation also supports the implementation of the EU Water and Floods Directives and Union 2008 regulation in view of its accession to the EU.
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.
Ideas for future evolution:

>> Enlarge database of user testimonials

>> Continue promoting knowledge exchange

>> Set up a more comprehensive portal to share knowledge on operational satellite-based services

>> Map all operational satellite-based services
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

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
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

20/11/2016

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Panel 2: Making a difference: Working Together Towards Sustainable Space
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......
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.
City of Diemen (The Netherlands): Coping with soil resilience with the support of satellite imagery

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.
Satellite-based services in use to build smart sustainable cities

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

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.
Satellite-based services in use to build smart sustainable cities

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

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.
Satellite-based services in use to build smart sustainable cities

... Some more applications of satellite information and services ...

Environment and climate change

Sat Nav to tackle 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
To reach the SDG we must use all available tools!!

We’ll never explain enough that satellites:
- Help to make decision
- Give solutions
- Are less expensive
- Personal gain
- Save time for management
- Provide information and services unimaginable 20 years ago

To fill the gap between space and society we need to improve our communication. Not technical but accessible to the end-users!

A priority!!!!
Thank you!

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

www.eurisy.org

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