EU EO Services Industries
contribution to Global Sustainability
Giovanni SYLOS LABINI: EARSC VP. & CEO Planetek Italia
EARSC

EARSC is a trade association (non-profit Belgian company), founded in 1989, dedicated to helping European companies: providing services (including consultancy) or supplying equipment in the field of remote sensing.

Our mission is:

• to foster the development of the European Geo-Information Service Industry
• to represent European geospatial-information providers, creating a sustainable network between industry, decision makers and users

Today: 85 members (75 full and 10 observers) from 22 countries in Europe
**Market development & promotion**

**OGEO:**
Link with Oil & Gas Industry

**EO Portal (wiki):**
Information on Geospatial services

**EO4OG:** guide to geospatial products for the O&G Industry

**Research Corner**

**eo4All**
Links with IFI’s

**EOpages:**
Brokerage site

**EOMag:**
Sector magazine

**Achievement Award**

**Annual Report**

**EARSC on Twitter**
Space Component
Dedicated Missions

- **S1**: Radar Mission
- **S2**: High Resolution Optical Mission
- **S3**: Medium Resolution Imaging and Altimetry Mission
- **S4**: Geostationary Atmospheric Chemistry Mission
- **S5P**: Low Earth Orbit Atmospheric Chemistry Precursor Mission
- **S5**: Low Earth Orbit Atmospheric Chemistry Mission
- **S6 (Jason-CS)**: Altimetry Mission

*Daniel Quintart, DG GROW*
Copernicus Contributing Missions

- SPOT (VGT)
- PROBA-V
- DMC
- Pléiades
- Deimos-2
- RapidEye
- SPOT (HRS)
- COSMO-Skymed
- TerraSAR–X
- Tandem-X
- Radarsat
- Cryosat
- Jason
- MetOp
- Meteosat 2nd Generation

Daniel Quintart, DG GROW
Impact of Copernicus

Estimated Total Addressable Market

Copernicus by 2024 will generate 2B€ and in excess of 20,000 new jobs

EC GIO Lot 3 Study
Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. (WCED, 1987)
70% of WATER use is from AGRICULTURE;

FOOD production and distribution accounts for 30% of global ENERGY consumption.

WATER is extracted, distributed and purified using ENERGY.
WITHIN NEXT 35 YEARS THE WORLD WILL NEED

60% MORE FOOD

55% MORE WATER

50% MORE ENERGY
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This false-colour image from the Sentinel-2A satellite shows agricultural structures near Tubarjal, Saudi Arabia. Circles come from a central-pivot irrigation system, where the long water pipe rotates around a well at the centre.
The crop yield prediction process using soil information and weather information could improve yield forecasting error in risk rating of 200% or greater.
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Water stress will increase in many agricultural areas by 2025 due to growing water use and higher temperatures (based on IPCC scenario A1B)
A ‘red tide’ over he coast of the United Arab Emirates has affected desalination plants over the last four years, causing severe damage and sometimes bringing operations to a halt.
EARSC study estimate the benefit of EO monitoring of pipeline at 2740 $/Km/y, only in US about 20,000 Miles of Water pipes should be replaced every year since 2035.
WITHIN NEXT 35 YEARS THE WORLD WILL NEED

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Land Use and DEM generation from EO data can largely improve wind speed forecast on large areas.
Each 3 sec. we destroy a football court of Forest
EO data can improve Deforestation monitoring and spread good practices in forest management
According to our analysis, the result leads to a total direct economic benefit to Sweden of between €16.1m and €21.6m per annum.
For more Information

For Information on EARSC:

www.earsc.eu  / www.eomag.eu / secretariat@earsc.org

For more information on the remote sensing industry:

www.eopages.eu

For information on EO applications:

www.earsc-portal.eu

For links to the O&G Community

www.geois-portal.eu