



Growing the EO Industry through Research and Innovation

- Geoff Sawyer , EARSC Secretary General
EP debate on H2020 and Space
5th June 2012, Brussels



What is EARSSC?

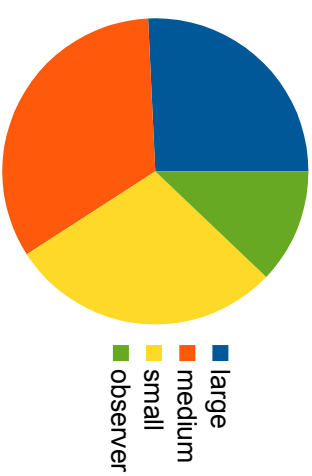
- EARSSC is a non-profit-making organisation created in 1989 as the voice of the European geo-information EO service industry
- Mission & objectives:
 - to foster the development of the European Geo-Information Service Industry
 - to stimulate a sustainable market for Geo-information services using EO data, openly accessible to all members
- Today EARSSC has 67 members in 22 countries, and is a recognized association worldwide
- Represents European geo-information providers creating a sustainable network between industry, decision makers and users



EARSC composition

EARSC has 66 Members

- Large: 17 companies
- Medium: 22 companies
- Small: 19 companies
- Observers: 8 organizations



From 22 countries [germany (9), belgium (7), francia (7), italy (7), uk(6), spain (5), netherlands (4), norway (3), bulgaria (2), luxemburg (2), poland (2), portugal (2), sweden (2), austria (1), canada (1), czech republic (1), denmark (1), greece (1), romania (1), russia (1), slovakia (1), switzerland (1), ukrania (1)]



European EO Services Industry

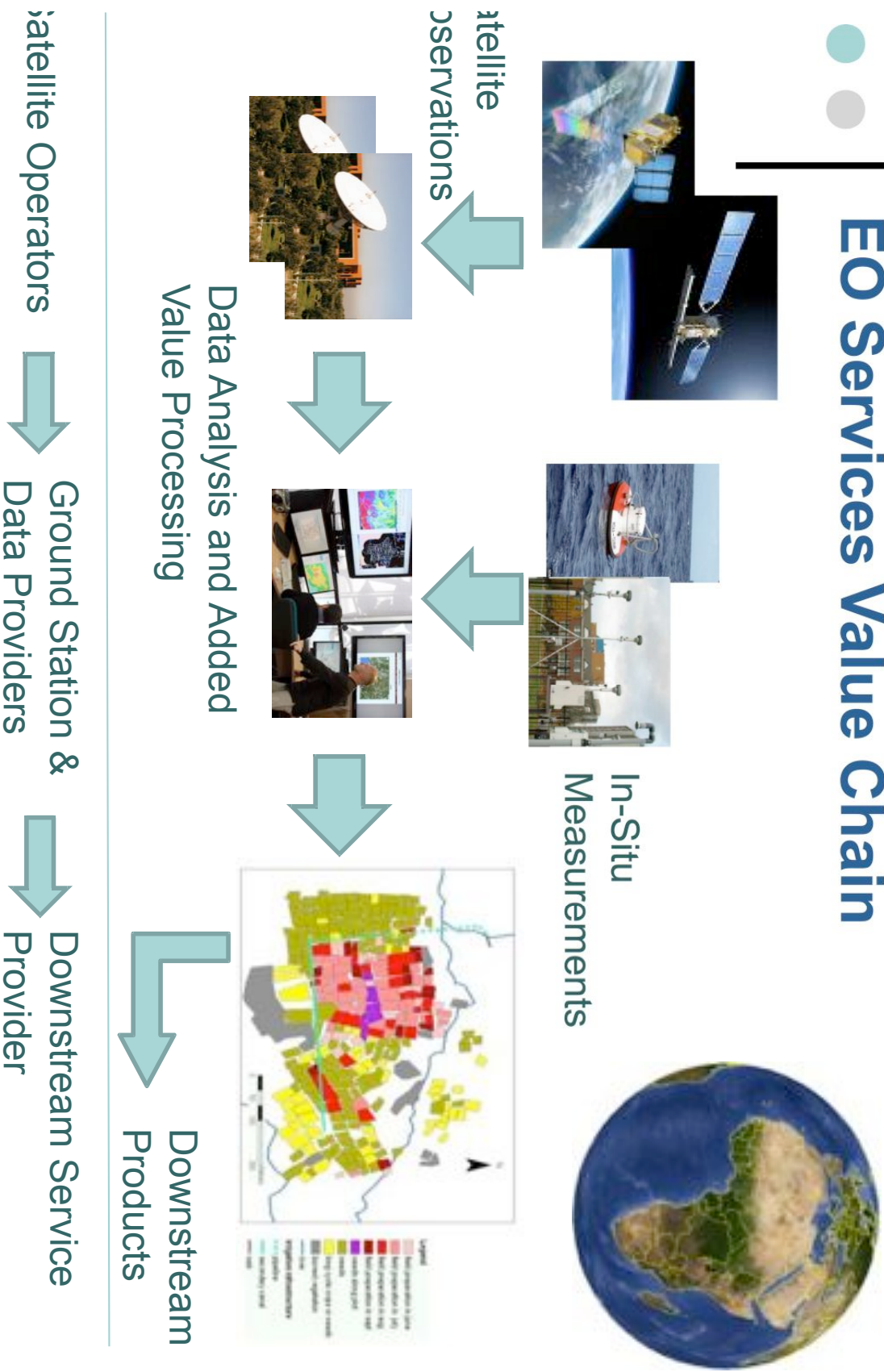
- Offers a full range of services based on extensive experience serving government, industry and the citizen
- Includes data providers, downstream service providers, software and consultancy companies with a mastery of space-borne/airborne/in-situ systems and sensors technologies.
- Innovative / dynamic; many new companies, changing ownership
- Between 100 and 200 companies largely SME's with strong partnership experience across European borders.
 - Estimated as €800m to €1b annual revenues.
 - Highly skilled workforce; interchange with other sectors
 - Last survey in 2006 identified 152 companies.
 - Full industry survey will be made by EARSC during 2012.



EARSC is Offering

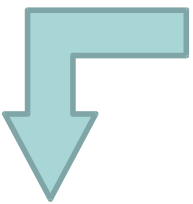
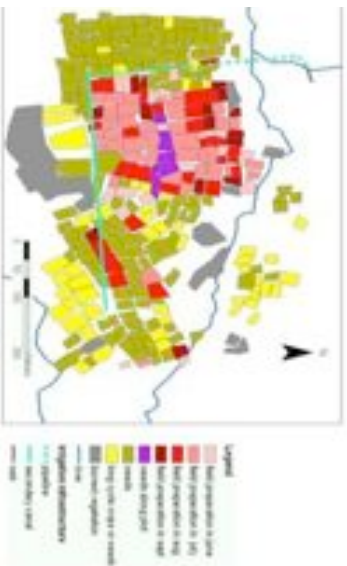
- An **industry voice**: access to bodies and individuals not possible for companies especially SME's.
- **Source of Information**: newsletters, searchable web-site etc but also direct interviews through meetings
- **Networking**: more opportunities throughout the year to meet with each other and key customers.
- Access to **new markets**: New sectors and new ways into established ones eg O&G.
- **Exports**: awareness of members capabilities and door opening in countries outside the home base.
- Encourage good **business conditions**: external (through lobbying) and internal (certification and standards).

EO Services Value Chain

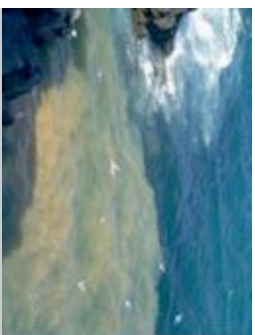




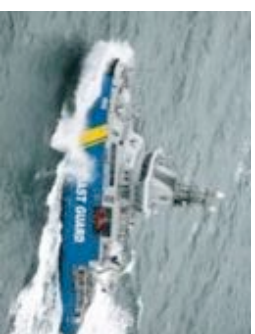
EO Services – Thematic Areas



Downstream
Products



Marine

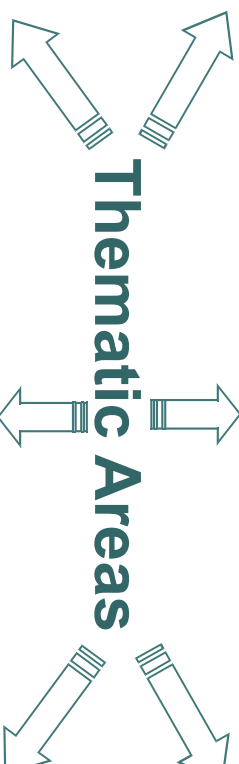


Security



Land

Thematic Areas



**Built
Environment**



**Atmosphere
& Climate**



**Disasters &
Geohazards**



EO Services – Markets & Sectors



Energy & Nat. Resources

		
Oil & Gas	Alt. Energy	Mining

Managed Living Resources

		
Agriculture	Forestry	Fisheries

International Bodies

	
Environment, Climate & Pollution	Humanitarian Operations

Industry

				
Utilities	Construction	Transport	Maritime	Communication

Services

			
Insurance & Finance	Real-Estate Management	News & Media	Travel Tourism Leisure

Public Authorities

			
Local Planners	Emergency Services	Research & Education	Security & Defence

Markets & Sectors



Market Development – ESA / EARSC Initiatives.



OGEO

- Link with Oil & Gas Industry



eopages

- Brokerage site for the EO services Industry



EOINS

- Link with Insurance Industry



eoworld

- Links to the World Bank and other IFI's



GMES – Key market enabler

- GMES is a key European public programme to provide space-derived information on environment and security to European policy makers and citizens.
 - Funding of EO services will develop new products to be exploited
- **GMES provides a strong opportunity as a market driver for EO Services.**
 - Industry will exploit opportunities using GMES products & services in other markets eg. commercial, export and non-EU government.
 - Development of the market is best supported by raw data being made available at low or zero cost:
 - In-line with European legislation for the re-use of Public Sector Information (PSI)
 - Economic benefit (growth, tax and employment) is higher if PSI is made freely available.



GMES: Key Issues for EARSC.

- Key Issues for EARSC and the industry:
 - Clarity in the market for GMES products and services; how will they be procured? Where will budgets be placed?
 - Clearly defined and understood responsibilities in the public and private sectors.
 - Clear data Policy respecting public and private commitments.
 - An EU budget for GMES within the MFF.
 - Launch Sentinels according to time plan.



Assured Data Continuity

ENVISAT

- Loss on 8th April has shown the importance of data continuity for governmental and research projects and for commercial operations.
- Amongst many applications Envisat used commercially for :
 - agriculture monitoring / hydrological and crop monitoring
 - environmental assessments / Forest monitoring
 - oil spill detection / ocean/marine environment / support to offshore operations.
- Importance for GMES and all satellite Earth Observation
 - Economist: Something to watch over us (<http://www.economist.com/node/21554528>)
 - Washington Post: Satellites at Risk (http://www.washingtonpost.com/opinions/satellites-at-risk/2012/05/04/gIQAHFdk2T_story.html)
- Funding for GMES must be organised urgently



Horizon 2020 – EO Industry views (1)

- Overall Horizon 2020 is moving in the right direction for the EO services industries
 - EO services can contribute to many if not all the societal challenges identified by the EC:
 - Health, demographic change, and wellbeing
 - Food security, sustainable agriculture, marine and maritime research & the bioeconomy
 - Secure, clean and efficient energy
 - Smart, green and integrated transport
 - Climate action, resource efficiency and raw materials
 - Inclusive, innovative and secure societies
 - EO services can make a strong and unique contribution
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Horizon 2020 – EO Industry views (2)

- EC Societal Challenges are very diverse and industry supports that these should be the drivers.
 - However, H2020 should also support the R&D of cross-cutting capabilities in Europe, in order to:
 - Ensure R&D of generic applications and enabling technologies (dissemination, processing techniques, sustainability)
 - Ensure maximum exploitation of each research activity across the domains (societal challenges)
 - Applications falling outside the societal challenges (for example in commercial markets) can be recognised and included
 - Actions that support the European economy can be addressed (European standards, industry competitiveness etc).
 - Services should be given more weight in considering space research.
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Horizon 2020 – EO Industry views (3)

- Re-introduce specific Measures for SME's, simpler rules, higher grant levels, protection of IPR,
- Faster time from call to project (more smaller projects) –
 - Fast track proposals.
 - Open call, regular evaluations,
 - Possibility for outline proposals,
- Specific focus to support locally connected consortia
- New funding rules need to be evaluated for SME's (we shall do so)
 - More realistic interpretation of direct costs (eg allowance for R&D equipment, facilities, satellite data etc.
 - Indirect costs could be more than 20% for SME's.



Questions to EARSC Members

- Are there specific priority topics you would wish to see included in the R&D programmes?
- What specific measures would best help SME's?
- Where should the focus be? Fundamental research, applied research, market development, demonstrations?
- Are the IPR rules well-adapted for our industry?
- Is the proposed funding scheme well-adapted for our industry?



Conclusions

- The European EO Services industry is a growing, dynamic and innovative sector
- Multiple satellite data sources provides opportunity to move from R&D to operations
- GMES is a strong lever to help the sector
- Research and innovation is vital to help the industry sector grow and make the appropriate contribution to the economy
- A co-ordinated effort between the EU and ESA can provide the platform for growth.