

EARSC

European Association
of Remote Sensing
Companies



Developing the European EO Services Industry

Geoff Sawyer: EARSC Secretary General



What is EARSC?



EARSC is a trade association (NGO), founded in 1989, which represents companies: offering and undertaking consulting and other services or supplying equipment in the field of remote sensing.

Our mission is

- to foster the development of the European Geo-Information Service Industry

We represent European geo-information providers creating a sustainable network between industry, decision makers and users

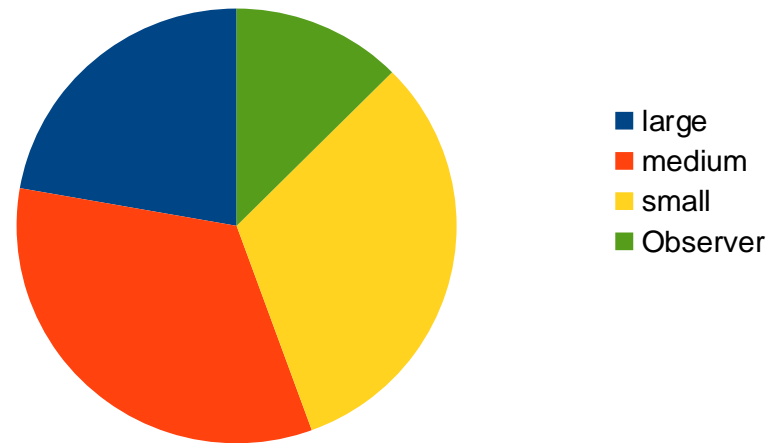
Our focus is on remote sensing from space-based platforms (satellites) but we also have members which are aircraft operators.



EARSC composition

EARSC has 72 Members

- Large: 16 companies
- Medium: 24 companies
- Small: 23 companies
- Observers: 9 organization



From 23 countries [germany (9), uk (9), france (7), italy (7), belgium (6), netherlands (6),spain (5), norway (4), bulgaria (3), austria (2), poland (2), sweden (2), austria (2), portugal (1), luxemburg (1), czech republic (1), denmark (1), lithuanian (1), greece (1), romania (1), russia (1), slovakia (1), ukraine (1)]



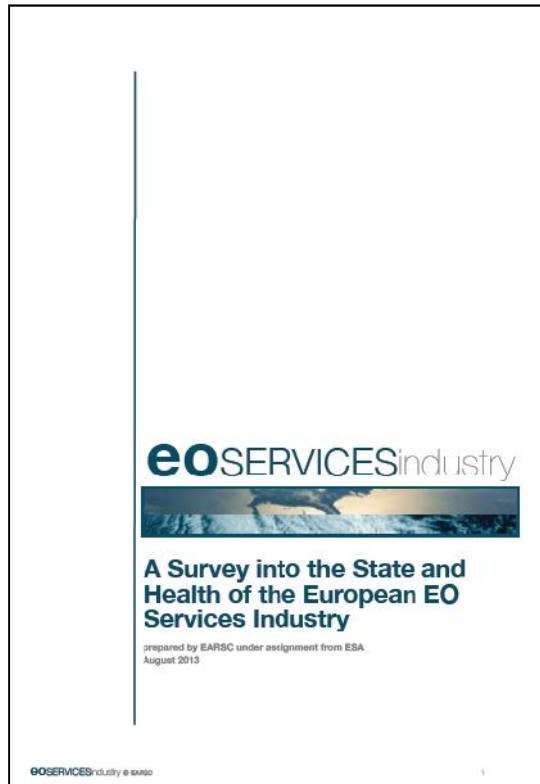
What does EARSC do?

- Provide information to our members on programmes, policy and the sector; (business intelligence)
- Maintain a knowledge of the industry ie statistics, market information etc.
- Promote professional standards within the industry
- Promote the industry and it's capabilities by:
 - Creating links between EO services sector and other business sectors eg oil & gas, insurance as well as public institutions e.g world bank
 - Organising events offering networking opportunities as well as focused information
 - Advocacy towards policy makers on issues of concern

Focus is on enabling development of new business



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
- Over 300 companies largely SME's with:
 - strong partnership experience across European borders.
 - a highly skilled workforce; interchange with other sectors
 - Full industry survey has been made by EARSC and published in September 2013.

EO Services Industry Sector Profile

Key Facts

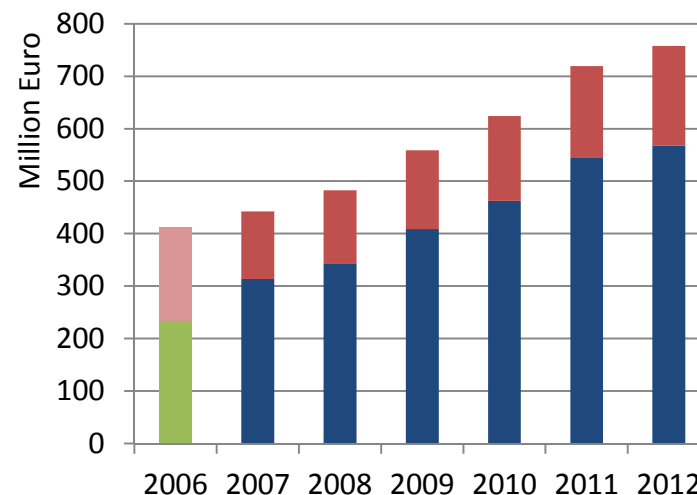
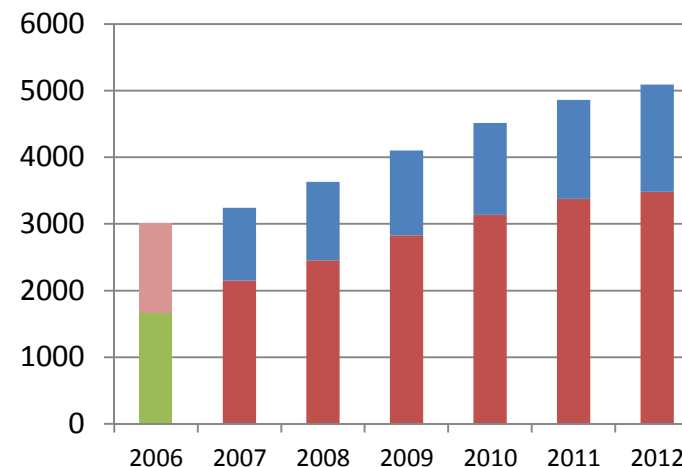
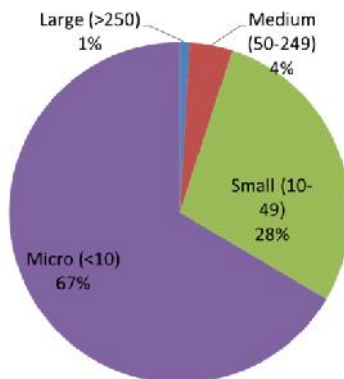
From EARSC 2013 Industry Survey

319 = Number of companies in Europe and Canada in 2012

5087 = Total number of employees in 2012

€757m = Total Revenues for the sector in 2012

67% = Proportion of companies with less than 10 EO employees:
95% with less than 50 employees





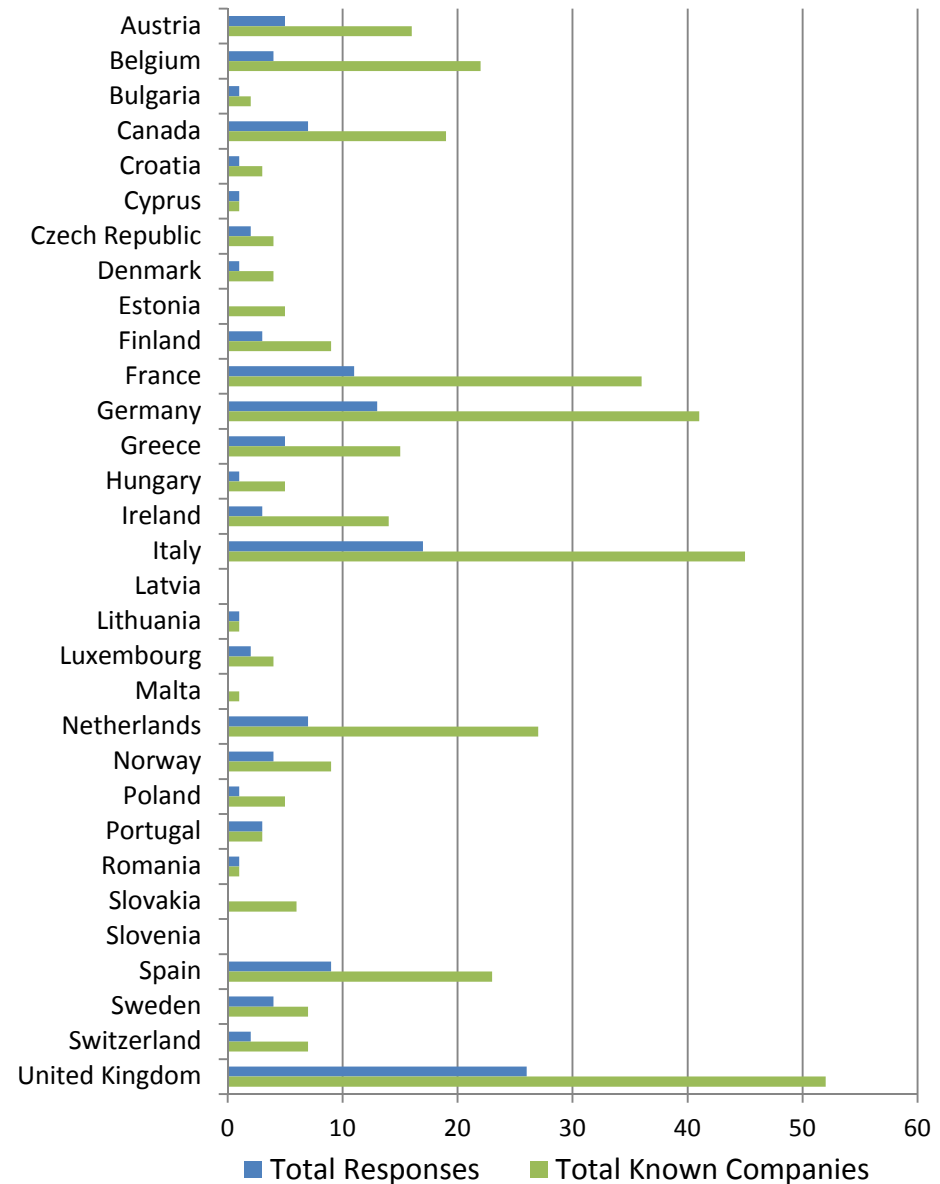
Company Location

UK holds the most companies followed by Italy, Germany, France, Netherlands and Spain.

Growth in number in the UK has continued; first visible in UK between 2004 and 2006.

At least 1 company in almost every EU member state.

Copernicus is likely to stimulate continued growth in all MS as regional interest is strong.





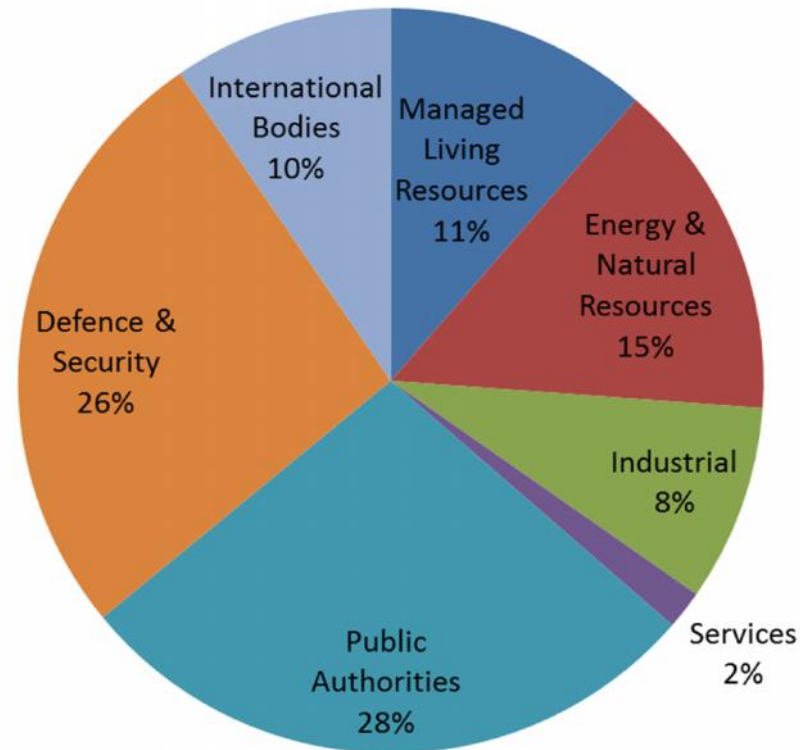
Market for EO Geo-Information Services - in 2012

Market for EO geo-information services is growing at around 10% p.a.

In Europe today, the business is worth €750m with public use dominating.

Global market in 2012 is around €2b

The split between market sectors found by EARSC is comparable with other surveys e.g. NSR 2013.





EO Services – Markets & Sectors

(Based on the EARSC Taxonomy)

Energy & Nat. Resources

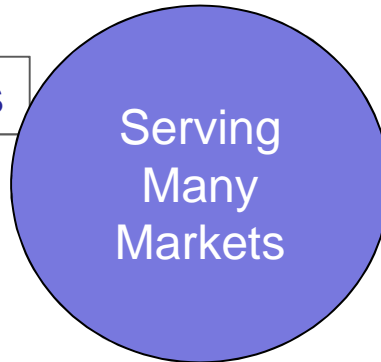
		
Oil & Gas	Alt. Energy	Mining

Industry

				
Utilities	Construction	Transport	Maritime	Communication

Managed Living Resources

		
Agriculture	Forestry	Fisheries



Services

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

Markets & Sectors

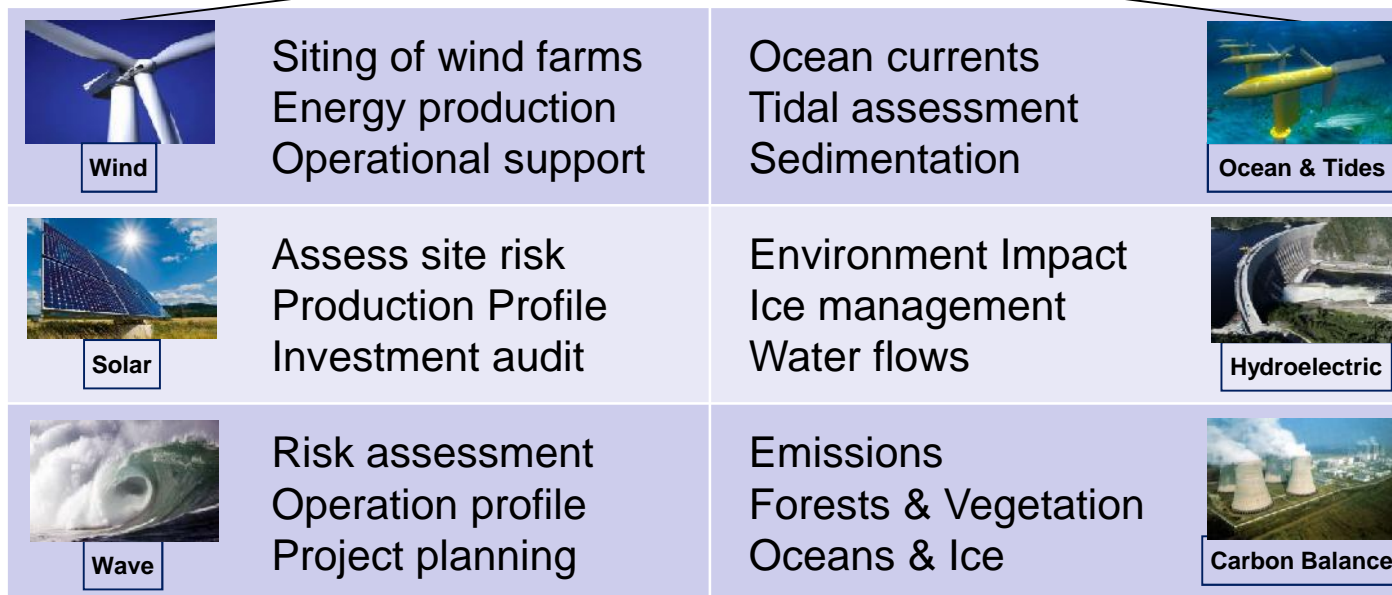
International Bodies

	
Environment, Climate & Pollution	Humanitarian Operations

Public Authorities

			
Local Planners	Emergency Services	Research & Education	Security & Defence

Example of Services – Alternative Energy





Market Development Challenges

- Raising Awareness: consistent problem, customers are aware of EO satellite observations but not how it can be applied to their problems.
 - applies to commercial and public (potential and actual) customers
 - perception as an expensive tool
- SME's : lack resources to develop new opportunities, especially difficult in export
- Public-private : EO domain is very complex. Both public and private suppliers and customers.
 - need to work in partnership



How can we help the industry develop?

Expanding Market Opportunities

EARSC working together with ESA:

EARSC: representative of whole sector, promote awareness, develop community links, provide tools to link to the industry and for the industry to promote their capabilities

ESA: provide institutional reference, technical authority where necessary, support and promote demonstrations

ESA/EARSC: links to the potential customer umbrella body, identify key lines (products to promote / problems to be addressed), establish demonstrations

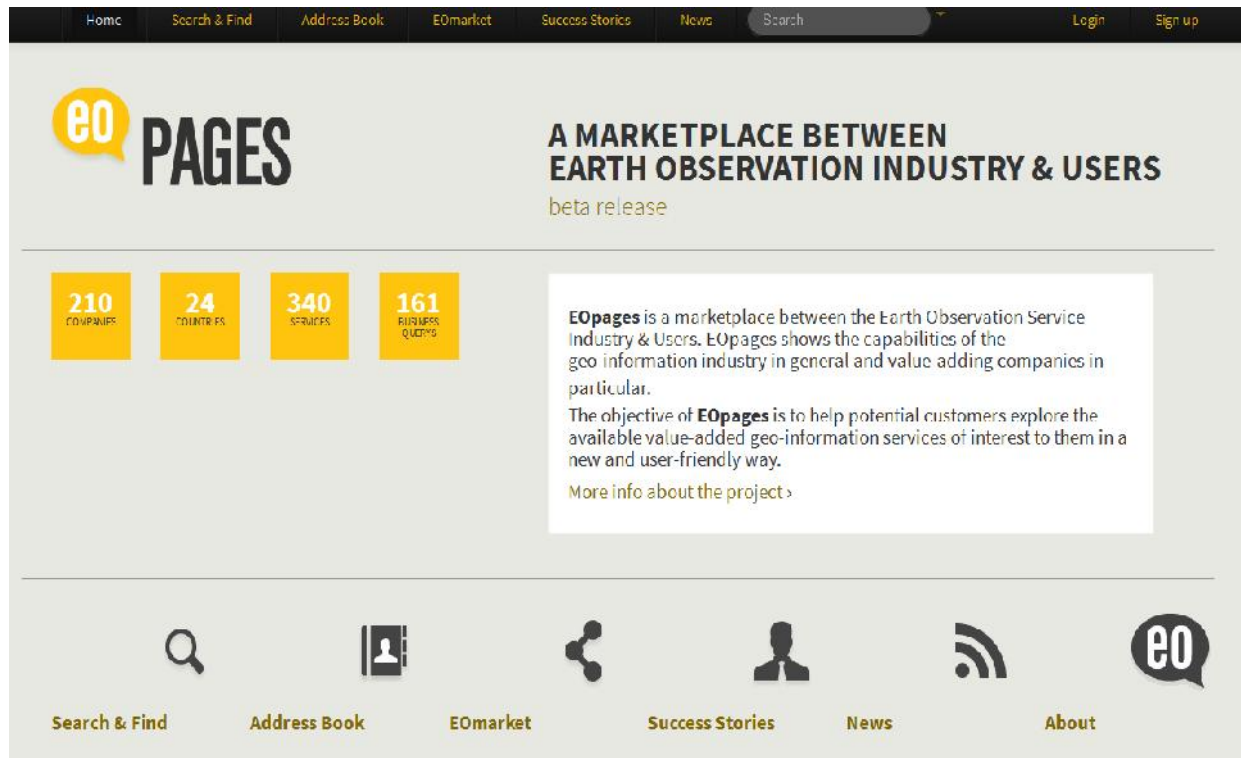
Model applies to both commercial and public customers

Eopages : the Industry Brokerage tool

Provides information on the EO service providers in Europe

Brokerage site for clients to find suppliers:

- Client enters the service they are seeking
- Eopages provides list of products
- Examples of the use of products
- List of suppliers and their contact details



The screenshot shows the EOpages website homepage. At the top, there is a navigation bar with links for Home, Search & Find, Address Book, EOmarket, Success Stories, News, a search input field, Login, and Sign up. The main header features the EOpages logo and the tagline "A MARKETPLACE BETWEEN EARTH OBSERVATION INDUSTRY & USERS" with a "beta release" note. Below this, four yellow boxes display statistics: 210 COMPANIES, 24 COUNTRIES, 340 SERVICES, and 161 BUSINESS QUERIES. A text box explains that EOpages is a marketplace between the Earth Observation Service Industry & Users, showing capabilities and value-added companies. The footer contains icons and labels for Search & Find, Address Book, EOmarket, Success Stories, News, and About, along with a social media icon.

Eopages: A Marketplace between EO Industry and Users

Linking Communities - OGEO



Login

OGEO Portal

- Provides a link with the Oil & Gas Industry
- Offers a forum for exchanging information
- Guidance on EO applications
- Success Stories eg real benefits from EO.
- Industry status eg certification & standards
- Knowledge management e.g documents, meetings etc



OGEO IS A FORUM FOR INFORMATION EXCHANGE BETWEEN THE OIL AND GAS AND EARTH OBSERVATION / GEO-INFORMATION PROFESSIONAL COMMUNITIES.

[MORE INFORMATION](#)

FAST INFORMATION

The portal offers the advantage of rapid and direct information exchange across the range of activities relating to Earth Observation undertaken in both market sectors. It will allow users to post questions related to information that is being sought and provides links to existing information in both communities.

BUILDING NETWORKS

Suppliers of Earth Observation derived geo-information can co-ordinate and exchange expertise as well as building networks and partnerships with members of the oil & gas industry. It will allow members to respond to demand requests and make commercial offers easier. Prior exchange will allow the oil and gas industry to select more targeted products.

PROBLEM SOLVING

Using the OGEO portal allows O&G members to seek help and address business problems using Earth Observation. Users can find new suppliers, win new customers, share experiences and seek practical advice for all application where remote sensing and earth observation can offer a solution or offer a business improvement.

Linking Communities – IFI's

EO Portal

- Provides generic tool for linking with other communities
- Eg. IFI's such as WB and ADB
- Present organised information relevant to each body
- All information on EO services common to all communities
- In process of stepping out towards the ADB

Linking Communities – EO Providers

- Provides information to EARSC members
- Knowledge management
- EARSC activities
 - Documents
 - Meetings
 - Projects
 - Discussion / exchange forums
 - Links to all the other Communities

The screenshot displays the EARSC portal interface. At the top, the EARSC logo is accompanied by the text 'European Association of Remote Sensing Companies'. A search bar is located in the top right corner. Below the logo, a navigation menu includes 'Dashboard', 'Forums', 'Work Groups', 'Resources', 'Projects', 'News', and 'Help'. The main content area is divided into several sections: a 'Welcome to the EARSC portal' message, an 'Announcements' section with a 'NEW 2nd OGEOZine launched!!!' notice, a 'Blog' section with a list of recent posts, an 'Activity' section showing updates from 'administrator' and 'Monica Miguel-Lago', and a 'Forums' section with a list of topics like 'Tweeting' and 'Vacancies'. A 'Favorite pages' sidebar on the right shows 'eovox3 [EARSC Wiki]' as a favorite. At the bottom right, there is a 'Quick links' section with 'Dashboard (EARSC) Home' and 'TESTING'.

Linking Communities - Research

Research Corner

Provides virtual networking and meeting facilities to form R&D (H2020) teams:

- Chat & exchange with other users
- Library of relevant documents
- Advertise partners search
- Book a private meeting room for a project team
- Learn about programmes with guidance and analysis

The screenshot shows the EARSC Research Corner website. At the top, there is a navigation menu with links for Dashboard, Forums, Work Groups, Resources, Projects, News, and Help. A search bar is located in the top right corner. The main content area is divided into several sections:

- Contents:** A list of links including Research Corner Bulletin Board, Research Corner Classroom, Research Corner Library, Research Corner Lounge, and Research Corner Meeting Rooms.
- Recently Updated:** A list of recent updates, including "EARSC Research Advert" (updated Feb 19, 2014), "Research Corner Library" (updated Feb 11, 2014), and "H2020 SC Societies" (created Feb 03, 2014).
- Research Corner Home:** A central section with a welcome message and a "soapbox" character. It includes a list of icons for "Chat in the Lounge", "Read in the Library", "Place & read ads on the bulletin wall", "Meet in Private", and "Learn in the Classroom".
- Blog Posts:** A section with two posts: "EARSC Guide to H2020" by administrator (Jan 08, 2014) and "Welcome! administrator" (Dec 27, 2013).
- Recent space activity:** A section featuring a profile picture of Monica Miguel-Lago and a post about "EARSC Research Advert" updated Feb 19, 2014.
- Space contributors:** A list of contributors including Monica Miguel-Lago (6 days ago), Geoff Sawyer (22 days ago), and administrator (30 days ago).



Linking Communities – The Future

We are successfully putting in place the foundations to establish links between the EO Service Providers and other key Communities: What next?

- ADB: Extend the information provided and examples given = More content
- OGEO: adding new projects: 4 new projects for O&G industry to be incorporated and run through the Portal
- Research Corner: to become live by June in time for the 2nd call under H2020.
- Regions: extend the portal to regional players to increase awareness and dialogue between and with the EO service providers.



Copernicus – Key market enabler

- Copernicus is a key European public programme to provide space-derived information on environment and security to European policy makers and citizens.
- Direct funding for EO services is important and will develop new products to be exploited

But more important:

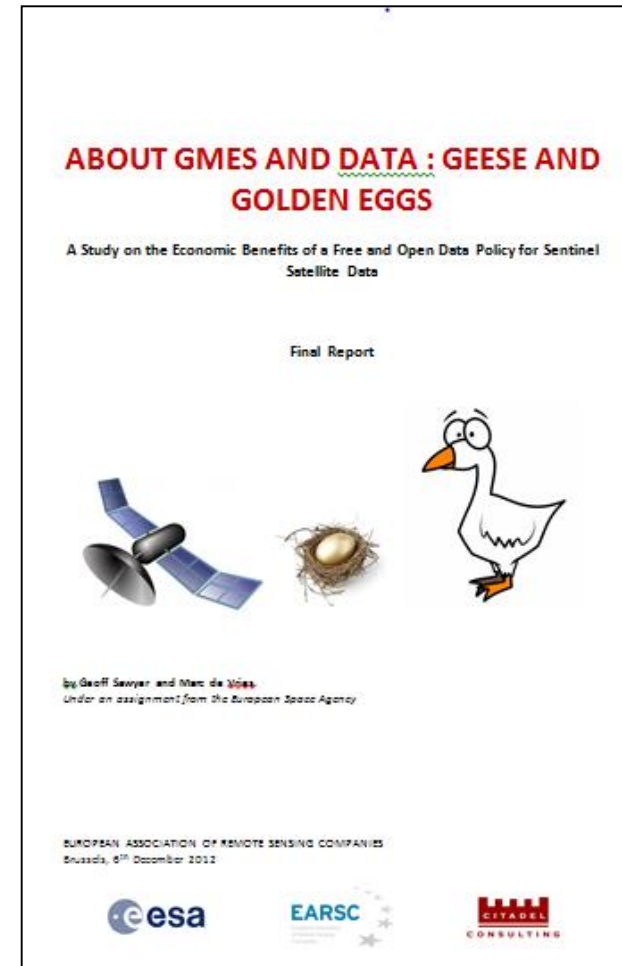
- Copernicus provides a strong opportunity as a market driver for EO Services.
 - Industry can exploit opportunities using Copernicus products & services in other markets eg. commercial, export and non-EU government.
 - with an EU customer base to provide a reference.
- In 2014, the first of the Copernicus Sentinel satellites will be launched generating Terrabytes of data every day.
- It can be a source of golden eggs creating new tax revenues and jobs.



Why should the data be free?

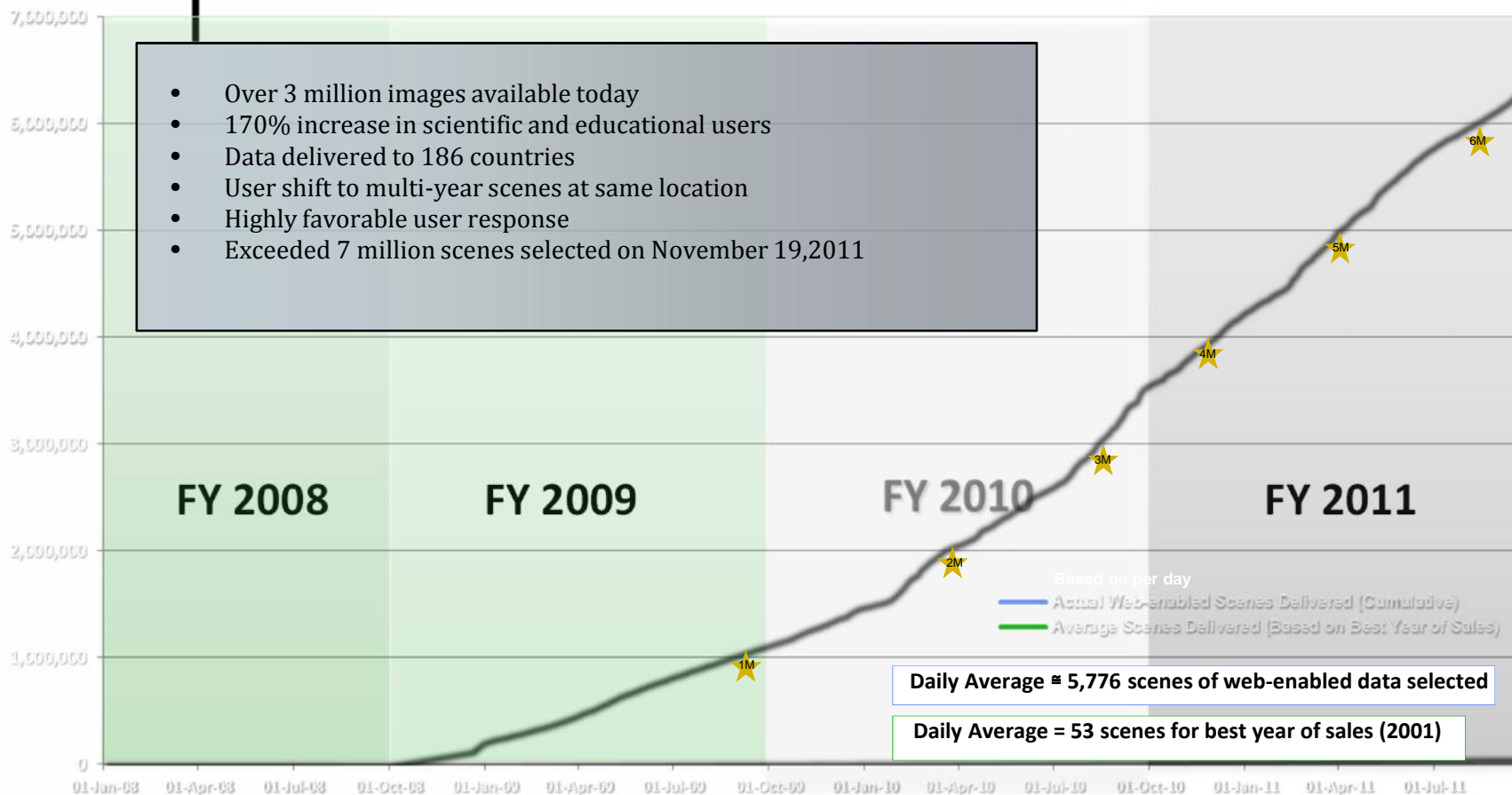
PSI = Public Sector Information

- The principle of PSI Re-use is very simple; the practice is quite complex!
 - PSI is fungible and non-rivalrous: it can be reproduced at very low cost and in many copies without any constraints.
 - PSI is information gathered by governments as part of their responsibility towards the citizen. Hence; it has been paid for out of tax revenues; why should citizens pay for it a second time?
- BUT There are practical considerations to making it available for re-use:
 - Security of the information whether due to national security concerns or due to personal nature of information
 - Investments made in systems or organisations need to be recognised and the transition managed



Landsat Internet Data Distribution

40-year archive of global data provided freely on the Internet



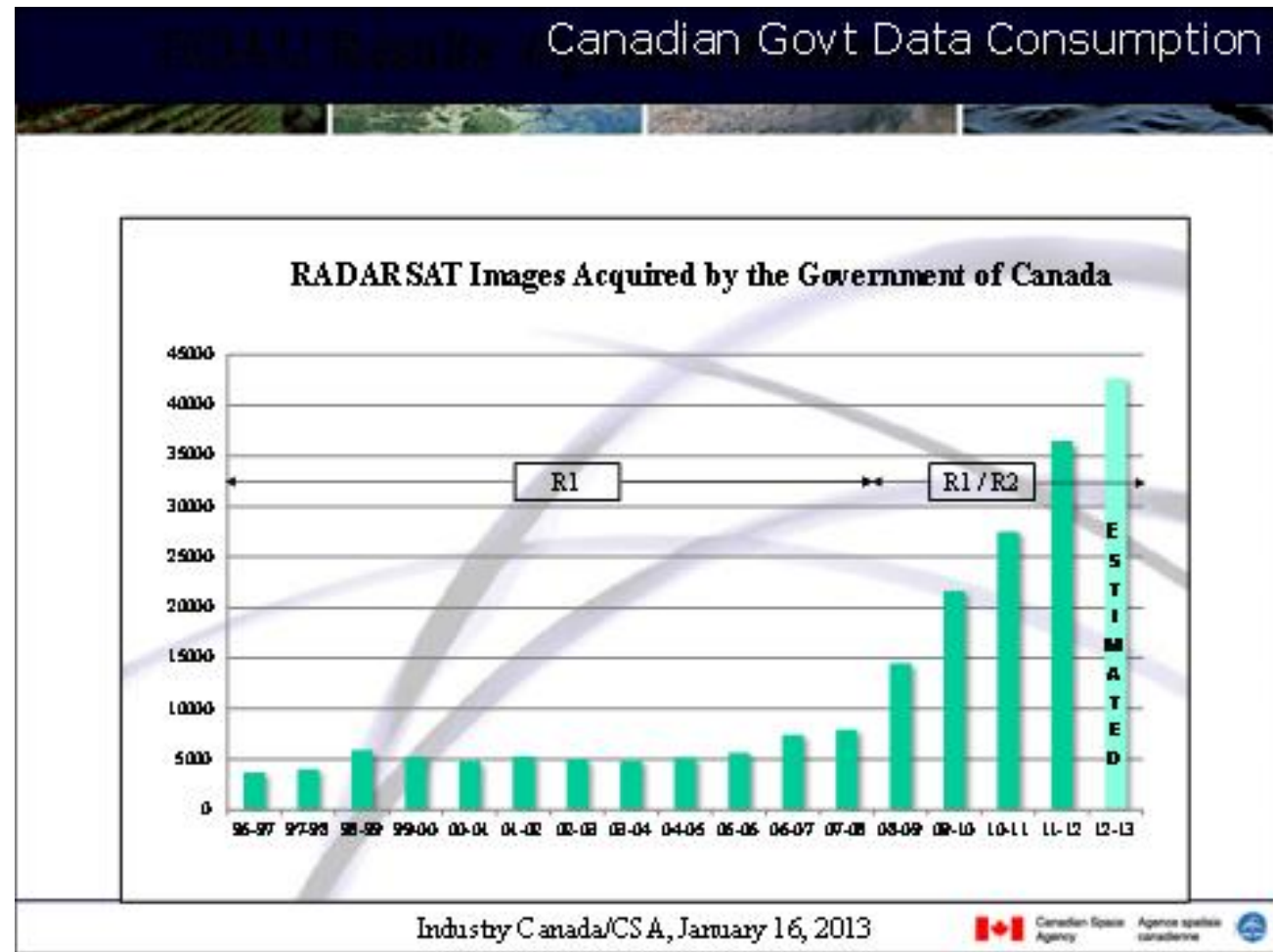
Total Landsat Scenes Selected By Users Since January 1, 2008

Radarsat – Government take of Imagery

Government take of R'sat imagery before 2007 pay cost by scene.

After 2007 (R'sat2), bulk buy by CSA hence marginal cost to other Gov. Depts becomes 0.

Image cost not only factor but a major one.





Driver of Economic Growth

- European decision makers have decided that the data coming from the Sentinel satellites should be shared globally on a free and open basis
- Conforms to the data sharing principles of GEO
- Previous experience has shown that freeing up the data whether to commercial or public sector users greatly stimulates the demand for its use.
- Industry role to turn that into economic growth!



For more Information

For Information on EARSC:

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

For information on the Industry:

www.eopages.eu

[Report on the State and Health of the EO Services Industry](#)

For links to other Communities:

www.ogeo-portal.eu