

EARSC

European Association
of Remote Sensing
Companies



Developing the European EO Business Sector (business and government working together)

- Geoff Sawyer , EARSC Secretary General
Geospatial Innovation Conference
10th December 2013, Sofia



Summary

- Geo-information is becoming available and familiar to everyone as a combination of maps and overlaid, related information.
- The EO geo-information services business is focused on providing geo-information to a wide base of users in public bodies and the business (commercial) market ie B2G and B2B.
- Satellites provide a key and critical source of primary data.
- Europe has important and world-leading assets in its industrial base and the flagship programme Copernicus
- Building on these two assets is a must for Europe to fully exploit the investments which have been made.



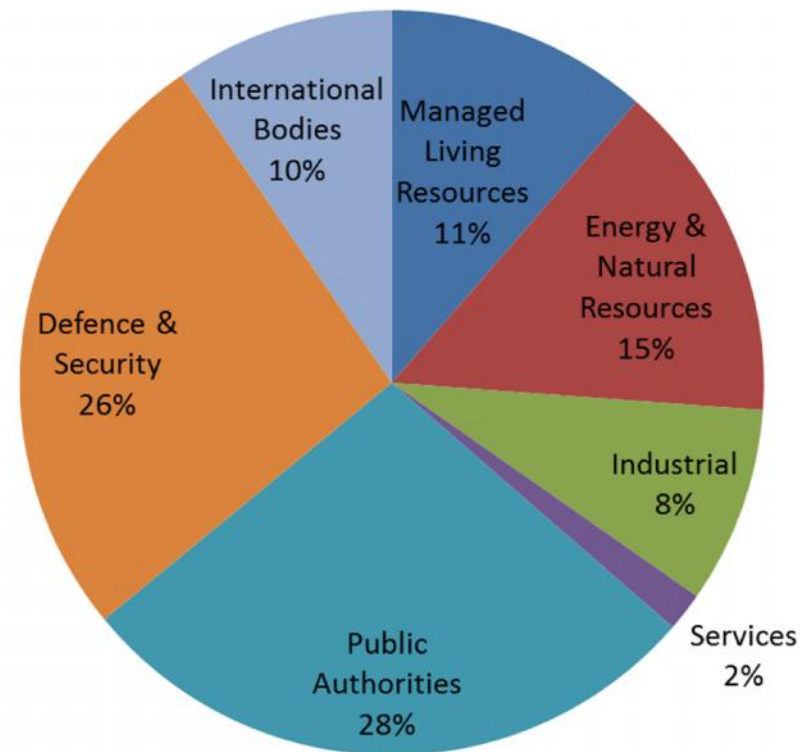
Market for EO Geo-Information Services - in 2012

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.



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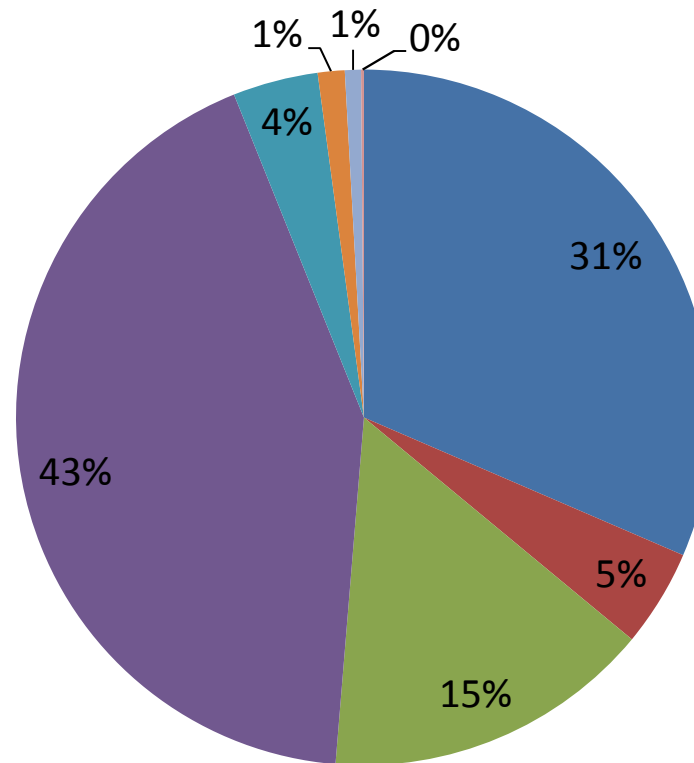


Types of Customer

Over 50% of revenues are coming from public sector customers at different levels.

Around 4% comes from International organisations.

The share of sales to commercial companies has doubled since 2006 from 22% to 43% which is 4 times in revenues.



- Public sector (National / European)
- Public sector (Local)
- Public R&D sponsor (FP, ESA, National Agency)
- Private company
- International organisations (including NGO's)
- Academia
- General Public



EO Services – Markets & Sectors

Energy & Nat. Resources

		
Oil & Gas	Alt. Energy	Mining

Industry

				
Utilities	Construction	Transport	Maritime	Communication

Managed Living Resources

		
Agriculture	Forestry	Fisheries

Serving Many Markets

Services

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

Markets & Sectors

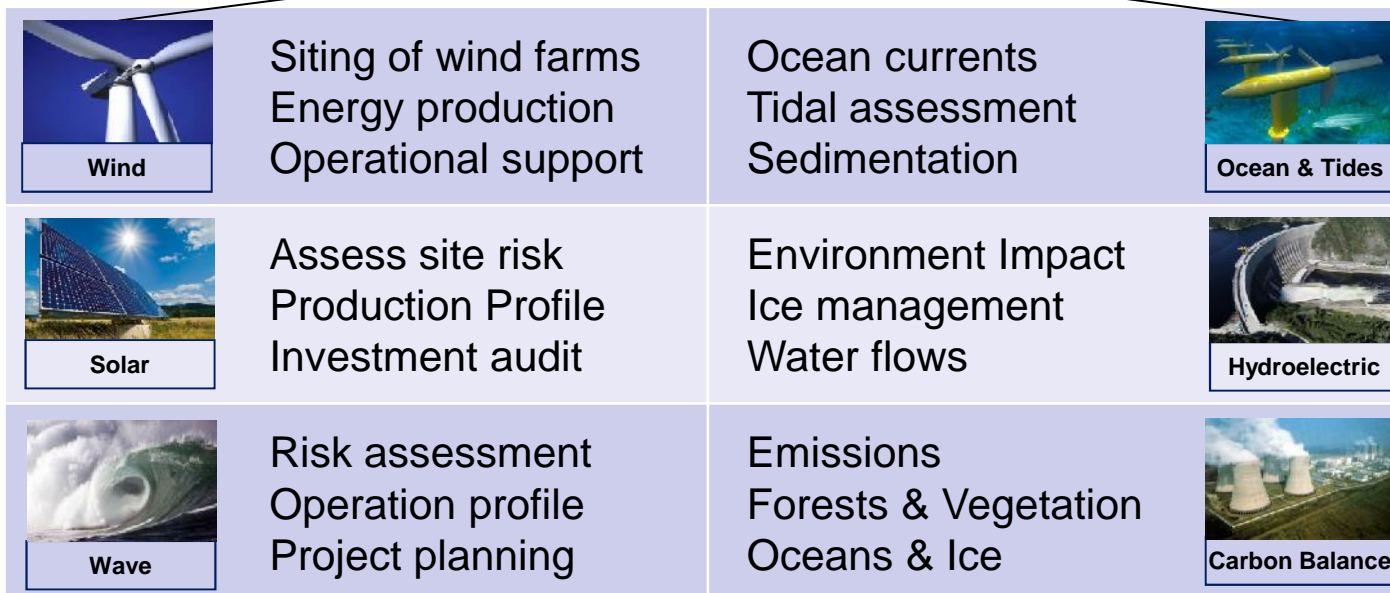
International Bodies

	
Environment, Climate & Pollution	Humanitarian Operations

Public Authorities

			
Local Planners	Emergency Services	Research & Education	Security & Defence

Example of Services – Alternative Energy





Market Evolution

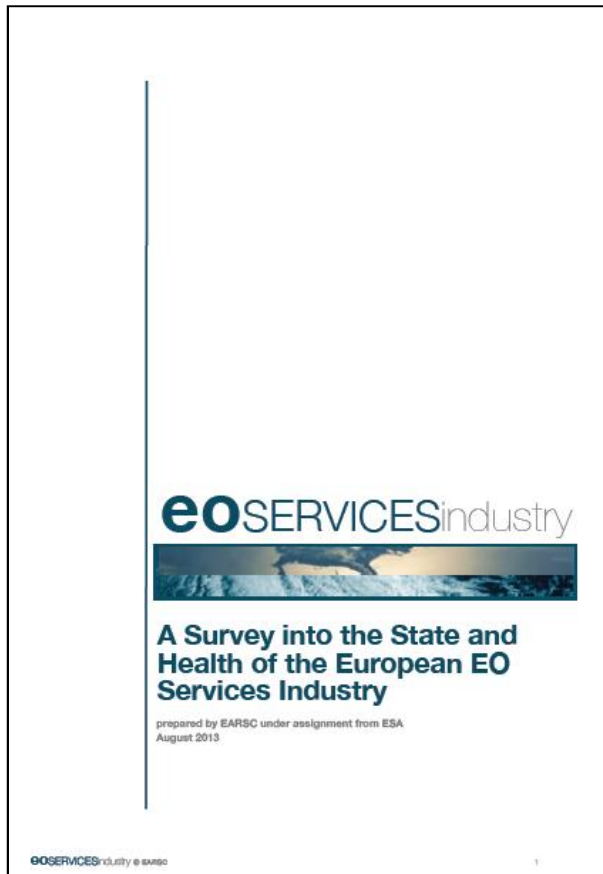
Market is moving from R&D to operational driven by a number of important trends:

- Satellite Data: many satellites are being launched so that data is becoming more reliably available but also putting pressure on price. Trend to very high resolution data with medium resolution data becoming free.
- Technology: new sources (UAV, crowd sourcing.....), big data
- Copernicus; reliable data access, long-term continuity, services
- New business models: but mainly in the US! How to stimulate in Europe?

If only the recent growth rate is maintained (10.1% p.a) then by 2020, the global market for EO geo-information services will be €4b+

Europe has a strong industry and a world leading programme (Copernicus), how to benefit from these two key resources?

EARSC EO Services Industry Survey



First survey since 2006 and most comprehensive.

Report has been published in September

Survey conducted between November 2012 and April 2013

Replies from 160 companies of which 133 companies provided data; around 40% of the total considered to exist (319) in Europe and Canada.

2 part survey; on-line and telephone interviews.

EO Services Industry Sector Profile

Key Facts

From EARSC 2013 Industry Survey

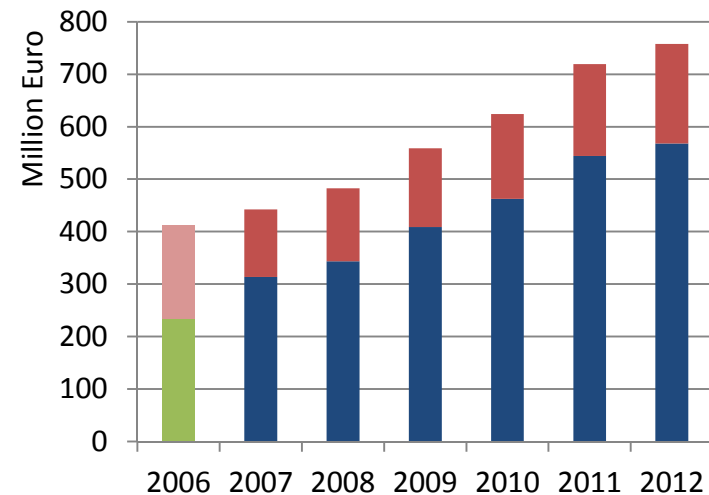
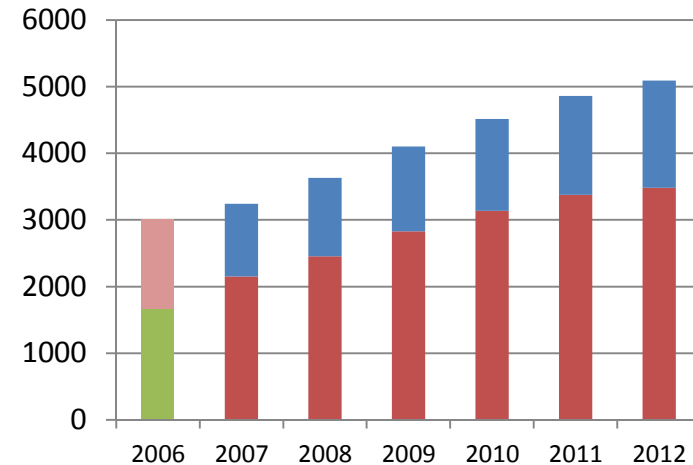
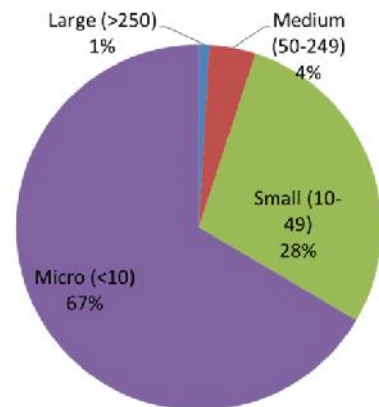
319 = Number of companies in Europe and Canada in 2012

5087 = Total employees in 2012

€757m = Total sector revenues in 2012

10.1% = average growth rate 2006-2012

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



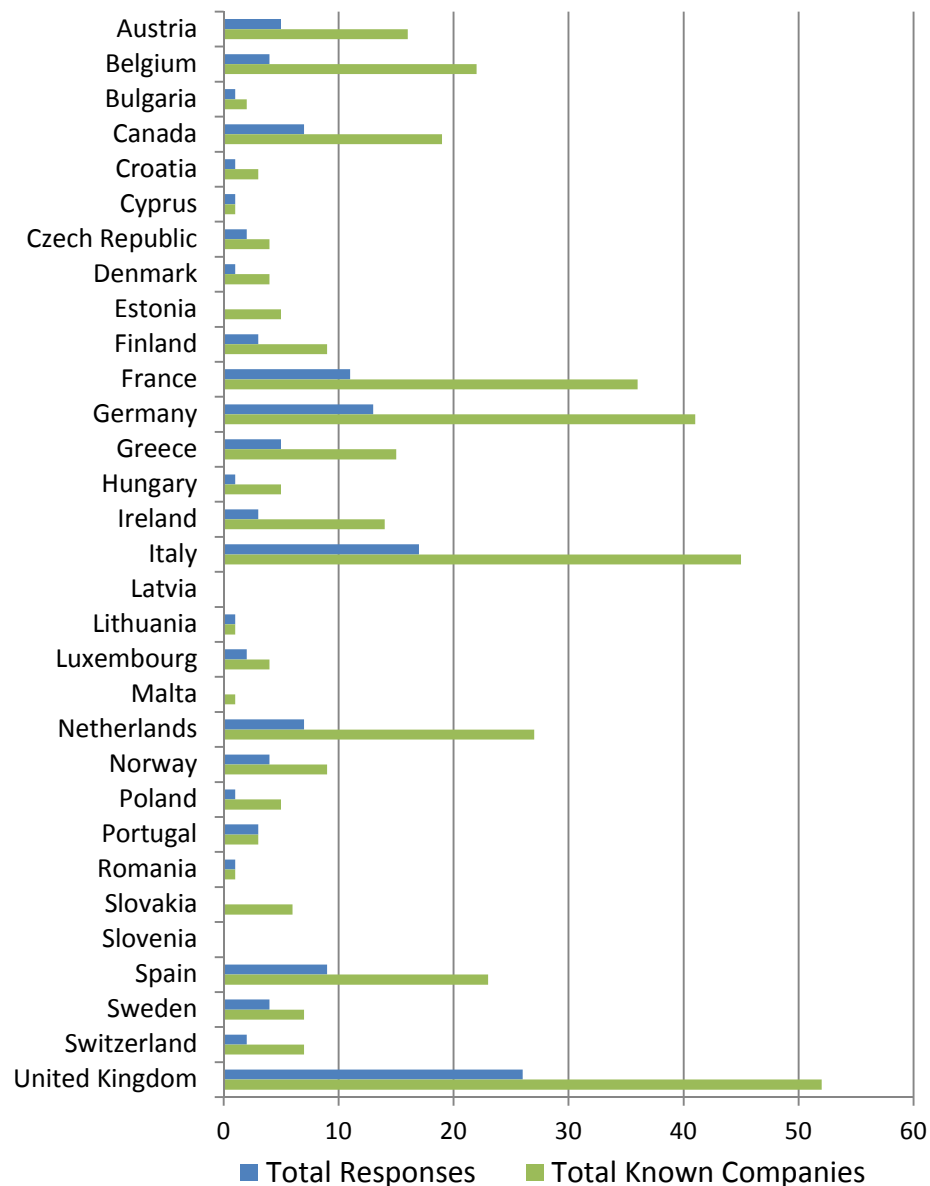
Company Location

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.

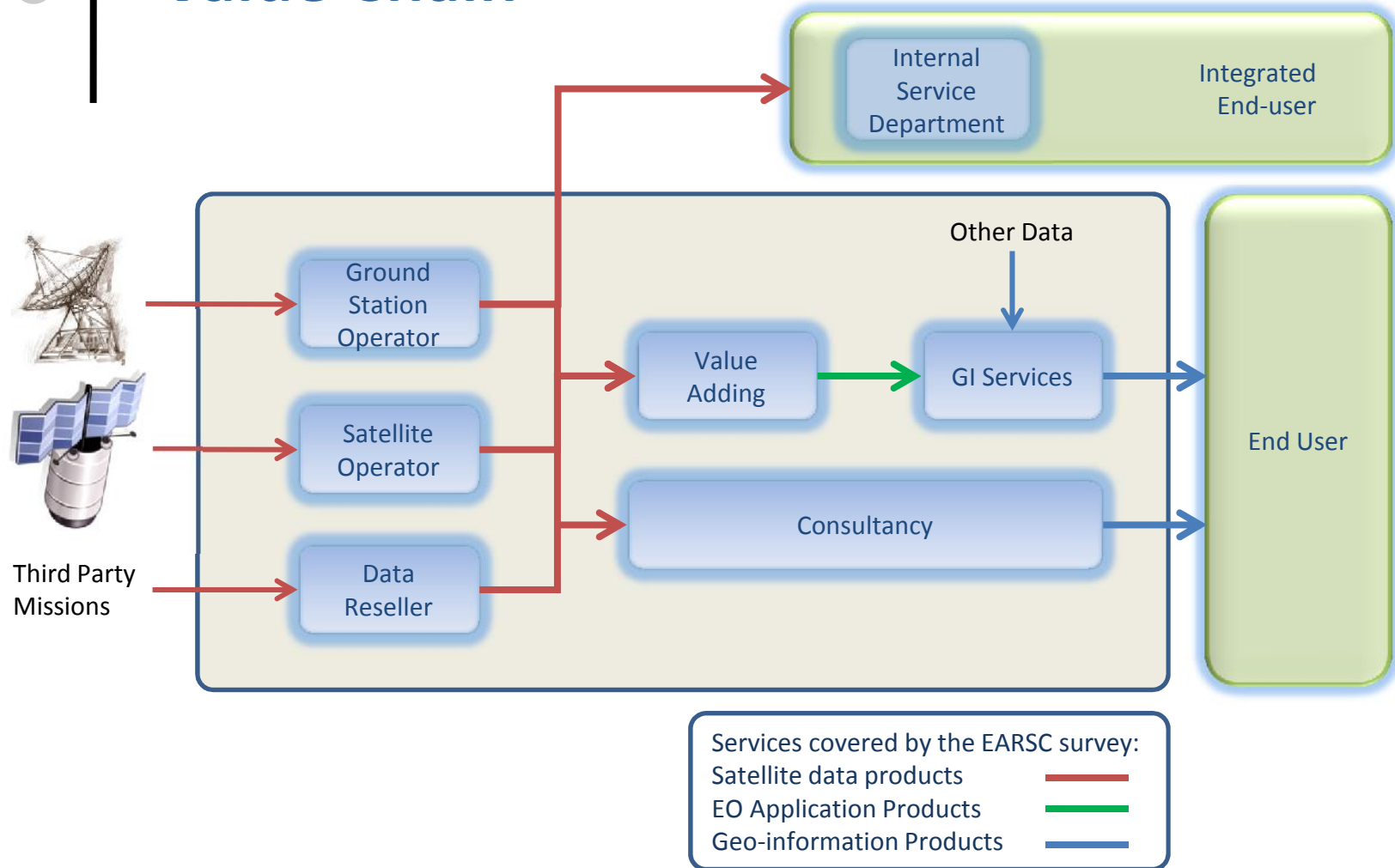
At least 1 company in almost every EU member state.

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





Value Chain





Percentage Revenues by Activity

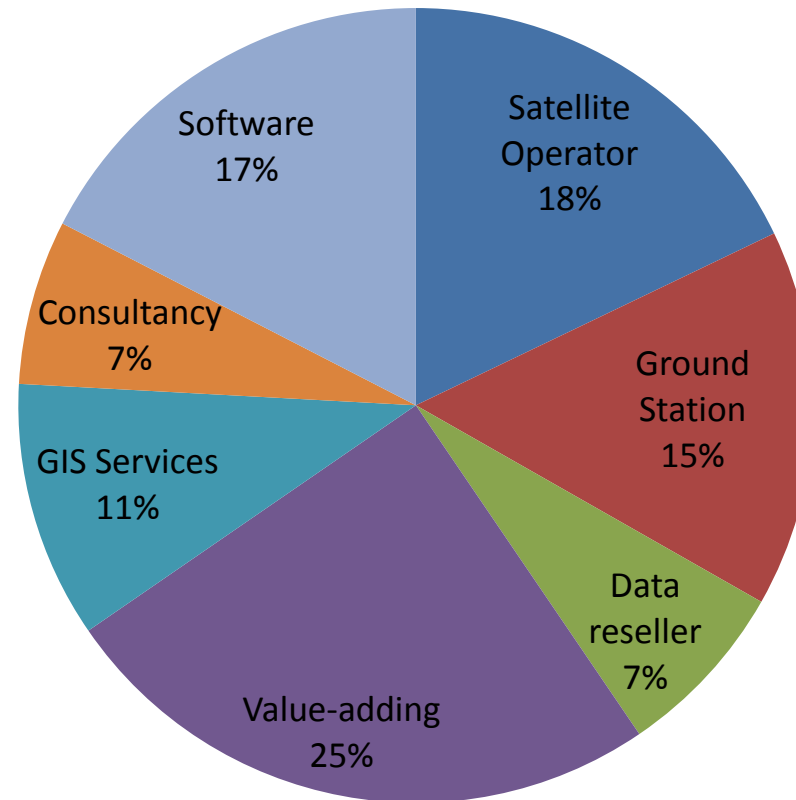
Split is roughly 50:50 between data sales and value-adding.

Data selling activities represent a 40% share of the market at €306m.

The rate of increase since 2006 has been around 17.3%.

The information services part of the business represents 42% of the market or €320m.

The rate of increase since 2006 has been around 8.1%



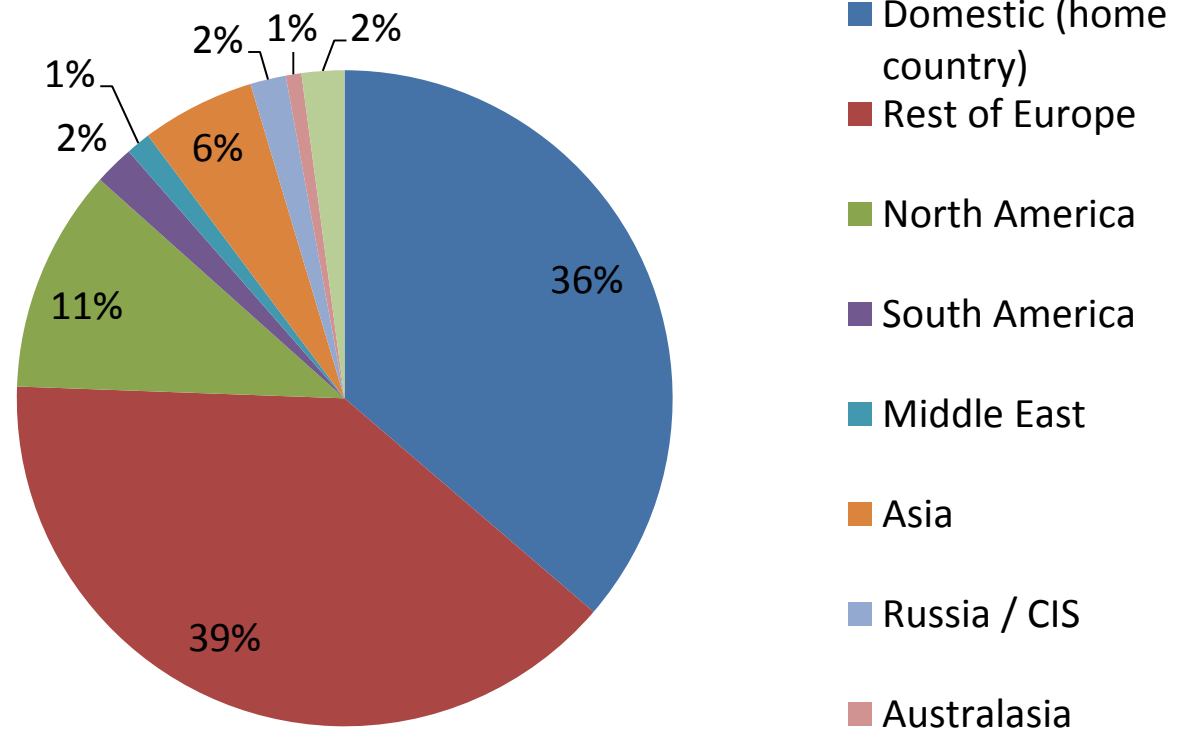


Location of EO Services Customers

The domestic market (company home market) and the rest of Europe provide 75% of sales split equally between the two.

Sales to export customers (ex N America) provide 14% of revenues which has been stable over the past decade.

Exports represent a good growth opportunity for European companies.





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.

Copernicus Services domains



Land monitoring



Marine environmental monitoring



Atmospheric monitoring



Emergency management response



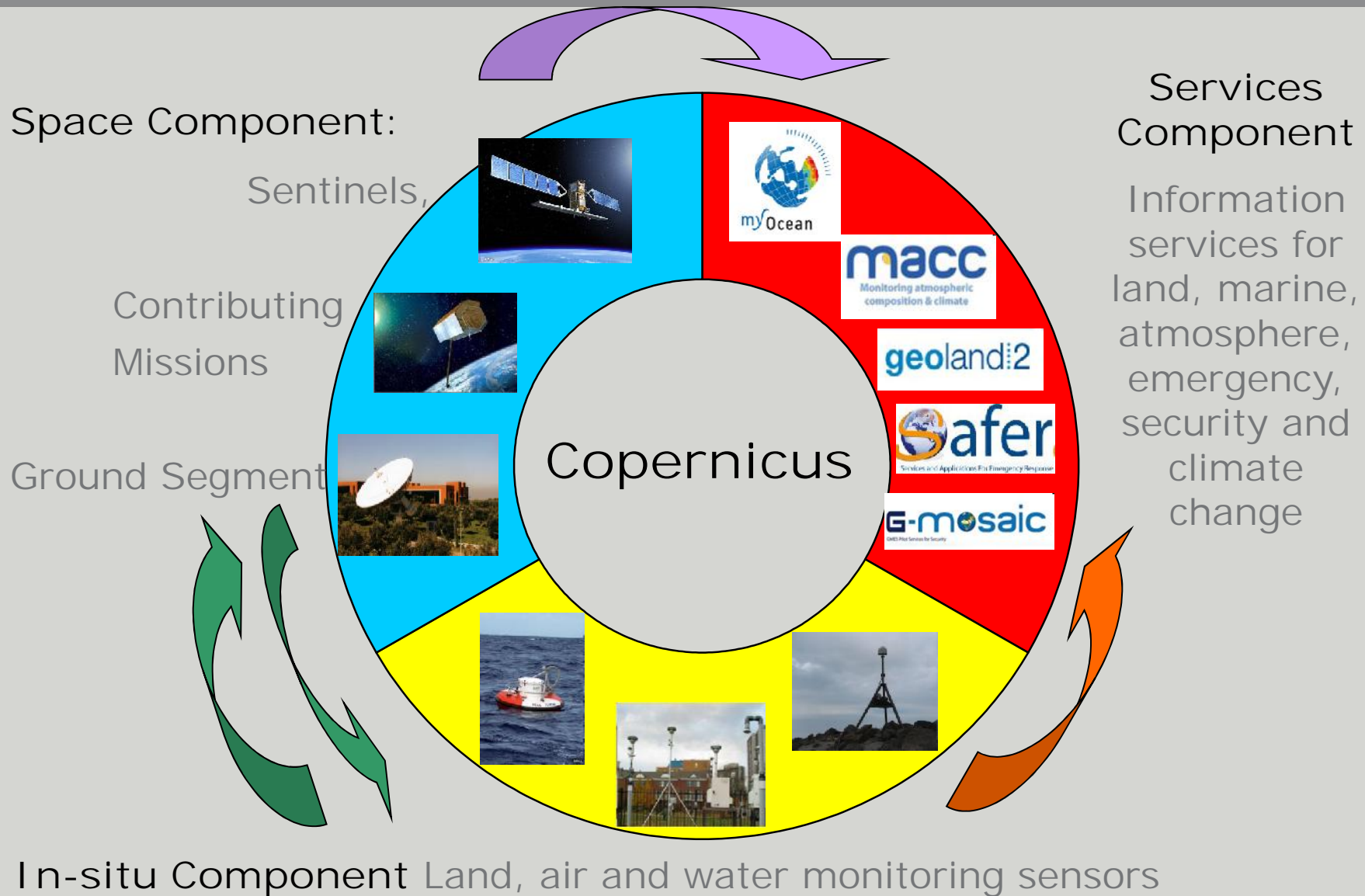
Climate Change monitoring



Security



Copernicus Components

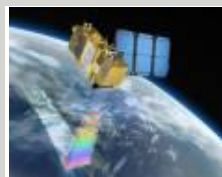


Copernicus dedicated missions: Sentinels



Sentinel 1 – SAR imaging
All weather, day/night applications, interferometry

2014/ 2015



Sentinel 2 – Multi-spectral imaging
Land applications: urban, forest, agriculture,..
Continuity of Landsat, SPOT

2014/ 2016



Sentinel 3 – Ocean and global land monitoring
Wide-swath ocean color, vegetation, sea/land
surface temperature, altimetry

2014/ 2015



Sentinel 4 – Geostationary atmospheric
Atmospheric composition monitoring, trans-
boundary pollution

2019



Sentinel 5 – Low-orbit atmospheric
Atmospheric composition monitoring
(S5 Precursor launch in 2015)

2019





EARSC and Copernicus Data Policy

Development of the market is best supported by raw data being made available at low or zero cost:

- Raw data from Sentinels should be free and open.
- Data from commercial satellite operators should be procured under appropriate license conditions.
- Core services to be freely available to all European users.

Copernicus model :

Free and open must not compromise Commercial business models (companies have invested)

Should European free data also be available free to non-contributing countries?

Support proposal to review the impact of the data policy in 2017



What is EARSC?

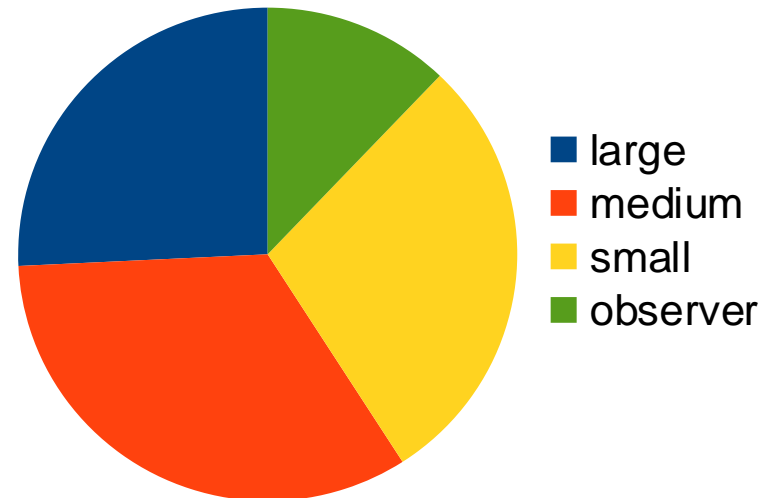
- EARSC is a non-profit-making organisation created in 1989 as the voice of the European geo-information EO service industry
- Mission & objectives:
 - to foster the development of the European Geo-Information Service Industry
 - to stimulate a sustainable market for Geo-information services using EO data, openly accessible to all members
- Today EARSC has 66 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 (>50): 17 companies
- Medium: 22 companies
- Small (<10): 19 companies
- Observers: 8 organizations



From 22 countries: germany (9), belgium (7), france (7), italy (7), uk(6), spain (5), netherlands (4), norway (3), bulgaria (3), luxemburg (2), poland (2), portugal (2), sweden (2), austria (1), canada (1), cezch republic (1), denmark (1), greece (1), romania (1), russia (1), slovakia (1), switzerland (1), ukraine (1)

Fees:: Large = €2500, Medium = €1500, Small = €750, Observer = €1000



EARSC in Bulgaria

EARSC has 3 members in Bulgaria:

- Eurosense EOOD
- TAKT
- ReSac

Kamen Iliev (TAKT) is a director of EARSC and Member of the Board.

At the time of our survey, we had 2 companies identified in Bulgaria which were sent the survey (TAKT was formed later).

Our database has expanded by 100 companies and today the EARSC Database of EO Companies has:

- 466 entries
- 6 in Bulgaria (3 above plus; ESRI, Geodetect, Geoconsult)



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 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

Focus is on Creating new Business Opportunities: **Red-line is Creating Linked Communities**

Market Development – 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



Conclusions

- The EO GeoInformation Services Industry is in a good position to develop over the next few years:
 - Excellent industrial base
 - Strong development in data sources including in Europe
 - European flagship programme for EO services
- Private sector and public sector working together in partnership will be the best way to gather the full benefits.
- EARSC provides access to a network of European EO Services Companies and provides them with tools and other means of support to help develop the business

www.earsc.eu / www.eomag.eu / www.eopages.eu / www.ogeo-portal.eu