EARSC

European Association of Remote Sensing Companies

EO Services Industry perspective on H2020 priorities 2016-2017

Chetan Pradhan: Vice-Chairman, EARSC Board of Directors

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About EARSC

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

Our mission is:

- to foster the development of the European Geo-Information Service Industry
- to 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/drone operators.

Today we have 75 members from 22 countries in the EU and beyond.

EO Services Industry Sector Profile

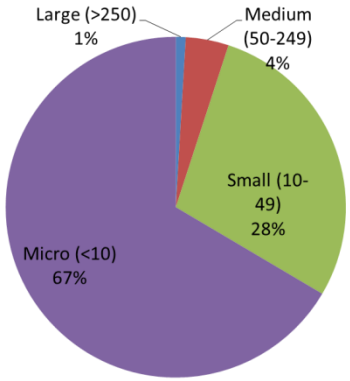
Key Facts From EARSC 2013 Industry Survey

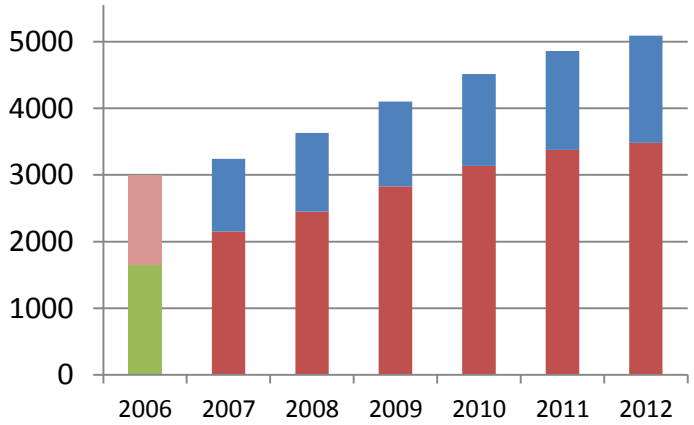
319 = Number of companies in Europe and Canada in 2012

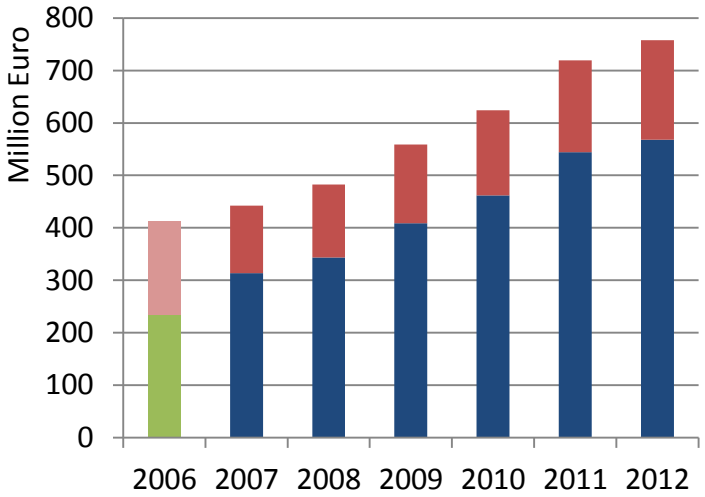
5087 = Total number of employees in 2012

€757m = Total Revenues for the sector in 2012

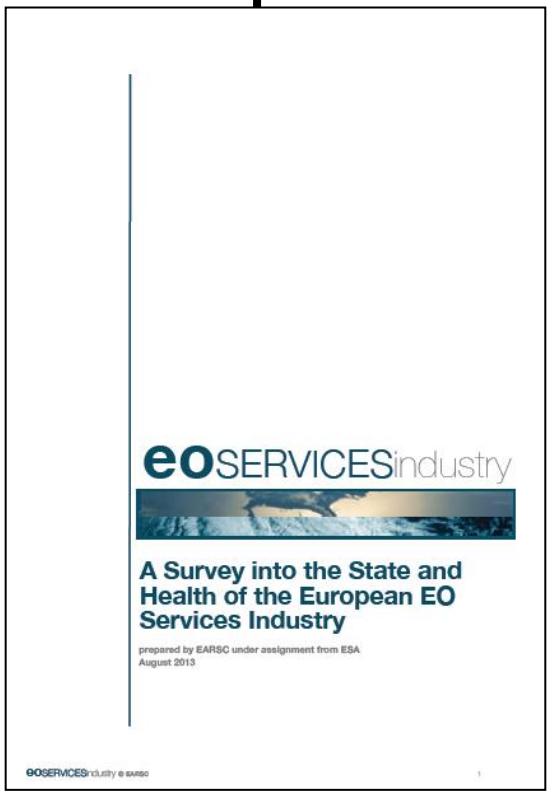
67% = Proportion of companies with less than 10 EO employees:
95% with less than 50 employees







European EO Services Industry



- Last survey based on our database of 365 companies across Europe and Canada.
- New survey started in October to provide update on the state and health of the industry; our database now holds over 500 companies in Europe.
- Extend coverage to include all sector employment in Europe and the projected use of Copernicus data and information
- Include international figures linked to Copernicus.
- Survey results expected in June 2015.
- In future, we plan an annual update with limited but key data.

Support is requested from all companies and national contact points, to ensure that our coverage is as full as possible.

Strategic Context and Current Challenges

Strategic Context

- Recently seen large shifts in the balance of power in the market:
  - DigitalGlobe has become the leading data supplier backed by new US legislation liberalising sales of high resolution imagery down to 25cm.
  - ESRI, PCI, Google, Microsoft provide the leading software and platforms for handling geospatial data.
  - Skybox (bought by Google), PlanetLabs and others are new players offering high resolution imagery through low cost business models.
  - Many other new players challenging, backed by government policy; for example China, India, Brazil, Japan.

Copernicus Context

- Copernicus is a world-leading, public programme and represents a key opportunity for Europe to regain position on the global stage, through a partnership between the public and private sectors.
- Whilst Copernicus priority is to supply information for public policy makers throughout Europe, its data and services should and must be exploited by the private sector in new markets (public and private).
- The strong government strategic interest makes it necessary to clarify the relationships between public and private sectors:
  - It would be beneficial to structure the public market through a common and consistent procurement approach;
  - It is essential to define clear boundaries where public actions stop and companies feel able to invest in new products and services;
  - We must also ensure private sector access to key skills and knowledge

H2020 - Some General Comments

1. More consistency of programmes supporting industry competitiveness
   - H2020 much better than FP7 where industry often felt an outsider; but still too much focus on science without industry involvement; this leads to duplication and non-exploitable solutions.
   - SME instrument is welcome, but early calls show that more thought (or funding) is needed to fully include the EO SME sector.
2. Reactivity to market changes:
   - Still takes too long (from call opening to project start); too arbitrary (evaluation & selection of proposals), too complex (process).
   - A much more agile approach is needed.
3. Steps to ensure user take-up
   - Need ways to encourage new private initiatives based on private investment. Consider use of prizes and progressive funding approaches.

H2020 - Some General Comments

4. Success rate for proposals is very low: even proposals which score 14 out of 15 points don't get selected for funding
    - This is not only demotivating for bidders, but also means that some excellent R&D concepts are simply not being followed up
    - Success rate needs to be improved: perhaps by increasing the budget for the downstream area, so that more proposals can be funded; or by making the calls more specific to thematic areas,
5. Overall, the programme will be stronger if actions are part of a Research Roadmap backed up by an industrial strategy
    - EARSC stands ready to engage with the EC on this.

R&D Priorities for the EO Services Sector

R&D Priorities – Linked to Copernicus

1. Enhancement of the digital infrastructure; improve access to Copernicus (Sentinel) data and information products, exploitation tools, and develop mechanisms to deliver value-added services to end users.
2. Evolution of the services: thematic research for Copernicus services to improve products, quality, accuracy, performance and thereby improve user uptake.
3. Understand new and evolving user requirements.

Copernicus evolution should become a central topic for H2020 EO R&D – and undertaken jointly by relevant public institutions and private sector

R&D Priorities – Market enabling

1. Foster the development of new services; innovation with a business priority; customer led-actions.
2. Innovative procurement by public customers including innovative payment and production systems and architectures.
3. Risk reduction and means to underpin new business models (e.g. low CapEx models).
4. Raise awareness of the capabilities of EO services and products related to the customers own processes.
5. Means to develop and enter new markets with customers outside of the EU (i.e. export markets).
6. Promote product standards and certification for EO services.

R&D Priorities – European Platform

1. Single “platform” to address needs of GEOSS, i.e. a European hub integrating Copernicus data and services with other European initiatives (e.g. INSPIRE, GMES for Africa, etc.)
2. “Sensors”: Integration of data from multiple sources e.g. satellite, aircraft, UAV, balloon, ship, sub-sea, crowd etc.
3. Digital infrastructure: Innovative technologies for data extraction, processing and representation.
4. Geospatial information: better defining the user requirements.

Summary

- The global environment is changing rapidly and effort is needed to maintain leading world-class capability in EO services within the EU.
- Stronger industrial involvement in decisions, and concerted R&D effort to help industry and especially SMEs, is needed to bring new ideas to the market:
    - To build upon investments made in Copernicus
    - To deliver improved products and services to EU public sector customers
    - To build and promote export capabilities
- Sustained investment needed: EC and ESA can both play complementary roles
    - Sustained investment through the “Valley of Death” up to demonstrable products with a confirmed customer base
    - Progressive but flexible funding (more use of prizes, incentives?)
    - Industry-led R&D with commitment for later stage research.
- Develop partnership through Structured Dialogue for EO/Geospatial Services.

Thank You

EARSC

European Association of Remote Sensing Companies

EARSC: Supporting the European EO services sector for over 25 years

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