



EARSC

European Association
of Remote Sensing
Companies

Evolution of Copernicus – An Industrial View

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EARSC Secretary General



What is EARSC?

Trade (non-profit) association founded in 1989, dedicated to helping European companies: *providing services (including consultancy) or supplying equipment in the field of remote sensing.*

- Foster the development of the European Geo-Information Industry

- Represent European geospatial-information providers, creating a sustainable network between industry, decision makers & users



98 members from **22 countries** in Europe

EARSC's Members



A Space Strategy

The recently adopted space strategy for Europe recognises the importance to:

“maximise the benefit of space for the society and the economy, by creating a European market for space based applications and services. For this we need to shift our focus from building the infrastructure to **creating the right environment for the space data economy.**”

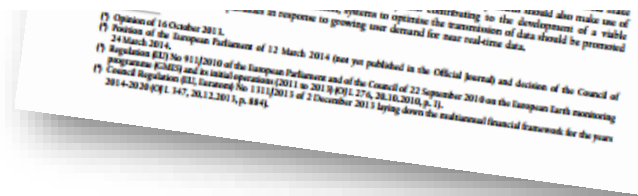
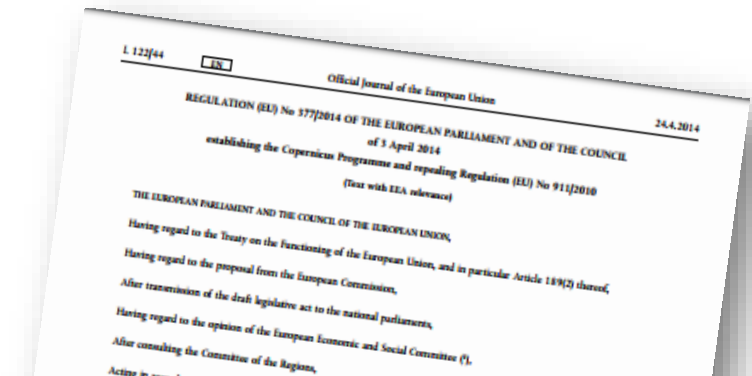
COM (2016) 705, A Space Strategy for Europe.



Establishing the Copernicus Programme

Regulation (EU) No 377/2014

*“The data & information produced in the framework of Copernicus should be made available on a **full, open and free-of-charge basis** subject to appropriate conditions and limitations, **in order to promote their use & sharing, & to strengthen European Earth observation markets, in particular the downstream sector**, thereby enabling growth & job creation.”*



The EO Services Market Challenge (1/2)

Market Evolution...



#EUSpaceStrategy

The EO Services Market Challenge (2/2)



- Difficult to predict, but changing rapidly
- Big IT players are taking an active interest suggesting that they consider it as a potential opportunity
- Majority of EO suppliers consider the market will evolve positively over next 5 years



Industrial Landscape



7877

Employees



510

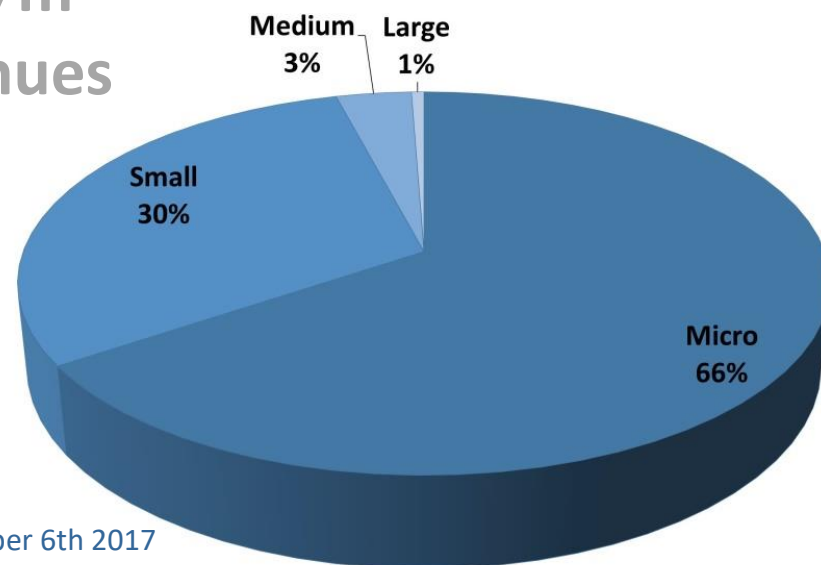
Companies



1247m

Revenues

**Growth rate 11-12% p.a. over
last 5 years**



A Survey into the State &
Health of the European EO
Services Industry



Prepared by EARSC

2017

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EARSC @ EU Council Space Working Party, October 6th 2017



Growth

A Survey into the State & Health of the European EO Services Industry



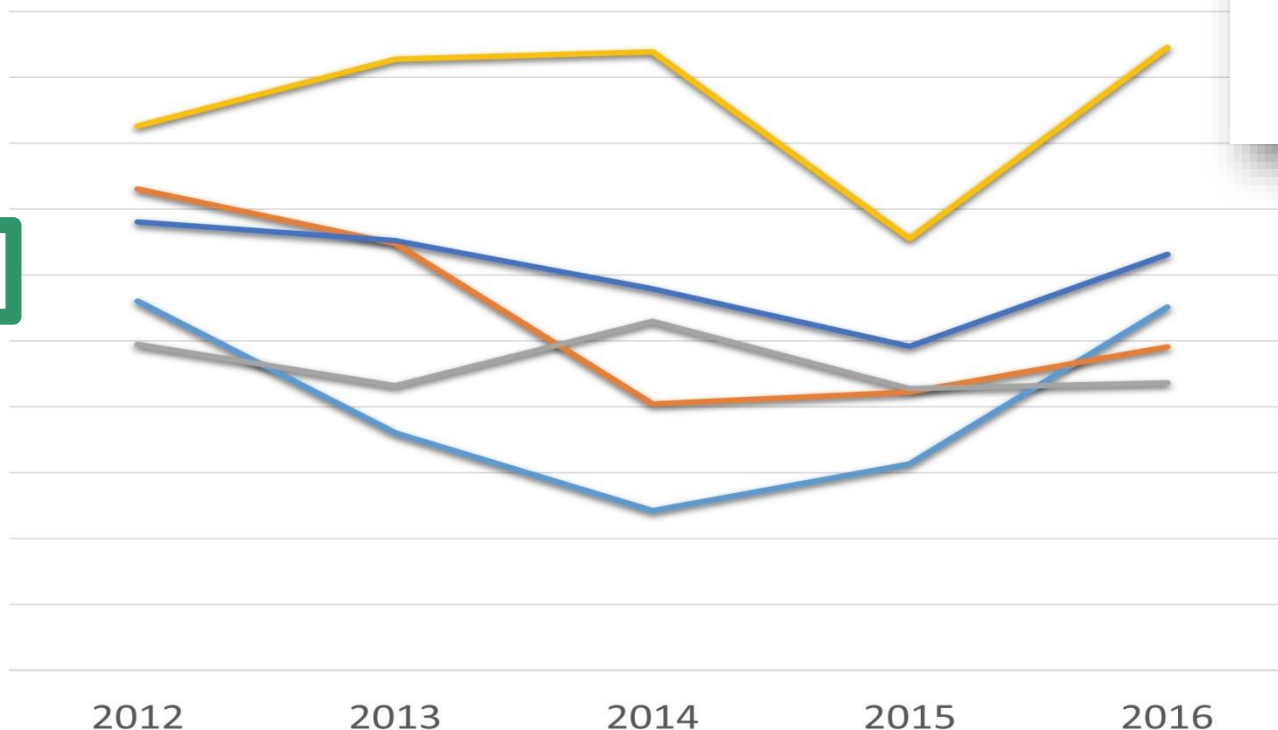
Prepared by EARSC

2017

EARSC



20%
18%
16%
14%
12%
10%
8%
6%
4%
2%
0%



- Micro
- Small
- Medium
- Large
- Overall

5 Years Growth Rates

Some Market Forecasts

Technavio:

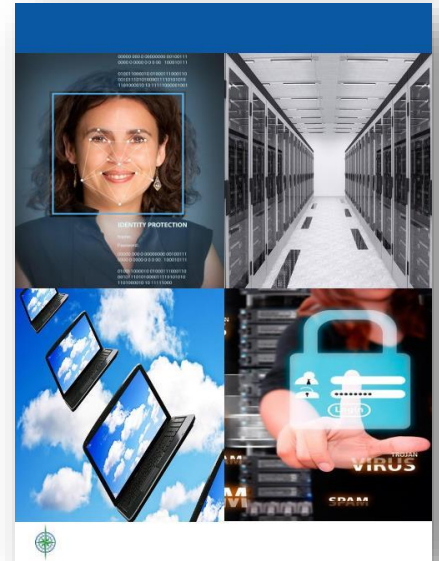
- The global GIS market will grow at a CAGR of **10.53%** during the period **2017-2021**

Markets & Markets:

- GIS market was valued at USD 5.33 Billion in 2016 and is expected to reach USD 10.12 Billion by 2023, growing at a CAGR of **9.6%** between **2017 and 2023**

Euroconsult:

- The value-added services market reached \$3.2 billion in 2015 & is growing at **11% CAGR**





Copernicus

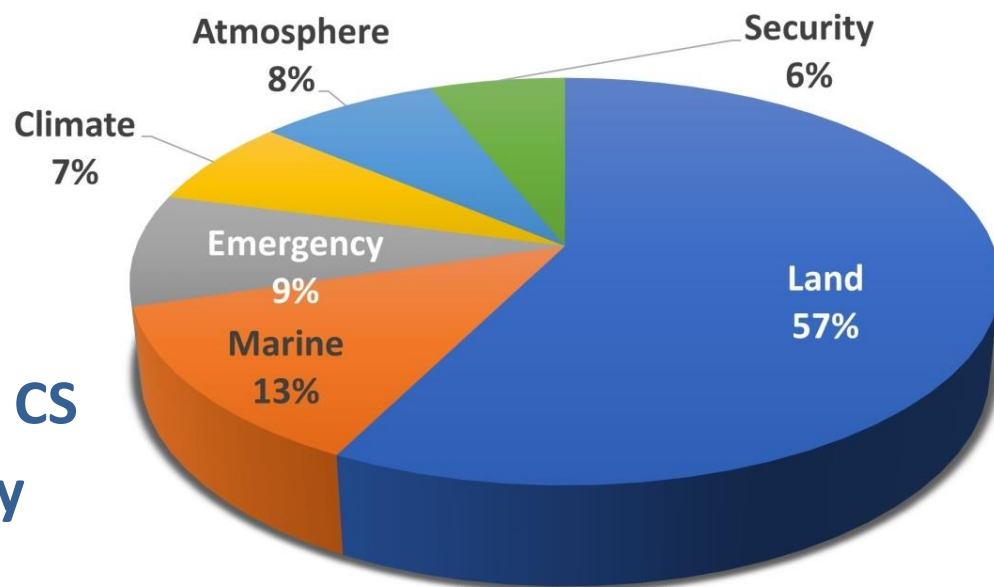


Companies' interest in Copernicus services



“Pregnant with potential”

Estimate that less than 25% of CS budget is spent with industry



Copernicus & Industry

- Industry has supported Copernicus from the outset
 - Suppliers industry meeting October 2009
- ...and the Free & Open Data Policy.....
 - EARSC Report GMES: Geese and Golden Eggs, December 2012
- EO services industry has strong capabilities for processing Sentinel data into information
- Exploit the Copernicus Data & Information into new markets:
 - Commercial markets ie other sectors
 - Export markets covering governments & businesses





Developing an Industrial Strategy



Downstream services industry based on 3 pillars



Sustained Data Access

...Service-led approach by public sector

Future Copernicus missions should adopt a **Service-led approach by the public sector**:

- Where commercial demand is strong - Private investment can be mobilised
- Where commercial demand is weak or absent – Fully public funding which could be for infrastructure
- Where commercial demand is uncertain - Buying data (anchor tenancy) can reduce risk & allow private sector investment alongside funding from public sector



Sustained Data Access

... Commercial sector views could be introduced at early stage



Commercial sector views could be introduced at early stage to:

- Enhance commercialisation potential (eg. specifications)
- Maximise private engagement (Sentinel & commercial satellites are complementary)
- Discuss & prepare procurement model, data policy etc.



Sustained Data Access

...|Public-private approach

When the **market is under-developed**:

- Demonstration mission can test the public-sector demand
- Establish the processes & structures to incorporate geospatial information into decision making
- The commercial market for the same data should be tested



- If the need is sustainable - the prediction of the market risk will allow an **effective Public-private approach** with the potential to bring private investment
- When the market risk is understood - **data-buy or anchor tenancy policy would be appropriate**



Develop Demand

- **Stronger partnership with industry:** ensure that public-market demand is transformed into an efficient & effective supply
- **Copernicus:** can be used to stimulate pilot projects demonstrating how the use of EO products & services can re-enforce existing policies & even new policy initiatives
- **Public agencies:** an industrial policy instrument which promotes economic development as a benefit of public expenditures



Understanding the roles

...Public-Private Boundary

Current situation:

- **USA:** Clear distinction & definition of the role of public agencies – contributes to strong, private investment into new ventures (eg. launch of new satellite constellations, EO products & services)
- **Europe:** Complicated with 28 MS having different views & institutional settings

Solution: EC could ensure an appropriate engagement of public & private sector suppliers able to meet market demand



**PAY
ATTENTION**

Public supply of CS shall be preferred ONLY when no proven commercial capacity is available!



Understanding the roles

...Public-Private Boundary

EEE's & the private sector:

- Downstream industry seeks to build upon Copernicus policy (free & open public services) to develop more market demand
- Working together enhance exploitation of Copernicus
- **An informal partnership** could enhance an entrepreneurial culture

R&D actions:

- foster industry to build missing capacity & ensure competition
- Ensure the results of R&D projects are used where possible to enhance Copernicus (eg. linked to measures through action on skills, Erasmus+)

Financial facility:

- Additional initiatives could be pursued to attract private finance, managed by existing institutions & backed up by technical knowledge



Conclusions & Way Forward...

COPERNICUS

- Excellent opportunity to capitalise on public expenditure
- Powerful tool for economic growth & jobs

INDUSTRY

- Enthusiastic about the opportunities
- Foster the development of the downstream sector



Stronger partnership between the **drivers of the programme** + **Industry** = **enhance exploitation**



Revised **Governance Structure** + **Industrial Voice** should be introduced



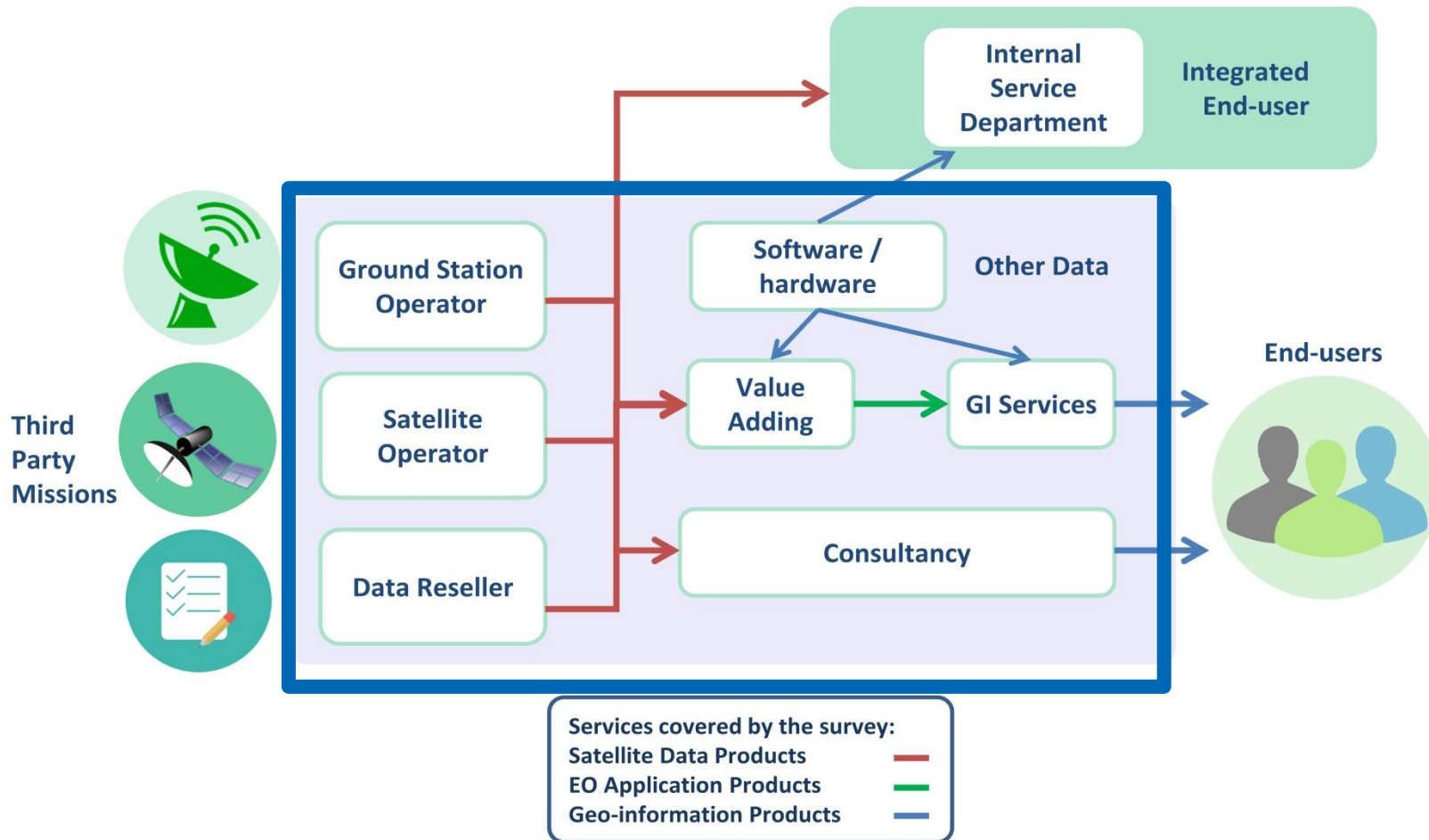
For more Information on EARSC:

www.earsc.eu / www.eomag.eu

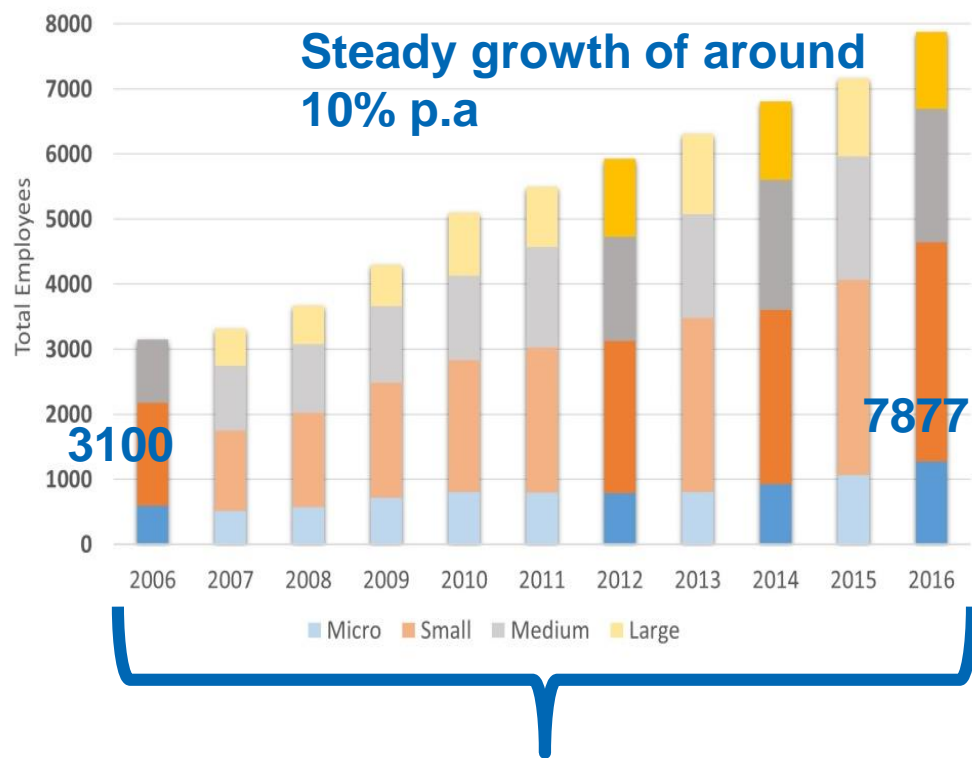
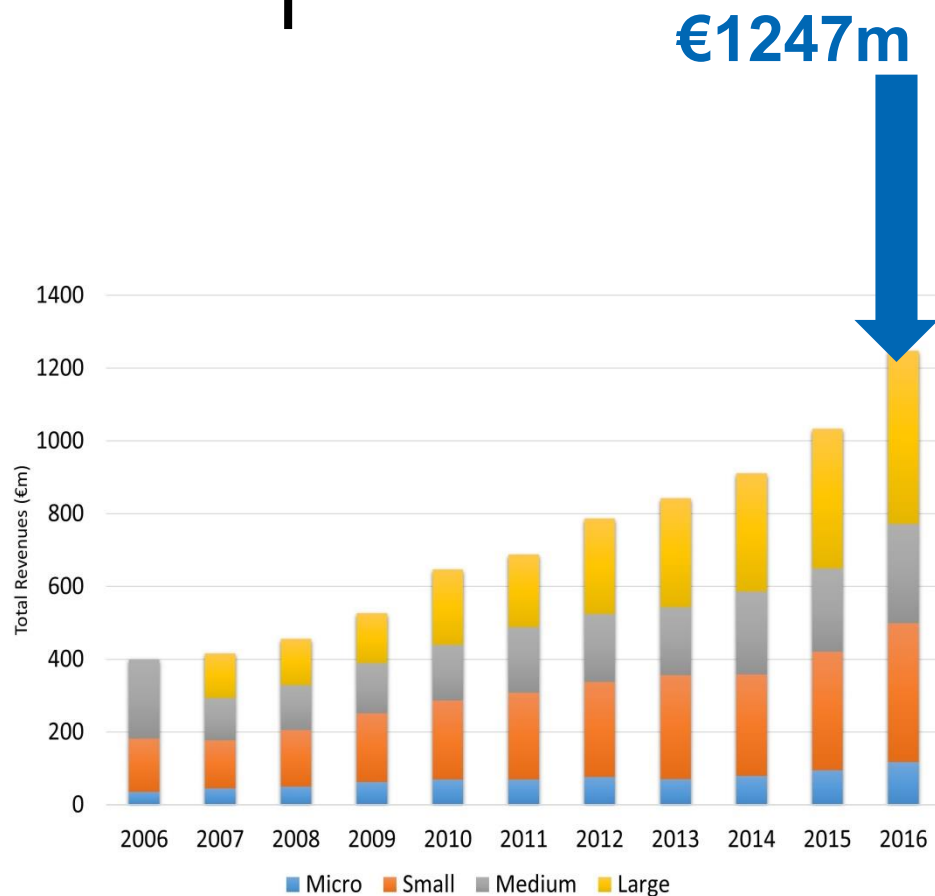
**For information about the
services of our MEMBERS:**

www.eopages.eu

EARSC EO Services Value Chain



Revenues & Employment

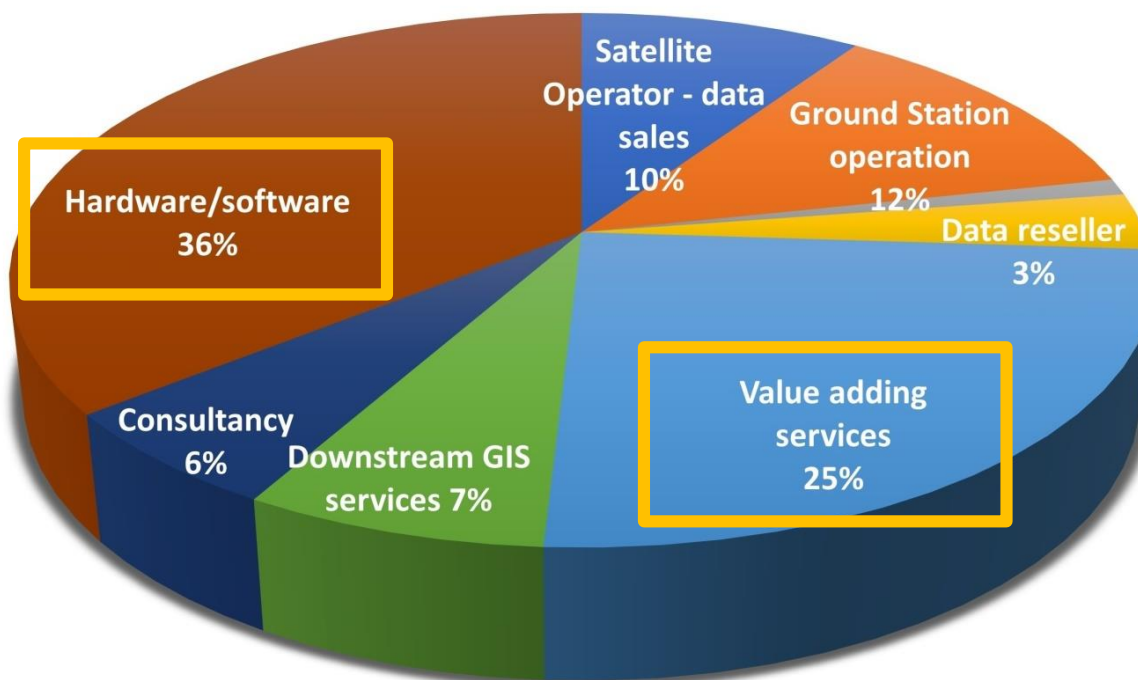


Evolution of total employment within 10 years



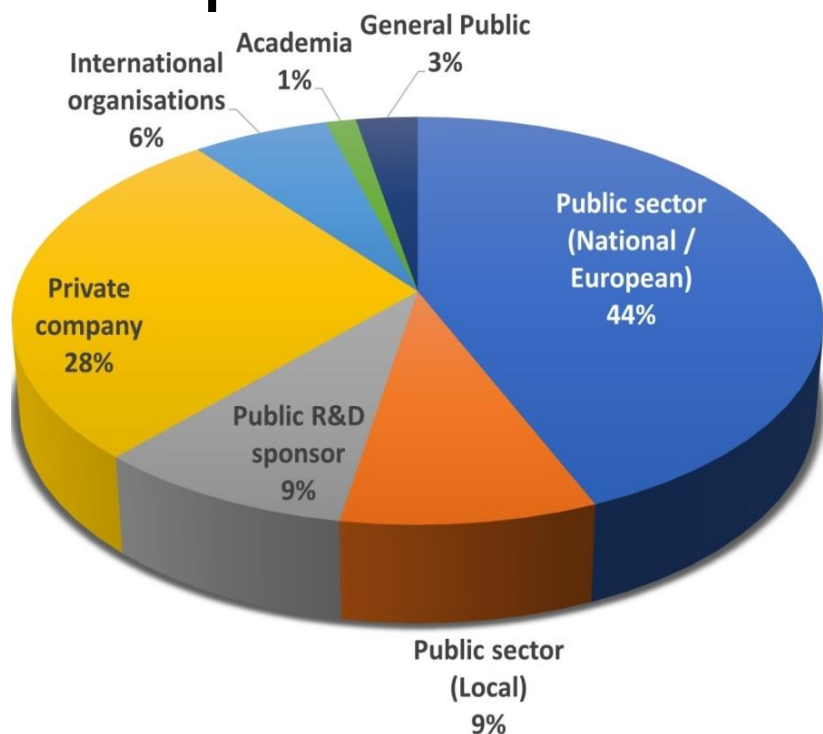
Activities

Split of activities (based on 2016 revenues)

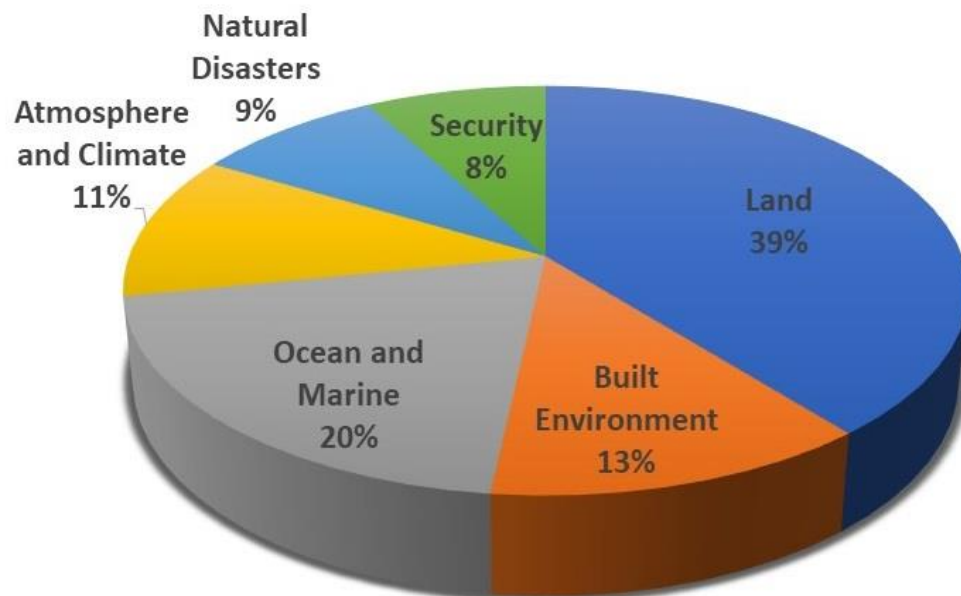




Customers & Markets



Main customer is public sector (55%):
public authorities & international
organisations



Main market (+50%) is on land &
infrastructure