

Improving national industrial participation in EU programmes and funds

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Multiannual Financial Framework workshop – ASI, 15/12/2017

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Brief AIPAS overview

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ABOUT AIPAS

Founded in 1998

40 Members with more than 1500 employees

About 30% of the national workforce in space

8 Large enterprises, 32 SMEs

System integration, payload, subsystems, data, ground applications

Founder of SME4SPACE (representing >450 SMEs so far in Europe)



AIPAS MISSION

Preparing, representing and defending common positions

Promoting the interests of its Members at National and International level

Facilitating the collaboration between SMEs and Large Companies

Carrying out research activities and promoting events and conference on Space



AIPAS MEMBERS DISTRIBUTION ON NATIONAL TERRITORY





AIPAS Members





















































































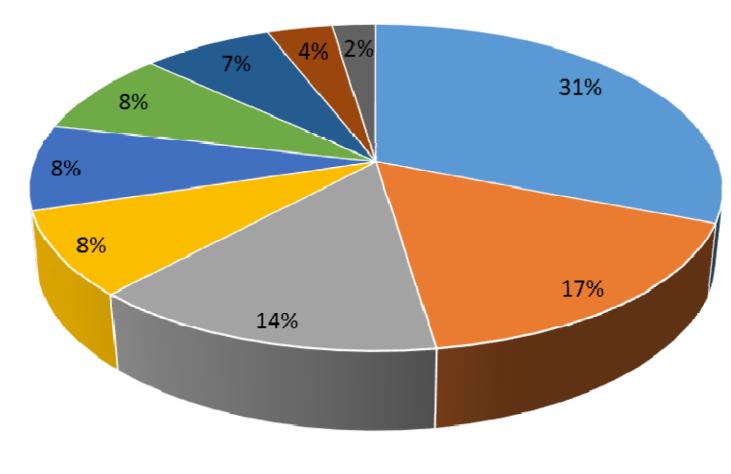








AIPAS Members Products/Priorities





Sensors

Education

EO Services

OBDH

Propulsion

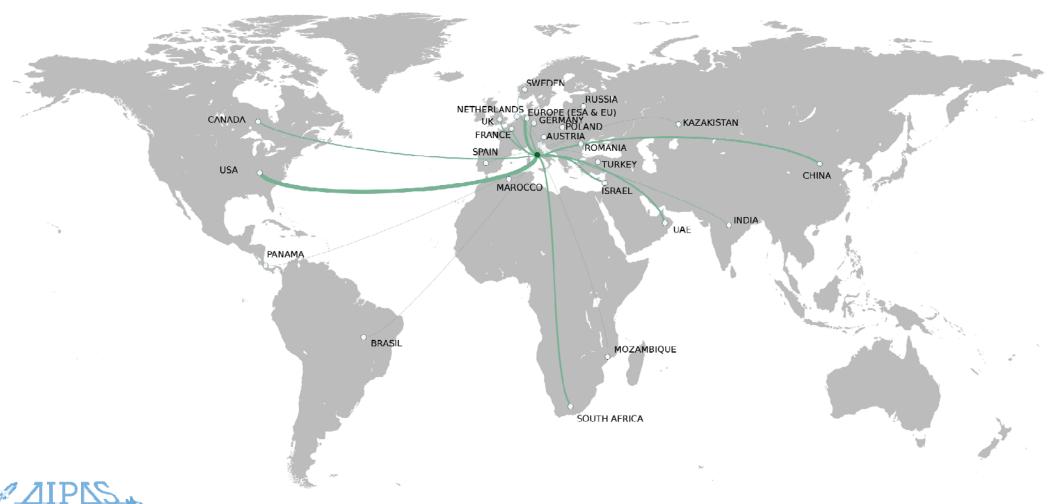
- Ground Station

Satellite

MGSE



AIPAS MEMBERS INTERNATIONAL INTERESTS



ASSOCIAZIONE DELLE IMPRESE PER LE ATTIVITÀ SPAZIALI

ITALY INFRASTRUCTURE TOWARDS EUROPE

Connetting the dots between Italian programs and EU programs

- Small satellites for constellations are considered the next market
- Integration with large, more capable and performing satellite programs is a key aspect
- Integration of Italian programs towards EU keeping a worldwide scenario perspective

Market-driven approach, market creation, disrupt innovation

- New programs shall follow a market-driven approach, not a technology-driven approach
- European space market today is public money: if we want to move towards a purely commercial market, we need first to create the market, starting from public demand (i.e. Space Economy model)
- Disruptive technology (not the incremental improvement technology) will lead the next market: let's use efficiently R&D public money



BIG DATA AND DATA POLICY

New potential large market based on satellite data arising

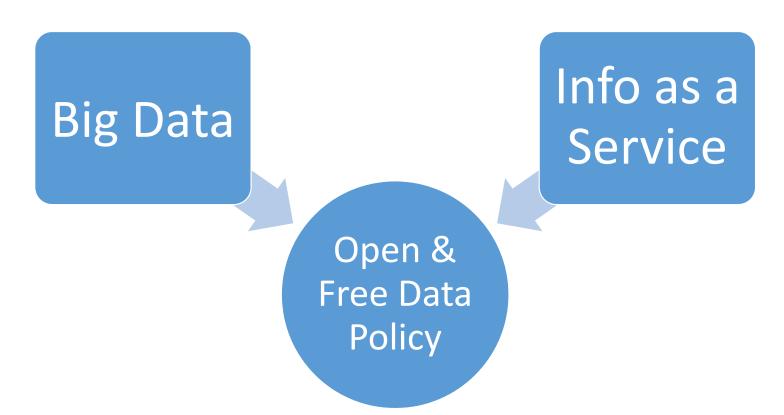
- Satellite data: a new commodity
- Satellite data applications and services: a new large market to be built

EUROPEAN DATA POLICY, NATIONAL CONTRIBUTION

- European satellite data as a competitive edge for EU service providers
- AIPAS shares and supports the Copernicus satellite data free and open data policy



BIG DATA POLICY ACCORDING TO SERVICES EVOLUTION





NEWSPACE

About 82 constellations for a total 23,000 satellites

- Mainly funded by private capital
- Willing to deliver big data and services to ground
- New private initiatives on the space segment: in-orbit servicing, ADR, in-orbit transportation other «fancy» activities (asteroid mining, mars tourism, space real estate)

Europe and Italy have not enough money to compete with US and China Newspace. But:

- Europe IS a market: we can fill the GAP using European public entities as first customers, to create public demand in order to stimulate the raising of a commercial market
- Structure public funds strategically to rapidly gain leadership
- Focus on EU commercial entities solidity vs US approach of increasing valuation: generate value should be the long term objective



EARTH OBSERVATION SYSTEMS EVOLUTION

Small Satellite constellations Increased on Board capacity

Users Direct Tasking

Cloud Services Distribution (DIAS) These main trends are deeply changing the actual EO landscape



FINANCIAL INSTRUMENTS

ENHANCING LOCAL MARKET TO COMPETE GLOBALLY

- We need new financial instruments for space companies
- Timing is of essence, hence, higher working capital lead to faster access to market
- The role of public entities is key: synergies with banks and other financial institutios

REDUCING TIME, INCREASING ACCESS TO CAPITAL

- Clear definition of roadmaps «ITT to contract signature» is essential. Timing shall be respected
- Improve access to capital and financial instruments over public contracts also for SMEs
- ASI, ESA and EC to work actively with private investors to educate VC sector to space opportunities and increase private investments into the space market



FINANCIAL INSTRUMENTS

Multiannual EU Investment Plan: an opportunity

- Potentially double budget
- Support and creation of VC and Growth private funds dedicated to space companies, ground-based services and space-segment technologies and services
- 50% of the fund money from public source, 50% from private
- Funds managed by experienced successful entrepreneurs or VCs with track record, and ASI/ESA as technical advisory board

Improving the relationship between large enterprises and SME

- Minimum SME share in public programs
- Incentive large enterprise to subcontract to SMEs: i.e. cost reduction via public support
- SMEs included at the beginning in the proposing team
- Closed loop: KPI and verification during the program development



EUROPEAN SPACE STRATEGY AND IMPLEMENTATION

European Commission: buyer and strategic designer

- EC is the primary buyer of space programmes today
- EC shall create public domain demand for products and services as a first step on which to build a commercial market
- EC shall drive the high-level requirements towards a clear European strategy
- EC shall define low TRL disruptive technology as future competitive edge for EU

ESA: implementation and technical director

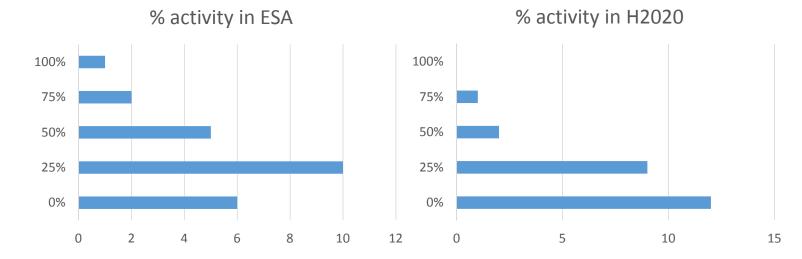
- ESA manages implementation and tactics for EU programmes
- ESA lead medium-high TRL to market: ESA (via EC requirements) is the first customer
- Avoidance of overlapping actions within EC, ESA and national programmes



EC & ESA RELATIONSHIP

- A clear and balanced distribution of roles and responsibilities among EC and ESA is to be found;
- ASI should promote the dialogue between EC and ESA;
- A win-win strategy should be adopted, maintaining the actual configuration, but refining the eventual shortcomings;
- For AIPAS Members, but not only, both the institutions are important.

Percentage of AIPAS Members turnover financed by ESA and H2020 projects





CONCLUSIONS

Creation of a public market

Defined data policy

Support the creation of VC and Growth funds focused on space

Support access to capital for SMEs and increase cooperation with Large Enterprises

Avoid overlapping between diverse public source of money



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