

Tenth Session of the South-East European Climate Outlook Forum SEECOF-10

Belgrade, Serbia, November 20-21, 2013

IGIS solutions Geo-Information Capacity Building

November 21st 2013

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All the space you need

Confidentiel Astrium



The Power of the EADS Group

EADS

€ 56.5 billion revenue
140,000 people



ASTRIUM



AIRBUS



CASSIDIAN



EUROCOPTER

€ 5.8 billion revenue
18,000 people



Astrum Services



Astrum Satellites



Astrum Space Transportation

Business Communications Services

Government Communications Services

GEO-Information Services

2012 Information

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A Legacy of Expertise

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CNES founds Spot Image

1982



Creation of Infoterra

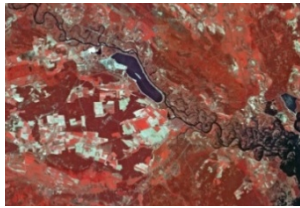
2001



Full integration to Astrium Services

2010

1986



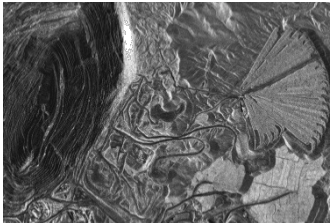
SPOT 1
Launch of SPOT 1

2002



SPOT 5
Launch of SPOT 5

2007



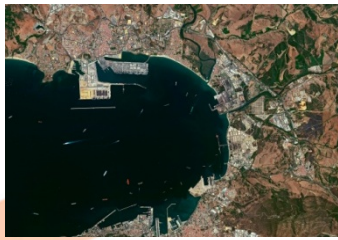
TerraSAR-X & TanDEM-X
2007: launch of TerraSAR-X radar satellite
2011: launch of TanDEM-X, for WorldDEM™

2011



Pléiades 1A & 1B
2011 & 2012: launch of Pléiades very-high-resolution satellites

2012

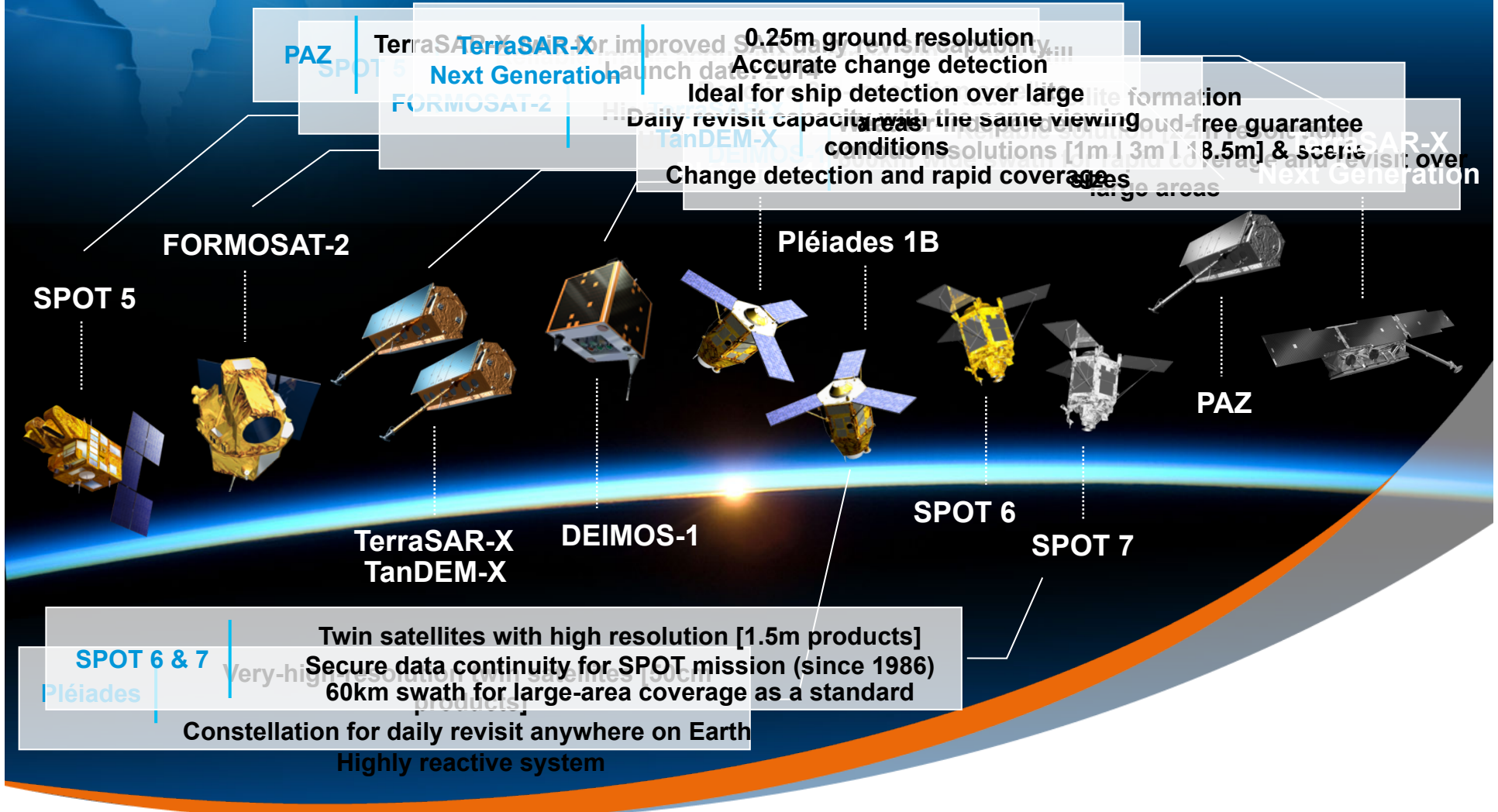


SPOT 6 & 7
2012 & 2014: launch of SPOT 6 and SPOT 7

2014

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A Unique Satellite Fleet



Astrium Services at a Glance

100 

Astrium Services serves customers in more than 100 countries



Astrium Services, GEO-Information accesses 6 Earth observation satellites, 2 radar and 4 optical

100 billion km²

Over 100 billion square kilometres of satellite imagery, archived since 1986

1.5 billion

Number of people using our imagery worldwide every year

3 

Number of direct reception station partners worldwide

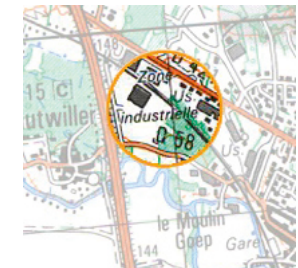
110 

110 resellers worldwide

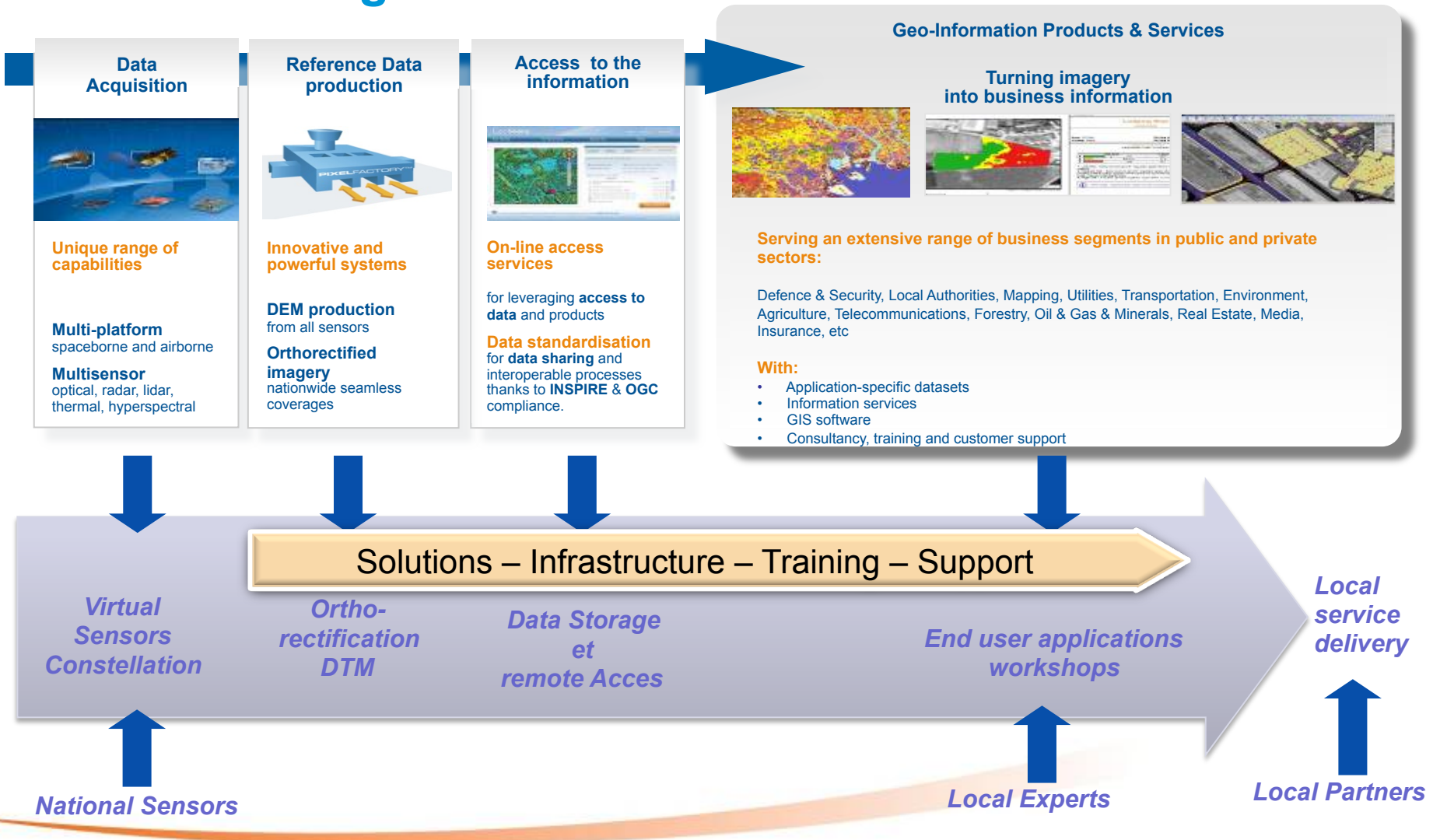
April 2013 information

Purpose of the IGIS solution

- *“For institutions aiming at e-governance, geo-spatial policies & data infrastructures become key assets to be carefully designed, implemented and operated for the benefit of the country.”*
- **The program is setting-up Geo-Information capability and provides high technology components with full support and transfer of expertise.**
- **If you are an institution willing to establish Geo-Information capability:**
 - Generic (for example multi-purpose National program)
 - Thematic (Cartography, Agri-SDI, Water-SDI, Defence-SDI...)
 - Through public procurement or public/private initiative

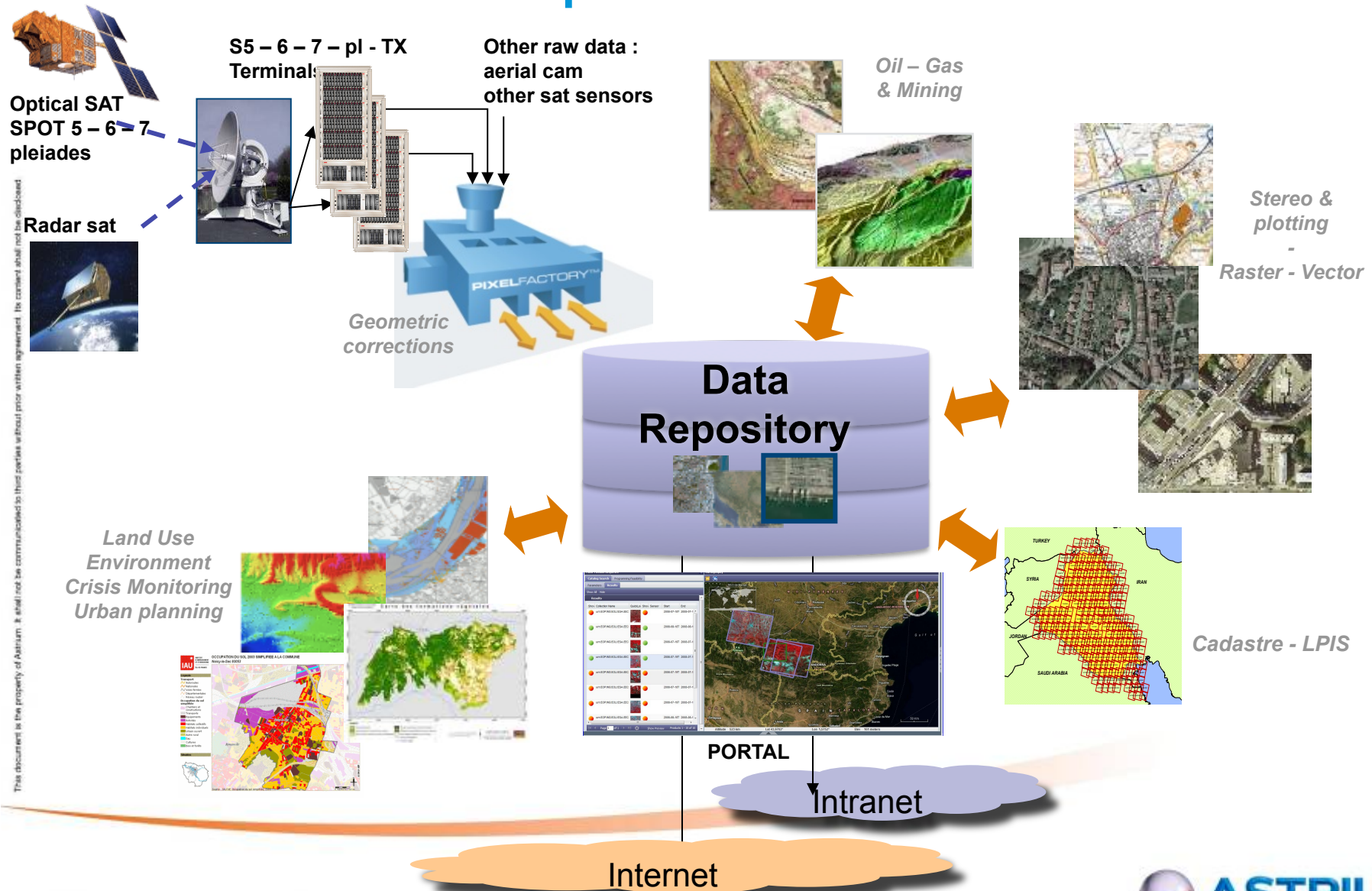


Benefiting from Geo-Information Services covering the whole value chain



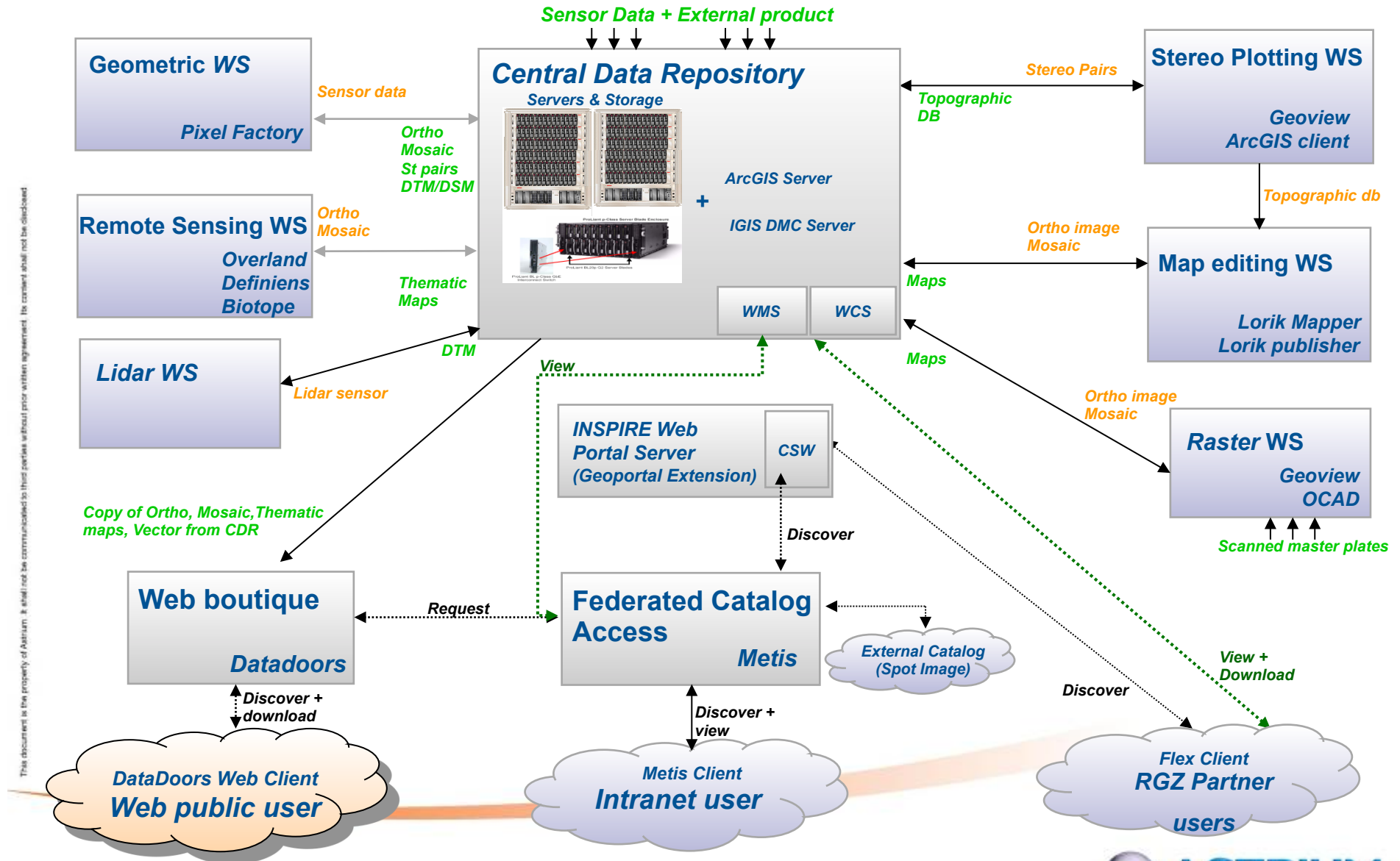
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Typical SDI infrastructure for capability building: flexible and open



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Overall logical architecture



IGIS: GEO comprehensive SDI framework





IGIS Project for Serbia

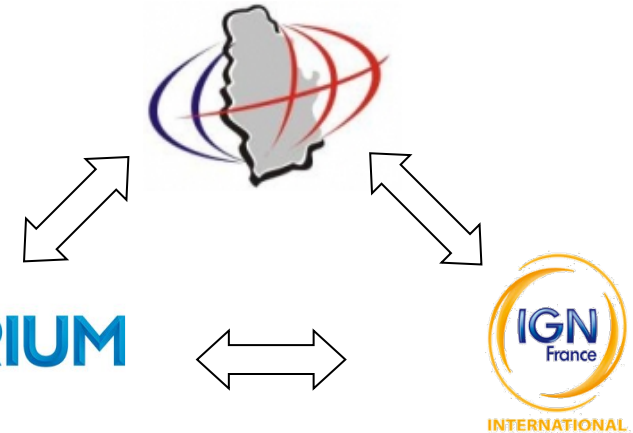
- Partnership programme with RGA

- ~17M€ supported by

- French authorities (special french loan)
- Serbian authorities (1/3 of the budget)

- Contract signed in « Le bourget air show » in Paris in june 2009. Implementation started in September 23th 2010 for 3 years duration (+2 years maintenance)

- Base data acquisition : Satellite, aerial & lidar
- Production Workshops & Infrastructure for data management and Dissemination
- Large phase training Know how Transfer
- END NOVEMBER 20th 2013



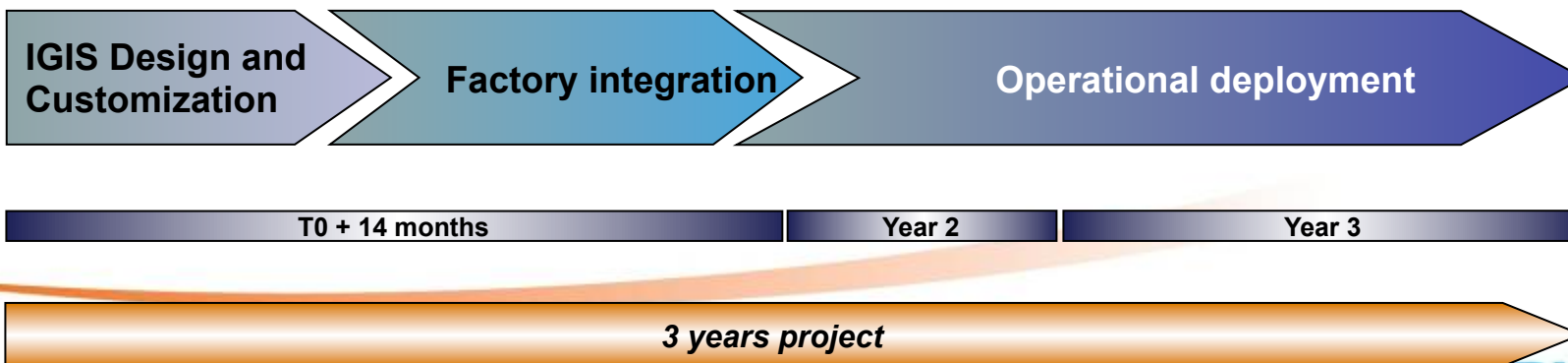
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- Start : 23/09/2010
- Space & aerial data over 5 years (Spot 4, Spot5, Geoeye, ADS80 & UCXp aerial cameras, LIDAR, other Sat ...)
- Infrastructure delivery in Nov 2011
- Large phase of training/know-how transfer over 3 years
- 2 years of maintenance : 2014, 2015

- *System design*
- *Site recommendations*
- *Infrastructure Customization*
- *Training planning*
- *Data delivery planning*

- *First Dataset deliveries*
- *Parameter setting*
- *Adaptations*
- *Tests & assembly*
- *Validation*

- *Following Data sets delivery*
- *Maintenance*
- *Support*
- *Training & know how transfer*



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Large phase of training & know how transfer

Smooth handover towards RGA staff

- Advanced users are the privileged point of contact with consortium experts all along the project timeline

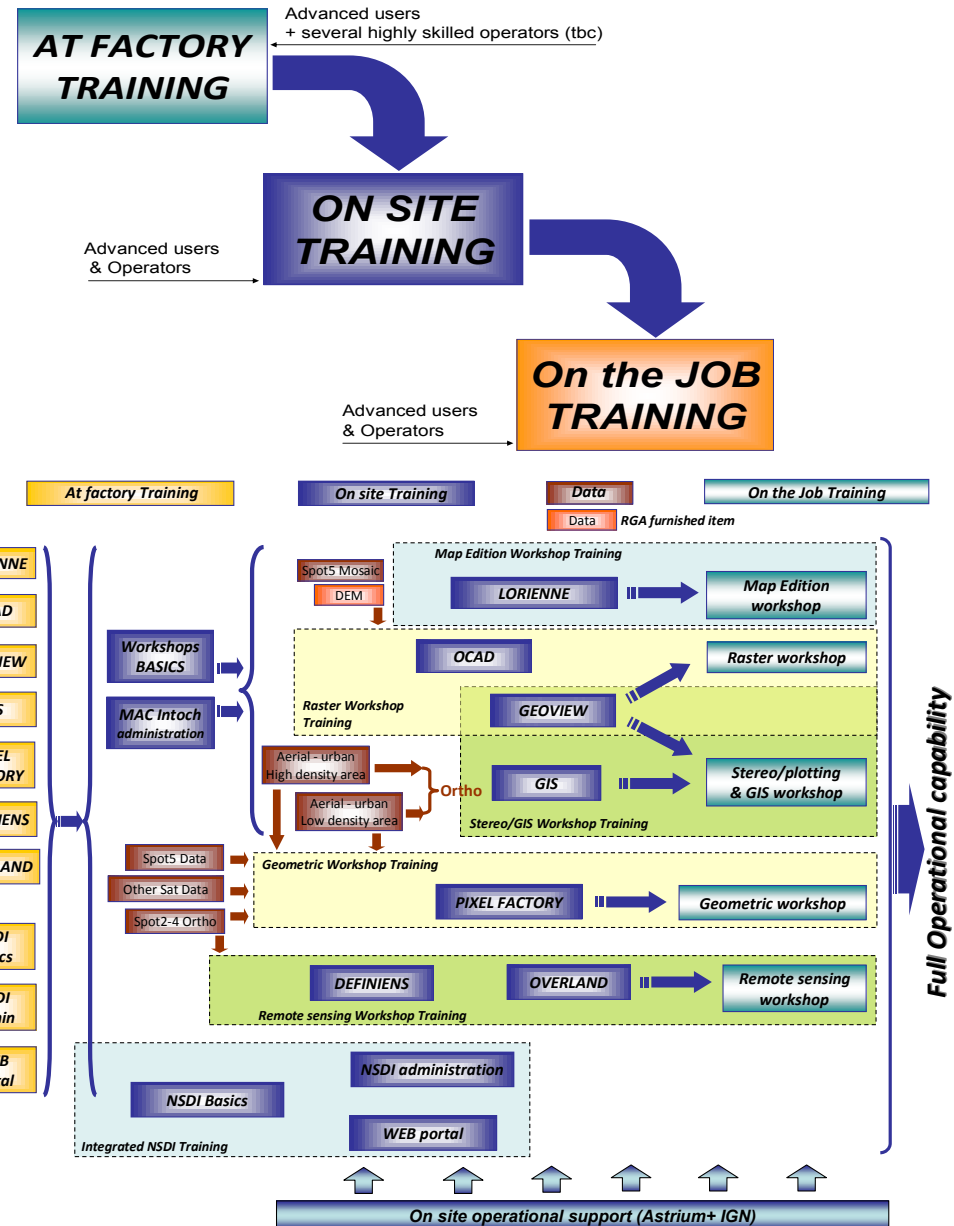
300h at factory training

- Advanced users set up adequate working procedures & policies in close cooperation with consortium experts

1200 h on site training

- Target data & final system are used on most training sessions

3000h on the job training and support

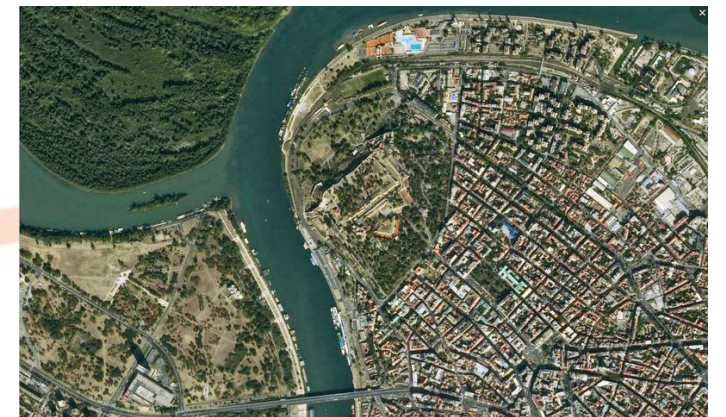


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IGIS Serbia : Key figures

- Know how transfer
 - 300 h factory training
 - 1200 h on site training
 - 3000 h on the job training and support
 - Site support until fully operational productions
- SDI System
 - 52 workstations, more than 60 operators
 - 25 Servers & computing nodes
 - 60TB of central digital storage space
 - 2 Interoperable web Portals
 - 2 A0 Ploters / 2 A3 printers
- Data provision
 - Aerial camera UCXp 10cm GSD over 92 cities
 - Aerial camera ADS80 40cm GSD over 77 000 sqm2
 - Aerial Lidar camera over 1870 sqm2
 - Full country coverage HR satellite cSpot5 over 3y
 - 4500 sq.m2 Satellite VHR
 - Various sites HR multi-temporal scenes for over 2y



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