



## **LAZIO CONNECT**

*Increase competitiveness of Aerospace Cluster in the Lazio Region*

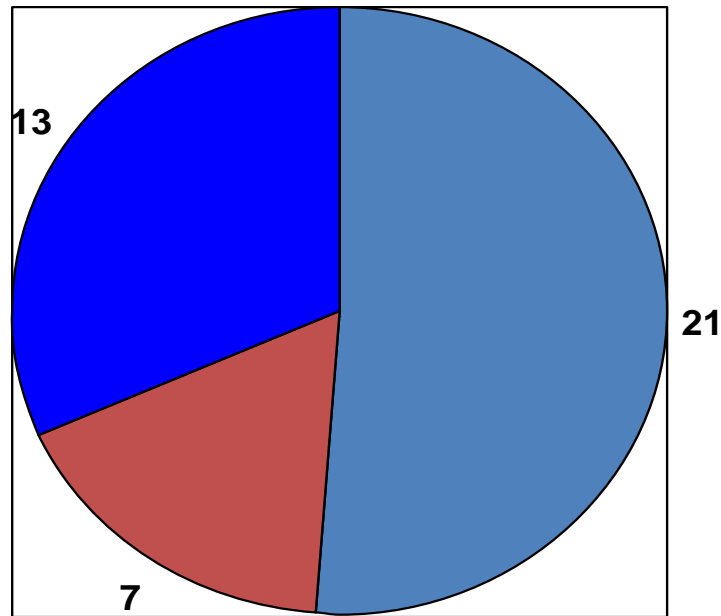
**“The Aerospace platform supporting collaborative enterprising”**

***JAPAN MISSION***

***4 – 9 September 2017***



## 41 Members LAZIO CONNECT – break down





# Aerospace Technological District – LAZIO REGION

## FACTS AND FIGURES

- **Over 5 billion** Euro in turnover
- **30,000** employees
- **200** prominent sized companies
- **10** research bodies/centres: ASI, CNMCA, CNR, CSM, ENEA, ESA/ESRIN, INAF, INFN, INGV, RSV
- **8** universities: La Sapienza, Tor Vergata, RomaTre, Cassino, Tuscia, Link, UniCusano, Lumsa
- **4** technology parks: Tecnopolo Tiburtino, Tecnopolo di Castel Romano, Pa.L.Mer., PST Alto Lazio
- **4** engineering faculties, 12 departments, 30 university advanced training programmes
- **3,000** specialists involved in aerospace research including university professors, researchers and other specialised scientists
- **Incubators and Support services for technology transfer and start-up creation:** ESA incubation centre, Bic Lazio, E2bLab Tor Vergata, Sapienza Innovazione, ILO Roma 3, Itechspazio (incubator for space projects joint sponsored by local authorities and ESA)

**THE LARGEST AEROSPACE CLUSTER IN ITALY**



## KEY CAPABILITIES

1. DETECT: Deep knowledge of the world of Sensors
2. UNDERSTAND: Transform complex **data** into useful information
3. MAKE SURE IT WORKS – ALWAYS: Design, develop, test and deploy **systems and materials** that resist in extreme conditions





## OUR MARKETS (Some...)

1. Space (e.g. satellite planning and manement, satellite communication M2M)
2. Agrifood (e.g. certification of products, bioengineering)
3. Aeronautics
4. Services for small and large Airports
5. Technologies and Systems for Railways
6. E-Health (e.g. aid to diagnosys, Tele presence and telemedicine)
7. Cyber security
8. Broad Band Infrastructure
9. Software and Hardware development and integration
10. Earth Observation Services



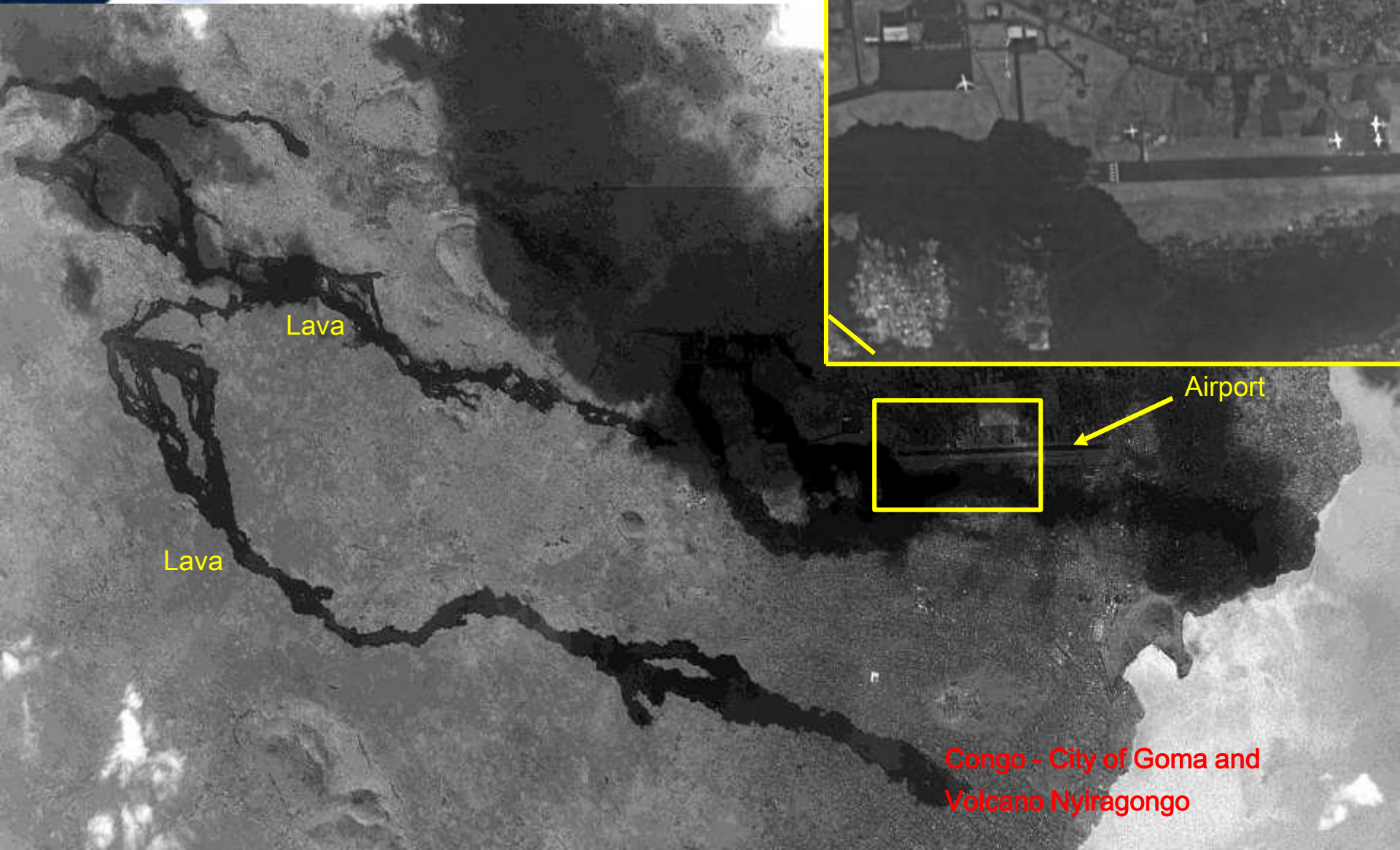


## EARTH OBSERVATION SERVICES

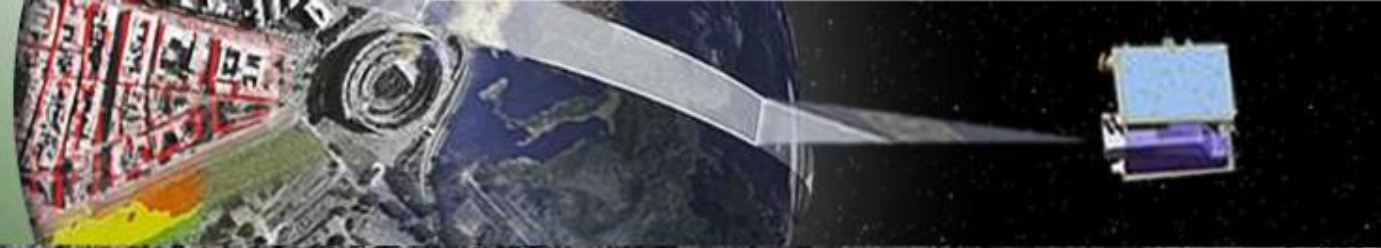
1. Critical Infrastructures
2. Disaster and Events
3. Urban Plannin and management
4. Agrifood
5. Sustainable mobility
6. Logistics
7. Environmental monitoring
8. Protection of cultural assets



# Monitoring and Control of Natural Disasters for Critical Infrastructures



Congo - City of Goma and  
Volcano Nyiragongo







Monitoring and control Natural disasters

Iran - Bam Earthquake \_ January 2004



# Monitoring and Control of Natural Disasters for Critical Infrastructures

USA - New Orleans Flood 2001



Czech Republic -  
Prague Flood of 2002

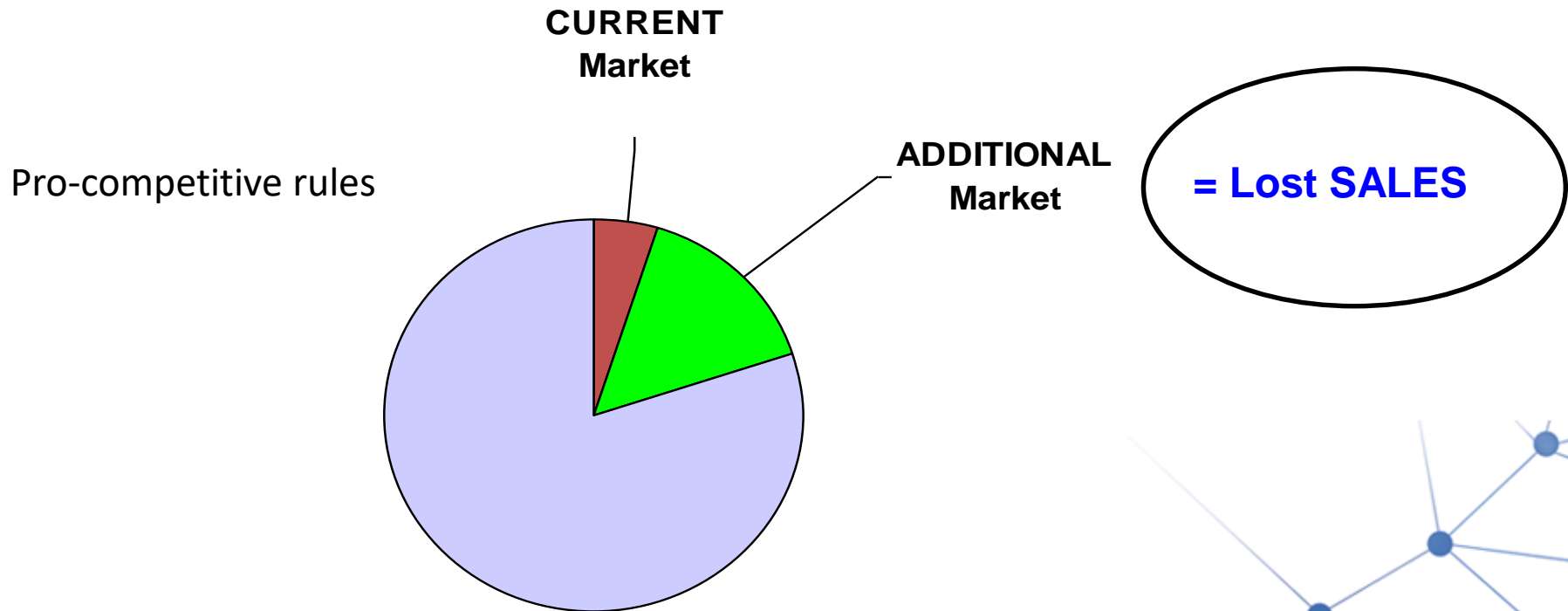


## Knowledge

Environmental monitoring of potentially at-risk industrial sites of the Territory



**Eliminate the barriers to collaboration** along the entire life cycle of the product in order to access **ADDITIONAL** market





## OUR FIVE KEY SERVICES

1. Competence Mapping of available capabilities in LAZIO Region
2. Facilitate access of members to regional, national, European and international innovation funding
3. Medium–Long term collaboration of SMEs and Research Organizations with Large Organizations
4. Building, running and promoting Virtual Enterprises in core markets to pitch for innovation funding and national and international public tenders
5. Copernicus Relay for Italy

For more info: [www.lazioconnect.it](http://www.lazioconnect.it)



# COPERNICUS – the world most comprehensive earth observation program

## WATCHERS IN THE SKIES

Once its Sentinel satellites are fully operational, Copernicus will probably be the world's most comprehensive Earth-observation programme. In addition to Sentinels 1 to 6, a Sentinel 5 Precursor satellite will be launched in 2016 to minimize the gap in atmospheric data following the expiration of Envisat in 2012.

### SENTINEL-1

**Launch date:** 1A: Launched; 1B: 2015

**Payload:** All-weather radar

**Revisit time:** 1–3 days

**Applications:** Monitoring sea ice and the Arctic, land surface motion risks, disaster response

### SENTINEL-2

**2A:** 2015; **2B:** 2016–17

**Optical sensors with 13 bands**

**2–5 days**

Monitoring land-use changes, agriculture and ecosystems, volcanoes and landslides

### SENTINEL-3

**3A:** 2015, **3B:** 2016–17

Sea/land temperature radiometer, sea/land colour instrument

**1–2 days**

Sea-surface and land-ice topography, sea and land surface temperatures and colours

### SENTINEL-4

Near end of this decade

Ultraviolet/visible/near-infrared spectrometer

Geostationary. Hourly coverage of Europe/North Africa

Monitoring of air pollution, stratospheric ozone, solar radiation

### SENTINEL-5

Near end of this decade

Ultraviolet/visible/near-infrared/shortwave spectrometer

**17 days**

Monitoring of air pollution, stratospheric ozone, solar radiation and climate

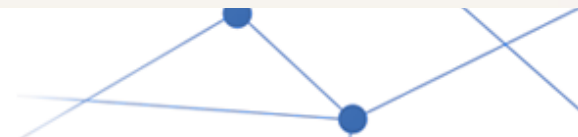
### SENTINEL-6

Mission still under discussion

Radar altimeter

Under discussion

Measure global sea-surface height for oceanography and climate studies



## THE NOVELTY

# Sentinel Data Policy = **FREE and OPEN access**

The EC Regulation on Copernicus Data and Information policy stipulates the main principles of Sentinel Data Policy:

- ✓ **Open** access to Sentinel data by anybody and for any use
- ✓ **Free** of charge data licenses
- ✓ **Restrictions possible** due to technical limitations or security constraints.

Copernicus Contributing Missions data access follow their owners data policies.





# LAZIO CONNECT – Italy Copernicus Relay



- Promoting Copernicus as a sustainable source of full, free, open and reliable information to meet the needs of national/regional/local public services
- Boost the development of services with high commercial potential by local entrepreneurs.
- Increase Copernicus awareness at the national, regional and local level.

More on Copernicus Relay Centres:

<http://www.copernicus.eu/news/copernicus-family-growing>





## WHY ARE WE HERE?

- To Seek Partners interested to deploy our innovations together
- To Seek Companies with capabilities tha complement ours for international collaborative projects (e.g. HORIZON 2020)

**If you are one of these come and talk to me today!**

