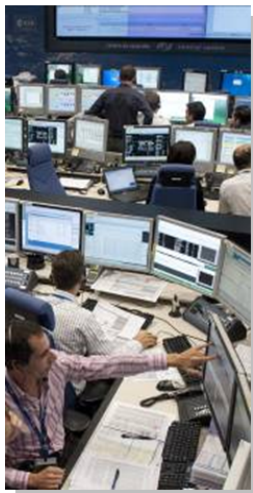


Telespazio France

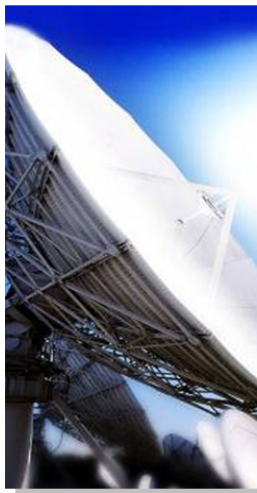
Satellite
Systems &
Applications



Satellite
Operations



Network &
Connectivity



Geo
Information



Programmes

Opérations

Solutions et services

Main figures:
2011 estimations
Orders : 109 M€
Sales : 46 M€

4 sites:
Toulouse (2)
Paris
Kourou

Staff:
Toulouse : 160
Paris : 40
Kourou : 130

French Guyana focus

Offices established in Kourou since more than 30 years:

- ✓ 130 Engineers and Technicians
- ✓ Of which 80% are locally employed

Our competencies:

- ✓ Electronics / Computers
- ✓ Telecommunications and networks
- ✓ Planification
- ✓ Documentation management
- ✓ Configuration management
- ✓ Purchases

Our customers : CNES, Arianespace, EADS Astrium



French Guyana focus

Operations and maintenance of:

Telemetry facilities
Localisation and trajectography systems
Telecommunications infrastructure

Maintenance and operations Plannification activities for the 3 launch pads Ariane, Soyuz and Vega

Documentation management for Ariane 5, Soyuz and Vega

Operations procedures' configuration management for Ground / Launchers interfaces (Command control, Liquides, Mécanical, Energies Infrastructures)



Telespazio Italy for VEGA - today

Directly under Vitrociset lead, Telespazio is responsible for the analysis, design, development, test and deployment on site of three major Centre de Contrôle (CCV) subsystems



Computer Centre (CdC)

CdC is used to prepare operational configuration data for CCV and to develop and test Automatic Launch Procedures

High Level Control System (HLCS)

HLCS provides the CCV operators with the needed tools and functionality to carry out the acceptance of launcher first stage and the execution of Launch Procedures

Data Analysis Subsystem (DAS)

DAS is useful during the post launch phase, allowing its users to perform off-line analysis over a large set of data produced during a CCV launch session

Telespazio Italy for VEGA - tomorrow

Telespazio is involved in the procurement of the second source of the VEGA Flight Programme Software, to be used for launches during the VERTA programme. Directly under ELV lead, Telespazio is responsible for



Design, implementation and verification of
Flight Programme Software Alternative (FPSA)



Operational flight implementation of Guidance,
Navigation and Control (GNC) algorithms
and their integration within FPSA

Development of GNC numerical
validation tool (FPSSIM)
used to be used by ELV
to validate GNC algorithms functionality
in all different mission types

Telespazio team supported CNES and Arianespace during the development phase, with a strong contribution to the Technical and Operational Qualification of the new launch pad and to the extensions of the Ground Systems for the French Guiana Space Centre (CSG) Measurement System.

The Telecom team has been supporting the customers since July 2010 for the extensions of the telecom networks to the VEGA site, and implementation of new telecommunication networks (operational telephony, telephone, etc.) required for operation of the new VEGA launch pad. With regards to localization, the Telespazio France team performed Qualification of the software adaptations required for VEGA.

Telemetry: for the specific VEGA-LARES mission, a certain number of stations distributed along the trajectory (Launch towards the North) will be involved. Some of them have been installed, qualified and will be operated by the Telespazio teams: Galliot in French Guiana, the ship-borne SNA station in the middle of the Atlantic, the Svalbard station in Norway, the Jeju station in South Korea.

Telespazio France for VEGA

