



We work on the ground to build bridges into space, contributing to the success of ambitious missions. Our extensive knowledge in the field of operations engineering enables us to prevent breakdowns and failures.

We design, build and operate ground segments, launch bases and teleports to the most important missions of the European and Italian Space Agencies, ensuring the highest standards of quality, safety and reliability thanks to superb integrated logistics support.

We value space by developing satellite communication networks and advanced dual space-based applications, such as localisation and navigation, earth observation, monitoring of the territory, meteorological services, search and rescue.

The experience gained in space in the integration of highly complex critical systems, has also allowed us to contribute our expertise to the implementation of major projects in the field of physics, such as ITER, the largest experimental nuclear fusion reactor.

SPACE & BIG SCIENCE

www.vitrociset.com



We walk the route
to conquer a new space.



SPACE & BIG SCIENCE

GROUND DATA SYSTEMS

Vitrociset designs, implements, validates and maintains checkout software and operating systems for Ground Segment of different Space Programmes.

The Company's involvement includes Mission Control Systems (development of SCOS 2000 and of European Ground Systems Common Core), Mission Automation and Planning Systems, Central Check-out systems and Database Engineering. Vitrociset works with the main space agencies (ESA, CNES, ASI), with large system integrators (TAS, Airbus D&S, Leonardo) and the most important commercial players (Arianespace, EUTELSAT, INMARSAT), to support the provision of services to public and private sector. More recent achievements are the VEGA EGSE at AVIO premises and Command and Control Bench at CSG in French Guyane for ESA; the reengineering of Tracking Radars (Amazonie, Bretagne) at CSG for CNES; the EGSE systems for different space programs: METOP, Sentinel, Cosmo 2G for TAS and ADS; the EGS-CC (evolution of SCOS 2000) for ESA.



SPACE G/S ILS & OPERATIONS

Working at the Centre Spatial Guyanaise (CSG) since more than 30 years, Vitrociset has acquired a sound experience in technical operational support and ad-hoc critical developments of ground systems in the space launchers domain. Vitrociset has been general contractor for ESA for VEGA Ground Segment development, from 2004 till successful maiden flight in February 2012. Since then Vitrociset has participated as Design Authority to all VEGA launch campaigns and it is currently involved in VEGA-C program development. Extending the perimeter to Ariane 5 and Soyuz launchers, Vitrociset is supporting operational team for trajectory and localization systems, telecommand and neutralization systems, meteorological system and services. Taking into account the Broglio Space Centre in Malindi, Kenya, the Company, in cooperation with Telespazio, is supporting the Italian Space Agency since 2011 for

logistics and operations of the Space Centre. The Company is also deeply involved in European Satellite Navigation Systems, where, following the consolidated experience in delivery of site survey services for EGNOS, has been awarded 10 years contract by GSA in cooperation with Spaceopal, being prime the main responsible for integrated logistics support and maintenance of Galileo worldwide ground infrastructures.



APPLICATIONS & SERVICES

Vitrociset has developed a wide range of support activities to provide technical, operational and engineering services to ESA and to major Space Agencies (DLR, ASI, NASA and CNES). This has allowed the development and consolidation of capabilities related with Satellite Ground Segment Services and Systems. Qualified and motivated staff are greatly contributing to maintain the highest quality throughout the work carried out, all over the period of presence in Noordwijk at ESTEC, in Darmstadt at ESOC, and nowadays in Spain at ESAC, in Germany at EAC, in Belgium at ESEC, in UK at ECSAT, in Italy at ESRIN and in France at ESA. Vitrociset is also supporting the Italian Consortium for the implementation of SST. A UHF transmitter in bi-static configuration has been provided and installed by Vitrociset and by the Italian National Institute for Astrophysics, granting the capability to discover objects with an area less than 10 cm², at a distance up to 2,000 km.

BIG SCIENCE

Building on its experience in space market and on its capabilities in critical system management, and C&C systems, Vitrociset works on international projects, supporting the implementation of large experimental physical facilities, providing highly specialized systems engineering services and developing ad-hoc systems. Vitrociset is involved in ITER program (International Thermonuclear Experimental Reactor), working in C&C (CODAC) and diagnostic domain, being one of the few authorized CODAC Core System development center worldwide. Vitrociset is also working at Fusion For Energy (F4E), the European Agency supporting the ITER program, in the Instrumentation and Control department. At European Spallation Source (ESS) program in Sweden, Vitrociset has been awarded with three framework contracts for electronics, SW development and mechanical consultancy services. The Company has recently provided the complete C&C system for STAR Matera, a linear accelerator developed for University of Calabria, in South of Italy.