

Giving you confidence in Space



Experience the commitment®

Space systems are no different from business IT systems. They are subject to radio interference, hacking, spoofing, viruses, eavesdropping, physical attack, etc.

THE CHALLENGE

The infrastructure that supports space missions has many security challenges which require considerable experience address. For example:

- The high capital value of the assets means a security breach is costly
- Radio links are required and need protecting against un-authorized interception, corruption, spoofing etc
- Ground facilities are often geographically isolated and/or unmanned, and so require special security
- The distinction between commercial and military space is becoming less and military grade security is needed for some commercial systems.

There are also space assets and applications which attract specific security threats, for instance surveillance from space, and also how data from space is securely received, processed and interpreted.

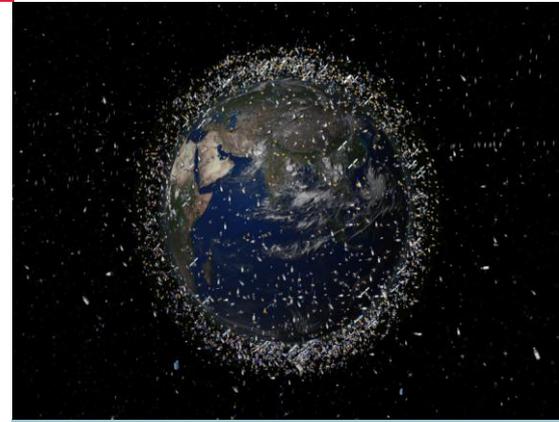
OUR APPROACH

Our space security team is one of the largest of its kind in the world with extensive experience from the civil, military and national security sectors and across the whole security lifecycle. We've been involved in the development process of international security standards and we play a leading role in helping to advance best practice through the space security working group of the Consultative Committee for Space Data Systems (CCSDS) - the group responsible for defining the standards used by much of the world's space community.

Our space clients usually have two key requirements; they want to safeguard their people, services and assets and to embed space security into their organisation to give people the confidence to make the most of the digital world. We meet these needs by providing consultancy, systems integration and secure managed services, led by our space security experts and supported by a global team of over 1,200 security professionals.

Governance, risk and compliance consultancy

Compliance to the growing number of regulations and laws affecting security and data protection is critical for all our clients. But it's not just about compliance – it is about actively managing risks and making sure people know their responsibilities for keeping information safe. Major Governments and commercial organisations and have trusted us for years



KEY BENEFITS

- One of Europe's largest teams of space security experts
- Our highly qualified people bring years of specialist space, security and cyber knowledge and experience.
- We are helping to define international space security standards and develop Space Security best practices
- Supported by over 1200 security professionals based in North America and Europe working across the public and private sectors
- A reputation for delivering space security into some of Europe's key programmes including EGNOS and Galileo.
- With over 35 years' experience in the space industry delivering mission-critical secure space systems

to set up and operate their controls and procedures for managing risk and maintaining compliance to international standards.

Our service catalogue comprises anything you may need to embed security into your organisation, whether it is policy development, training, business continuity, evaluation or testing. And it is all tried and trusted within the space sector. For example we have provided security policies to many systems including Skynet 5, the UK Ministry of Defence's satellite communications system, and to EGNOS. We have developed '27001 for space' specifically to address the needs of this specialised sector. We've undertaken assessments of space organisations including the GNSS Supervisory Authority and the EGNOS operator ESSP. We provided security certification support in the development of a safety case for the EGNOS system and provided significant accreditation support by defining Security Requirements Statements for the Galileo system.

Secure systems integration

In the space sector, new programmes bring together new teams of people who need to collaborate securely. Boundaries open up between secure environments that have previously been separate. This creates a need for secure systems integration whether that is for shared applications, system architectures or infrastructures and platforms. Our security architects draw on CCSDS best practice in designing security into a system's architecture and we involve our clients in a detailed cost benefit discussion to ensure any approach is budget sensitive. In one example, we designed and built the security infrastructure for the management segment of Skynet 5. Our development teams also implemented the management segment security applications for a variety of space programmes including Skynet 5, Europe's Galileo satellite navigation system, and the EGNOS integrity facility.

Managed security services

The operational cost of running a space infrastructure is growing every day. The resource required to continually update the infrastructure to protect against the ever-changing global threats is significant. We have delivered secure managed systems services throughout Europe for commercial and public sector organisations. Our clients benefit from a reduced cost to run their networks and be able to release their own resources to focus on their core activities in space.

WHY WORK WITH CGI?

We have helped to shape the growing area of space security for many years. We have contributed security expertise to major European space programmes including Skynet 5, GMES, Eutelsat, Galileo and EGNOS. We have space specific security capabilities across Europe providing a strong capability for addressing the complete security needs of space agencies, operators, regulators, manufacturers, service providers and users.

Our security practice operates around the world and work for many sectors such as from banking and telecoms, to space and defence. All security consultants and developers are part of a single security community, sharing approaches, experiences and solutions with each other. This enables the space security team to identify tools and initiatives from other sectors that would benefit the space market.

The projects referenced in this document were delivered by Logica, which CGI acquired in August 2012

ABOUT CGI

With over 68,000 professionals in 40 countries, CGI fosters local accountability for client success while bringing global delivery capabilities to clients' front doors.

Founded in 1976, CGI applies a disciplined delivery approach that has achieved an industry-leading track record of on-time, on-budget projects.

For over 35 years we have worked in the Space industry delivering complex, mission-critical space systems. Our solutions are secure, often in complex technical environments, proven to work first time, every time, ultra-reliable and delivered on time to avoid costly delays.

We work on the major European navigation, communication and earth observation programmes and are specialists in space security and ground control systems. We share innovative uses of space and satellite technology with commercial organisations to help them solve their business problems effectively. Our software has supported the missions of more than 200 satellites.

Our high-quality business consulting, systems integration and outsourcing services help clients leverage current investments while adopting new technology and business strategies that achieve top and bottom line results.

As a demonstration of our commitment, our average client satisfaction score for the past 10 years has measured consistently higher than 9 out of 10.

For more information about CGI, visit www.cgi-group.co.uk/space or email: enquiry.uk@cgi.com or tel: +44 (0)845 070 7765

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