CGI in Satellite Communications

Enabling operational excellence in space

For over five decades, CGI has been a trusted provider of IT and software solutions to the space industry. Our systems support the operations of hundreds of satellites across Low Earth Orbit (LEO), Medium Earth Orbit (MEO), and Geostationary Orbit (GEO), enabling mission-critical operations with unmatched reliability. Our expertise covers the entirety of the range of software which an operator needs to fly satellites, manage their network, and run an efficient business.

Trusted by Industry Leaders

As part of CGI's Space, Defence, and Intelligence business unit, our solutions reflect a commitment to client success and security. We proudly collaborate with global leaders like OneWeb, ViaSat, Airbus Defence and Space, and the European Space Agency.

Comprehensive Solutions for Satellite Operators

Operational Support Systems

CGI designs and delivers highly reliable, cost-effective Network Operations Centres (NOCs) integrating bespoke software and Commercial Off-The-Shelf (COTS) products. Our expertise includes:

- **Demand Management and Capacity Planning**: maximising satellite flexibility and revenue.

- **Network Management Systems**: addressing complex operational scenarios.

- **Terminal Management Systems**: supporting extensive device networks.

- **5G Integration**: developing Satcom-specific management and orchestration functions and RAN/core integration for direct-to-device capabilities.

Business Support Systems

With combined telecom and space expertise, CGI offers vendor-agnostic, best-of-breed solutions tailored to the individual needs of different satellite operators to enable effective business management.

Our extensive experience in billing, CRM, HR, payroll, service management, subscription management, and customer experience portals, with on-shore, near-shore, and off-shore delivery models means that we can provide solutions better matched to satcom operators' needs than off-the-peg solutions.

Network Integration

CGI's experience bridges terrestrial and satellite networks for use cases such as private 5G and communications-on-the-move. Our hands-on experience of terminals, network equipment, and orchestration gives us a unique insight into how satcoms are being used at the cutting edge, as well as developing new revenue and disruption opportunities for our satcom partners. Our partnerships foster innovation, exemplified by contributions to the IRIS air traffic control communications service.

Satellite Control

CGI has delivered secure mission control systems for high-profile projects like Galileo (MEO) and H2SAT (GEO). Our Pleniter® suite offers proven satellite management capabilities. With proven solutions we have been able to support some of the most demanding missions through design, launch and operations. We also have an on-board software allowing us to provide embedded mission critical software for any space mission.

Cyber Security

Tailored solutions protect satcom operators from evolving threats, encompassing:

• Advanced threat detection

• Secure cloud services

• Compliance assurance

Business Advisory Services

Leveraging operational expertise, CGI provides actionable insights into business process optimisation and emerging IT technologies, including cloud and AI.

About CGI

Insights you can act on

Founded in 1976, CGI is among the largest IT and business consulting services firms in the world. We are an IT Systems Integrator working to advise, build and operate bespoke, technically complex, mission-critical information systems. Bringing innovation to our clients using proven and emerging technologies, agile delivery processes and our expertise across space, defence, intelligence, aerospace and maritime, all underpinned by our end-to-end cyber capability.

For more information
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