

# SYSTEMS ENGINEERING

## SATELLITE COMMUNICATIONS



## SATELLITE COMMUNICATIONS ENGINEERING SERVICES

Telespazio UK, through its recent acquisition of e2E, provides systems engineering support to a wide range of global, regional, and national space systems and programmes. Being satellite communication specialists, our engineers are experienced in antenna technologies, RF design, modem implementation and baseband IP network routing and management. This has been applied across all satellite system types (FSS, BSS, MSS) and constellations (GEO, MEO, HEO, LEO). Our expertise is provided on hardware, software, and firmware aspects and can be provided across the full end-to-end system.

Whether leading or supporting the technical definition, design specification and subsequent implementation of a communication network or system, we have been called engaged from initial system feasibility definition, through, the formal system engineering design lifecycle, and for post equipment support and obsolescence management. We work with various satellite operators, providers, system integrators and equipment vendors, and can work equally well as part of the client engineering team or take on full end-to-end delivery responsibilities.

Our activities encompass a multitude of systems engineering, managing and modelling capabilities as applied to complex systems. These include:

- › Independent Technical Support
- › Technical Feasibility Assessments
- › Mission and System Definition
- › Requirements Definition and Management
- › Architectural Design
- › Engineering Trade-off Analysis
- › Rapid Engineering Prototyping
- › Subsystem Design and Development
- › Solutions Development
- › Model Based Systems Engineering (MBSE)
- › Operations Engineering
- › Space Segment Procurement and Delivery
- › Equipment Design (hardware, software & firmware)
- › Protocol Development
- › Information Security Management Plans