

# LEO & 5G NTN

SATELLITE COMMUNICATIONS ENGINEERING

## NETWORK AND SERVICE MANAGEMENT

### LEO CONSTELLATION AND 5G NTN DEFINITION AND CONOPS

Our client, a European space and technology Group specialising in the development, implementation and operation of space systems, required support for the definition and Concept of Operations (CONOPS) of two Low Earth Orbit (LEO) satellite constellations, and a 5G Non-Terrestrial Network (NTN) over LEO, MEO and GEO. This included contributing to the definition of the mission level specification and approving the CONOPS, that was provided by the customer, for the payload and network operations.

Telespazio UK, through its recent acquisition of e2E, provided engineering resource to assist in the design, interfacing, management and operations of the Ground Segment and Satellite networks.

Our engineers defined the teams needed to cover different aspects of the Satellite network including Radio Frequency, Networking, Operational and Security disciplines.

The first project delivered:

- › CONOPS
- › Architecture
- › RMM
- › Service Management
- › Interface Definition
- › Network Management Requirements
- › Various design papers

The second project delivered:

- › CONOPS
- › Architecture
- › Service Description/Management
- › Interface Definition
- › Security Requirements
- › 5G NTN design papers

Our client benefited from our approach to providing drafts, technical notes and briefs to aid in engineering discussions and efficient decision making.