

## **Military SATCOM Engineer**

### Satellite Communications Systems Engineer Responsibilities:

- Advising customers on the definition and design of satellite communications systems, including RF and digital communications;
- Ground Segment Engineering – requirements definition, trade-off analysis and designing new systems/ equipment and sizing;
- Communications Payload Engineering (including understanding of digital payload design);
- Provide technical consultancy services to and make technical representations within and outside the company
- Preparation of concept of operations and service delivery documentation;
- Participation in relevant operations and procurement (when necessary) reviews and meetings;
- Coordination, planning and implementation of Ground and Satellite Operations for system-wide operations;
- Experience of capacity and coverage planning, link budget analysis and transmission planning;
- Development of design and analysis toolkits for modelling and simulation of end-to-end system performance;
- Maintain awareness of technology trends and assist in the development of new products and services and be able to outline their architectural implementation and support trials.

### Essential:

- Ideally degree qualified in an Engineering or Science subject and be a member of a professional industry body (e.g. Chartered Engineer).
- Proven experience in satellite communications systems engineering with knowledge of system design, ground segment design, satellite operations and payload engineering (including RF systems design, digital communications, air interface communications standards such as DVB-S2, DVB-RCS).
- The candidate will need a thorough understanding of communications systems and associated engineering concepts, e.g. link budget analysis, IP networking, radio spectrum management, modulation and demodulation, security, interference etc.
- Strong practical knowledge of systems engineering practices (from Requirements Engineering through Design / Development and on to VV&T).
- Confidence in working directly with potential customers, suppliers and subcontractors at the technical level.
- Experience developing requirements, systems design documentation, test plans and procedures, and operational procedures.
- The candidate will need “hands on” experience of working with satellite communications systems and a proven track record of identifying and solving problems efficiently in this environment.
- Thorough and professional approach to problem solving.
- Strong analytical skills and ability to identify the key issues both technically, commercially and in organisational processes.
- Willing to travel and work at customer sites around the UK.
- The candidate will need to be able to quickly build relationships with both peers and customer management and demonstrate an ability to “hit the ground running” and understand underlying issues.
- Technical writing skills and good verbal a Understanding encryption. Understanding encryption

Understand counteracting denial of service threats

Understand the current family of ground terminals that support the UK MOD services

Understand how the UK MOD utilises the SATCOM capabilities

Ideally DV Cleared (min SC Cleared)

Desirable:

- Practical experience in the commissioning and testing of satellite systems – satellite and ground based.
- Business awareness and acumen.
- Experience on ESA projects or programmes.
- Satellite manufacturer and/or ground segment system engineering experience will be considered as an advantage.
- Understanding of security architectures.