

IOT ENGINEER



COMPANY: e2E SERVICES LTD.
JOB REF: RES.059
TYPE OF ROLE: PERMANENT
PRIMARY LOCATION: WELWYN GARDEN CITY, HERTFORDSHIRE
CLIENT LOCATIONS: LONDON



Our Company

e2E has been at the forefront of innovation in the space sector, specialising in satellite communications, for two decades, offering to all our world-wide stakeholders unrivalled expertise to design, develop and operate state-of-the-art solutions and systems. Our portfolio of consultancy services and technology know-how covers the entire spectrum of any satellite communication project, from market opportunity sizing and end-user requirements down to ground network development and operations. To both commercial and defence related domains, we also offer unique modular and agile technology to enable a more user-friendly and accessible use of satellite communication resources.

Innovation and ingenuity are the guiding principles of anything we do for our customers. Working with e2E requires a high level of dedication and personal motivation, commitment and a drive to continually seek to strive to improve – and the results consistently achieved over the years, at both personal and team levels, are outstanding and make e2E a great place to work.

Job Description

Our team is involved in establishing the assurance and test programmes for satellite communications networks for both civil and military customers. These networks can involve GEO, MEO and LEO satellite constellations.



IOT ENGINEER

We are expanding our team and are seeking an In-orbit Test (IOT) Engineer to support the ongoing test programmes that are necessary to ensure mission success. This role will typically require development of the test strategy which encompasses system and complex multi-payload end-to-end system and acceptance test campaigns for cutting-edge satellite communications networks.

The successful candidate is expected to undertake a variety of IOT preparation and test activities. Working closely with e2E's clients on their test campaigns before, during and of course after communications service launch. The successful candidate will be responsible for undertaking a variety of test-related activities and related communications systems engineering tasks including the development of test strategies, plans and procedures. Typically, during campaigns, the work offers the opportunity of on-site international travel.

e2E requires an excellent understanding of payload design and RF communications with system level breadth and trouble-shooting depth, ideally (but not exclusively) gained via a typical satellite system project. This interesting and varied work will incorporate both space and ground segments and requires test systems and systems engineering knowledge.

A graduate who impresses and/or who has some relevant experience would be encouraged to apply.

The successful candidate is ideally expected to be able to demonstrate experience of many - but not necessarily all - of the following skills, experience and responsibilities.

Key Responsibilities

- Development and execution of IOT VV&T (Validation, Verification and Testing) test cases which will incorporate satellite payload, IP-based service networks, ground systems and satellite radio networks.
- Identifying and troubleshooting system communication paths, capacity performance and network devices as well as conducting post-test data analysis and reporting.
- Creation of test reports to document issues and assist development with the investigation and resolution of issues.
- Review/comment on 'testability' issues, obvious design flaws, anticipate data collection points and develop plans for and conduct anomaly test and analysis as required.
- Assist with the design, development and preparation of strategies and plans; assist with specifying environments, facilities and equipment for complex satellite networks.

Skills, Character and Experience

- Experience of creating test procedures / cases / scripts in one or more of: satellite payloads (classical communications, optical), ground systems, mobile and satellite radio networks, service networks or IP networks.
- Willing to travel nationally and internationally where required (project dependent, short durations for example to support test execution campaigns).



IOT ENGINEER

- To be able to work as an integral member of a highly focused team; a team player who is self-motivated and enthusiastic even when under pressure.
- Experience in testing and/or fault analysis and faulting tools.
- Good customer-facing and communication skills with ability to produce and present clear, concise and unambiguous presentations to customers and other clients
- An ability to develop innovative solutions to defined problems; adaptable to new requirements and changing priorities.
- Awareness of both commercial and technical issues.

Essential

- A sound technical engineering background.
- An appreciation of systems engineering processes, particularly those related to test activities and operational environments.
- An interest in the sector and role; a genuine willingness to learn.
- A university degree or other qualification in a space / engineering discipline or STEM subject); equivalent qualifications and/or experience will be considered as an alternative.
- Experience of producing link budgets.
- Knowledge or experience of on-board processing payload systems.
- Understanding of satellite system design.
- Understanding of RF propagation theories.
- Understanding of RF equipment in ground stations.
- Strong work ethic with a desire to grow knowledge both through mentoring and independently.

Desirable

- Experience or knowledge of space system network design and architecture with particular regard to payload architecture and design knowledge.
- Previous involvement in VV&T test campaigns: executing tests, collecting and analysing data from tests, communicating results and anomalies to test management; experience to have been gained in one or more of system end-to-end testing, stand-alone/integration testing, factory acceptance testing or operational networks and ideally.
- Experience in the commissioning of satellite systems (space and/or ground segment based) ideally with a leading global satellite network operator (GEO and/or non-GEO).
- Experience in assessment/development of security architectures in a communication systems and/or military communications networks / systems.
- Experience with ESA project and documentation processes and familiarisation with ECSS and other standards.
- Excellent writing and reporting skills and the ability to relay information to clients through both presentations and formal test reports.
- Software coding experience (e.g. Python).



IOT ENGINEER

- Experience of office tools (e.g. Outlook, Word, Excel, PowerPoint).
- Desirable to have experience of system modelling/testing tools (e.g. MATLAB/Simulink).
- Desirable to have experience of requirements management tools (e.g. DOORS, Jama).
- Skills and experience that underpin the role's 'Key Responsibilities'.

Salary

- Attractive compensation package dependent on skills/experience plus a growing list of Company benefits
- By submitting your CV/application you are consenting to e2E Group using and storing information about you for monitoring purposes relating to your application of future employment. This information will only be used by e2E Group.

e2E Group is committed to achieving workforce diversity and welcome all applications irrespective of social and cultural background, age gender, disability, sexual orientation or religious belief.

