



COMMUNICATIONS TEST ENGINEER

COMPANY: e2E SERVICES LTD.
JOB REF: RES.033
TYPE OF ROLE: PERMANENT
PRIMARY LOCATION: WELWYN GARDEN CITY, HERTFORDSHIRE
CLIENT LOCATIONS: LONDON, WILTSHIRE (PROJECT DEPENDENT)



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 requirements, design, capacity, performance and resource planning, verification and operation of satellite communications networks for both civil and military customers.

Agility in Communications



COMMUNICATIONS TEST ENGINEER

We are expanding our team and are seeking a versatile **Communications Test Engineer** to provide technical and commercial expertise to e2E's customers.

The candidate will be responsible for undertaking a variety of test-related activities and related communications systems engineering tasks on advanced satellite communications networks and supported communications services, including the development of test strategies, plans and procedures at system, network and end-user terminal levels.

e2E requires an excellent understanding of a typical end-to-end satellite project, at system and subsystem levels, at both space and ground segments, and a thorough breadth of test system, systems engineering knowledge and experience; the successful candidate is ideally expected to have acquired some areas of specialisms also and so will be expected to demonstrate experience of many - but not necessarily all - of the following skills, experience and responsibilities.

Key Responsibilities

- Development and execution of overall test strategy, test plans and procedures for complex mobile and fixed satcom networks (GEO and non-GEO/LEO/cubesats constellations)
- Development and execution of test cases which may include the incorporation of satellite payload (communications, optical), ground systems, satellite radio networks, IP and service networks (including but not limited to OSS and BSS technologies)
- Communications system test strategy development and VV&T (Validation, Verification and Testing) plan documentation and test execution in either ground or in-orbit test (IOT) environments
- Testing network devices' communication paths and capacity performance, conducting post-test data analysis and reporting
- Ground segment engineering/terminal design, development and test
- Identifying and troubleshooting system communication paths and capacity performance, as well as conducting post-test data analysis and reporting
- Create test reports to document issues and assist development with the investigation and resolution of issues
- Review and comment on 'testability' issues, obvious design flaws, anticipate data collection points and develop plans for, and conduct, anomaly tests and analysis as required

Skills, Character and Experience

- Experience of working as an integral part of a highly focused team; self-motivated and enthusiastic even when under pressure
- Awareness of both commercial and technical issues
- Good customer-facing and communication skills with ability to produce and present clear, concise and unambiguous presentations to customers and other clients
- Strong analytical skills, the ability to identify key issues and to solve day-to-day challenges and issues

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- Proven ability to develop innovative solutions to defined problems; adaptable to new requirements and changing priorities
- Willing to travel for up to one month nationally and internationally, for example to support test execution campaigns (project dependent).

Essential

- Graduate with a good Honours or Masters degree in a relevant subject (e.g. Space Systems Engineering, Electronics, Communications); equivalent qualifications and/or experience can be considered as an alternative
- A consolidated and proven experience of at least 5-7 years in the development of communications system test strategy, plans and procedures, VV&T documentation and test execution in either ground and/or in-orbit test (IOT) environments, ideally matured with a global satcom network provider
- Thorough understanding of satellite communications systems and associated engineering concepts; strong practical knowledge of systems engineering practices from requirements engineering through design/development and on to VV&T
- Testing experience in a variety of environments/venues (test automation environments and languages, stand-alone/integrated testing, factory acceptance testing, operational networks, end-user terminal testing)
- Solid and relevant experience of planning test campaigns, conducting tests, collecting and analysing data from tests, communicating results and anomalies to test management and the customer through both presentations and formal test reports
- Experience and knowledge of IP network design, protocols and security of data; experience of troubleshooting of network, RF signal connection and protocol problems, including identifying and solving problems and issues
- Knowledge of software development environments, languages and methodologies
- Knowledge of test tools such as Wireshark, Spirent or equivalent
- Familiarisation with ECSS and other standards
- Experience of test automation development environments / languages
- Experience of development methodologies (Agile, DevOps)

Desirable

- Chartered Engineer or equivalent
- Practical experience in the commissioning and testing of satellite systems (satellite and ground based) with a leading satellite network operator (GEO and/or non-GEO)
- Experience with network challenges associated with systems integration, including COTS integration, capacity and performance analysis and system architecture design
- Skills necessary to evaluate network hardware, software, algorithms and processes to verify and characterise network capability
- Familiarity with OSS/BSS technology and the use in management and reporting of communications networks



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- Experience in assessment/development of security architectures in a communications systems and/or military communications networks

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.

