

Safety-Critical Systems Assurance and Advice

Service Category: Quality Assurance and Performance Testing, Cloud Support Services

About Our Service

We assure safety-critical hardware and software systems through robust certification, assurance strategies, and safety management. Our team provides Integrated Test, Evaluation, and Acceptance (ITEA) services and delivers design and systems engineering expertise, enabling compliance with rigorous standards and resolving technical challenges efficiently and cost-effectively.



Service Features

Effective use of recognised good practice for safety-related system development

Efficient application of safety-related good practice, reduces programme costs

Provide a regulatory-compliant method to identify cyber security risks

Provide credible and authoritative functional safety assessments and safety cases

Provide an integrated assurance approach across human factors, cyber, etc

Access to our methods of assurance of AI controlled systems

Access to our trusted system-based approach for programmable elements/firmware

Producing standards-related gap analysis, impact assessment and gap closure reports

Provision of bespoke or off-the-shelf training courses in assurance

Provision of safety techniques including Fault Tree Analysis, BOWTIE management

Service Benefits

Ensuring you build confidence in your safety and mission-critical system

Assistance in developing relevant, maintainable and readable safety documentation

Clear roadmaps and action plans to address any identified shortfalls

We work with your people, thereby improving your capabilities

Access to those responsible for the development of relevant standards

Helping make the transition from non-safety to safety-related product development

Expertise in all types of systems across many industry sectors

Fully independent provision of open and constructive advice and support

Expertise in the use of specialist safety assurance techniques

Detailed Service Definition

We support organisations in assuring and certifying safety-critical complex digital systems, ensuring that software meets the rigorous standards required, including but not limited to Def Stan 00-055, IEC 61508, RTCA/DO-178C, and RTCA/DO-254.

We conduct system design, system and software risk assessment, software safety assessments, software auditing, software safety design assurance, supplier capability evaluation, development and delivery of safety arguments and development of safety case reports for complex platforms and systems.

Additionally, when the path to certification is not clear or standards cannot be met, we support our clients across a range of industries to define their digital assurance strategies.

We can support our customers in understanding and managing the residual risk in these complex situations.

Our emphasis is on future and emerging systems that incorporate non-traditional aspects.

Detailed Service Definition

We conduct:

Software and system risk
assessment

Software and system
safety assessments

Software and system
safety auditing

Software and system safety
design assurance

Supplier capability
evaluation

Certification strategies

Development of safety
and environmental
management systems

Development and delivery
of safety arguments and
safety assessments

Why Frazer-Nash Consultancy?

Frazer-Nash Consultancy is an independent engineering and technology consultancy with over 35 years' experience delivering high-quality digital and cloud-enabled solutions. We support organisations operating in complex and regulated environments through our collaborative approach and deep expertise in digital engineering, software development and systems integration.

We are **solution and technology-agnostic**. We assess our clients' requirements and provide impartial advice and design solutions based solely on their needs. This independence enables us to select the most appropriate cloud technologies and architectures to deliver secure, resilient and value-for-money outcomes.

Our cloud solutions are informed by experience gained across multiple platforms, sectors and use cases. We combine proven engineering discipline with a strong understanding of integration and whole-system design to support and enable cloud adoption while managing risk and ensuring long-term sustainability.

Our Commitment to Quality

Frazer-Nash is committed to delivering consistently high-quality services and outputs that **often exceed customer expectations**. Quality is embedded throughout our ways of working, from engagement and communication through to delivery and assurance.

We actively monitor progress using our robust, proportionate controls, ensuring key decisions are subject to appropriate challenge. Each project is allocated a dedicated Project Manager, a Project Supervisor who independently reviews and approves monthly reports, and a Project Auditor for ongoing quality assurance.

We ensure accuracy and suitability for purpose of all deliverables, with independent verification by two reviewers. Our Quality Management System is certified to **ISO 9001 and TickITplus** (for software development), providing customers with confidence that our quality standards are externally assured and continuously maintained.

Our Security

Frazer-Nash operates robust security processes and controls suitable for handling sensitive and classified information **above OFFICIAL** up to and including **Top Secret**. Security is embedded across our people, processes and systems, ensuring information is protected throughout delivery.

We support sensitive and critical programmes across government and national infrastructure by applying strict information-segregation controls, including team separation to address security, or conflict-of-interest considerations

All 1500 staff hold **BPSS clearance as a minimum**, with the majority cleared to **SC** and over 225 consultants holding **DV clearance**.

Our IT systems are certified to **ISO 27001** and **Cyber Essentials Plus**, providing assurance that information security risks are proactively managed in line with recognised industry standards.

Our Approach to Subcontracting

Frazer-Nash primarily delivers services through our large base of permanent staff, supplementing this capability where required with trusted partner organisations to provide additional flexibility, specialist expertise and scale while retaining full delivery control.

We are experienced in engaging and managing subcontractors across the full project lifecycle, ranging from sole traders to large multinational organisations. Our structured approach ensures the right supplier is selected for each requirement and integrated effectively into the delivery team.

Our subcontracting processes focus on robust supplier identification and assessment, clear definition of scope, appropriate flow-down of contractual terms and conditions, and proactive risk management. All subcontractors are subject to proportionate commercial and technical due diligence to ensure they meet our standards for security, quality and delivery, enabling us to deliver outcomes on time, within budget and to the required quality.



Resourcing

Frazer-Nash employs over **1,500 technical specialists** across all grades, from **Follow to Set Strategy**, providing depth, continuity and scalability across a wide range of disciplines, backgrounds and experience levels.

To support agile and flexible delivery, our people are organised into defined **technical delivery areas** (including Information Systems, Cyber, Modelling and Software), which are deployed across multiple sectors such as central and local government, policing, health and energy. This structure, combined with strong portfolio, programme and project management (P3M), enables us to actively monitor demand and adapt resourcing throughout the project lifecycle.

We deliver complex requirements efficiently, consistently and at pace by forming tailored, multi-disciplinary teams led by a single accountable Project Manager.

Our consultants regularly work across different sectors, enabling us to cross-pollinate ideas, tools and best practice between domains. Drawing on in-house expertise, such as information security and human factors, we ensure effective and responsive delivery for every client.



Our Commercial Approach

Frazer-Nash adopts a flexible and transparent commercial approach to ensure best value and a model that aligns to each client's specific requirements. We collaborate with customers to clearly define the scope of services and agree a commercial structure that is predictable, proportionate and aligned to your required outcomes and effective delivery.

Depending on the requirement, this may include a **fixed-price model for clearly defined scopes**, or **time and materials using agreed day rates** where flexibility is required to accommodate evolving needs.

For longer-term or ongoing service requirements, and where we have control over resource flexibility, we can also offer a **single blended day rate** covering a range of grades. This provides simplicity, transparency and ease of management while maintaining access to the appropriate skills at the right time.

Next Steps

To discuss your requirements in more detail or request an order for services, please contact ccs@fnc.co.uk

