

Digital Twin

Service Category: Cloud Migration Planning, Cloud Support Services

About Our Service

We are a pioneer of Digital Twin technologies. We use a systems engineering approach, our engineering pedigree, and cloud technology expertise to support the design, development, and deployment of digital twins. We integrate monitoring and visualisation into our secure cloud solutions, developed to model highly complex systems.



Service Features

**Detailed and
thorough asset
health assessment**

**Prognostic
modelling**

**Support to make
pragmatic
development
decisions**

**Underpinning
engineering
knowledge and
capability**

**Integration of
secure real-time
data**

**Secure system
architectures and
approaches**

**Proven patterns to
enable rapid design
and deployment**

**Comprehensive
requirements
capture approach**

**Training and
documentation for
handover**

**Azure, AWS and
Private Cloud
Experience**

Service Benefits

Asset management

Asset life
optimisation

Asset value
optimisation

Rigorous processes
and experience
meeting quality and
security standards

Rapid results and
evaluation

Agile development
approach,
embracing changing
requirements

Cross-domain
experience

Systems-based
approach

Experience in
modelling systems
using a broad range
of approaches

Through-lifecycle
management

Detailed Service Definition

Frazer-Nash, as a systems engineering and technology company, has the right mix of deep engineering knowledge, systems design and cloud deployment capability to design, build and deploy digital twins of systems.

We can represent complex systems incorporating physics-based models to predict future states, while integrating monitoring to best understand current state and performance. We develop user interfaces to interact with systems and visualisation to provide insight into current and future operations states to support good decision-making. Digital twins are provided on platforms ranging from self-contained (air-gapped) systems to hosting on secure cloud platforms.

Detailed Service Definition (continued)

These models provide a coupled digital and physical based representation of an asset or process. Combining current state with prognostic capability, digital twins can forecast future asset condition and explore operational, maintenance or support strategies, based on the past, current and projected operation needs of the system. Digital twins are an essential component of a modern asset management process, aligned to standards such as ISO-55000/1/2.

Our approaches are accredited to ISO9001, ISO27001, Cyber Essentials and TickITplus to meet the demands of commercial, CNI and defence customers. Furthermore, we are familiar with the best practices laid out by organisations such as the NCSC, NIST, OWASP ASVS etc.

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

