

Railway of the Future

Service Category: Cloud Migration Planning, Cloud Support Services

About Our Service

Frazer-Nash can help you deliver your cloud and digital technology-enabled railway of the future. From helping you create a vision of your future system, mapping the enterprise and determining the technology and change needed to realise and assure the system, we provide the solution-agnostic support you need.



Service Features

Extensive expertise spanning discovery and implementation of digital technology

Enterprise and whole systems approaches engage stakeholders and capture requirements

Horizon scanning ensures you understand the state of the art

Technology vision, concept of operations and technology roadmaps guide implementation

Advanced appraisal and modelling techniques to enable rapid option assessment

Technical, economic and carbon appraisal help demonstrate project benefits

Change and programme management expertise to ensure successful delivery

Expertise includes robotics, automation and autonomy (including drones/ UAVs BVLOS)

Expertise includes data analytics, AI, predictive and preventative maintenance

Expertise includes alternative fuel assessments and route to net zero

Service Benefits

We provide you
with the expertise
to successfully
innovate

Active engagement
means solutions
meet stakeholder
and user needs

We can help you
understand the art
of the possible

We help you
understand what is
needed to
implement
solutions

We help you find
the right solutions
for your situation

We can help
demonstrate the
business case for
the change

We focus on your
goals as we are
solution
independent

Our cloud and
digital experience
will help maximise
potential benefits

Our rail experience
helps minimise your
team's time
commitment

Our multiple
innovation awards
prove we can
deliver for you

Detailed Service Definition

Railways have an important role to play in helping decarbonise transport and providing the travelling public and freight businesses with the transport connectivity they require. But the industry – and no doubt your organisation – is under pressure to change, in particular to deliver more for less. Delivering this railway of the future means harnessing cloud and digital technology in all aspects of the railway; digitally simulating solutions, operations and maintenance, rolling stock and infrastructure, plant and depots.

At Frazer-Nash, our aim is to help you through the process of making your vision a reality. We can help you deliver your cloud and digital technology-enabled railway of the future. From helping you create a vision of your future system, mapping the enterprise and determining the technology and change needed to realising the system, we can provide you with the advice and support to make your project a success. And, as a true advisory business, our support is impartial – we have no vested interest in any specific technology or solution.

Detailed Service Definition

Why us? Through methodical consultation assessment we bring together people and ideas to help you deliver your vision for a railway of the future.

Features:

- Work with award winning innovators; winners of multiple railway innovation awards.
- Excellent in stakeholder engagement at all levels.
- Proven use of enterprise and systems engineering to determine solution requirements.
- Adaptable at helping you define and manage smart rail masterplans and managing evolving ambitions.
- Expertise in applying cloud and digital technology to optimise rail systems: digitally modelling your proposed system to ensure it will deliver your intended outcomes and optimise transport system costs and benefits.

Detailed Service Definition (continued)

- Extensive expertise in railway systems and applying innovative technology. We are also leaders in:
 - o Alternative Fuel Assessments as the industry considers hydrogen, bio-fuels, battery and electrification technologies.
 - o Robotics, automation and autonomy (including drones/UAVs BVLOS).
 - o Specific understanding of digital coupling.
- Holistic assessment of options.

Benefits:

- Proven at engaging stakeholders of all levels in challenging issues.
- Proven at finding solutions to challenges through collaboration.
- We provide you with rail and multi-sector good practice.
- Focussed on your goals; we are solution independent.
- Extensive future-proofing experience around uncertain and evolving future rail landscapes.

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

