Amey

Operational Systems Engineering

G-Cloud Service Offering Document

Why choose Amey?

Amey Consulting is one of the UK's leading engineering consultancies, inspiring change and driving improvement across the nations critical infrastructure to create a positive impact on society. We make a genuine difference to people's lives, whether we are using data to reduce delays across transportation networks, designing carbon neutral schemes or delivering critical infrastructure projects.

Our ambition is to leave a legacy of sustainable infrastructure for future generations. Our team of designers, engineers and digital consultants – from our offices across the UK – is transforming the way we design, build, maintain and analyse strategic assets. We provide creative solutions to our customers to keep the country moving and support economic growth.

We are trusted partners of both central and local government, managing assets and complex projects vital to sustainable growth. We develop ground-breaking approaches to the way work can be delivered – and then put this into action. We pride ourselves on our ability to embed change into client organisations and deliver benefit assurance through digital strategies and practical delivery to business-as-usual activities.

Our team is inclusive, open-minded and a place where professional development can thrive. We bring together a diverse range of skills and experiences, fostering a collaborative environment that unlocks the best solutions for our clients.

Amey Advisory & Analytics: Data-driven decisions for an enhanced future

Empower your business by maximising the potential of your data. Amey Advisory & Analytics unlocks hidden insights through cutting-edge analytics and technology. Our team of digital consultants acts as your partner in transformation, crafting data-driven solutions that:

- Boost performance: We translate data into actionable insights that optimise your operations
- Improve decision-making: We enable clarity and confidence with data-backed recommendations
- Provide long-term value: We develop solutions that support your business goals and objectives

Our experienced professionals guide you every step of the way. We collaborate closely to:

- Embed meaningful change: We ensure technology adoption and empower your teams with the skills and knowledge to thrive.
- Drive your digital strategy: We craft a roadmap that aligns technology and data with your vision, future-proofing your business.
- Navigate the data landscape: We help you harness the power of data to make highquality decisions.

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Operational Systems Engineering

Amey provides expertise in designing and managing complex systems throughout their lifecycle, integrating relevant technical domain knowledge with systems engineering management techniques. This comprehensive approach supports the evolution of systems, from concept through operational use to disposal, ensuring seamless integration of operational technology.

Features and benefits

Features

- Requirements engineering process to convert user needs into system specifications.
- Multi-disciplinary engineering skills and processes input into system.
- Development of system architecture.
- Detailed system analysis activities including options evaluation.
- Function-level analysis.
- User acceptance testing process undertaken.
- Control activities including risk management, configuration management and data management.
- Technical performance measurement.
- Industrial cyber security best practices, including ISO 27000.

Benefits

- Solution delivery for complex and large-scale engineering problems.
- Diverse range of technical discipline input into system design process.
- User requirements drive functional and performance requirements.
- Solution optioneering decisions made with the entire system in mind.
- Technical decisions and specification requirements based on systems engineering outputs.
- Demonstration of relationships across systems.
- Effective risk management in complex systems.
- Managed technological change control process – change adaptation while maintaining service.
- Secure system design and deployment in accordance with industry standards.

Delivery from initial design through to handover

Our system engineering team has a proven track record of delivery at all stages of the design process, from the initial proof of concept scheme designs, through detailed designs, build and installation, factory and site acceptance/integration testing, all the way to handover and posthandover support. We have also worked with clients to provide technical assurance services to other contractors, providing their project's design and delivery, resulting in a high level of confidence that the delivery solution will meet the project's objectives.

Industry best practices

Our team is committed to delivering according to current industry standards and best practices. We have applied those design and delivery principals across multiple market sectors, leveraging that

cross-sector expertise to provide the best approach for a given solution, not just the de-facto standard for the specific sector at hand.

Multi-disciplinary and system integration

We have a broad range of skills gained from our team's extensive experience working across a broad range of different industries, including rail, highways, aviation, utilities, manufacturing, and service organisations. Our team is also well versed in working as a part of a larger project delivery team that might encompass many other disciplines outside of our own core expertise. We can provide system integration capabilities to ensure that all those threads are woven into one cohesive whole.

Cyber security

In today's increasingly connected world, Amey is well-aware of the importance of cyber security in any project. We apply a defence-in-depth approach to design and delivery of our projects that not only includes cyber security but integrates it throughout the entire design. This includes not just technological approaches to securing the infrastructure, but also the underlying management processes, data flows within the system, and the physical security of information technology and operational technology assets. Due to our core client base, we are especially well-versed in the very specific requirements and design considerations necessary to apply a robust security model to operational networks that often have constraints arising from end devices that were not really designed with modern cyber security principles in mind.

Innovation

Providing innovation is at the forefront of any project, and we have a demonstrable track record in providing innovative solutions to design problems. We also understand the importance of not innovating purely for the sake of innovation and provide a measured approach that assesses the value of a proposal and provides a more comprehensive understanding of the benefits that may be realised, enabling a more informed decision to be made as to whether the approach is the correct one.

Levels of data backup & restore, business continuity and disaster recovery planning

Amey's cloud-based solutions are designed with regular backups to prevent data loss. These backups ensure that critical data is protected and can be restored if needed. In cases of severe events, such as system failures or disasters, Amey has robust systems in place to enable the restoration of services back to business levels.

Business continuity plans ensure that critical functions continue during disruptions. Amey's approach combines data-driven insights with practical strategies to maintain operations.

Amey collaborates closely with clients to understand their specific recovery needs to ensure continuity and minimise downtime.

Onboarding and offboarding support

Amey provides seamless onboarding for clients, ensuring a smooth transition to their services. Ongoing support is offered throughout the client's journey, including offboarding assistance when needed. This commitment extends beyond the initial implementation phase.

Service levels

Amey identifies and agrees upon service levels with each client engagement. Deliverables, resources, budget caps, timescales, and reporting methods are established before service commencement. Regular monitoring and reviews ensure that agreed-upon service levels are consistently met.

After sales support

Amey's commitment extends beyond implementation. Exceptional after-sales support ensures clients maximise the benefits of their contracts.

Technical requirements

Amey's experts assess clients' technical infrastructure and provide guidance on necessary adjustments to optimise their experience. This personalised approach ensures that technical requirements align with the client's goals.

Outage and maintenance management

Amey proactively manages outages and maintenance to minimise disruptions. Clients are kept informed throughout the process, and the company strives for maximum platform uptime for relevant systems.

Hosting options and locations

Amey offers hosting options tailored to clients' data security and regulatory requirements. We leverage Microsoft Azure for Amey's proprietary cloud platforms. By using Azure, our clients can benefit from a wide range of services, including AI and machine learning capabilities, analytics, and more. We also work with other cloud providers, including AWS and GCP2, subject to client requirement.

Our approach extends to embrace hybrid-cloud and multi-cloud environments, allowing seamless integration with more complex hosting needs. This flexibility ensures that Amey can choose the

best-fit solutions for its diverse workloads while maintaining agility and scalability across different cloud ecosystems.

Amey will ensure a clear and controlled process upon exiting any service. As users or employees transition out of a project or leave the organisation, Amey follows strict protocols to manage data access.

Access to data (upon exit)

Amey places great emphasis on data ownership and access, even after a client exits their services. Clients retain ownership of their data, and Amey ensures that clear procedures are in place for data retrieval upon request. Whether transitioning to another service provider or concluding the engagement, clients can confidently access their data as needed.

Amey's commitment to data protection extends beyond the service lifecycle, ensuring that only authorised individuals have access to relevant data.

Security

Amey prioritises security across its operations, especially when handling sensitive data. The company adheres to the Baseline Personnel Security Standard (BPSS) established by the Cabinet Office. For employees working on sensitive projects, Amey will work with you to support employees through Security Check (SC) clearance and Developed Vetting (DV) vetting processes, ensuring you have the skills and clearances for delivery. These clearances are processed through UK-SV (United Kingdom Security Vetting) and other relevant agencies. Amey maintains a pool of individuals who hold the necessary security clearances, ensuring compliance with project requirements.