



# Geospatial Information Systems [GIS]

G-Cloud 15 Framework  
Lot 3 Cloud Support: Service Definition

January 2026

# Contents

[Service overview](#)

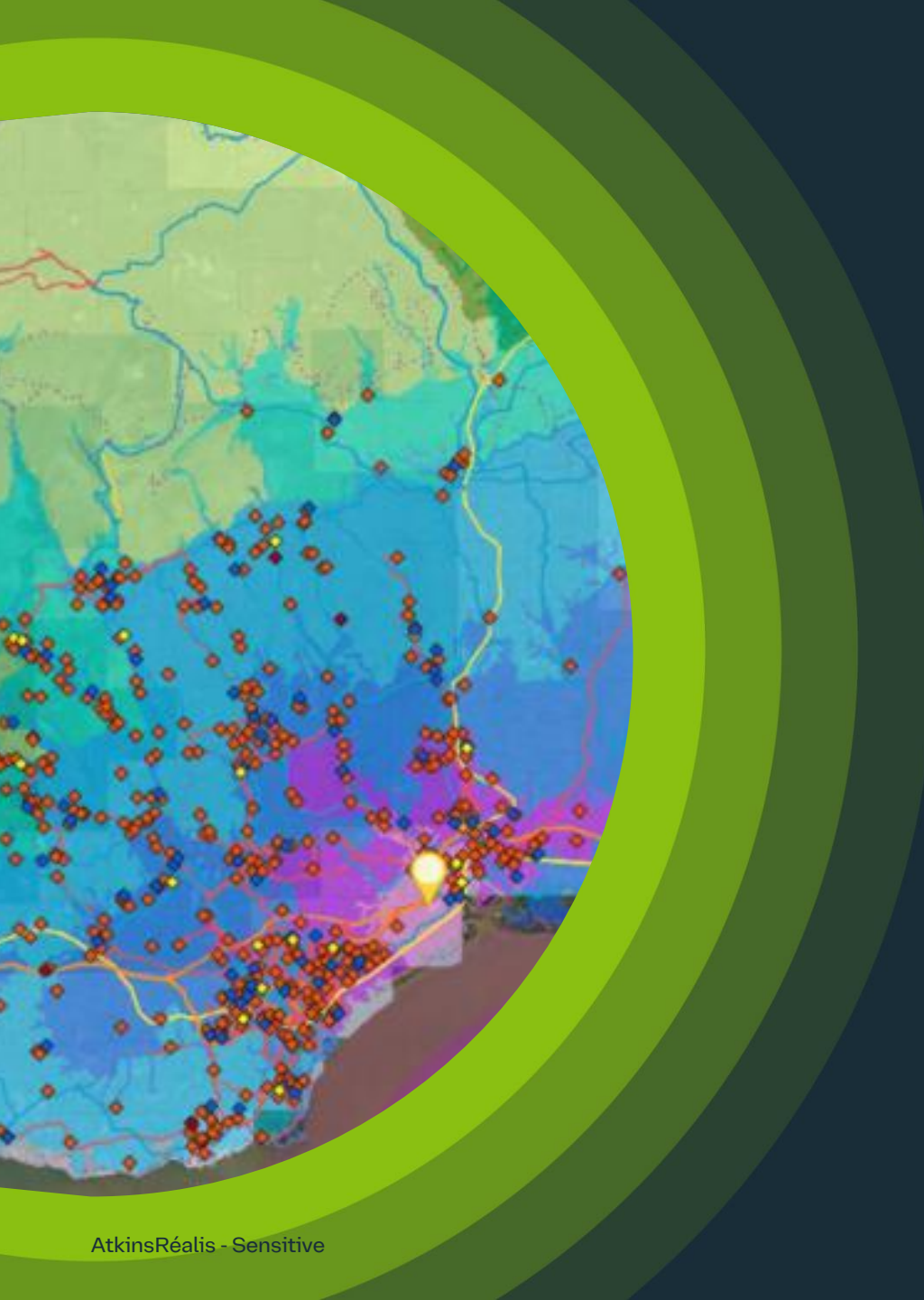
[Our service in action](#)

[Why choose us](#)

[Case studies](#)

[About AtkinsRéalis](#)

[Contact us](#)



# Service overview

Organisations make high-stakes decisions every day, about their land, assets, infrastructure and services. Yet these decisions often rely on incomplete insights, because information is siloed, spatial data is inconsistent, and critical location intelligence is difficult to access at the right time.

This creates operational blind spots, increases risk and restricts the ability to plan effectively or respond quickly to change. At AtkinsRéalis, we help solve this by turning your complex spatial information into clear, actionable intelligence. Bringing **more than 30 years of geospatial expertise**, we deliver specialist support across GIS, geomatics, surveying, spatial data science, software engineering and cloud architecture.

Our teams design, build and operate **secure, cloud-based geospatial platforms** for you, deliver **advanced spatial analytics**, and integrate your diverse datasets into **trusted single sources of truth** aligned to **BIM Level 2 Kitemark**, eight ISO and PAS standards (ISO 19650, ISO 19115, ISO 19139, ISO/IEC 10646-1, PAS 1192, ISO 27001, ISO 140001, ISO 9001) and best practice across regulated environments. We offer **Geo100 recognised experts**, ESRI and certified Feature Manipulation Engine (FME) professionals to support your projects, as well as specialists who help shape industry standards – from building information modelling (BIM) through to Civil Aviation Authority (CAA) guidance on safe drone operations in hazardous environments.



As a multi-award-winning provider of groundbreaking geospatial solutions, we have been recognised for work that is delivering meaningful, measurable public value. Our programmes have achieved £30 saved for every £1 invested – as evidenced by our work on the National Underground Asset Register (NUAR) – improved safety across complex construction environments, enhanced community access to public services, and strengthened national resilience through geospatial intelligence advisory services.

In addition to our major national-scale programmes, we've delivered measurable operational improvements across government and infrastructure, including 25,991 staff hours saved in one year with Northumberland Council's GIS Data Strategy, £300k annual savings through our inhouse Spatial Common Data Environment (SpatialCDE) on A9 Dualling, 75% reduction in QA time at Sizewell C, and 90% time savings in water network design for Thames Water.





We are proud to have been recognised with **industry honours** including the Digital Construction Awards' Best Application of Technology, the Management Consultancies Association's (MCA's) Performance Improvement in the Private Sector award, and the British Construction Industry Awards (BCIA) Digital Impact Award; as well as being a finalist for the Construction News Workforce Awards' Technology Team of the Year.

Providing SpatialCDE, a proven data platform, that gives all your projects a head start, we offer pre-curated data, established workflows, secure cloud hosting and immersive environments that accelerate delivery and help you unlock the full value of your location data.



# Our service in action

## Spatial data strategy and advisory

From assessing your current spatial data landscape, to defining a clear spatial data strategy, we help you to identify opportunities to build your long-term capability including governance models, data architecture guidance, and integration with wider digital strategies. You gain **clear priorities and an actionable roadmap** aligned to organisational objectives. Our spatial advisory work is strengthened by close collaboration across GIS, digital engineering, artificial intelligence and geomatics.



# Data architecture, management and integration

We design and implement secure data architectures, aligned to industry standards, to enable you to **manage, govern and integrate** your geospatial information with confidence. Our approach creates an authoritative, interoperable spatial data environment that ensures the right data is accessible at the right time, supporting evidence-based decision making in your teams. We are experts in using **cloud technologies, automated data pipelines and secure Application Programming Interfaces (APIs)** to integrate GIS with your wider enterprise systems including BIM, programme management tools and Customer Relationship Management (CRM) solutions. You gain a **single source, authoritative spatial data environment** that reduces duplication and strengthens multidisciplinary collaboration.

# Advanced geospatial analysis

By applying advanced spatial modelling, risk analysis, network optimisation and scenario testing, we reveal insights to empower confident decision making. You gain **evidence that informs planning, investment and operational decisions**, supported by consistent, repeatable methods. Our analysis is further enhanced through data science and AI, which enable predictive spatial modelling and the creation of operationally meaningful insights.



# Visualisation and location driven decision support

Building intuitive, interactive products, including online mapping platforms, dashboards, digital twins, immersive environments and tailored visualisations, we enable you to quickly share information with both technical and public audiences. You gain **clarity and accessibility**, ensuring the spatial insights gained are easy for anyone to explore and use.





# Digital data capture and geomatics

Our geomatics teams use Ground Penetrating Radar (GPR), Light Detection and Ranging (LiDAR), mobile mapping, UAVs and manned aircraft to capture accurate survey data. We follow ISO 19650 compliant workflows and operate under enhanced CAA permissions. You gain **high quality, reliable spatial data**, captured safely, quickly and cost effectively. This rich data is utilised in GIS workflows, where it is transformed into usable layers, models and decision support tools. .



# Bespoke geospatial solutions and cloud platforms

To deliver the solutions you need, we **create secure, cloud based spatial platforms** including Spatial Common Data Environments (sCDEs), automated data-processing workflows, and custom tools built on technologies such as ESRI ArcGIS, QGIS, PostGIS, GeoServer and FME.

Our SpatialCDE is a proven, auditable and scalable platform that centralises spatial data management, analysis and visualisation. The platform's support has underpinned client successes, including delivering **£300k annual savings** on A9 Dualling, enabling cross-disciplinary collaboration, reducing offline data silos, and accelerating decision making across major government programmes.

You gain **future ready, maintainable geospatial systems** that scale with your organisation



# Our methods and technical expertise

## Standards and governance

With an in-depth understanding of regulations and best practice across diverse industries, we offer:

- Alignment to appropriate standards, such as ISO 19650, BIM Level 2 Kitemark, and the CAA safe drone operation standards
- Secure cloud hosting, for sensitive and regulated environments
- Repeatable, assured processes that ensure accuracy, interoperability and audit readiness.

## Tools and technology

We work across industry leading platforms including:

- ESRI ArcGIS, QGIS, PostgreSQL/PostGIS and GeoServer
- FME, Python, SQL and Arcade for automation, analytics and data processing
- Mobile mapping, LiDAR, photogrammetry, VTOL and drone systems
- Cloud environments, including Azure, AWS and GCP
- Integration via secure APIs and enterprise data pipelines.

# Why choose us? – trusted results, proven impact

## Global capability, trusted delivery

Our capability is strengthened by unified delivery across GIS specialists, digital engineers, data scientists and geomatics professionals. Combining this geospatial expertise with decades of engineering heritage, our AtkinsRéalís teams deliver secure, reliable and high impact solutions for government, defence and critical national infrastructure. Part of a **1,000 plus strong global digital capability**, we are complemented by regional teams who understand local context and operational realities.

What sets us apart is our blend of **deep technical knowledge, certified geospatial expertise** and **proven experience delivering at national scale**. The solutions we deliver to you are built to be accurate, interoperable and compliant, with a clear focus on measurable outcomes such as cost savings, safety improvements and operational efficiency.



Clients trust us because we provide:



Award winning  
geospatial capability,  
backed by recognised  
experts



Secure, standards  
aligned services  
suitable for high  
trust environments



A unique  
combination of GIS,  
geomatics, digital  
engineering and AI  
expertise



A proven data  
platform that  
accelerates delivery  
and reduces cost



Integrated teams  
who work  
collaboratively, from  
initial strategy devel  
opment through to  
operational delivery

# Case studies

Find out how our impact is demonstrated  
through real-world delivery

## CASE STUDY

# NUAR

## Transforming underground asset management

AtkinsRéalis led delivery of the award winning National Underground Asset Register (NUAR) programme, integrating data from more than **700 asset owners** into a secure, cloud-based map of buried infrastructure. Retrieval times fell **from days to seconds**, enabling safer excavation, faster planning and stronger cross-industry collaboration. The programme is projected to **save the UK hundreds of millions of pounds annually**, representing one of the most significant geospatial transformations in recent years.

# £490M

**Predicted in cost savings**



- Cut data access time from 6.1 days to 60 seconds
- £490m annual benefit to the UK economy — a 36× return on investment
- Processes streamlined to deliver £91m in annual cost savings





## CASE STUDY

# NetCreate

## Scalable, Global Utility Planning

We developed NetCreate, an innovative digital process that uses global open-source GIS datasets to automatically create a standardised, repeatable way to plan utilities at national and international scale. The approach delivers **up to 90 percent cost savings** compared with traditional methods, and helps unlock funding by offering clear, evidence-based insight into infrastructure needs. Its configurable framework is now used across multiple regions, helping planners make confident strategic decisions. .

# 90%

**In cost savings**



- Improves efficiency & safety
- Hundreds of millions of pounds saved annually

## CASE STUDY

# East West Rail

## Automated Environmental risk management

For East West Rail's Phase 2 works, we automated environmental and ecological risk assessments using GIS and advanced FME workflows. The solution has delivered **£1.2 million in savings**, removed manual duplication, and reduced the time required to produce each assessment by two to three hours.

# £1.2M

**In savings**



- Consistency
- Transparency
- Assured approach to environmental decision making



# About AtkinsRéalis

AtkinsRéalis is a global leader in engineering, design, and digital services, renowned for delivering end-to-end solutions across government, infrastructure, energy, transportation, and technology sectors.

Founded in 1911, our company operates in over 160 countries with a workforce of more than 36,000 professionals, combining deep technical expertise with cutting-edge digital innovation. Notable for internationally recognised engineering projects such as the Burj Al Arab, the Ho Chi Minh City Skyscraper and the Elizabeth Line, alongside digital projects for MoD, HMRC, National Highways and Heathrow, we have earned a reputation for consistently delivering high-quality work.

Our digital capabilities span business strategy, architecture, design, implementation, project management, and lifecycle support, leveraging advanced technologies such as AI, digital twins, and data-driven systems to transform government, infrastructure and energy systems worldwide. With our strong focus on human-centric design, resilience, and sustainability, AtkinsRéalis is a trusted partner for complex, mission-critical projects for clients across government, defence, infrastructure and beyond.



# CONTACT US



[ccs@atkinsrealis.com](mailto:ccs@atkinsrealis.com)



Nova North,  
11 Bressenden Place,  
Westminster, London,  
SW1E 5BY