# Delivering the Power of Where for Public Sector Impact

**CGI** 

Harnessing the value of location intelligence to improve policy, operations, and public outcomes across central and local government.

### The Role of Location in Modern Government

Location is more than just a point on a map — it's a critical asset in the digital transformation of government. From responding to environmental challenges and tracking transport movements, to supporting public safety and managing land resources, geospatial intelligence underpins informed decision-making and effective service delivery.

The UK Government's commitment to leveraging spatial data is articulated in the UK Geospatial Strategy 2030, which envisions a comprehensive national location data framework by 2030. This strategy underscores the essential role of geospatial data in government operations, highlighting that future technologies will be underpinned by data about events occurring at specific times and places.

It is structured around three key missions:

# 1. Embrace Enabling Technologies to Accelerate Geospatial Innovation:

This mission focuses on integrating advanced technologies such as artificial intelligence (AI), satellite imaging, and real-time data to drive innovation in geospatial applications. The goal is to enhance the UK's position as a leader in geospatial technology by leveraging these emerging tools.

# 2. Drive Greater Use of Geospatial Applications and Insights Across the Economy:

This mission aims to promote the widespread adoption of geospatial data and applications across various sectors, including property, transport, and utilities. By embedding location data into these industries, the strategy seeks to unlock significant economic benefits and improve public services.



#### 3. Build Confidence in the Future Geospatial Ecosystem:

This mission is dedicated to establishing a trustworthy and robust geospatial framework. It involves setting standards, ensuring data quality, and fostering collaboration among stakeholders to create a sustainable and reliable geospatial infrastructure.

Around 80% of all data collected includes a geospatial element, yet only a fraction is routinely used to support policy and operational decisions. This represents a significant opportunity to improve public outcomes through location insight.

# CGI's Geospatial Vision and Global Expertise

CGI brings a deep and proven capability to help public sector organisations unlock the full potential of location data. With more than 40 years of experience delivering public sector IT in the UK, and over 500 geospatial professionals globally, we design, deliver and support powerful geospatial solutions that are integrated, secure, scalable and built for purpose.

We combine our local expertise and client intimacy with global innovation to create location-intelligent solutions that work within the complexity of government systems. Our geospatial services are underpinned by cross-domain knowledge in data science, cloud infrastructure, software development, Al/Machine Learning (ML), and enterprise architecture — all with the goal of helping clients derive insight from the location element of their data.

We work in close partnership with government bodies to support transformation initiatives, reduce duplication, enhance citizen services, and enable smarter, faster, and more transparent decisions. Whether working with central government departments, local authorities, or Arm's-Length Bodies (ALBs), CGI provides the tools and expertise needed to connect place, people, and purpose.



## Our track record in the UK and beyond

CGI has delivered geospatial systems and services across a broad range of public sector use cases - from national environmental data platforms to local land management solutions. A few highlights include:

#### Managing Common Land in Wales

We delivered a modern GIS-enabled registry for all 22 Welsh local authorities, transforming fragmented paper records into a unified digital platform. This enabled local planning departments, legal services, and citizens to access accurate and consistent land records with ease, reducing processing times and enhancing transparency.

#### Earth Observation for Environmental Monitoring (Defra Group)

CGI developed an Earth Observation data processing and dissemination platform for the Defra group, enabling access to up-to-date satellite imagery for environmental policy-making, compliance monitoring, and climate impact analysis. Automated ingestion and classification of data helped Defra scale up analysis without the need for manual interpretation.

**Property Risk Automation** 

We implemented a mining risk report service that automatically assesses land stability risks during the home-buying process. Integrated into national land databases, this service provides near-instant reports to homebuyers and solicitors, improving speed and certainty in the property transaction chain.

#### Maritime Surveillance

CGI developed and deployed an AI-powered geospatial platform to monitor overseas coastal waters using satellite data and predictive analytics. It enables government departments to detect abnormal activities, enforce maritime boundaries, and support conservation efforts through real-time insight.

#### Modernising Farm Subsidy Systems - CGI Finland

We worked with the Finnish Food Authority to enhance their land parcel identification system using satellite imagery and Al/ML. By automating classification of farmland types and validating subsidy eligibility, the system improved accuracy, reduced inspections, and ensured faster payments to farmers. These techniques can be adapted to support UK agricultural compliance schemes.

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## Our services and capabilities

CGI supports government clients across the entire geospatial value chain, from strategic planning through to systems integration and long-term service management.

#### Strategy and advisory

We work with departments to define enterprise-wide geospatial strategies aligned with organisational objectives. This includes architecture reviews, roadmap definition, and identifying high-value use cases for location data. Our advisory services are based on a strong understanding of UK public sector policy and governance environments.

#### **Data Migration and Integration**

We support the migration of geospatial data from legacy platforms and fragmented systems into modern, interoperable solutions. We facilitate data federation using open standards such as INSPIRE and OGC, ensuring systems can communicate across organisational boundaries.

#### **Application Development and Systems Integration**

CGI builds bespoke and off-the-shelf geospatial applications for desktop, mobile, and web use. These tools are tailored to the workflows of departments — from planning and licensing to emergency response and asset tracking. We work across major geospatial platforms including ESRI, QGIS, GeoServer, Geonode and Mapstore.

#### **Real-Time Geospatial Analytics**

We enable live spatial insight by integrating real-time sensor data, traffic feeds, mobile signals, and IoT inputs. These systems support dynamic decision-making for use cases like congestion monitoring, environmental alerts, and real-time asset management.

#### Al, Machine Learning and Automation

CGI applies AI/ML models to satellite imagery, drone footage, and historical spatial data to detect change, classify land use, and predict future patterns. This supports proactive regulation and efficient resource allocation.

#### **Cloud & Edge Deployment**

We architect and deploy geospatial solutions using public, private or hybrid cloud environments. For use cases requiring low latency and offline capability (such as field inspections), we support edge deployments as well.



## Why partner with CGI?

Government organisations choose CGI because we offer:

#### **Proven Public Sector Experience**

Over four decades supporting UK government IT systems - with clients across environment, justice, land, local authorities, and health.

#### Global Expertise, Local Delivery

500+ geospatial professionals worldwide, 30+ in the UK, with access to a network of industry specialists and R&D hubs.

#### Secure and Scalable Platforms

We design secure, resilient, and compliant solutions that meet UK government data standards, security frameworks, and accessibility regulations.

#### Standards-Based and Future-Ready

We use open standards, open source, and reusable patterns - reducing vendor lock-in and future-proofing your investments.

#### **Commitment to Value and Outcomes**

We focus on measurable business outcomes - whether it's reduced processing time, improved compliance, or enhanced citizen experience.

# Let's Map a Smarter Future Together

CGI's geospatial capabilities are helping UK public sector organisations unlock the full value of their location data. Whether you're just starting out or scaling up an enterprise GIS platform, we bring the right blend of strategy, technology, and delivery excellence.

Let's work together to harness "The Power of Where" - and deliver smarter, more connected public services for the UK.

#### **About CGI**

Founded in 1976, CGI is among the largest IT and business consulting services firms in the world. At CGI, we are insights-led and outcomebased to help clients accelerate returns on their investments.

#### For more information

Visit cgi.com/uk
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