

Modernizing aeronautical information systems for a safer, more connected world



The future of safe, efficient airspace starts with the data that guides every flight, every decision, every mission.

Overview

As global airspace becomes more dynamic and digitally interdependent, Air Navigation Service Providers (ANSPs) require modern, automated and resilient Notice to Airmen (NOTAM) capabilities. CGI's NOTAM Management Solution offers a modern, cloud-enabled platform with a robust data architecture that improves safety, accuracy, interoperability and efficiency. Our solution replaces the complexity of legacy or hybrid systems with a reliable, fully managed, outcome-based service that enables aviation organizations to focus on mission-critical decisions, not maintaining technology.

Urgency behind NOTAM transformation

Air navigation service providers and airspace managers around the world face increasing pressure to modernize how they manage the NOTAM lifecycle and aeronautical information. Many still rely on aging or mixed infrastructure that struggles to keep pace with growing operational demands. These systems increase the risk of outages and inconsistent data, while manual processes slow response times and introduce opportunities for human error.

Non-standardized NOTAM formats continue to challenge interoperability, especially as regional and national systems try to coordinate more closely. Regulatory pressure for adopting digital NOTAM standards adds urgency for organizations already balancing tight modernization timelines.

At the same time, airspace use is expanding. Commercial traffic is growing, and new entrants — including unmanned aircraft systems, commercial spaceflight and defense operations — require timely, reliable and interoperable data. Together, these pressures highlight the limits of today's airspace environment and point to the need for a more robust and resilient approach to manage the full NOTAM lifecycle and aeronautical information.

Key Capabilities

- **End-to-end NOTAM lifecycle management**
Automated tools support origination, validation, approval, publishing and distribution — aligned with Aeronautical Information



CGI in aviation

With more than 40 years of mission-critical systems delivery, CGI is a trusted global partner across civil aviation, defense and space.

Our teams bring deep expertise in aeronautical information management and real-world success, modernizing such systems as the FAA's NOTAM ecosystem, which is one of the world's most complex.

Globally, CGI partners closely with aviation organizations to deliver tailored solutions that combine innovation, resilience and operational excellence.

- **Modernize with confidence.**
- **Operate with resilience.**
- **Deliver safety with clarity.**

Exchange Model (AIXM) and digital NOTAM standards.

- **Cloud-native resilience**
High-availability architecture with multi-region redundancy and continuous monitoring for uninterrupted service.
- **Automated quality assurance**
Machine-assisted validation, contextual tagging and real-time relevance improve data clarity and reduce human error.
- **Interoperability by design**
Supports AIXM temporality compliance, data management, transformation and exchange; System Wide Information Management (SWIM)-based exchange; Aeronautical Fixed Telecommunication Network (AFTN) integration; and cross-border collaboration with regional centers.
- **Intuitive user experience**
Role-based dashboards, geospatial visualization, templates, alerts and customizable workflows improve operator efficiency.
- **Delivered as a managed service**
CGI manages infrastructure, security, upgrades, compliance and operations.

Solution Outcomes and Benefits

- **Enhanced safety**
Reliable, accurate and clear NOTAM information improves pilot situational awareness and reduces operational risk.
- **Operational efficiency**
Automation and intuitive workflows reduce time spent on manual tasks and free experts to focus on analysis and decision-making.
- **Future-ready for digital NOTAM**
Fully supports the transition to digital NOTAM data management, transformation and exchange, along with evolving International Civil Aviation Organization (ICAO) mandates.
- **Cross-border harmonization**
Structured data, standard application programming interfaces (APIs) and ICAO compliance improve data exchange between states, ANSPs and regional centers.

“CGI’s NOTAM Management Solution is designed for ANSPs, civil aviation authorities, military airspace managers and regional aviation authorities seeking a modern, dependable and scalable approach to NOTAM operations.”

About CGI

Insights you can act on

Founded in 1976, CGI is among the largest IT and business consulting services firms in the world. We provide comprehensive, scalable and sustainable IT and business consulting services that are informed globally and delivered locally.

CGI Federal Inc., is a wholly-owned U.S. operating subsidiary of CGI Inc. We partner with federal agencies to provide insights-driven solutions for defense, civilian, healthcare and intelligence missions. We help agencies digitally transform and accelerate returns on investments.

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