

WHITE PAPER

**INTERAGENCY
COORDINATION
IN THE ADVANCEMENT
AND DEPLOYMENT
OF AIR TRAFFIC
MANAGEMENT
SYSTEMS**

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Context / Problem

The Federal Aviation Administration's (FAA) Brand New Air Traffic Control System (BNATCS) is designed to modernize the antiquated systems that comprise the National Airspace System (NAS). This large-scale effort aims to meet current and future demands for aerospace traffic, while enhancing safety and efficiency with a state-of-the-art air traffic control system. This program has drawn significant attention from airspace stakeholders due to its large scale, accelerated timeline, and critical importance to U.S. aviation safety.

The NAS is a shared resource between the FAA and the Department of Defense (DoD). The DoD manages about 20 percent of domestic U.S. airspace, and in many locations, jointly controls both military and civilian air traffic. This includes Special Use Airspace, which encompasses prohibited areas, restricted areas, military operating areas, military training routes, controlled live weapons firing ranges, and national security areas. When it comes to aerospace management, the DoD is the most extensive NAS stakeholder besides the FAA.

Why It Matters

Because the FAA is the Title 49 lead agency for national airspace management, it must coordinate closely with both the DoD (Title 10) regarding the activity of the armed forces and the Department of Homeland Security (DHS) (Title 6), regarding domestic security operations.

As BNATCS requirements, modeling, planning, acquisition, testing, and deployment move forward, it is essential to integrate the needs of these stakeholders. Without deliberate interagency coordination, there is a risk of misalignment, reduced interoperability, and delays in achieving the safety and security standards required for this shared domain. This need for coordination becomes even clearer when viewed against the scale and complexity of today's National Airspace System.

Operating in a Highly Complex, Interdependent Environment

Modernizing the National Airspace System (NAS) is not simply a technology upgrade – it is a transformation within one of the most complex operating environments in the world. The DoD alone operates the nation's largest fleet with more than 14,000 aircraft operating daily in shared civilian and military airspace. Any aircraft modernization efforts to meet BNATCS requirements, such as hypothetically fully automated separation standards linked to aircraft flight management systems, will have significant impacts on programmatic costs and timelines, particularly in terms of aircraft upgrade scheduling, mission and aircraft readiness, and training. Alongside the FAA's 313 Federal air traffic control (ATC) facilities and 264 contract ATC towers, the DoD maintains an additional 290 ATC facilities, creating a deeply interconnected system that must evolve as a unified whole.

The BNATCS modernization effort aims to transform the U.S. air traffic control system into one that will enable the resiliency demands of the complex airspace of the future. Advanced tools for air traffic controllers, upgraded radio and telecommunications infrastructures, enhanced air traffic control facility consolidation, state-of-the-art national surveillance network, weather, and air traffic automation systems will drive new capability and interoperability requirements for all stakeholders. Specific FAA programs should consider the issues and concerns of the DoD (and others). Finally, a fully integrated and interoperable multi-use surveillance architecture of BNATCS and the proposed Golden Dome for America missile defense system must be addressed to ensure both civil and military cooperative aerospace operations.

Every adjustment to BNATCS, whether new automation standards, upgraded surveillance networks, or changes to aircraft equipment, has cascading effects on scheduling, mission readiness, training, and funding. A truly interoperable surveillance and communications architecture must support both civil and military operations, ensuring seamless cooperation without compromising security.

This environment underscores a central truth: the success of BNATCS depends not only on technology, but on deliberate interagency coordination. Recognizing these interdependencies up front prevents costly delays and ensures the system delivers on its promise of safety, resilience, and efficiency.

Coordinated Solution: An Interagency Approach

Given this complexity, BNATCS can only succeed through a deliberate, coordinated interagency approach that actively engages the DoD and DHS, along with other external NAS stakeholder groups from the outset. Their operational and programmatic requirements must be incorporated into the overall BNATCS development plan to ensure seamless interoperability.

This coordination, engagement, and alignment must occur at every level—executive, operational, and programmatic—through interagency working groups that are empowered by senior Agency and Department stakeholders and connected to front-line program managers. The working groups can rapidly align on shared requirements, acquisition strategies, deployment timelines, and sustainment.

Objective Area Solutions (OAS) is uniquely positioned to guide this process. With decades of experience bridging civil, defense, and security priorities, OAS helps stakeholders anticipate conflicts, align requirements, and translate plans into action. Our approach reduces risk, accelerates delivery, and increases the likelihood of success.

By engaging early and sustaining collaboration, stakeholders can avoid costly late-stage changes, strengthen safety and security, and ensure BNATCS delivers on its promise.

Why Objective Area Solutions?

- **Unique Understanding:** Decades of experience navigating the complexities of the FAA, DoD, and DHS give OAS unmatched insight into interagency coordination and planning.
- **Cross-Domain Expertise:** We bring civil, defense, and security knowledge together to anticipate conflicts and align priorities.
- **Reduced Risk, Greater Success:** Our proven approach minimizes delays, prevents costly rework, and ensures mission success.

Leveraging Proven Interagency Coordination Models

The interagency approach is not theoretical. Past NAS modernization efforts prove that when stakeholders collaborate early and align responsibilities, outcomes improve and risks are reduced.

For example, under the last NAS modernization plan, the FAA led the acquisition and fielding of air traffic automation systems and the voice switches. At the same time, the U.S. Air Force (USAF) managed procurement and deployment of the ASR-11 terminal radar program. This division of responsibility leveraged each agency's strengths and avoided duplication. Likewise, the FAA, DoD, and DHS have built enduring partnerships to jointly manage and support DoD Air Defense, and DHS Homeland Security Surveillance radar program

Institutional mechanisms such as the NAS Interagency Working Group and the DoD's Policy Board for Federal Aviation capture lessons learned, address interoperability challenges, and provide continuity for policy and modernization decisions.

These examples highlight a proven truth: siloed stakeholder requirements can be overcome. When agencies collaborate deliberately, system modernization goals can be met more efficiently, with lower risk and greater confidence in long-term success.

Past Success Snapshots

FAA & USAF Division of Roles

- FAA: Led acquisition and fielding of automation systems and voice switches
- USAF: Managed procurement and deployment of ASR-11 terminal radar

Joint FAA–DoD–DHS Partnerships

- Sustained collaboration on Air Defense and Homeland Security surveillance radar programs
- Shared program management and sustainment responsibilities

Enduring Mechanisms for Collaboration

- NAS Interagency Working Group
- DoD Policy Board for Federal Aviation

The Interagency Coordination Payoff: Reduced Risk, Greater Success

Deliberate interagency engagement delivers benefits that reach across operations, strategy, and cost:

Operational Benefits

- Seamless interoperability across FAA, DoD, and DHS systems
- Faster program and portfolio delivery through early alignment
- Improved innovation and capability development through stakeholder idea exchange
- Clearer visibility into requirements and capability gaps, enabling more intelligent decisions.

Strategic Benefits

- Stronger trust and enduring relationships between interagency partners
- Proactive issue resolution that replaces reactive problem-solving
- Efficient joint planning for future shared requirements in communications, navigation, and surveillance

Financial Benefits

- Reduced acquisition costs through shared procurement and larger economic order quantities
- Cost savings from shared logistics capabilities
- Lower risk of late-stage modifications by engaging stakeholders early

Together, these benefits advance BNATCS from concept to successful implementation, while reducing risk and ensuring that modernization delivers on its promise of safety, security, and efficiency.

Conclusion

The success of BNATCS depends on deliberate interagency coordination that actively engages the FAA, DoD, DHS, and other stakeholders. Leveraging best practices from past interagency coordination efforts provides stakeholders with effective mechanisms to communicate and collaborate on shared airspace traffic management infrastructure programs, resulting in improved outcomes.

Today, that lesson is even more urgent. Coordinated engagement is the only way to align funding strategies and long-term appropriations that integrate new technologies and deliver a resilient National Airspace System (NAS) capable of meeting future safety and efficiency demands.

Objective Area Solutions (OAS) brings the cross-domain expertise and proven experience needed to guide this process. By helping stakeholders bridge priorities and sustain collaboration, OAS reduces risk, accelerates delivery, and ensures BNATCS achieves its full potential in strengthening the NAS and advancing U.S. security and operational readiness.

About the Authors

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Scott leads knowledge management and business intelligence activities for Objective Area Solutions. He has over 30 years of experience in intelligence and operations management, bringing expertise in the areas of aviation threats and vulnerabilities, global aviation security issues, and strategy development.

James “JR” Roberts

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Rick Dunham

Rick has over 45 years of experience providing practical and transformational aviation systems solutions and operational expertise across airports, aircraft, and airspace to modernize global aviation operations. He has held senior positions as a U.S. Air Force officer and was an F-117A Stealth Fighter pilot and squadron commander, FAA manager, airline pilot, and Site Lead at the MITRE National Security Engineering Center.