



**Committee on Transportation and Infrastructure
U.S. House of Representatives**

Bill Shuster
Chairman

Washington, DC 20515

Nick J. Rahall, III
Ranking Member

Christopher P. Bertram, Staff Director

July 17, 2013

James H. Zoia, Democrat Staff Director

SUMMARY OF SUBJECT MATTER

TO: Members, Subcommittee on Aviation
FROM: Staff, Subcommittee on Aviation
RE: Subcommittee Hearing on "Causes of Delays to the FAA's NextGen Program"

PURPOSE

The Subcommittee on Aviation will meet on Wednesday, July 17, 2013, at 10:00 a.m. in 2167 Rayburn House Office Building to receive testimony from the Federal Aviation Administration (FAA) and the Department of Transportation Office of Inspector General (DOT IG), regarding the underlying causes of delays to the NextGen program.

BACKGROUND

More than a decade ago, Congress, the federal government, and aviation industry stakeholders began working on a program to transform our World War II-era air traffic control (ATC) system into a modern air traffic management system capable of meeting the future air traffic demands of 2025. Congress recognized that without modernizing our ATC system, the United States would be hard-pressed to remain global leaders in aviation. The concept was simple; create a more efficient, reliable, safer, and environmentally-friendly air transportation system using 21st Century technologies. While FAA has made progress in its efforts to implement NextGen, it has also experienced setbacks, including cost overruns and delays on some major programs. Additionally, several key strategic decisions that will ultimately shape the capabilities, timing, and costs of NextGen have not been made.

Over the years, the DOT IG has conducted several audits and issued numerous reports on the FAA's NextGen program and the agency's efforts to develop and implement this multi-billion dollar endeavor. Given its long history monitoring the FAA's efforts, the DOT IG is uniquely positioned to study and report the status of the implementation of NextGen, as well as evaluate potential causes for delays. In fact, the DOT IG has repeatedly raised concerns with the pace and progress of the NextGen program and has made recommendations intended to assist in keeping the program moving forward.

2010 DOT IG Report – “Timely Actions Needed to Advance the Next Generation Air Transportation System”

In June 2010, the DOT IG published a report (AV-2010-068, Timely Actions Needed to Advance the Next Generation Air Transportation System), which examined the FAA’s progress in transitioning to NextGen. The report was critical of the FAA’s progress and highlighted a number of improvements needed to move NextGen from planning to implementation. These improvements included (1) establishing firm requirements or reliable costs and schedules for adjustments to existing projects or new NextGen acquisitions, (2) modifying its Acquisition Management System so it can manage initiatives as portfolios, (3) addressing key safety concerns related to increased throughput at congested airports and mixed equipage, (4) assessing the ability to implement multiple capabilities concurrently, and (5) establishing a viable plan to secure the expertise needed to manage a NextGen-driven workforce.

In this same report, the DOT IG also analyzed the efforts of the Joint Planning and Development Office (JPDO), an entity housed within the FAA and established in 2003 to plan for, in coordination with government and industry stakeholders, the transition to NextGen. The report cited concerns related to inadequate budgeting, a lack of coordination in several areas between the FAA and its partner agencies, including leveraging research and development within the Department of Defense, and a failure to clearly define the role of certain industry stakeholders.

In addition to encouraging the FAA to follow through on previous recommendations provided by the DOT IG in testimony before the Subcommittee in March 2009,¹ the DOT IG made five additional recommendations intended to further reduce risk, enhance collaboration with the private sector, and advance NextGen. These recommendations include (1) assessing the risks associated with implementing multiple NextGen capabilities in the mid-term and what can reasonably be accomplished, (2) assessing risks with mixed-equipage operations and mitigation strategies and policies, (3) developing a plan to potentially utilize Department of Defense research and development for NextGen efforts, (4) expanding the NextGen Research Transition Team concept, and (5) reassessing the role and need for the NextGen Institute. Although the FAA concurred with each recommendation, more than three years later four of five recommendations are considered ‘open’ by the DOT IG.²

2013 Draft DOT IG Report – “Underlying Causes of Limited NextGen Progress”

The DOT IG continues to monitor the FAA’s progress in implementing NextGen and they are currently updating their 2010 report. They are expected to publish their final report in July 2013.³ Specifically, the DOT IG is (1) assessing the FAA’s progress with meeting key milestones for achieving NextGen capabilities, (2) examining possible underlying causes for the FAA’s limited progress with advancing NextGen overall, and (3) reviewing the FAA’s recent reorganization and other efforts to improve the management and execution of NextGen

¹ <http://www.oig.dot.gov/library-item/4988>

² Recommendations remain ‘open’ when the FAA has yet to fully implement proposed actions or to provide the DOT IG with supporting documentation of their implementation.”

³ The DOT IG provided the FAA with a copy of the Exit Conference Draft of the report in early July 2013.

initiatives. The audit was initiated in July 2012. The preliminary findings conclude that while the FAA is making progress with elements of NextGen, and while many initiatives are still in the early stages of development, there are still longstanding problems with cost increases, schedule slips, and performance shortfalls with the FAA's air traffic control projects.

The current audit examines the FAA's progress in making key NextGen-related decisions, including investment, management, planning, and design decisions. It also assesses programmatic and organizational challenges and looks at the FAA's organizational culture. Areas highlighted by the DOT IG as underlying causes of the FAA's lack of progress with NextGen include:

- An overambitious and unrealistic plan for NextGen: The DOT IG points out that the initial plans for NextGen—targeted for 2025 at a cost of \$40 billion—was overambitious and unconstrained, and an executable implementation plan linked to Agency budgets has proven elusive.
- NextGen design issues remain unresolved: Examples include a lack of comprehensive facility realignment and consolidation planning, which the DOT IG describes as a critical step in implementing NextGen and replacing the Nation's aging air traffic infrastructure, and insufficient progress in determining the appropriate level of automation to support NextGen efforts.
- Stakeholder skepticism: The FAA has had difficulty formulating the business case for NextGen systems, such as Performance Based Navigation (PBN).⁴ The Agency has not been able to clearly define or show the benefits of PBN, and airlines and other airspace users remain reluctant to purchase and install avionics required for PBN.
- Problems with foundational programs: The FAA has had technical issues with modernization projects that are needed to implement NextGen capabilities, including delays in developing and deploying En Route Automation Modernization (ERAM).⁵ The DOT IG has raised serious concerns with the status of ERAM, which has experienced extensive software problems that have delayed the effort by almost 4 years, with cost increases that could reach in excess of \$500 million.
- FAA's organizational culture: A 2010 internal FAA study found that FAA "lacks a sense of urgency and exudes a 'resistance to change.'" The FAA has also been unable to coordinate across internal lines of business as well as with other agencies.

⁴ Performance-Based Navigation (PBN) is comprised of Area Navigation (RNAV) and Required Navigation Performance (RNP) and describes an aircraft's capability to navigate using performance standards.

⁵ According to the FAA website, ERAM is vital to the future of air navigation, providing the platform required for the FAA to evolve to NextGen, via programs including System Wide Information Management, Data Communications, and Automatic Dependent Surveillance-Broadcast, which depend on a successful ERAM deployment.

- Changes in leadership and lack of clear lines of accountability and authority: Due to delays in replacing key NextGen leadership positions and an inability to clearly define roles and responsibilities, there has been no consistent FAA mission or vision for NextGen. However, it should be noted that last month FAA appointed a Deputy Administrator who will serve for a 5-year term as Chief NextGen Officer in accordance with section 204 of the FAA Modernization and Reform Act (P.L. 112-95).

The current DOT IG audit also takes a close look at the FAA's reorganization, such as elevating the Director of the JPDO to Associate Administrator and establishing a Chief NextGen Officer. It updates previous work by the DOT IG regarding the FAA's progress in defining clear lines of responsibility, accountability, and authority, and the agency's ability to develop performance metrics (also mandated by the *FAA Modernization and Reform Act*) to measure success and progress, including whether or not the expected outcomes were achieved.

The DOT IG's current audit points to the need for the FAA to provide sustained leadership, identify clear lines of accountability and authority, and set realistic expectations and priorities. The DOT IG's final report will include recommendations to help the FAA provide greater visibility and understanding of critical NextGen decisions and achieve a successful reorganization.

WITNESS LIST

Panel 1

The Honorable Michael Huerta
Administrator
Federal Aviation Administration

The Honorable Calvin Scovel, III
Inspector General
U.S. Department of Transportation