

**SENATE COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION:
QUESTIONS FOR THE RECORD**

**HEARING ON
FAA REAUTHORIZATION: AIR TRAFFIC CONTROL MODERNIZATION AND REFORM
TUESDAY, MAY 19, 2015**

**Questions for the Honorable Michael P. Huerta, Administrator, Federal Aviation
Administration**

From Chairman Thune

Question 1. Administrator Huerta, the National Research Council's recent report on NextGen recommended that expectations be reset for NextGen along with a number of other recommended improvements. How is FAA responding to this report? Do you agree with the findings?

Answer. The Next Generation Air Transportation System (NextGen) was envisioned as a complex modernization effort that was necessary for the nation to maintain the safest and most efficient air transportation system possible for generations to come, adaptable to growing demand by increasing capacity and reducing delays. It is important to remember that the NextGen vision examined by the National Research Council (NRC) was a multi-agency view of the future including both operational and research partners. As such, it included both near and mid-term expectations as well longer term - stretch goals to serve as a basis for advanced research. The FAA's commitment to that vision, as an implementing agency, is found in the FAA's NextGen Plans and the Mid-Term Concept we produced to which we are still substantially aligned.

The FAA's NextGen implementation objectives are delivering benefits through improvements that include saving time and fuel, and reducing emissions. The improvements deployed by NextGen to date have already delivered nearly \$1.6 billion in benefits by upgrading our infrastructure, creating more efficient procedures, and delivering advanced technologies. In addition, NextGen has made significant progress in areas such as infrastructure, surveillance, navigation, information, separation standards, and decision support tools.

The FAA is responding to this report by continuing to work closely with industry to achieve high standards, remain nimble, and have flexibility. We will also continue to work with our cross-government partners on their implementations and research that extend and refine the far-term expectations.

Question 2. As we consider potential air traffic control reforms, we are examining a host of studies indicating safety and service have not been negatively affected by separating air traffic control services from direct government control in other countries. As part of a possible transition in the U.S., what are some of the key issues you believe should be addressed?

Answer. Congress' consideration of a new FAA governance structure raises many important issues that would need to be addressed to best ensure that the nation's and public's interests would continue to be served, and that the U.S. would retain its global leadership in aviation, operating the world's safest, most diverse, most complex, and most efficient aviation system.

Studies on the transition from one type of governance to another in other nations indicate that it could take years to effectively and totally separate air traffic control functions. This could prove even more challenging in the U.S. given the size and complexity of our aviation sector compared to other nations. Some of the complexity of a transition would involve defining new processes, roles, and responsibilities that may have not been included in establishing legislation.

In evaluating whether to depart from the existing air traffic control service model and what a new model would look like, while not exhaustive, some of the issues that would need to be addressed include:

- Funding issues including how the existing mix of taxes and revenues would be divided between a new entity and the remaining FAA; the transition to a user fee structure; the charges that general aviation (GA) would pay; source and structure of airport funding; and dealing with budget instability and uncertainty for the residual FAA.
- Safety oversight of a new entity and integration of new entrants in the national airspace
- Governance of the new entity and roles of stakeholders on oversight boards, if any
- Maintaining security and linkages with the Department of Defense and Department of Homeland Security
- Retaining a global leadership position in aviation
- Ensuring good stewardship of the environment
- Determining appropriate roles and responsibilities in the development of NextGen
- Assigning capital liabilities and assets between the FAA and a new entity
- Development of new processes (e.g. new air traffic route development) that currently require coordination between air traffic and regulatory functions
- Determining the employee and labor protections associated with a new entity
- Establishing new offices for any functions that would be required in both the FAA and the new entity (e.g. human resources)

From Senator Blunt

Question 1. The FAA has indicated it has made great progress on NextGen over the last several years. However, according to the National Academy of Sciences report released on May 1, 2015 (very recently), it identifies many areas where the FAA is not delivering the promised benefits of NextGen to users of the air traffic system. Specifically, the report states ‘the original vision for NextGen is not what is being implemented today. ‘Can you explain the large discrepancy between what the FAA is publicly saying on NextGen compared to the National Academies report?’

Answer. The original NextGen vision, Concept of Operations for the Next Generation Air Transportation System, was published in 2007. It is important to remember that this NextGen vision examined by the NRC was a multi-agency view of the future including both operational and research partners. As such, it included both near and mid-term expectations as well the longer term - stretch goals- to serve as a basis for advanced research. The FAA’s commitment to that vision, as an implementing agency, has been found in the FAA’s NextGen Plans and the Mid-Term concept to which we are still substantially aligned. Throughout this process, the FAA has engaged a broad cross section of stakeholders to include airlines, airports, business aviation, general aviation, other government agencies, and academia. We have engaged our stakeholders in numerous workgroups and committees to collaborate on high-priority, high-value improvements.

Some of our most recent collaboration with our stakeholders are:

- **NextGen Priorities Plan.** A collaborative plan with the NextGen Advisory Committee, delivered to Congress in October, lays out milestones for delivering benefits in the one-to three-year timeframe. This provides early-benefit, high-readiness capabilities to airspace users. The priorities are improvements in Performance Based Navigation, Data Communications, surface and multiple runway operations. We have completed 27 of 27 commitments so far. This builds on previous collaborative efforts with the aviation industry.
- **Global Harmonization:** The FAA has worked collaboratively with partners worldwide to ensure that NextGen capabilities won’t stop at our borders. Interoperability and standards setting have been a focus of NextGen planning and implementation.
- **Interagency Planning:** We work with other agencies, including the Departments of Defense and Commerce, as well as the National Aeronautics and Space Administration, through our Interagency Planning Office (and before that, through the JPDO, which established the original vision for NextGen). We work with our cross-government partners on their implementations and their research that extend and refine the far-term expectations.

In some cases, we have decided to adjust our plans as the needs of the airspace have evolved. In addition, flexibility has been necessary because not all technologies and improvements mature at the same time.

Finally, a significant challenge has been funding. The cost differential between what we designed NextGen to achieve and the funding we actually received has been \$3 billion since 2011. A modernization with this many moving parts requires stable and predictable funding, as well as a long-term plan with the flexibility to make incremental updates to adjust to advances in technology and the latest priorities of our industry.

From Senator Fischer

Question 1. I have read the concerns expressed by the general aviation community regarding “commercialization” or “privatization” of the air traffic control (ATC) system. Do you believe there is a way for us to reform this system to ensure safety, efficiency, and innovation, while protecting the concerns of general aviation?

Answer.

- The general aviation (GA) sector in the United States has breadth and scope unparalleled elsewhere in the world. It is part of what makes the U.S. aviation sector so dynamic. Certainly one set of the issues involved in separating the air traffic organization (ATO) from the FAA involves the GA community, such as how much GA contributes to funding a new model, and the impact of an FAA structural change on services to the GA community and access to airspace.
- The Administration has not proposed governance changes to air traffic control, and we are not in a position to endorse an approach to resolve these issues. There may be a number of approaches to consider in evaluating these issues ranging from the composition of the new entity’s board to Congress legislatively setting a GA fee and service structure. However, financial independence and viability for the new entity would necessitate authority and flexibility to change fees and services, so legislation would need to provide a compromise that preserves GA interests as much as possible while ensuring viability of the new entity. If Congress decides it wants FAA to change how air traffic services are provided, then we will need to work carefully with the GA community as well as other stakeholders to design a system that continues to ensure safety, efficiency, and innovation.

Question 2. As you know, reforms to the ATC system have been considered by the FAA and Congress previously. In 2007, the FAA released a cost allocation study that helped determine the factors that drive the costs of providing air traffic control services and the allocation of those costs to various users. This 2007 study was used to support policy development for alternative ATC proposals. As we consider reforms to the ATC system in the upcoming FAA reauthorization, can you please commit to providing the Committee with an updated version of the ATC cost allocation study?

Answer. Cost allocations are often quite complex and require policy decisions. As such, any future study should be preceded by substantive discussions with stakeholders. As the assumptions and choices underlying various cost allocation methodologies are reflected in the

results, studies designed to reflect different choices would be needed to inform the use of the studies' results. It would be premature to pursue an updated study without input on key assumptions.

Question 3. Administrator Huerta, a recent report by the National Research Council found that the FAA is not delivering what it promised with regard to NextGen. Given the National Research Council's findings, and the real benefits to aviation businesses and passengers from moving to the NextGen system, do you agree that private-sector oriented reforms to our ATC system would help to advance NextGen technology?

Answer.

- Our ability to deploy NextGen technologies and capabilities depends on sufficient funding and commitment from government and service providers, and effective internal collaboration as well as with industry to ensure milestones and goals are met, implemented, and sustained.
- There are a wide variety of air traffic management models in different countries around the world ranging from government owned to fully privatized. I am not aware of any clear data that shows that one particular model is better than another to achieve the necessary modernization of air traffic systems. Running a Fortune-500-size complex enterprise, operating 24 hours a day while undertaking one of the largest, most sophisticated infrastructure projects in the last few decades in modernizing the national airspace system would prove daunting whether in the private or public sector.
- The success of NextGen deployment hinges on interdependencies and relationships within the agency. NextGen is more than installing technology in our air traffic facilities and on aircraft – it involves the close participation of our safety organization to ensure that the technology is safe and that controllers and pilots know how to use it safely. It requires training and equipage within the aviation sector. Therefore, we believe that any decision about changes to governance must take into account these issues.