

**U.S. HOUSE OF REPRESENTATIVES  
COMMITTEE ON SCIENCE AND TECHNOLOGY  
SUBCOMMITTEE ON SPACE AND AERONAUTICS**

**HEARING CHARTER**

***The Joint Planning and Development Office and the Next Generation Air Transportation System: Status and Issues***

Thursday, March 29, 2007  
10:00a.m. – 12:00 p.m.  
2318 Rayburn House Office Building

**Purpose:**

On Thursday, March 29, 2007 at 10:00 am, the Subcommittee on Space and Aeronautics will hold a hearing to examine the status of the Next Generation Air Transportation System initiative [also known as NGATS or NextGen—both terms will be used interchangeably in this hearing charter] and explore key issues related to the initiative and the interagency Joint Planning and Development Office (JPDO).

**Witnesses:**

The witnesses scheduled to testify at the hearing include the following:

**Mr. Charles Leader**

Director  
Joint Planning and Development Office  
Federal Aviation Administration (FAA)

**Dr. Gerald L. Dillingham**

Director  
Physical Infrastructure Issues  
Government Accountability Office

**Hon. John Douglass**  
 President and CEO  
 Aerospace Industries Association

**Dr. Bruce Carmichael**  
 Director  
 Aviation Applications Program  
 Research Applications Laboratory  
 National Center for Atmospheric Research

## **BACKGROUND**

### **Potential Issues**

The following are some of the issues that could be raised at the hearing:

- *Is the JPDO effectively organized and adequately funded to plan and develop the Next Generation Air Transportation System? Does it have the necessary authority and independence? If not, what changes are needed?*
- *Is the JPDO's placement within FAA properly balanced? As JPDO becomes more tightly integrated into the FAA, will it continue to be viewed as an "honest broker" by the other participating agencies? Will FAA's new Operational Evolution Partnership (OEP) implement the JPDO's plans and development products or will FAA wind up subsuming JPDO's activities within the FAA's OEP?*
- *What are the biggest near-term and mid-term technical and programmatic challenges facing the JPDO as it attempts to plan and develop the NextGen? What steps can be taken to address those challenges?*
- *How well are the resource commitments and R&D activities of the agencies participating in the JPDO aligned with the needs of the NextGen initiative?*
- *How can we ensure that the technologies and concepts developed for the NextGen initiative will be implemented in the national airspace system in a timely manner? How important are equipage and financing policies to ensuring an effective transition of the NextGen R&D into national airspace systems and procedures?*

- *What role should the private sector play in the planning and development of the NextGen? How well are the views and concerns of the industry and the air traffic controllers being incorporated in the JPDO planning process?*
- *What needs to be done to ensure that aviation weather information is integrated effectively into the nation's future air traffic management system and weather impacts are reduced?*
- *Given the importance of aviation to U.S. global commerce, how will the U.S. NextGen initiative be harmonized with the European air traffic modernization initiative, SESAR, as well as with modernization activities elsewhere in the world?*

### Overview

While the health of the National Airspace System (NAS) is critical to the economy, the current approach to managing air transportation is becoming increasingly inefficient and operationally obsolete. Today's NAS is near capacity, with delays growing to record levels, yet a threefold increase in air traffic is expected by 2025. Current processes and procedures do not provide the flexibility nor the scalability needed to meet the growing demand.

In 2003, Congress created the Joint Planning and Development Office (JPDO) as part of P.L. 108-176, *Vision 100: Century of Flight Reauthorization Act* [the specific legislative provisions are included as Attachment 1 to this hearing charter]. The JPDO is to plan for and coordinate, with federal and nonfederal stakeholders, a transformation from the current air traffic control system to the NextGen by 2025. NextGen (formerly called NGATS) is envisioned as a major redesign of the air transportation system that will entail precision satellite navigation; digital, networked communications; an integrated aviation weather system; layered, adaptive security; and more.

Seven agencies are participating in the JPDO: the Departments of Transportation, Commerce, Defense, and Homeland Security; FAA; the National Aeronautics and Space Administration (NASA); and the White House Office of Science and Technology Policy. JPDO is housed within FAA, and the FAA FY 2008 budget request includes \$18 million to support JPDO. NASA is still negotiating the amount that it will provide to the JPDO in FY 2008. However, while JPDO has the planning and development responsibility and can define R&D requirements, etc., that it would like the participating agencies to carry out, it has no budgetary or management authority over the agencies' activities in support of NextGen. Although JPDO is responsible for planning the transformation to NextGen and coordinating the related efforts of

its partner agencies, FAA will be largely responsible for implementing the policies and systems necessary for NextGen, while safely operating the current air traffic control system 24 hours a day, 7 days a week.

To date, the JPDO has not established practices to institutionalize the multi-agency collaborative process. For example, JPDO does not have formal, long-term agreements among the partner agencies on their roles and responsibilities in creating NextGen. The JPDO has been working to establish a memorandum of understanding (MOU) between its participating agencies since at least August 2005, but the MOU had not been signed as of the date of this hearing, even though in a hearing a year ago this Subcommittee was told that it “should occur in the next few weeks.”

JPDO also currently lacks explicit policies and procedures for decision making and dispute resolution and has not yet completed mechanisms for leveraging partner agency resources. JPDO has been working with the Office of Management and Budget (OMB) to develop a means to consider NextGen-related funding, dispersed across JPDO’s partner agency budget requests, as a unified federal program. Nonetheless, given JPDO’s limited authority, the office could face continuing challenges in sustaining the lengthy and elaborate federal collaborative effort set forth in the *Vision 100* legislation.

FAA has created a NextGen Review Board, co-chaired by JPDO’s Director and Air Traffic Organization’s (ATO) Vice President of Operations Planning. Initiatives, such as concept demonstrations or research, proposed for inclusion in the OEP, will now need to go through the Review Board for approval based upon NextGen requirements, concept maturity, and risk. Additionally, as a further step towards integrating ATO and JPDO, the Administration’s FAA Reauthorization proposal calls for the JPDO Director to be a voting member of FAA’s Joint Resources Council and ATO’s Executive Council. While some see those steps as important means of ensuring ATO can effectively implement JPDO’s plans, others fear that the steps will adversely impact JPDO’s independence.

The *Vision 100* legislation also directed the Secretary of Transportation to establish a Senior Policy Committee (SPC) to work with the JPDO. The SPC is to be chaired by the Secretary and is also to include the FAA and NASA Administrators (or their designees), as well as the Secretaries of Defense, Homeland Security, Commerce, OSTP Director (or their designees) and other federal agency representatives as appropriate. However, the SPC has met infrequently since its inception. According to JPDO officials, the SPC makes decisions through consensus of the members. If there are any issues that the committee cannot resolve among themselves, JPDO officials said that they would expect that the Secretary of Transportation would elevate those issues to the appropriate White House-level policy council, such as the Domestic Policy Council.

The JPDO established eight multi-agency Integrated Product Teams (IPTs) to facilitate the planning and development of the JPDO. They included the following [with the lead agency indicated in parentheses]:

1. Develop Airport Infrastructure to Meet the Future Demand (FAA)
2. Establish an Effective Security System without Limiting Mobility or Civil Liberties (DHS)
3. Establish an Agile Air Traffic System (NASA)
4. Establish User-Specific Situational Awareness (DOD)
5. Establish a Comprehensive Proactive Safety Management Approach (FAA)
6. Develop Environmental Protection That Allows Sustained Aviation Growth (FAA)
7. Develop a System-Wide Capability to Reduce Weather Impacts (DOC/NOAA)
8. Harmonize Equipage and Operations Globally (FAA)

However, the JPDO has been restructuring the IPTs, and JPDO Director Leader should describe the changes at the hearing.

The NextGen Institute (the Institute) was created by an agreement between the National Center for Advanced Technologies and the FAA to incorporate the expertise and views of stakeholders from private industry, state and local governments, and academia into the NextGen planning process. The NextGen Institute Management Council, composed of top officials and representatives from the aviation community, oversees the policy, recommendations, and products of the Institute and provides a means for advancing consensus positions on critical NextGen issues. To meet *Vision 100*'s requirement that JPDO coordinate and consult with the public, the Institute held its first public meeting in March 2006.

In general, transforming the National Airspace System by 2025 to accommodate a projected demand of three times the current demand for air transportation services, providing appropriate security and environmental safeguards, and doing these things seamlessly while the current system continues to operate will be a complex undertaking. As noted by the Government Accountability Office (GAO), “... *given the staggering complexity of this ambitious effort to modernize and transform the air traffic control system over the next two decades, it will not be easy to move from planning to implementation.*” Nonetheless, implementing the JPDO's plans and products in the national airspace system in a timely manner will be critical to the success of the NextGen initiative.

JPDO has recently released a draft JPDO Concept of Operations for public comment, and JPDO indicates that in the next few months it will publish the NextGen Enterprise Architecture (originally intended to be ready for release last summer) and the Integrated Work Plan.

## External Reviews of JPDO Progress

There have been several recent independent reviews of the status of the JPDO and its progress in developing NextGen. Some of the key findings and recommendations of those reviews are as follows:

### Government Accountability Office

In November 2006, the GAO issued a status report [GAO-07-25] on the NextGen initiative [Dr. Gerald Dillingham, one of the hearing witnesses, participated in the study and will be able to provide an update]. Some of the main findings and recommendations of the GAO study were as follows:

#### Findings

- *“JPDO’s partner agencies have agreed on a vision for NGATS [NextGen] and on eight strategies that broadly support the goals and objectives of NGATS.”*
- *“JPDO faces challenges in institutionalizing its collaborative effort, addressing planning and expertise gaps, establishing credibility with stakeholders, and harmonizing its work with other countries’ efforts to modernize their own air traffic management systems.”*
- *“To date, JPDO has not established some practices significant to institutionalizing its collaborative process, such as formalizing roles and responsibilities. Such practices are important because JPDO is fundamentally a planning and coordinating body that lacks authority over the key human and financial resources needed to continue developing plans and system requirements for NGATS.”*
- *“FAA, as the key implementer of the transition to NGATS, faces challenges...in obtaining the financial and technical resources needed to implement NGATS. FAA also faces challenges in finding ways to reduce costs or realize savings to help fund the costs of transitioning to NGATS while continuing to operate and maintain the current system. Finally, FAA faces challenges in obtaining the technical and contract management expertise needed to define, implement, and integrate the numerous complex programs and systems inherent in the transition to NGATS.”*

### Recommendations

- *“JPDO should finalize and present to the Senior Policy Committee for its consideration and action the MOU among the partner agencies to define their roles and responsibilities related to NGATS planning and development.”*
- *“[JPDO should] clarify the roles and responsibilities between JPDO and [the FAA’s] Air Traffic Organization in the planning, development, and transition from JPDO to FAA for implementation of NGATS.”*
- *“[JPDO should] develop written procedures for dispute resolution at all levels of the JPDO organization.”*
- *“[JPDO] should determine whether key stakeholders and expertise are not represented on JPDO’s integrated product teams, divisions, or elsewhere within its organization.”*
- *“FAA should work to determine whether it will need to contract with a Lead System Integrator, federally-funded not-for-profit corporation, or other technical or managerial entity to assist in the implementation of NGATS.”*

### **Department of Transportation Inspector General**

On February 12, 2007, the DOT Office of the Inspector General (OIG) released an audit report [AV-2007-031] on the JPDO. In that report, the OIG listed a number of actions that it considered to be critical for the JPDO to be able to make progress and to make the transition from planning to implementation. Those actions included such things as having JPDO:

- *“Finalize cost estimates, quantify expected benefits, and develop a roadmap for industry;*
- *Have FAA and NASA come to a clear understanding of the level of technical maturity NASA projects will have [so that any technology gaps will be identified]. FAA has historically relied on NASA for long-term air traffic management research;*
- *Establish linkage between the plans developed by JPDO and the implementation priorities of the Air Traffic Organization by delineating lines of responsibility and accountability for both;*
- *Develop and implement mechanisms for aligning resources between agencies; and*
- *Develop approaches for risk management and systems integration.”*

The OIG also recommended that the FAA Administrator:

- *“Report NGATS cost data along three vectors—developmental efforts, adjustments to existing programs, and NGATS implementation—when reporting NGATS financial requirements to Congress and stakeholders;*

- *Determine the level of technical maturity of NASA’s research projects developed for NGATS initiatives;*
- *Review existing ongoing modernization programs to determine if they are still needed and, if so, what adjustments in cost, schedule, and performance parameters will be needed;*
- *Include information in the annual JPDO progress report on specific research projects with budget data for FAA developmental efforts as well as budget data of other agencies that are being leveraged and specify how the ongoing research is supporting the JPDO;*
- *Determine what skill sets and expertise, with respect to software development and system integration, will be required by the ATO and JPDO—and how they will be obtained—to manage and execute NGATS initiatives;*
- *In planned NGATS demonstration projects, develop sufficient data to establish a path for certifying new systems and identify the full range of adjustments to policies and procedures needed to get benefits;*
- *Continue to develop and refine procedures that address conflict of interest issues with JPDO initiatives and conduct annual reviews of the matter as the role of the JPDO evolves from planning to implementation;*
- *Use technology readiness levels in assessing the maturity of research conducted at other agencies to help speed technology transfer and the introduction of new capabilities into the National Airspace System; and*
- *Fund targeted human factors research to ensure that the changing roles of controllers and pilots envisioned by the JPDO can safely be accommodated. This will require a re-prioritization of ongoing efforts at FAA and close cooperation with NASA, which also conducts human factors research.”*

The OIG report also identified a number of “*key research efforts needed for NGATS,*” including: Automation Improvements, Separation Standards for an Automated Environment, Cockpit Displays, and Weather Integration into Automation. The OIG indicated that over seventy research or policy areas have been identified as needing further investigation and stated that the research areas would be needed “*regardless of the technology ultimately selected.*” In addition, the OIG report stated that: “*To see benefits in the 2012 timeframe, as projected by the JPDO, FAA officials have told us that work must begin now, given the lag time between development and actual deployment. It is not yet clear who or what agency will do this research. To be effective, the research must also focus on policies, procedures, and methods for certifying systems as safe for use.*”



## Other Concerns

### Uncertainty over NextGen Costs

In testimony before the Committee on Transportation and Infrastructure, Subcommittee on Aviation, February 14, 2007, Dr. Dillingham reported “A JPDO official told us they have submitted a limited NextGen cost estimate to OMB with the 2008 budget request.” In his written opening statement for a March 22, 2007 Senate Commerce, Science and Transportation Committee hearing, Charles Leader wrote “Requirements for the first ten years range from \$8 billion to \$10 billion. Preliminary estimates suggest that the investments necessary to achieve the end state NextGen system range from \$15 billion to \$22 billion in FAA funding.”

As noted in the November GAO study, “There are a number of drivers in the current uncertainty over the cost of NGATS. One of these drivers is the decision about which technologies to include... A second driver is the sequence for replacing current technologies with NGATS technologies. A third driver is the length of time required for the transformation to NGATS, since, according to JPDO, a longer period would impose higher costs. JPDO’s first draft of its enterprise architecture should constrain some of these variables.”

The November GAO study reported: “The FAA’s Research, Engineering and Development Advisory Committee (REDAC)—developed a limited, preliminary cost estimate, which officials have emphasized is not yet endorsed by any agency. The REDAC estimated that FAA’s budget under a NGATS scenario would average about \$15 billion per year through 2025, or about \$1 billion more annually (in today’s dollars) than FAA’s fiscal year 2006 appropriation.”

In Charles Leader’s opening statements last week, he reported “MITRE, working with FAA, has developed a preliminary estimate of the NextGen avionics costs to users. It concludes that a wide range of costs are possible, depending on the bundling of avionics and the alignment of equipage schedules. The most probable range of total avionics costs to system users is \$14 billion to \$20 billion.”

The November GAO study reported that “JPDO has also begun working with its stakeholders to develop initial cost information through a series of investment analysis workshops. Representatives from commercial and business aviation, equipment manufacturers, and ATC systems developers attended the first workshop, held in April 2006. The second workshop, held in August 2006, was for those involved with general aviation and public safety operations. JPDO plans to invite representatives from airports and regional, state, and local planning bodies to the third workshop. According to the JPDO, participants in these

*workshops are asked to discuss and comment on the appropriateness of JPDO's current assumptions about factors that drive private sector costs."*

### **NASA's Role**

Both the above-mentioned GAO and DOT OIG reports expressed concern over the potential impact of NASA's restructuring of its aeronautics program [as has FAA's RE&D Advisory Committee], noting the FAA has traditionally relied on NASA for key air traffic management research taken to a relatively mature level of technology readiness. They cite the potential "technology gap" and resulting delays to NextGen if NASA reduces its involvement in those research areas. Those concerns are echoed by a number of the hearing witnesses.

### **FAA's Management and Acquisition Performance**

In 1995, the Government Accountability Office (GAO) designated FAA's air traffic control modernization program as high risk because of systemic management and acquisition problems. In its November 2006 report, the GAO noted that the FAA has taken a number of actions aimed at improving its management practices and institutionalizing these improvements by attempting to ensure that the reforms are fully integrated into the agency's structure and processes. However, GAO also noted that transforming organizational cultures requires substantial management attention, as it can take several years for such initiatives to be fully implemented and cultures transformed in a sustainable manner.

However, follow-through on these changes must survive the loss of some of the leaders during the change: The agency's COO left in February 2007, after serving 3 years, and the FAA Administrator's term ends in September 2007. Moreover the current director of the JPDO is relatively new, having assumed that position in August 2006. He is the third director of the JPDO in the little more than three years that the JPDO has been in existence.

### **Human Factors**

To quote the GAO report, the NextGen Concept of Operations "*envisions an increased reliance on automation, which raises questions about the role of the air traffic controller. Similarly, the Concept of Operations envisions that pilots will take on a greater share of the responsibility for maintaining safe separation and other tasks currently performed by controllers. This raises human factors questions about whether pilots can safely perform these additional duties. Although the JPDO has begun to model how shifts in air traffic controllers' workloads would affect their performance, it has not yet begun to model the effect of how this shift in workload to pilots would affect pilot performance. According to the JPDO, the change*

*in the roles of pilots and controllers is the most important human factors issue involved in creating NextGen, but one that will be difficult to research...*

### **Aviation Weather**

It is estimated that about seventy percent of the delays in the national airspace system are weather-related. It is anticipated that increases in the volume of air traffic in the coming decades will make the impact of weather on the operation of the system even more pronounced than it is today. The JPDO established an Integrated Product Team (IPT) to address aviation weather issues, and the JPDO has recently announced its intention to establish an aviation weather program office. Dr. Carmichael—who is Co-Lead of the Weather IPT’s Forecasting Group and a hearing witness—will discuss progress and problems in addressing aviation weather in the NextGen planning. One issue Dr. Carmichael raises in his testimony is the growing uncertainty over NASA’s funding and programmatic commitment to research in the integration of weather into automated decision support tools, wake turbulence research, and integration of unmanned aircraft observing systems into the national airspace system.

### **International “Harmonization”**

Compatibility of the U.S. NextGen system with the air traffic modernization efforts being planned elsewhere in the world is very important to U.S. and international air carriers. Failure to ensure compatibility could lead to air carriers having to equip their fleets with two sets of communications, navigation, and surveillance systems—something that could be very expensive. The Europeans currently have an initiative underway, the “Single European Sky Air Traffic Management Research Programme (SESAR). It differs in a number of respects from the U.S. NextGen initiative. FAA and the European Commission are attempting to ensure that appropriate coordination takes place, and they signed a Memorandum of Understanding to the effect in July 2006.

### **Establishing Credibility with Stakeholders That the Government Is Fully Committed to NextGen**

As noted by external experts on a GAO-sponsored panel, JPDO also faces challenges in establishing credibility among stakeholders. For example, some members of the panel told GAO that [to quote GAO], *“although JPDO has produced much activity, they did not feel the effort had demonstrated sufficient progress; some stakeholders said that both the 2004 Integrated Plan and the 2005 Progress Report lacked sufficient detail, such as definition of research needs.”*

## ATTACHMENT 1

### Excerpts from Title VII of H.R. 2115 (Public Law 108-176)

#### **SEC. 709. AIR TRANSPORTATION SYSTEM JOINT PLANNING AND DEVELOPMENT OFFICE.**

(a) ESTABLISHMENT- (1) The Secretary of Transportation shall establish in the Federal Aviation Administration a joint planning and development office to manage work related to the Next Generation Air Transportation System. The office shall be known as the Next Generation Air Transportation System Joint Planning and Development Office (in this section referred to as the `Office').

(2) The responsibilities of the Office shall include--

(A) creating and carrying out an integrated plan for a Next Generation Air Transportation System pursuant to subsection (b);

(B) overseeing research and development on that system;

(C) creating a transition plan for the implementation of that system;

(D) coordinating aviation and aeronautics research programs to achieve the goal of more effective and directed programs that will result in applicable research;

(E) coordinating goals and priorities and coordinating research activities within the Federal Government with United States aviation and aeronautical firms;

(F) coordinating the development and utilization of new technologies to ensure that when available, they may be used to their fullest potential in aircraft and in the air traffic control system;

(G) facilitating the transfer of technology from research programs such as the National Aeronautics and Space Administration program and the Department of Defense Advanced Research Projects Agency program to Federal agencies with operational responsibilities and to the private sector; and

(H) reviewing activities relating to noise, emissions, fuel consumption, and safety conducted by Federal agencies, including the Federal Aviation Administration, the National Aeronautics and Space Administration, the Department of Commerce, and the Department of Defense.

(3) The Office shall operate in conjunction with relevant programs in the Department of Defense, the National Aeronautics and Space Administration, the Department of Commerce and the Department of Homeland Security. The Secretary of Transportation may request assistance from staff from those Departments and other Federal agencies.

(4) In developing and carrying out its plans, the Office shall consult with the public and ensure the participation of experts from the private sector including representatives of commercial aviation, general aviation, aviation labor groups, aviation research and development entities, aircraft and air traffic control suppliers, and the space industry.

(b) INTEGRATED PLAN- The integrated plan shall be designed to ensure that the Next Generation Air Transportation System meets air transportation safety, security, mobility, efficiency, and capacity needs beyond those currently included in the Federal Aviation

Administration's operational evolution plan and accomplishes the goals under subsection (c). The integrated plan shall include--

- (1) a national vision statement for an air transportation system capable of meeting potential air traffic demand by 2025;
- (2) a description of the demand and the performance characteristics that will be required of the Nation's future air transportation system, and an explanation of how those characteristics were derived, including the national goals, objectives, and policies the system is designed to further, and the underlying socioeconomic determinants, and associated models and analyses;
- (3) a multiagency research and development roadmap for creating the Next Generation Air Transportation System with the characteristics outlined under clause (ii), including--
  - (A) the most significant technical obstacles and the research and development activities necessary to overcome them, including for each project, the role of each Federal agency, corporations, and universities;
  - (B) the annual anticipated cost of carrying out the research and development activities; and
  - (C) the technical milestones that will be used to evaluate the activities; and
- (4) a description of the operational concepts to meet the system performance requirements for all system users and a timeline and anticipated expenditures needed to develop and deploy the system to meet the vision for 2025.

(c) GOALS- The Next Generation Air Transportation System shall--

- (1) improve the level of safety, security, efficiency, quality, and affordability of the National Airspace System and aviation services;
- (2) take advantage of data from emerging ground-based and space-based communications, navigation, and surveillance technologies;
- (3) integrate data streams from multiple agencies and sources to enable situational awareness and seamless global operations for all appropriate users of the system, including users responsible for civil aviation, homeland security, and national security;
- (4) leverage investments in civil aviation, homeland security, and national security and build upon current air traffic management and infrastructure initiatives to meet system performance requirements for all system users;
- (5) be scalable to accommodate and encourage substantial growth in domestic and international transportation and anticipate and accommodate continuing technology upgrades and advances;
- (6) accommodate a wide range of aircraft operations, including airlines, air taxis, helicopters, general aviation, and unmanned aerial vehicles; and
- (7) take into consideration, to the greatest extent practicable, design of airport approach and departure flight paths to reduce exposure of noise and emissions pollution on affected residents.

(d) REPORTS- The Administrator of the Federal Aviation Administration shall transmit to the Committee on Commerce, Science, and Transportation in the Senate and the Committee on Transportation and Infrastructure and the Committee on Science in the House of Representatives--

- (1) not later than 1 year after the date of enactment of this Act, the integrated plan required in subsection (b); and

(2) annually at the time of the President's budget request, a report describing the progress in carrying out the plan required under subsection (b) and any changes to that plan.

(e) AUTHORIZATION OF APPROPRIATIONS- There are authorized to be appropriated to the Office \$50,000,000 for each of the fiscal years 2004 through 2010.

**SEC. 710. NEXT GENERATION AIR TRANSPORTATION SENIOR POLICY COMMITTEE.**

(a) IN GENERAL- The Secretary of Transportation shall establish a senior policy committee to work with the Next Generation Air Transportation System Joint Planning and Development Office. The senior policy committee shall be chaired by the Secretary.

(b) MEMBERSHIP- In addition to the Secretary, the senior policy committee shall be composed of--

(1) the Administrator of the Federal Aviation Administration (or the Administrator's designee);

(2) the Administrator of the National Aeronautics and Space Administration (or the Administrator's designee);

(3) the Secretary of Defense (or the Secretary's designee);

(4) the Secretary of Homeland Security (or the Secretary's designee);

(5) the Secretary of Commerce (or the Secretary's designee);

(6) the Director of the Office of Science and Technology Policy (or the Director's designee); and

(7) designees from other Federal agencies determined by the Secretary of Transportation to have an important interest in, or responsibility for, other aspects of the system.

(c) FUNCTION- The senior policy committee shall--

(1) advise the Secretary of Transportation regarding the national goals and strategic objectives for the transformation of the Nation's air transportation system to meet its future needs;

(2) provide policy guidance for the integrated plan for the air transportation system to be developed by the Next Generation Air Transportation System Joint Planning and Development Office;

(3) provide ongoing policy review for the transformation of the air transportation system;

(4) identify resource needs and make recommendations to their respective agencies for necessary funding for planning, research, and development activities; and

(5) make legislative recommendations, as appropriate, for the future air transportation system.

(d) CONSULTATION- In carrying out its functions under this section, the senior policy committee shall consult with, and ensure participation by, the private sector (including representatives of general aviation, commercial aviation, aviation labor, and the space industry), members of the public, and other interested parties and may do so through a special advisory committee composed of such representatives.