

REALIGNMENT OF THE JOINT PLANNING & DEVELOPMENT OFFICE

April 2007

BACKGROUND

The Joint Planning & Development Office (JPDO) was created in 2003 by Congressional Legislation contained in Vision 100. The JPDO was tasked as a joint entity to catalyze planning and coordinate research, demonstrations, and development across the several Federal departments and agencies responsible to create the Next Generation Air Transportation System (NextGen). The JPDO has been successful in its first years of effort in developing conceptual and technical descriptions of what NextGen will consist of as well as developing a plan for the coordinated implementation of that transformed future system.

In February, the JPDO published for stakeholder and public review a Concept of Operations providing a textual description of the future NAS as envisioned for 2025. In March, the JPDO provided to Congress an annual report of progress containing a preliminary estimate of the cost of the transformed system between 2008 and 2025. In May, the JPDO will release the Enterprise Architecture providing a technical documentation of key NextGen capabilities including interfaces of the NextGen system with its legacy components and the infrastructures of its partner Federal entities. In July, the JPDO will begin stakeholder review of a baseline Integrated Work Plan that outlines the operational improvements required to achieve the NextGen transformation. The plan identifies the research and development, implementation activities and policy changes required to achieve those operational improvements as well as highlighting the interdependencies among the activities.

These key planning documents – the Enterprise Architecture, ConOps, and Integrated Work Plan – will be updated on an approximately annual cycle to reflect lessons learned, research results, policy decisions, implementation progress, etc.

CURRENT CHALLENGE

With the delivery of the foundational planning documents for NextGen, it is appropriate for the JPDO to shift its primary focus from planning to one that facilitates implementation within and among its partner agencies. Late in 2006, the JPDO provided high-level research and implementation guidance to its partner agencies to facilitate cross-agency activities to support the NextGen development effort. This is the first step in providing joint leadership in the development of plans and budgets to be executed in FY09. The JPDO has been tasked by Office of Management and Budget (OMB) to develop a joint agency Managing Partner Exhibit 300 to identify all Federal investment activity related to NextGen. That budgetary document will be an important tool as the JPDO coordinates and facilitates NextGen efforts across the implementing agencies. In addition to coordinating funding activities through OMB, the JPDO will also work with OMB's Chief Architect to ensure that the NextGen enterprise architecture reflects the appropriate integration and evolution of the agency architectures.

JPDO REALIGNMENT

The refocusing of the JPDO from long-term planning to near-term implementation facilitation requires realignment of the Office's internal structures and working processes. The realignment

has been reviewed extensively with government and industry stakeholders and approved by the FAA Administrator. The realignment maintains or improves opportunities for stakeholders to participate in JPDO activities. The high-level organization chart (Figure 1) reflects some of the obvious realignments to structure and also how the governing and advisory bodies remain unchanged. Principal among the changes are:

- Evolution of the Master Integrated Product Team (MIPT) into an Integration Council (IC)
- Creation of a Regulatory Council (RC)
- Reformation of the Integrated Product Teams (IPTs) into Working Groups (WGs)
- Creation of a Joint Architecture & Engineering Board (JAEB)

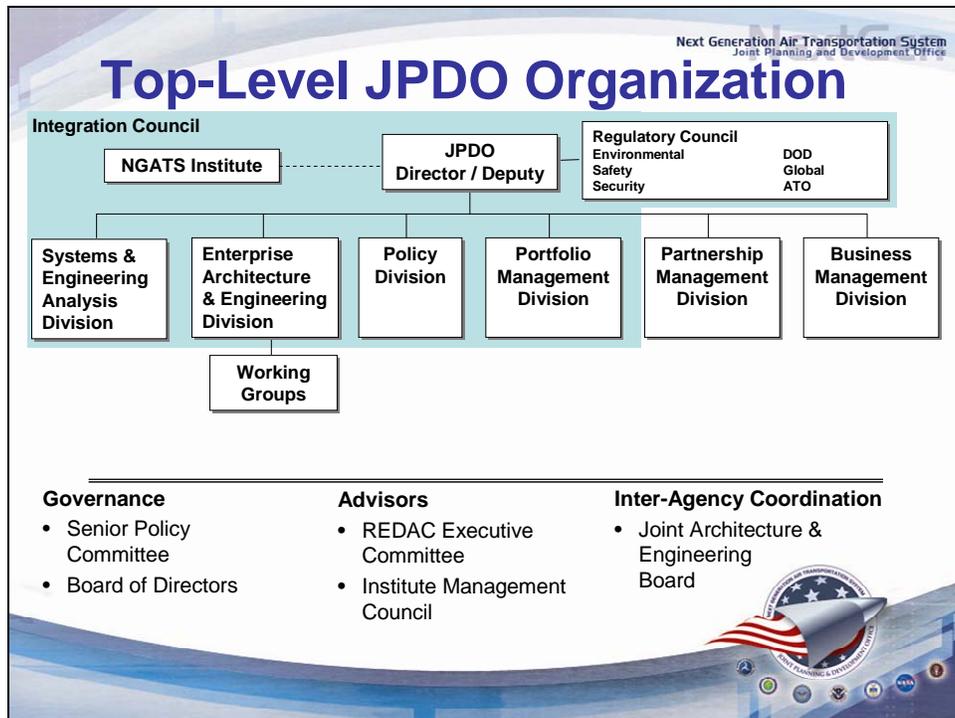


Figure 1

Integration Council

The Integration Council (IC) is the most obvious acknowledgement of the shift in JPDO focus from planning to implementation. While the MIPT was appropriate and inclusive in the context of conceptualizing and planning, its size – the meetings often exceeded 50 attendees – and the need to facilitate broad and free-ranging topics rendered it inadequate as a forum for evaluating focused staff work to support decision-making. The IC will concentrate upon the evaluation of focused staff work to support NextGen implementation recommendations and decisions. Its charter is to evaluate proposed concepts to be incorporated into the NextGen system and to evaluate overall implementation progress against plans. As steward of the NextGen 2025 Vision, it is well placed to evaluate a proposed concept’s impact on and compatibility with the NextGen design intent. The IC will play a similar integrative role in acting as the agent addressing proposals made by the JAEB. The IC’s membership reflects the membership of the major stakeholders in the future system.

- The JPDO Director and Deputy provide executive direction

- The JPDO Technical Division Directors and Chief Architect provide technical continuity
- The Regulatory Council provides the counsel of those agencies with regulatory and operational authority
- Three members nominated by the NextGen Institute provide private sector technical expertise and perspective.

Regulatory Council

The Regulatory Council (RC) organizationally recognizes the regulatory, procedural, inter-governmental, and certification issues to be addressed in transforming the current NAS and is chaired by the JPDO Director. These requirements must be anticipated and prepared for during implementation to ensure that they do not create barriers to execution. Similarly, there will be regulatory requirements that may serve as constraints to existing or future NextGen concepts. These also must be anticipated and addressed. The governmental membership of the RC (Figure 2) reflects those with regulatory authority over, or operational control of, parts of the NAS:

- FAA Aviation Safety
- FAA Environmental Policy
- FAA Air Traffic Organization (ATO)
- FAA ATO International (Global Harmonization)
- Department of Homeland Security
- Department of Defense



Figure 2

Working Groups

The reformation of the IPTs into Working Groups (WGs) is a change necessary to ensure that complete and quality staff work is accomplished to support recommendations for technology,

procedures, and policies to be implemented under NextGen. Several IPTs will be renamed to more accurately reflect their focus and a new WG focused on aircraft will be constituted, (Figure 3).

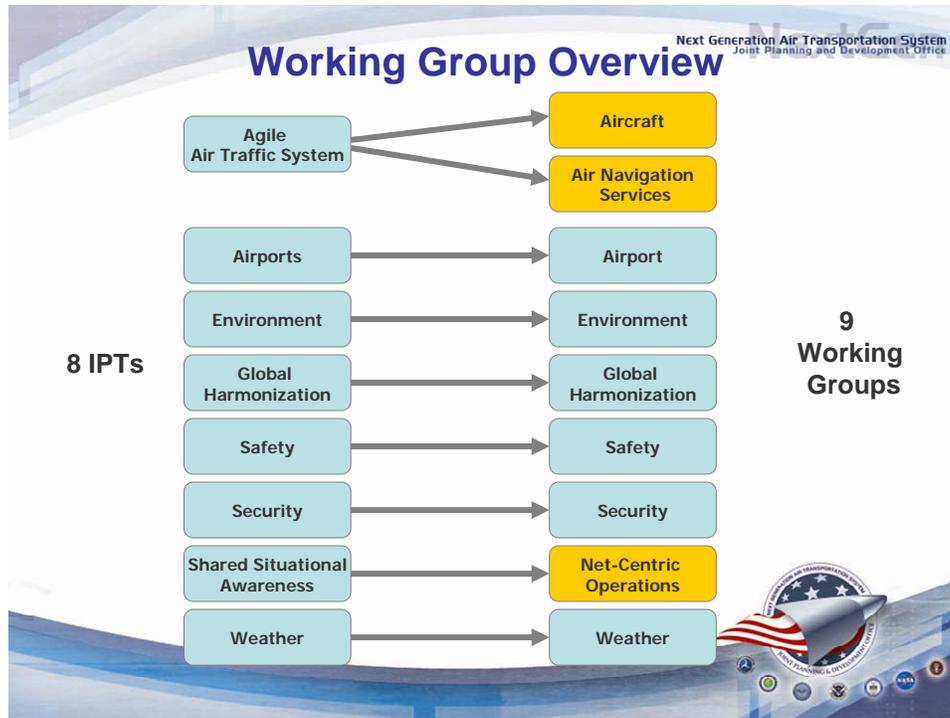


Figure 3

The change intended in creating the working groups is more than a semantic refinement. The intent of the realignment is to create teams capable of problem-solving staff work resulting in specific, fact-based conclusions and recommendations capable of being implemented into NextGen or of changing its tactical direction in critical areas. As envisioned, the WGs would operate on a model similar to that successfully employed by RTCA and familiar to the aviation community. Each WG would be co-chaired by a federal employee and an industry representative nominated by the NextGen Institute and accepted by the Director of the JPDO. Each WG would have a small executive committee to provide WG oversight, direction, and organizational continuity. Working under the direction of the executive committee would be study teams with transient charters focused on specific issues. Each study team would be given a specific objective, resources, and a deadline to report out to the WG leadership. Study teams would be staffed from the WG membership, initially transferred from the originating IPT, and augmented by other private sector and government personnel as necessary. (Figure 4)

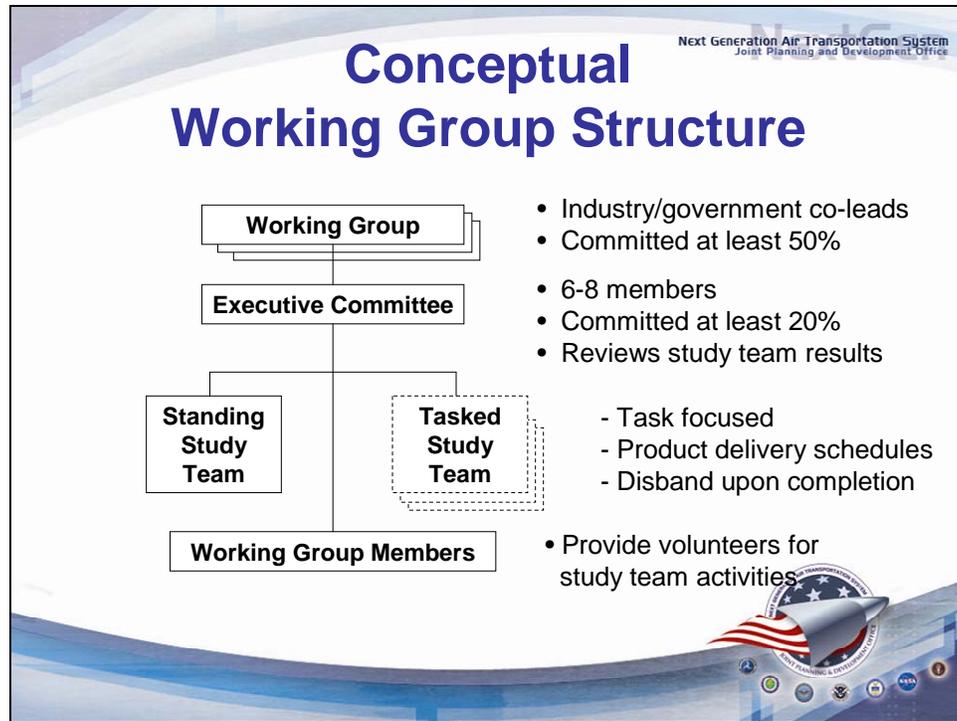


Figure 4

Study teams would dissolve upon completion of their assignment. After acceptance by the WG, recommendations would be forwarded to the IC for evaluation of incorporating the recommendation into the NextGen implementation process. WGs might also selectively establish standing committees to address inter-related and longer-term, recurring issues; as, for example, a standing avionics study team within the aircraft WG.

Joint Architecture & Engineering Board

It is evident that a great deal of integration across governmental entities will be driven by the alignment of partner agencies' enterprise architectures under the oversight of OMB. To address this integrative activity, the JPDO will form a Joint Architecture & Engineering Board (JAEB). The JAEB serves as the standing governance body serving the JPDO Integration Council to implement an effective architecture that manages the application and use of information technology in meeting NextGen mission and business needs. The Board will be co-chaired by the JPDO Chief Architect and the JPDO Enterprise Architecture & Engineering Division Director. Actions of the JAEB will be carried by consensus. Membership will consist of representatives appropriate to represent the CIO's and Chief Architects of the NextGen partner federal agencies as nominated by those entities. The Board will meet as necessary.

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Organization alone does not guarantee enterprise success. The JPDO realignment aims to increase the likelihood of success in supporting NextGen implementation by increasing the ability of industry and government to do collaborative problem solving of priority issues and to link the cross-agency governmental effort at the research, implementation, budgetary, and architectural levels.