



NextGen – What Can Be Done Now

BACKGROUND

The Civil Aviation Leadership Council Working Group has been tasked to generate ideas and actions to focus AIA on the high priority initiatives that will best benefit the member companies. The working group has identified the top two priority areas as the Next Generation Air Transportation System (NextGen) and the environment. The working group believes that these two areas are high priorities and are also inseparable. NextGen will significantly improve the overall environmental impact of civil aviation but environmental concerns will also be an obstacle in some geographical areas. The working group is developing detailed recommendations to focus on the environment and NextGen. This paper provides more detail about our NextGen ideas.

In considering NextGen initiatives the working group is recommending that AIA focus in two areas. First, to convince the next political Administration that the air transportation system and implementation of a next generation satellite based air traffic control system must be a high priority. The second area is focused on what can be done now to ensure that the FAA is well positioned and capable of actually implementing the NextGen system. This paper will provide some detail for this topic.

In 2003, the multi-agency Joint Planning and Development Office (JPDO) was established to create a plan for the development of a next generation air transportation system. The Secretary of Transportation was given the Administration lead and the JPDO office was created in the FAA reporting jointly to the FAA Administrator and COO. Over the past few years the JPDO has created a concept of operation document; an architecture document that at a high level defines the next generation system; and is completing a very detailed work plan. Now that the vision creation stage is completed, it is time to embark on the difficult task of turning the planning into an adequately funded executable implementation plan. A recent AIA press release says “NextGen is at the stage of development where planning is moving into application to advanced technologies”.

CURRENT STATUS

AIA has raised many concerns about the JPDO, including funding; organization, lack of coordination; industry involvement and FAA’s ability to implement NextGen. AIA has made numerous constructive

recommendations and has influenced current House and Senate versions of the FAA Reauthorization legislation. Our working group believes that the current most significant issue is that the FAA is not adequately positioned to successfully implement NextGen.

Although the JPDO has had some limited success in developing plans, the JPDO is not an implementation organization. Much work needs to be done to define and conduct specific research and development activities; conduct operational trials and proof of concept demonstrations; define the technical and safety specifications for new systems; develop and integrate the new systems; and then procure, install and certify the new systems for operational use. The JPDO does not have the responsibility or accountability for any of these implementation activities. The JPDO Director reports jointly to the FAA Administrator and the COO. He has no authority over the program management people in the Air Traffic Organization (ATO) who acquire and implement new systems and who also are responsible for the day to day operation of the world's busiest air traffic control system.

The FAA understands that the JPDO is not an implementation organization and therefore is creating a new office to manage the integration and implementation of NextGen. To accomplish this, the FAA is expanding an existing capacity enhancement plan, formally known as the Operational Evolution Plan (OEP) to become the chief operational implementation plan for NextGen. The expanded OEP – now called the Operational Evolution Partnership - will detail the path to the NextGen system, integrating a myriad of FAA planning activities into one blueprint. The FAA has created a new executive level position within the Air Traffic Organization to “guide the implementation of the NextGen plan,” and is currently searching for someone to fill the position.

The OEP is a planning and implementation process that has proven to be successful over the past eight years in successfully implementing new capacity increasing projects like new runways that require coordinated actions by many state, local and Federal organizations. The OEP can be expanded to provide the integration planning necessary for NextGen but it must be closely and continuously managed by a senior FAA executive who can bring commitments from the entire organization to the implementation process. The problem with the current FAA direction is the OEP Director will work within the COO organization and will not have authority over the JPDO or the FAA program managers who will implement new systems. The relationship between the OEP and the integrated work plan being developed by the JPDO is not clear to industry.

In short, the FAA has a planning organization – the JPDO; a process implementation organization – the OEP; and various program managers responsible for their own programs throughout the ATO. No one in the FAA below the COO is responsible for overall integration, coordination, and implementation of NextGen. The COO is only partially accountable, because the JPDO also reports to the Administrator. The COO and his senior executives are responsible for running the day to day operation. The operational, safety, and labor issues they face every day are enormous and it is not surprising that they are focused on today's operation and not NextGen.

Although our working group has concerns about funding, the current construct of the JPDO working groups and overall meaningful industry involvement, we believe the single most important thing that AIA can do now is to encourage the FAA to designate an executive who has budget and program authority over the JPDO, OEP and program managers and who has the authority to implement. NextGen is a complex system that requires a structured and disciplined program management and systems engineering approach. It requires strong dedicated program management leadership. We do not think that approach exists today.

RECOMMENDATION

The working group recommends that AIA aggressively work to convince the next political administration that the nation's air transportation system must be a funding and implementation priority. At the same time, we recommend that AIA work to ensure that the FAA is currently postured to successfully begin to implement NextGen. Specifically we recommend:

1. FAA should create a structure and executive leadership that has the over-all charter and authority to implement FAA's NextGen and OEP capabilities. The planning, monitoring, development, acquisition and implementation of NextGen should be under common leadership. Dedicated funding and accountability should reside in this office.
2. In addition to changing the structure and authority at FAA, the FAA should continue to expand the OEP's content to enable the FAA to use it to guide integration and implementation of NextGen. The OEP should encompass the full scope of NextGen needs, from the development of integrated system requirements to acquisition and implementation.
3. AIA should offer the program management skills and experiences of member companies to the FAA to aid in establishing a structure that will be successful.