

# Advancing ATM

Evolving air traffic management (ATM) is essential, said David McMillan, director general of Eurocontrol, and the need for change is quite clear. “The big challenge is that the industry is broadly healthy. This year we expect 27,000 operations a day [in Europe]; by 2020 that will rise to 50,000 a day.”

Speaking at a Flight Safety Foundation Newsmaker Breakfast<sup>1</sup> in Washington, D.C., McMillan said the current ATC system “is a high-technology system managed in an old-fashioned way, each aircraft directly controlled,” one controller at a time.

The two major efforts to move to a new ATM paradigm, the U.S. Federal Aviation Administration’s (FAA’s) NextGen program, and Europe’s Single European Sky ATM Research (SESAR) effort, must end up with systems “that work together, with global interoperability.”

The publication earlier this year of the ATM Master Plan, the final step of the SESAR definition phase, “is very important to get that level of commitment,” McMillan said.

The approaches to planning NextGen and SESAR are quite different, with the European effort putting “a lot of planning into a detailed system, spending a lot of time working on the architecture of the system,” McMillan said.

“It is not necessarily a good thing that SESAR is ahead [of NextGen]. We’re spending a very significant amount of money.” So far, it seems, “we both understand what the issues are in similar ways.”

If the United States is not able to fund NextGen in the way it needs to be funded, “it would be a concern,” McMillan said, “but so far we don’t have that impression.”

Organization of European air traffic control (ATC) is another challenging issue, McMillan said. “There are 70-odd ATC centers in Europe; there’s a cost in that regardless of the technology you put in place.”

In Europe, “we need to optimize the system at the level of the national service providers. Next is to develop a regional system,” while looking at eventually operating on a European level.

Having said that, McMillan gave credit for the changes that have taken place since waves of delays washed over European airspace in the 1990s. However, “we do fear an increase [in delays] in 2009 and 2010 due to changes in Germany, the U.K. and Maastricht as new technology comes on,” McMillan said. Worsening the delay outlook is the fact that over the past two summers weather events “have become more significant, plus we are going more toward [airline] hubbing.”

Environmental concerns about aviation in Europe “focuses on CO<sub>2</sub> [carbon dioxide], but noise is still very big,” McMillan said. Several ATM initiatives have helped, he said, pointing at the work of the CFMU (Central Flow Management Unit) to keep aircraft on the ground instead of holding en route, and new “flex use” of military airspace. However, the flex use potential “is not always used by airlines. We

try to convince airlines to use it when it is available. A 6 percent reduction [in CO<sub>2</sub>] can be achieved” if full use is made of the airspace, he said.

Continued attention to reducing airport noise also produces more CO<sub>2</sub>, with noise-reducing routes adding to flight times and gas production.

“The biggest constraint in Europe is airport capacity, especially runway capacity,” McMillan said. “The debates in Europe will center on what local people think about adding runway capacity. There needs to be an understanding of how much the world economy depends on mobility, but the battles will be fought locally.”

## Note

1. A Newsmaker Breakfast is an on-the-record, informal opportunity for the media to interact with aviation leaders from around the world.



McMillan