

The data revolution

➤ SIX YEARS AGO, COLLABORATION IN EUROPE TOOK A BIG STEP FORWARD WITH THE LAUNCH OF THE EUROPEAN AIS DATABASE, WHERE MANY STATES NOW COORDINATE THEIR AERONAUTICAL DATA. SYLVIANE WYBO OF EUROCONTROL ASKS WHETHER IT HAS DELIVERED ON ITS PROMISE OF COST SAVINGS, EFFICIENCY AND NEW SERVICES FOR THE PUBLIC AND THE AVIATION INDUSTRY.

KEY FACTS

- EAD Basic, the public website that provides access to the world's largest repository of aeronautical information, has more than 47,000 registered users.
- Over 40 countries are contributing to the new platform, and 75% of those are maintaining their data directly on EAD.
- Canada and New Zealand are now connected to the system and Japan's database will start to exchange information with EAD from mid-2009.

There has been a major transformation in the management of Europe's aeronautical data in recent years and, to a great extent, the fragmented reporting structures have been swept away by the European aeronautical information services database (EAD). No longer do states have to manage their own databases.

EAD is a centralised database of quality-assured aeronautical information. Previously, every state in Europe was carrying out the same task of maintaining its own data repository. Now, over 40 countries are contributing to the new platform, and 75% of those are maintaining their data directly on EAD.

'No longer do states have to manage their own databases.'

EAD Basic, the public website that provides access to the world's largest repository of aeronautical information, has more than 47,000 registered users, including private pilots, training schools and the general public. There are also dedicated solutions for aircraft operators, airports, business aviation, software developers and all operational staff dealing with AIS matters. It enables users to quickly and easily create ad-hoc pre-flight information bulletins, generate standard aeronautical data reports and browse aeronautical information publications and charts.

Among the states already maintaining their data directly on EAD, the system has become a firm

platform for sharing and improving procedures and processes. Furthermore, the dialogue between air navigation service providers (ANSPs) and their close interaction with data users helps to accelerate the development process, helping EAD to evolve faster.

Living up to expectations

From the outset a single source for all aeronautical information promised many advantages. EAD would be a safer, faster, more accurate and cost-effective solution than the previous regime of fragmented AIS data collection and delivery.

What is clear after six years is that EAD has not failed to deliver. 'The most tangible benefits are the improvements in delivery time and accuracy. The progress we have made with data providers means that they deliver more information on time. 100% of the deadlines are not met, but there is an obvious improvement,' says Sylviane Wybo, head of EAD and AI bureau at EUROCONTROL.

Having proved to be faster, EAD has also succeeded in raising the quality of the data. 'Quality has certainly improved. When data providers migrate to the database they first do a complete review to improve data quality. Also, we continually monitor the quality of the data, which is refined and checked before it is entered. Data providers now have many common procedures, which means more harmonisation between the states' data,' she comments. As more states join the EAD community the gains in speed and quality are accentuated, so there is no doubt that much more value can be uncovered in the future.

When providers start to use EAD they will notice that it also delivers on cost efficiency. Some

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data providers keep their own database and connect it to EAD, while others use only EAD and access it directly through terminals. Both approaches will reduce costs, but direct use of EAD eliminates the expense of running a separate database.

‘All data providers make some savings as they have worldwide aeronautical information processed and made accessible for free. Also, the centralisation of processes means smaller human resources requirement,’ Wybo remarks.

As for whether EAD is a safer approach to data management there is no easily quantifiable answer, but there is no doubting that the strong safety case behind its development has been proven.

Room for manoeuvre

There is still more to come from EAD and its evolution will be defined in part by the closer interaction between data providers and users. ‘ANSPs want to provide the services that users need, not only what is required by ICAO, for instance. EAD is in the middle bringing users and providers much closer, and this is partly what will help it grow worldwide,’ says Wybo.

EAD has clearly been a successful venture, and if proof were needed it comes in the form of growing interest from outside the European Civil Aviation Conference (ECAC) area. International expansion

will most likely be the dominant factor in shaping EAD in the years ahead. ‘There is a lot of interest in joining EAD or copying the model and sharing our experience. In the last few months there has been an explosion of interest and we are in talks with states on the other side of the world,’ she says.

Canada and New Zealand are now connected to the system and Japan’s database will start to exchange information with EAD from mid-2009. Discussions are also ongoing with countries in North Africa, including Egypt, Syria and Jordan, which have firm plans to connect to EAD.


‘We are also talking to people in Singapore, the Philippines and South Africa about direct connection or the development of similar models. Either approach is fine. The important thing is to exchange aeronautical information. People were very cautious at first, but now they have seen that EAD is working, so I am very optimistic about its future,’ she adds.

There is certainly more hard work ahead for Wybo and her colleagues, as well as for ANSPs, but the effort so far has been rewarded. As a result there is no lack of willingness to push forward. Users and data providers are working together as never before, and the momentum and belief behind EAD as a digital gateway to the future is growing all the time. ○




SYLVIANE WYBO


➤ Sylviane Wybo has been deeply involved in the EAD programme since 1997. In July 2004, she was appointed EAD manager, responsible for the EAD service.



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