



Jane's Airport Review

Operators learn from dAIR

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The Decarbonised Airport Regions (dAIR) project, which spent three years exploring ways to reduce CO₂ emissions at airports, concluded on 13 October with a final meeting in Brussels.

Members of the EUR5 million (USD6.6 million) programme - mainly local government organisations, regional planners, policymakers, environmental experts, and airport operators - claimed a successful exchange of ideas as a result of dAIR.

In particular, dAIR sought to improve surface access to airports as a way of cutting carbon emissions. Other measures included the use of renewable fuels for passenger transport and airside operations.

By following the recommendations of the dAIR project, an airport could save up to 122,843 tonnes of CO₂ per year.

The project identified problems and solutions at specific airports, culminating in documents outlining best practices. This in turn helped 14 public authorities and airport operators in Europe to understand the larger framework surrounding the air quality at airports.

At the final dAIR meeting, the chief executive officers (CEOs) of Bologna, Eindhoven, and Stockholm Arlanda airports presented their steps to cut CO₂ output and reduce energy consumption.

At Stockholm, as part of Swedavia's wider environmental strategy, the airport operator ordered 29 biogas-fuelled snow removal vehicles from Aebi Schmidt in a EUR200 million investment. Eight of the vehicles have been delivered to date. The towed jet sweepers run on up to 70% biogas, with the remainder from environmentally sustainable diesel.

Swedavia CEO Torborg Chetkovich noted that the acquisition of these vehicles will play a crucial part in allowing Arlanda to meet its green targets. "The majority of our remaining fossil CO₂ emissions will be eliminated, while at the same time operations will become even more efficient, since we are involved in developing sustainable technology," she said. "In this way Swedavia will achieve its target of zero CO₂ emissions from its own operations by 2020. The co-operation within dAIR by sharing best practices has been important for the airport to meet our targets."

Eindhoven Airport in the Netherlands focused on landside access and noise reduction as part of its phased growth strategy. CEO Joost Meijs admitted that the biggest challenge was to ensure that all airport stakeholders were fully engaged in pursuing sustainable growth.

Eindhoven is the second-largest airport in the Netherlands (behind Amsterdam Schiphol). It handled 3.9 million passengers and 26,508 aircraft movements in 2013. According to the national aviation advisory body (called the Alders Table), Eindhoven will be allowed to grow to about 43,000 aircraft movements and 5.5 million passengers by 2020, when Schiphol is expected to meet its capacity limit of 510,000 annual aircraft movements.

In the context of this growth strategy, Eindhoven used dAIR to focus on sustainability, connectivity, and reducing the environmental impact of its operations. In the first phase of growth, Eindhoven intends to extend its low-noise contour to a 6.7 square kilometre area. "Then we will evaluate and check on noise reduction and sustainability and determine go or no go on this," explained Meijs. Phase 2 will involve a further extension of its low-noise zone to 10.3 square kilometres by 2020.

The biggest challenge faced by Eindhoven is in landside access. Today 69% of passengers arrive by car at Eindhoven, compared with only 19% by public transport. The city and airport set up a traffic circulation plan with an integrated plan of highways, car parking, and roads. Additionally, a EUR50 million intercity railway station is planned for the airport, as well as eco-friendly shuttle buses linking Eindhoven's main railway station with the airport. Other recommendations include a people mover to transport passengers from the car park to the terminal.

Progress to date enabled Eindhoven to achieve 'neutral' status in the Airport Carbon Accreditation programme, and Meijs hopes the airport will operate with zero CO₂ emissions by 2030. He said: "dAIR proved that local politicians and airport managers are prepared to co-operate and take the lead when it comes to the reduction of carbon emissions. The results of the project fuel the current debate on ways to make airports CO₂ neutral, easier to access, and more friendly for passengers, employees and local inhabitants."

A comprehensive mobility strategy at Bologna Guglielmo Marconi Airport in Italy included a monorail people mover linking the airport and the central railway station, plus initiatives encouraging wider use of public transport or cycle lanes to access the airport.

Other schemes included solar energy panels on the roof of the terminal building and light-emitting diode (LED) airfield lighting.

"Managing and mastering the environmental agenda is a competitive issue for us. By doing so, we address real business problems, because I believe sustainability is another aspect of the business", said Nazareno Vendola, managing director of the airport.

Airport officials in 2008 signed an agreement with regional authorities to guarantee sustainable airport development. This ensured that the dAIR projects at Bologna had support from local government.

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