

Existing Environmental Constraints on Noise

How noise constraints will impact the airline business

The report looks at the noise-based measures that affect airline operators. How much freedom an airport enjoys to set its own noise measures varies by region and country, the study found. U.S. airports have little flexibility to set their own constraints as they are determined by the Federal government, for example, while airports in the European Union have a wide range of options.

Most of the noise constraints today are based on the aircraft's certification and operating time, the report found, and do not depend on the way the aircraft is flown into the airport. Similarly, most of today's noise-based financial penalties are due to the non-respect of official schedules and curfews.

There are some exceptions, however, such as noise-based landing and take-off charges at airports in Germany and Switzerland, for example. In addition, noise limits at specific monitoring stations are used to spot extreme levels of noise but only a small number of operations exceed the limits every year, the report found. Trajectory optimisation, therefore, may not be promoted as a way of better respecting current noise limits, the authors said.

Finally, noise preferential routes and profiles may not represent constraints as they do not require specific on-board equipment or pilot training. They would be considered constraints, however, if they led to greater fuel consumption than default procedures, the study found.

Current noise charges remain relatively low compared to an airline's overall operating cost (just a few tenths of a percent). Partial bans on noisier airplanes will likely have a larger impact on aircraft operators than noise charges, the report concluded