



The Balanced Approach to aircraft noise management

Fact sheet

Aircraft noise management is not only an environmental issue, but it also has social, political, and economic aspects, not just at local level, but also globally.

The International Civil Aviation Organization (ICAO)'s Balanced Approach to Aircraft Noise Management is the main overarching policy in this area. The Balanced Approach requires that all available options be evaluated to identify the most cost-effective measure or combination of measures to mitigate a specific noise problem.

Each new generation of aircraft is quieter than the previous one and the noise footprint surrounding airports has reduced, but increased flight operations have counteracted some of these benefits. These factors are driving some local authorities to impose noise operating restrictions at airports, either in terms of annual movement reductions, aircraft type bans, or night operations bans.

Most of these restrictions are being implemented without ICAO's Balanced Approach, which requires that the noise concerns of local residents be balanced with protecting the huge social and economic benefits of the airport's connectivity for the whole country.

IATA and its member airlines fully support the implementation of the Balanced Approach when it comes to noise management.

What is the Balanced Approach?

Limiting or reducing the number of people affected by significant aircraft noise has always been one of ICAO's main priorities and key environmental goals. Until the late 1970's, noise was the only environmental issue related to aviation.

Since then, noise reduction has become a major challenge for aircraft manufacturers and they are constantly making progress. It is estimated that individual aircraft have become 75% quieter over the last 60 years.

Despite this enormous progress, operational restrictions to limit noise continue to be implemented at congested airports, reducing available capacity. This is shrinking the connectivity of these airports for passenger and cargo services and raising the risk of international disputes.

In 2001, the ICAO Assembly adopted the principle of the 'Balanced Approach' to aircraft noise management as a coherent method to address aircraft noise, and a foundation of noise regulation for aviation as a global industry.

The ICAO Balanced Approach to aircraft noise management is the main overarching policy on aircraft noise, and it is included in Annex 16, Volume I to the ICAO Chicago Convention. It is enshrined in the EU regulation 598/2014, and it is also stipulated in the USA-EU Air Transport Agreement.





Principle

The principle of the Balanced Approach entails identifying noise mitigation measures through four pillars, and then analyzing them with the goal of addressing the noise problem in a cost-effective manner that preserves the connectivity benefits at the airport. The four pillars of the Balanced Approach are:

1. Reduction of Noise at Source
2. Land-use Planning and Management
3. Noise Abatement Operational Procedures
4. Operating Restrictions

The Balanced Approach clearly states that each pillar must be fully explored in turn before considering operational restrictions, and safety has primacy over noise benefits.

The process to implement the Balanced Approach should be transparent and would typically consist of the following:

1. An assessment of the noise situation at an individual airport
2. Definition of the noise objective
3. Provision for consultation with stakeholders at different stages from assessment to implementation
4. Identification of measures available to reduce the noise impact
5. Evaluation of the likely costs and benefits of the various measures available in order to identify the relative cost-effectiveness of the measures

6. Selection of the measures with the goal to achieve maximum noise benefits most cost-effectively
7. Adequate public notification of intended actions
8. Implementation of measures, and
9. A provision for dispute resolution available to stakeholders.

Cost-effectiveness analysis and selection of measures

A combination of these measures is generally used in a complementary manner to reach the airport's noise objective.

The noise benefits and costs of the combined principal elements measures should be assessed by conducting a cost-effectiveness analysis, guided by the principle of transparency and full disclosure of data, models, inferences and assumptions used, along with adequate justification for the choices made, and assessments of the effects of these choices on the analysis.

Based on the results of the cost-effectiveness analysis, appropriate measures would be selected. The goal is to achieve maximum noise benefit in the most cost-effective manner.

Operating restrictions are measures that limit or reduce access to an airport. In view of the impact they may have on airlines, passengers and local economies, operating restrictions should not be introduced as a first resort but only after a full assessment of all available measures to address a demonstrated noise problem at an airport.