Balanced Approach to Aircraft Noise Management

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• Balanced Approach to Aircraft Noise Management
  – Rationale (Why it was developed).
  – Objectives (What it aims to achieve).
  – Concept & elements (How it works).
• Problems with aircraft noise have led to operational limitations and opposition to airport expansion/construction.

• Uncoordinated policy developments to address aircraft noise could hinder the economical operation of air transport.

• Guidance document was published in 2004 (Doc 9829 AN/451) and revised in 2007.
• Address aircraft noise problems at individual airports in an environmentally responsive and economically responsible way.

• Achieve maximum environmental benefit most cost-effectively.

• Recognize that States may already have noise regulations and policies in place.
• Follows comparative economic analysis based on “best practice” cost benefit analysis techniques

• To achieve maximum environmental benefit in the most cost-effective manner.

• Combinations of measures can be necessary to achieve noise objectives.

• Interdependencies must be taken into account:
  – Between different elements;
  – Between noise and emissions.
Balanced Approach

- Reduction of noise at source
- Land-use planning and management
- Operating restrictions
- Noise abatement operational procedures

Concept & Elements

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- Manufacturers’ new technologies have produced significant noise reductions.
- Noise certification is based on aircraft performance (airframe + engine).
- ICAO Annex 16, Volume I contains the aircraft noise Standards.

Reduction of noise at source

75% Quieter

Technology Improvement

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• Aimed at reduction and/or redistribution of noise around the airport.

• Enable full use of modern aircraft capabilities.

• Potentially a cost effective measure.
- Planning (zoning, easement, etc.).
- Mitigation (building codes, control measures, etc.)
- Financial (tax incentives, charges, etc.).
- Aim is to protect noise reduction gains.
• Defined as any noise-related action that limits or reduces an aircraft’s access to an airport.
• Not to be used as a first resort, only after consideration of benefits gained from the other three elements.
• Examples:
  – Movement caps;
  – Noise quotas;
  – Non-addition rules;
  – Curfews.
A sustainable approach is crucial...

- Combining the principal elements of the ICAO Balanced Approach may be necessary to improve the noise climate in the vicinity of airports.

- ICAO encourages the benefits to be safeguarded by accounting for sustainability of airport growth.

- ICAO’s role is to provide a global forum to develop a commonly-agreed solution among member States:
  - Consists of a variety of measures to address all aspects of aviation and environmental protection in a harmonized and balanced manner.
For more information on ICAO activities on Aircraft Noise…

ICAO Web Page

www.icao.int/

THANK YOU