



Destination Green

ICAO Symposium on Aviation and Climate Change, "Destination Green", 14 – 16 May 2013

Balanced Approach to Noise Management

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Introduction



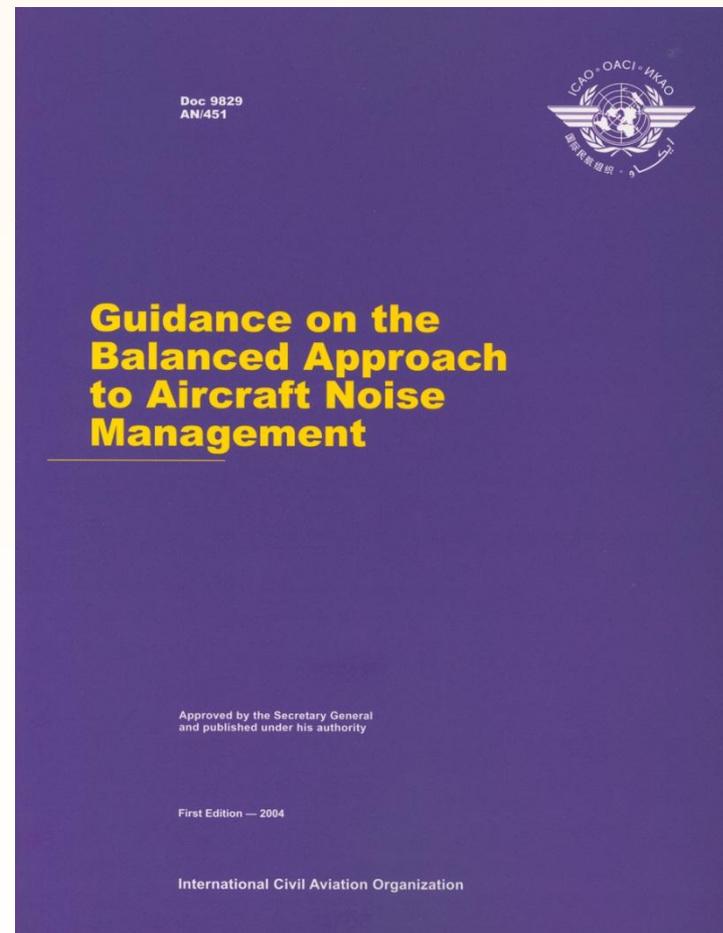
- Rationale (Why it was developed).
- Objectives (What it aims to achieve).
- Concept & elements (How it works).



Rationale



- Aircraft noise problems 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.





Content of the Balanced Approach

- In 2007 the Balanced Approach guidance was expanded to include:
 - People issues
 - Information on communication strategies;
 - Enhanced information for public access;
 - Consultation was already contemplated in the guidance.
 - Airport Case studies.



Objectives



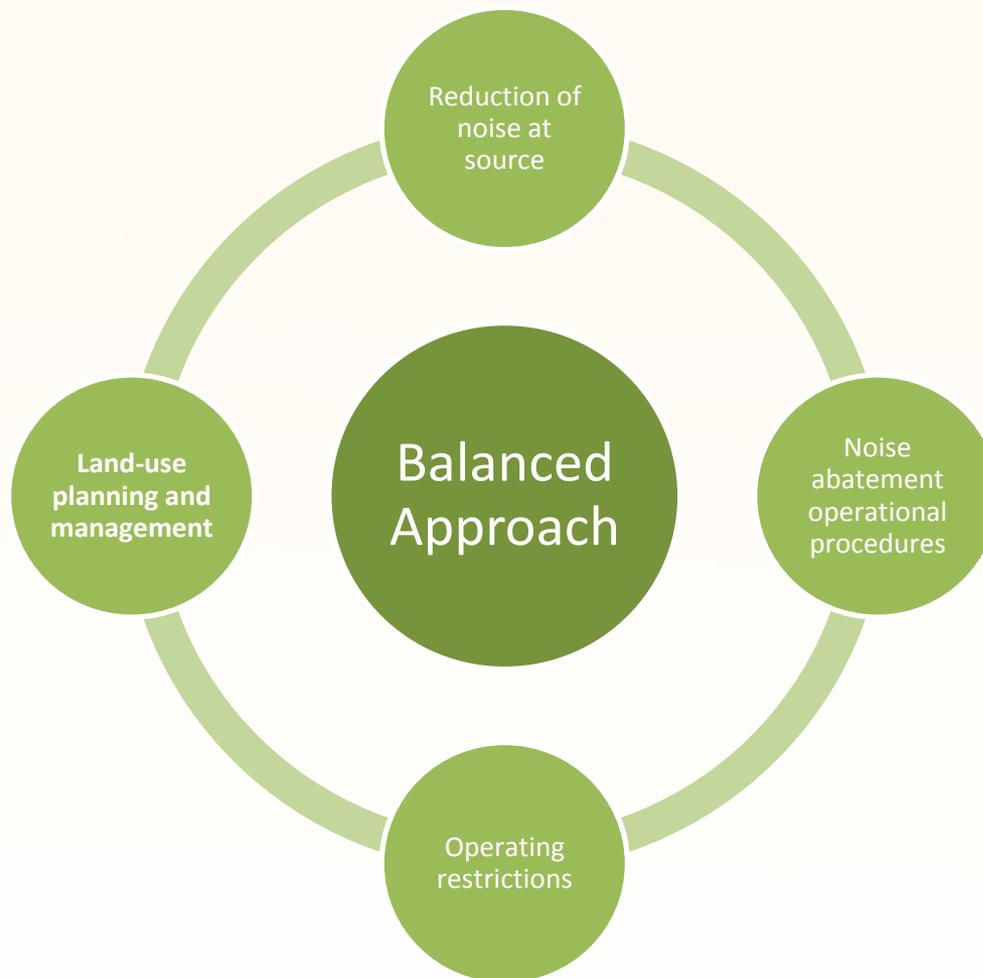
- Address aircraft noise problems at individual airports in an environmentally responsive and economically responsible way.
- Achieve maximum environmental benefit most cost-effectively:
 - Recognizing that States may already have noise regulations and policies in place.



Analysis and selection of measures

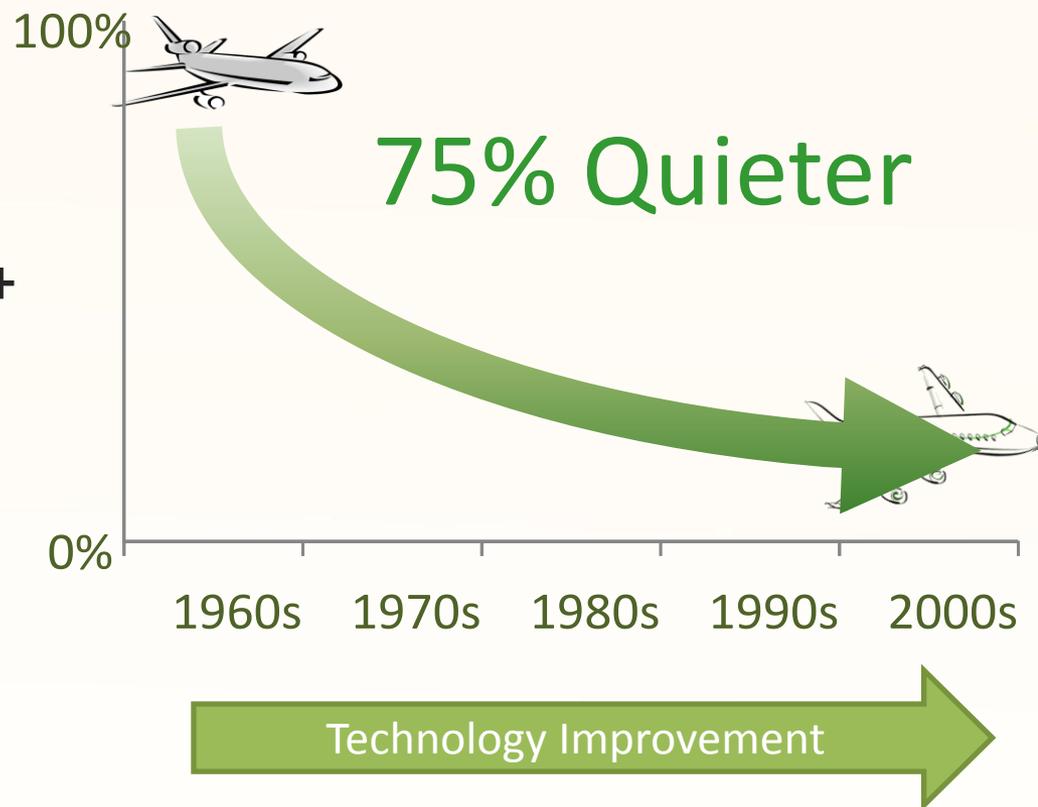
- Follows comparative economic analysis based on “best practice” evaluation techniques/methods:
 - CBA, CEA, sensitivity analysis.
- To achieve maximum environmental benefit in the most cost-effective manner.
- Combinations of measures can be necessary to achieve noise objectives.
- Interdependencies must be taken into account:
 - Between different element;
 - Between noise and emissions.

Elements of the Balanced Approach



Reduction of noise at source

- Manufacturers' new technologies have produced significant noise reductions.
- Noise certification is based on aircraft performance (airframe + engine).
- ICAO Chapter 14 noise standard has been agreed by CAEP.
- Environmental Technical Manual (Doc 9501) contains the procedures for noise certification of aircraft.



Land Use Planning and Management

- Planning (zoning, easement, etc.).
- Mitigation (building codes, insulation, real estate disclosure, etc.).
- Financial (tax incentives, charges, etc.).
- Key to protecting noise reduction and abatement benefits.
- May involve “opportunity costs” for airports/local government.





Land-Use Control Measures



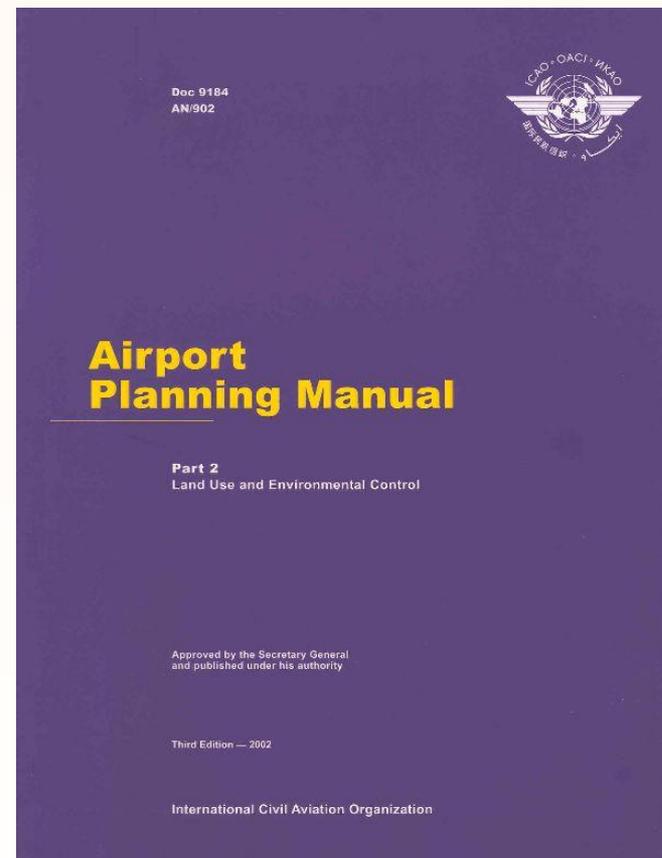
- Planning (zoning, easement, etc.):
 - Airport planning is an integral part of an area-wide comprehensive planning programme;
 - Airport development and operations should be coordinated with the planning, policies and programmes for the area in which the airport is located.
- Planning instruments:
 - comprehensive planning, noise zoning, subdivision regulations, transfer of development rights and easement acquisition.



Land-Use Control Measures



- Mitigating instruments:
 - building codes, noise insulation programmes, land acquisition and relocation, transaction assistance, real estate disclosure and noise barriers.
- Financial instruments:
 - capital improvements, tax incentives.

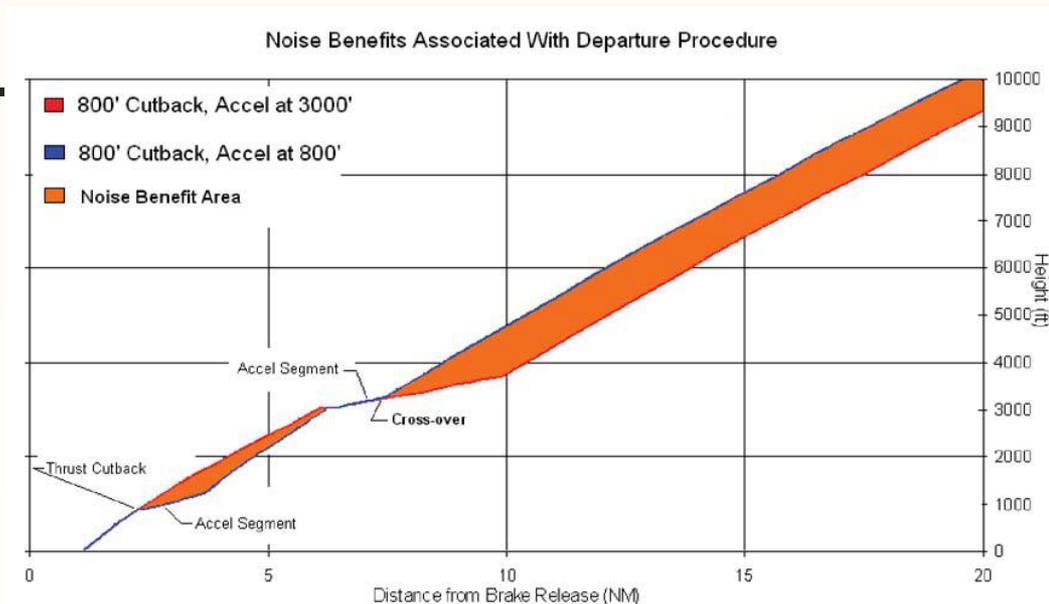




Noise Abatement Operational Procedures



- Aimed at reduction and/or redistribution of noise around the airport.
- Enable full use of modern aircraft capabilities.
- Potentially a cost effective measure.





Operating Restrictions



- 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 other 3 elements.
- Examples:
 - Movement caps;
 - Noise quotas;
 - Non-addition rules;
 - Curfews.



Noise Charges



- Should be levied only at airports experiencing noise problems.
- Should recover no more than the costs incurred.
- Doc 9082 - ICAO's Policies on Charges for Airports and Air Navigation Services.



A sustainable approach is crucial....

- A combination of 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 taking account of the sustainability of future growth of airports.
- 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
environmental protection

ICAO Web Page

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THANK YOU