

WORLDWIDE AIR TRANSPORT CONFERENCE: CHALLENGES AND OPPORTUNITIES OF LIBERALIZATION

Montreal, 24 to 29 March 2003

Agenda Item 2: Examination of key regulatory issues in liberalization 2.2: Market access

AIRPORT CAPACITY EXPANSION: ALLEVIATING THE ENVIRONMENTAL CONSTRAINTS

(Presented by Airports Council International (ACI))

SUMMARY

Aircraft noise is the single most important factor behind community opposition to airport capacity construction and expansion. Noise reduction at source, i.e. quieter aircraft, is the only way forward to increase capacity at many noise-sensitive airports. It is airport restrictions and commercial reasons, not ICAO noise certification standards that drive manufacturers to produce quieter aircraft. Progress in noise reduction at source therefore depends on additional noise restrictions on airports, which in turn reduce capacity further. To break this vicious circle, ICAO Annex 16 aircraft noise certification standards have to become more stringent so as to encourage manufacturers to produce quieter aircraft.

Action by the Conference is in paragraph 4.1.

1. INTRODUCTION

1.1 As pointed out in ATConf/5-WP/8, environmental constraints have prevented airport construction and expansion in some instances. The airport operators experience shows that aircraft noise is the single most important factor that galvanizes political and community opposition to airport construction and expansion. This opposition constitutes a major constraint upon the development of the aviation system, and has caused extreme difficulty in the construction of new airports, the expansion of existing airports and the scheduling of aircraft operations, especially at night. This paper describes the problems associated with

¹ French and Spanish versions are provided by Airports Council International (ACI).

alleviating the adverse impact of aircraft noise on airport capacity.

1.2 Currently, many airports which account for sizable portion of the world's traffic are noise-constrained, and their number will increase unless an effective solution is found to alleviate the impact of aircraft noise and so enable airports to develop their capacity and meet the growth in air traffic expected with increased air transport liberalization.

1.3 ICAO's Committee on Aviation Environmental Protection (CAEP) is the competent ICAO body for addressing environmental issues, including noise. While observers and stakeholders offer advice based on their technical expertise, and CAEP depends on such support for its work, the power of decision rests in the hands of the State-appointed CAEP member experts. Customarily, decisions are taken by consensus. The balanced approach for aircraft noise management recommended by ICAO CAEP/5 (2001) and adopted by ICAO Contracting States in ICAO Assembly Resolution A33-7, consists of reduction of noise at source (i.e., quieter airframes and engines), land use planning, noise abatement operational procedures and operating restrictions on aircraft.

2. DISCUSSION

2.1 ACI supports a balanced approach that provides equal weight and status to each of its four elements, to be readily applicable at all airports. This is because at many noise-sensitive airports the possibilities of land use planning and noise abatement procedures have been fully exhausted. Noise reduction at source is the only way forward for such airports, since any increase in capacity will depend on maintaining or reducing overall noise levels around them. Even the ability of airports currently without such problems to maintain or expand capacity will diminish over time due to environmental constraints. For all those reasons, a progressive and credible reduction in aircraft noise at the source, which constitutes an effective and permanent technological gain, is the only significant way forward to ensure future air transport growth under increasing environmental constraints.

2.2 ICAO's balanced approach leaves noise reduction at source up to manufacturers and technological progress and argues that the adoption of ICAO Chapter 4 noise certification standards by States would by itself achieve such a reduction. However, manufacturers apply noise reduction technology to meet certain noise restrictions at certain airports and for commercial reasons, not to meet ICAO standards which, according to the balanced approach, continue to reflect current technology. Since airport noise restrictions, not ICAO standards, drive the application of noise reduction technology, the introduction of quieter aircraft depends on additional noise restrictions on airports, which reduce airport capacity even more. To break this vicious circle, ICAO Annex 16 noise certification standards need to become more stringent so as to encourage the introduction of quieter aircraft.

3. CONCLUSIONS

3.1 Environmental constraints are not expected to diminish. Noise-sensitive airports depend on a credible reduction in noise at the source to expand capacity and ICAO Annex 16 noise certification standards need to be made more stringent so as to encourage the introduction of quieter aircraft.

4. **ACTION BY THE CONFERENCE**

4.1 The Conference is invited to:

- a) recognize the efforts of airport operators to expand capacity at their facilities;
- b) agree that ICAO Annex 16 noise certification standards need to be made more stringent so as to encourage the introduction of quieter aircraft without depending on airport restrictions; and
- c) recommend that CAEP be advised of that need.

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