



INTERNATIONAL CIVIL AVIATION ORGANIZATION

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ASSEMBLY – 35TH SESSION

EXECUTIVE COMMITTEE

Agenda Item 15: Environmental protection

AIRPORTS AND THE ENVIRONMENT

(Presented by Airports Council International)

SUMMARY

Environmental protection is of vital concern to airports and is particularly critical to noise sensitive airports. Higher than acceptable aircraft noise and emissions levels affect the ability of airports to expand capacity in order to meet future demand. Since ICAO policies, standards and guidance material have a determining influence on aircraft noise and emissions levels, both at airports and surrounding communities, it is essential that the concerns of airports be properly addressed.

ACI supports ICAO's guidance on the Balanced Approach in Doc 9829 but emphasizes that the further work being undertaken by CAEP to improve the guidance is essential to making it a more useful document for airports. Airports also need, at an early date, more stringent aircraft noise and aircraft emissions standards to be incorporated in Annex 16.

ACI supports ICAO's work on market-based options for emissions reduction, including emissions trading, charges (with the exception of levies such as taxes), and voluntary agreements.

The views of ACI on these key issues are presented in this paper.

Suggested Assembly action is presented in paragraph 22.

INTRODUCTION

1. Environmental protection is of growing concern to airports around the world, as surrounding communities have become more forceful in demanding lower noise and emissions levels. Such demands constitute a major constraint on airport capacity development. Airports have widely exhausted their own options in sparing communities the environmental impact of growing traffic.

¹ English, French and Spanish versions provided by ACI

Increased stringency of aircraft noise and emissions standards is needed to encourage manufacturers to produce and airlines to operate, quieter aircraft and engines. This would allow airports to operate at optimum efficiency and maintain their ability to expand capacity to meet increasing demand.

2. ACI supports ICAO's policies on the environment and its objectives in carrying out its responsibility to achieve maximum compatibility between the safe and orderly development of civil aviation and the quality of the environment by: limiting or reducing the number of people affected by aircraft noise; limiting or reducing the impact of aviation emissions on local air quality; and limiting or reducing the impact of aviation greenhouse gas emissions on the global climate (as stated in Appendix A to revised Resolution A33-7 in WP/77).

3. ACI acknowledges the important work carried out by the Committee on Aviation Environmental Protection (CAEP) and its working groups, in which ACI has participated actively and will continue to do so.

AIRCRAFT NOISE

Balanced Approach to Aircraft Noise Management

4. ICAO indicates in WP/56 (para 2.5.2.) that ICAO's *Guidance on the Balanced Approach to Aircraft Noise Management* in Doc 9829 contains information on all the elements of the balanced approach and development of cost-benefit analysis for implementation of the balanced approach. ICAO further indicates that the guidelines are not prescriptive; rather that they are intended to illustrate good practices in the conduct of economic analysis that may be used by States or airports to achieve the goals of Resolution A33-7.

5. ACI and its member airports have long supported and implemented a balanced approach to aircraft noise management. ACI supports ICAO's policy on the Balanced Approach as identified in ICAO Assembly Resolution A33-7, adopted unanimously by the 33rd Session of the Assembly in 2001. The balanced approach gives equal weight to the four elements: noise reduction at source; land use planning; noise abatement operational procedures; and operating restrictions.

6. ACI considers ICAO's Doc 9829 to represent guidance on the Balanced Approach. However, as ACI pointed out at CAEP/6, certain areas in the guidance document need further development to ensure that the guidance is of practical value for noise management at airports. Issues that need to be addressed include strengthened emphasis on noise reduction at source to give it equal emphasis to the other three elements; a realistic role for land use planning; the refinement of the noise index and contour descriptions; and flexibility in the cost benefit analysis to account for any unquantifiable elements. Flexibility in application is also important to accommodate different regional, national and local environmental needs and situations, and to provide for workable solutions tailored to the specific circumstances of individual airports.

7. In addition to the areas requiring development mentioned above in para. 6, it must be pointed out that the section on cost-benefit analysis gives the overall, and misleading, impression that each element of the balanced approach is easily quantifiable, and that a simple formula exists for finding the most cost-effective measure. However, many of the factors relating to community noise problems have social and political impacts which are often impossible to quantify in monetary terms. Flexibility is required in the cost analysis to account for any non-quantifiable elements.

8. Updating of Doc 9829 is being undertaken by CAEP as part of its future work. ACI is taking an active part in this process and looks forward to the necessary amendments being issued at an early date.

Aircraft Noise Reduction at Source

9. The first element of the balanced approach - reduction of noise at source - has been a continuing and fundamental focus of ICAO and CAEP. ACI reiterates its long-standing goal of reducing noise impact around airports and considers that quieter aircraft are the key to ensure the sustainable future growth of airport capacity and air transport for the benefit of the traveling public, airlines, airports, their neighboring communities and regional and national economies. Airlines that have a quiet aircraft fleet are most likely to benefit in the longer term from greater flexibility and increased operational opportunities, especially at noise sensitive airports.

10. ACI continues to emphasize the need for achieving noise reduction at source through increased stringency of certification standards at all measuring points (flyover, sideline and approach) beyond those of ICAO Annex 16, Volume I, Chapter 4 that becomes effective in 2006. This standard does not reflect the full extent of current production aircraft noise reduction technology, will not encourage improved noise performance of future aircraft at each of the three noise measurement points and will not significantly contribute to noise reduction around airports. ACI urges that work to further increase the stringency of noise certification standards in Annex 16 be undertaken by CAEP for implementation at the earliest possible date.

REDUCTION OF AIRCRAFT EMISSIONS

11. ACI wishes to re-emphasize that emissions, just like noise, are increasingly becoming a factor that limits airport capacity expansion and the ability to meet future traffic growth. Local air quality is an increasingly important environmental issue for airports, particularly as new governmental standards are being implemented nationally and internationally.

12. ACI supports a further increase in stringency of aircraft emissions standards that would truly reflect the highest technological feasibility, economic reasonableness and environmental benefit. While some market-based mitigation instruments such as emissions trading offer one solution to the issue, reduction at source remains, as it is the case for noise, the only long-term credible solution.

13. ACI considers the recent adoption in Annex 16 of an increased stringency of 12 per cent for aircraft engine NO_x emissions certification standard over the CAEP/4 standard adopted in 1998 to be insufficient, as it does not reflect the full extent of current engine NO_x technology. However, it notes that this is part of a two step process that includes consideration of more stringent standards for aircraft engine emissions, especially NO_x (see WP/56 para. 3.2.1), to be completed by 2010.

14. ACI believes that it is essential that the further reduction in NO_x in particular, be introduced at an earlier date than 2010. The CAEP process to be followed on the establishment of mid- and long-term goals for NO_x reduction to assist in future standard setting should produce the significant reductions required by airports.

15. The further work of CAEP on assessing the available scientific information on aircraft emissions, both globally and at ground level, is important. ACI notes that guidance material on the use of LTO certification data for assessment of operational impacts has been developed. ACI supports the further development of this material for practical application by airports.

16. ACI notes the recent attention being placed by States on the issue of hazardous air pollutants (HAP's) generated by aircraft operations. Presently, there is little reliable data on the emissions of the pollutants or on the potential human health impacts. ACI encourages CAEP to take a leadership role in developing credible information on the subject.

MARKET-BASED MEASURES TO LIMIT OR REDUCE EMISSIONS

17. Airports are interested in and support market-based options as a means of reducing emissions in order to meet the requirements of future air traffic growth.

18. ACI supports continued work on market-based options for emissions reduction, including emissions trading, charges (with the exception of emissions-related levies or other taxes, that go beyond the Council's Resolution of 9 December 1996) and voluntary agreements, reflected in Appendix I of revised Resolution A33-7 presented in WP/76.

19. Market-based options should offer measurable and accepted goals of absolute emissions reduction. They should incorporate an emissions allocation and distribution process that is clear and transparent. Implementation programmes for any market-based option should include a plan to monitor and evaluate their effectiveness in meeting the identified goals.

20. ACI supports the further development of an open emissions trading system for international aviation focused on the two approaches identified in the draft revision of Appendix I of revised Resolution A33-7 presented in WP/76, namely to develop a voluntary trading system that interested States and international organizations might propose, and to provide guidance to incorporate emissions from international aviation into States' emissions trading schemes consistent with the UNFCCC process. ACI also supports voluntary agreements, as indicated in Appendix I of revised Resolution A33-7.

FORECASTING AND ECONOMIC ANALYSIS

21. Finally, it is important to recognize the importance of the support work provided to the CAEP process by the Forecasting and Economic Analysis Support Group (FESG). For many years this group was led by the ICAO Secretariat in an effective and impartial manner, essential to acceptance of its work. ACI believes that, despite resource constraints, some level of Secretariat involvement in this work would be similarly beneficial.

ACTION BY THE ASSEMBLY

22. The Assembly is invited to:

- a) note ACI's general support for ICAO's leadership role, policies in Resolution A33-7, and work in the aviation environment field;
- b) take into account ACI's views presented above, particularly when considering amendments to ICAO's policies and practices in Assembly Resolution A33-7, presented in WP/77;

- c) encourage the work currently in progress by CAEP to amend ICAO's Guidance on the Balanced Approach to Aircraft Noise Management (Doc.9829) to deal effectively with the improvements required; and to publish amendments at an early date in order to increase its practical value for airports;
- d) agree that an effort be made by CAEP to develop more stringent noise standards for Annex 16 that reflect current production aircraft noise reduction technology for introduction as soon as possible, to assist in improving the airport noise environment and to facilitate airport capacity development to meet future traffic growth;
- e) support a significant future increase in stringency of emissions standards in Annex 16 (beyond those recommended by CAEP/6) in the second planned step, at an earlier date than 2010, that reflect technological feasibility, economic reasonableness and environmental benefit; and
- f) note ACI's support for priority being given to the proposed further work by ICAO on market-based options for emissions reduction, including emissions trading, charges (with the exception of levies such as taxes) and voluntary agreements (Appendix I of revised Res.A33-7 in WP/77).

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