THIRD MEETING OF THE ALLPIRG/ADVISORY GROUP

(Montreal, 6 – 8 April 1999)

Agenda Item 5: Interregional coordination and harmonization mechanism

INCLUSION OF ENVIRONMENTAL ISSUES IN THE ICAO GLOBAL AIR NAVIGATION PLAN

(Presented by the European Organisation for the Safety of Air Navigation (EUROCONTROL)))

SUMMARY

This paper proposes to include the subject of environmental issues in the ICAO Global Air Navigation Plan.

1. **Introduction**

- 1.1 The Objectives of the ICAO Committee on Aviation Environmental Protection (CAEP) Operational Measures Working Group (WG/4) were established in April 1998 during the CAEP/4 Meeting in Montreal. This group was established to quantify and ensure that the relevant environmental impact of aviation is fully taken into account in the global planning of CNS/ATM and then incorporated into airport planning.
- 1.2 Two major identified items for action by WG/4 were:
 - a) to develop a common methodology of quantification of potential benefits produced by implementation of CNS/ATM; and
 - b) the involvement in the activities of the Planning and Implementation Regional Groups (PIRGS) relating to CNS/ATM.
- 1.3 During the 2nd meeting of this group (Sevilla, 2 4 March 1999), it was noted that the draft ICAO Global Air Navigation Plan did not include environmental issues as a strategic objective. Following a relevant discussion, the meeting felt that these matters could be more fully considered at the forthcoming ALLPIRG meeting in April 1999.

2. EUROPEAN ATM OBJECTIVES ON ENVIRONMENTAL ISSUES

- 2.1 The Air Traffic Management (ATM) Strategy for the Years 2000+ has been developed in response to the request of the Transport Ministers of the European Civil Aviation Conference (ECAC) Member States. The strategy Proposal falls within the framework of the ECAC Institutional Strategy for ATM in the Area of the ECAC Member States and of the global and regional CNS/ATM plans being developed by ICAO.
- 2.2 The overall strategic objective for the future European ATM network is: "that for all phases of flight, to enable the safe, economic, expeditious and orderly flow of traffic through the provision of ATM services which are adaptable and scalable to the requirements of all users and areas of the airspace of the ECAC Member States. The services shall accommodate demand, be globally interoperable, operate according to uniform principles, be *environmentally sustainable* and satisfy national security requirements."
- 2.3 To achieve the overall objective, certain principles shall be systematically applied throughout the ATM network in the airspace of the ECAC Member States during the life cycle of all ATM projects. *Environment* has been identified as one of these strategic principles and the environmental impact of aircraft noise and gaseous emissions shall be taken into account when defining operational ATM improvements. The implementation and application of CNS/ATM measures associated with such improvements should provide *environmental benefits* wherever possible.
- 2.4 The strategic objective with regard to Environment is:

"To work with ICAO and its Member States in order to obtain improvements in ATM, in particular the accelerated implementation of CNS/ATM concepts, procedures and systems which help to mitigate the impact of aviation on the environment."

- 2.4.1 The environmental effects of aviation are an increasingly important political, economic and social issue. One of the goals of the Strategy is to accommodate environmental considerations in an integrated and expanded European ATM network. Others are to identify and tackle environmental problems posed by traffic growth, and to progressively improve environmental performance on a network-wide basis.
- 2.5 For planning purposes, the Strategy divides the ATM operational enhancements into three separate phases, i.e. up to 2005, 2005 to 2010, and 2010 to 2015.
- 2.5.1 The implementation dates used are approximate and forecast percentage increases in capacity, fuel burn reduction and reduction in ground movement emissions are based on expert judgement pending the results of on-going analytical work.
- 2.5.2 A study carried out by EUROCONTROL indicates that a fuel saving reduction of 7 to 8% could be achieved in an "unconstrained gate-to-gate" scenario.

3. ACTION BY THE ALLPIRG

- 3.1 The meeting is invited to:
 - a) note that the ATM 2000+ Strategy includes 'Environmental Issues' as a major strategic objective;
 - b) consider whether 'Environmental Issues' should be recommended as a necessary element of the ICAO Global Air Navigation Plan; and

c) encourage the development, by Working Group 4 of the ICAO Council Committee on Aviation Environmental Protection, of a common methodology of quantification of the potential benefits to be achieved through CNS/ATM implementation could form the basis of an ICAO 'Environmental Issues' strategy.