## ASSEMBLY — 36TH SESSION

#### **EXECUTIVE COMMITTEE**

**Agenda Item 17: Environmental protection** 

#### AVIATION AND EMISSIONS - MEETING THE CHALLENGE OF AVIATION GROWTH

(Presented by Argentina, Brazil, Canada, Colombia, Ecuador, Japan, Mexico, Pakistan, Panama, Saint Lucia, Singapore, the United Arab Emirates and the United States)

#### **EXECUTIVE SUMMARY**

To meet in an effective manner the environmental challenges that aviation's growth poses, it is imperative that ICAO continues to maintain its leadership role of establishing a well-structured, long-term, and globally acceptable approach to allow growth while managing the associated environmental impacts. This approach should include fostering cost-effective solutions based on international consensus for use by Contracting States to achieve ICAO's environmental goals. ICAO should endorse guidance on emissions trading that supports the principle of mutual agreement and urge States to refrain from unilateral implementation of greenhouse gas charges. ICAO should also recognize the need to take account of the implications of environmental measures on the economic circumstances of the developing world and with full respect for the agreed principles contained in the applicable provisions of international aviation law.

## **Action:** The Assembly is invited to:

- a) affirm the unique role aviation plays in linking the world's economy and citizens;
- b) recognize the significant achievement of the ICAO thus far in addressing aviation emissions;
- c) confirm the importance of ICAO's previous commitment to limit or reduce the impact of aviation's greenhouse gas emissions on global climate;
- d) affirm ICAO's leadership role to address aviation emissions on a global basis, by securing support and cooperation from Contracting States on a systematic and comprehensive framework to manage the impacts of aviation's emissions, including better scientific understanding, modernization of air traffic management procedures and systems, development of lower emission and more energy-efficient technologies for aircraft and engines, exploration of the potential use of alternative fuels, and cost-beneficial market-based measures based on mutual agreement;
- e) endorse guidance on emissions trading that supports the principle of mutual agreement, and reiterate that the only acceptable manner for managing emissions from international aviation is on the basis of mutual agreement and with full respect for the agreed principles contained in the applicable provisions of international aviation law, again urging "States to refrain from unilateral environmental measures...";

- f) recognize the unique national circumstances of individual States and their right to determine how best to manage the greenhouse gas emissions from their airlines and the essential role of ICAO's leadership to achieve effective global harmonization in the management of greenhouse gas emissions;
- g) urge States to continue to refrain from unilateral implementation of greenhouse gas emission charges, as agreed at the last Assembly; and
- h) recognize the need to take account of the implications of such environmental measures on the economic circumstances of the developing world.

Strategic Objectives:	This working paper relates to Strategic Objective C(Environmental Protection – Minimize the adverse effect of global civil aviation on the environment).
Financial implications:	Not applicable.
References:	

# 1. **INTRODUCTION**

- 1.1 The 35th Session of the ICAO Assembly in October 2004 unanimously adopted Resolution A35-5 concerning both aircraft noise and aircraft engine emissions. The Assembly adopted the environmental goals of limiting or reducing the impact of aviation greenhouse gas emissions on the global climate, the impact of aviation emissions on local air quality, and the impact of noise on communities.
- 1.2 It is critical for ICAO to maintain leadership and continue important efforts to address aviation's environmental impacts, including fostering cost-effective solutions based on international consensus for use by Contracting States to achieve the global environmental goals, in order to ensure the sustainable growth of aviation with all the benefits it brings to the world.
- 1.3 ICAO should secure international support and cooperation on a systematic and comprehensive framework to manage the impacts of aviation's emissions through a combination of science, technology and operational measures, complemented by market-based measures that States and/or regions deem appropriate to address their aviation greenhouse gas emissions.

## 2. LEADERSHIP ROLE OF ICAO

- 2.1 Aviation has a vital role to play in economic progress for the world. It moves billions of passengers each year and 40% by value of the world's exports, and has redefined opportunity and markets for countries around the world.
- 2.2 Aviation has a proven record of improving its environmental performance even as it has grown significantly over the past few decades. For example, aircraft noise has been reduced by 75 percent, and fuel efficiency has been improved by 70 percent over the last 40 years.
- 2.3 Building upon this positive record and recognizing the increasing role of environmental issues in shaping the growth of international aviation, the 35th Session of the ICAO Assembly in October

2004 unanimously adopted Resolution A35-5 containing environmental goals of limiting or reducing the impact of aircraft noise, local air quality emissions, and aviation greenhouse gas emissions.

- 2.4 The Assembly also recognized that Contracting States had already put in place a number of measures they judged as appropriate to address aviation's emissions from their own airlines. Believing complementary regional and global endeavors would best be developed on the basis of collaboration and mutual agreement, the Assembly urged "States to refrain from unilateral environmental measures that would adversely affect the orderly development of international civil aviation."
- 2.5 ICAO remains the appropriate United Nations body for Contracting States to develop the environmental goals and global framework with respect to aviation and to work together to translate this into effective action. It is critical for ICAO to maintain leadership and continue important efforts to address aviation's environmental impacts, including fostering cost-effective solutions for use by Contracting States to achieve the global environmental goals, and ensure the sustainable growth of international civil aviation with all the benefits it brings to the world.
- 2.6 To address successfully the challenge of aviation emissions growth, ICAO should seek collaboration from Contracting States on a comprehensive approach to manage the impacts of aviation's emissions through a combination of efficiency, technology, operational, alternative fuel, and policy measures, taking into account the interdependencies involved in reducing the environmental impact of noise and emissions. Such an approach should:
  - a) urge Contracting States to facilitate research on critical scientific issues to enhance understanding and develop necessary metrics on the impact of aviation greenhouse gas emissions. This way we can ensure measures and approaches are targeting reductions in the areas with the most serious impacts and in the most cost-effective manner:
  - amend the ICAO Global Air Navigation Plan work to provide greater emphasis on reducing fuel burn and aircraft emissions and request States and regional groupings to accelerate improvements in air traffic efficiency and reduce airport congestion. This provides the most immediate and tangible manner to reduce aviation emissionsboth local and global;
  - c) encourage States to foster the necessary research and development to provide more environmentally efficient engine and aircraft designs, and advanced air transportation CNS/ATM systems in a timely and robust manner. Such technology improvements have produced the vast majority of past gains in environmental improvements;
  - d) invite States to explore the development of alternative fuels that could assist aviation in reducing both local air quality and greenhouse gas emissions; and
  - e) support the use of cost-beneficial market-based measures, such as emissions trading, under the auspices of the global ICAO framework on the basis of mutual agreement between States if applied to another State's carriers.
- 2.7 The Committee on Aviation Environmental Protection (CAEP) completed development of emissions trading guidance in February 2007. The ICAO Council subsequently approved this as a draft document in March with a foreword stating that the majority of the Council members support use of

emissions trading on other States' airlines only on the basis of a mutually agreed approach. As a continuation of its leadership role, ICAO should extend its work on market-based measures by including issues related to linking of differing open emissions trading systems in various States and/or regions.

- 2.8 With respect to greenhouse gas emission charges, there continues to be significant legal controversy. Further, as CAEP has already demonstrated such charges are much less cost-effective than emissions trading ICAO should maintain its moratorium on use of greenhouse gas emission charges
- 2.9 It is important to recognize that measures taken to address aviation emissions impacts can impose significant costs and reduce economic development. Given the particular economic conditions of developing countries, such measures could pose a burden. It is important to take into account the implications of such environmental measures for the developing world, something readily done through an approach based on mutual agreement.
- 2.10 In exercising its leadership on aviation environmental issues, ICAO should continue to work towards its vision of safe, secure and sustainable development of civil aviation through cooperation amongst its member States. Contracting States must respect each others rights to decide how best to manage the aviation emissions from their airlines. There will be a wide variety of goals and measures given the diversity of experiences and structures of aviation sectors around the world. Success for ICAO and its Contracting States in tackling the challenges of international aviation emissions will ultimately arise in finding common ground for action based on consultation and collaboration.