



**Statement from the  
International Civil Aviation Organization (ICAO)  
to the Twenty-first Session of the UNFCCC Subsidiary Body for Scientific  
and Technological Advice (SBSTA)**

(Buenos Aires, 6 to 14 December 2004)

The International Civil Aviation Organization appreciates this opportunity to address the Subsidiary Body for Scientific and Technological Advice at its Twenty-first Session.

The aim of this statement is to report to SBSTA on recent developments in ICAO, with a particular focus on the outcome of the 35th Session of the ICAO Assembly (28 September-8 October 2004).

**The Assembly**

The ICAO Assembly met to review ICAO's activities over the past three years and to approve the work programme and budget of the Organization for the period 2005-2007. The major issues considered by the Assembly included aviation safety, aviation security and environmental protection.

The Council reported<sup>1</sup> to the Assembly on its work on **technical and operational measures** to reduce emissions. The principal activities included:

- ✈ The Council's Committee on Aviation Environmental Protection (CAEP) had recommended more stringent Standards for oxides of nitrogen (NO<sub>x</sub>) for inclusion in Annex 16, Volume II - Aircraft Engine Emissions. The new NO<sub>x</sub> Standard, which would be 12 per cent below the current permitted levels, would be considered by Council for adoption early in 2005.
- ✈ Guidance material had been published on operational measures (*Operational Opportunities to Minimize Fuel Use and Reduce Emissions*, Circ 303) so as to enable airports, airlines and other stakeholders that have successfully reduced emissions to share their techniques with others.
- ✈ CAEP was currently analyzing models for the assessment of CNS/ATM environmental benefits and the environmental-related information contained in the Global Air Navigation Plan for CNS/ATM Systems (Doc 9750) would be updated accordingly.

The Council report also drew attention to the increasing cooperation with the UNFCCC process. Regular reports had been made regarding the work in progress within ICAO on limiting or reducing greenhouse gases from aviation and, at the request of SBSTA, ICAO was cooperating in an exercise aimed at improving both the quality of data on aviation missions reported by Parties to the UNFCCC and the methodology on which this reporting is based. In this connection, the UNFCCC Secretariat made a very helpful statement regarding the cooperation that is taking place.

In the light of the Council's report and other inputs, the Assembly:

- underlined the importance of ICAO's leadership role on emission-related issues;
- welcomed the excellent cooperation between ICAO and other UN bodies involved in emissions and recommended that the Council continue to cooperate closely with such bodies, notably the UNFCCC process and the IPCC, and to be responsive to their requests for information;
- recognized that emissions growth from aviation had declined recently, but there remain growing concerns regarding aircraft engine emissions both at the local and global level;
- welcomed the recommendation for a new NO<sub>x</sub> standard;
- expressed its appreciation for the development of the guidance material contained in *Operational Opportunities to Minimize Fuel Use and Reduce Emissions* (Circ 303);
- recognized that air traffic management (ATM) has a significant role to play in alleviating air transport's environmental impact and encouraged States that had not already done so to explore the possibilities offered by ATM to reduce fuel use and emissions;
- called for ICAO, through CAEP in cooperation with other relevant bodies such as the Planning and Implementation Regional Groups (PIRGs), to develop appropriate tools to assess emissions reductions associated with implementation of ATM measures; and
- expressed its support for the work currently being undertaken by CAEP in the emissions field.

The Council also reported<sup>2</sup> to the Assembly on its work in response to the Assembly's earlier request "to continue to develop guidance for States on the application of **market-based measures** aimed at reducing or limiting the environmental impact of aircraft engine emissions, particularly with respect to mitigating the impact of aviation on climate change", and "to evaluate the costs and benefits of the various measures with the goal of addressing aircraft engine emissions in the most cost-effective manner" (Assembly Resolution A33-7, Appendix I). This work had focussed on voluntary measures, emissions trading and emission-related charges. It had been assumed that the market-based measures would target CO<sub>2</sub> emissions, while leaving open the possibility of later extending this work to other greenhouse gas emissions from aviation.

In the light of the Council's report and other inputs, the Assembly noted that discussions on the use of market-based measures were taking place in a context of consensus as to the general objectives that were pursued by States regarding the need to address aviation's impact on climate change, and recognized the leadership role that ICAO had to play in this regard. However, diverging views existed on the pace and methods which should be used to reach these objectives.

With respect to **voluntary measures**, under which industry and governments would agree to a target and/or a set of actions to limit or reduce emissions, the Assembly:

- welcomed the progress made in developing a Template Agreement - Memorandum of Understanding that States and other parties concerned could use, along with associated guidance; and

- took note of the fact that some voluntary measures were being implemented or would be in the near future.

The Assembly endorsed the plans of the Council for conducting further studies and developing appropriate guidance on an **international aviation open emissions trading system**, on the basis of two identified approaches:

- under one approach, ICAO would support the development of a voluntary emissions trading system that interested airlines, airports, States and international organizations might propose; and
- under the other approach, ICAO would provide guidance for use by States, as appropriate, to incorporate emissions from international aviation into States' emissions trading schemes consistent with the UNFCCC process.

On the more difficult issue of **emission-related charges**, the Assembly took note of the work undertaken and of the diverging opinions. CAEP had attempted to develop guidance to address issues that could arise if some States were to implement a CO<sub>2</sub> emissions charge, but had been unable to arrive at a consensus because of a number of outstanding issues, including cost-effectiveness and various legal, policy and implementation aspects.

In the view of a majority of States at the Assembly, the application of charges would not be the most cost-effective option (consistent with UNFCCC, Art. 3, para. 3) and there remained fundamental questions about the scientific basis for such a charge and about its legitimacy if applied at a global level. These States felt that no unilateral measures should be imposed but that solutions should rather be pursued at a multilateral level. Finally, they stressed that the focus should primarily be put on technical and operational measures, rather than on market-based measures. In view of their economic difficulties, developing States had serious concerns that such measures could possibly be applied to them while they had no obligations under the current international climate change instruments; they consequently expressed a strong opposition to emission-related levies and requested to be exempted from them.

An opposing view stressed the need to keep all options for market-based measures open, since one of the options selected, emissions trading for example, may not be sufficient in itself to deal completely with the problem. These States felt that scientific uncertainty should not be used as a means of avoiding action, referring to the precautionary principle recommended in the Rio Declaration (1992) and the UNFCCC (Art. 3, para. 3) and to the polluter-pays principle. They also put forward the need for those States that had accepted commitments under the UNFCCC process, and more especially under the Kyoto Protocol expected to enter into force shortly, to take action that was consistent with this process, while taking into account the concerns of developing States, in a context of common but differentiated responsibilities.

The Assembly recognized that States have commitments under the UNFCCC and that ICAO has special responsibilities in this process, particularly now that the Kyoto Protocol seemed likely to enter into force. It agreed that future work on CO<sub>2</sub> emissions charges should address and attempt to resolve the outstanding issues that had been identified in the Council's report and during the Assembly's discussions, and noted that the Council would be considering how such studies would be conducted in the light of the Assembly's consideration of this matter. The views expressed would help the Council in its future deliberations.

After extensive negotiations, an agreement was reached. Studies on greenhouse gas emissions charges would continue. Over the next three years, such charges would not be introduced internationally, although there would be some scope for States to introduce them under certain circumstances; this matter would be considered and discussed again at the next regular session of the Assembly. In addition, new studies concerning emissions charges related to local air quality would be initiated.

In order to reflect the various developments since the Assembly Session in 2001, the Assembly updated and revised its *Consolidated statement of continuing policies and practices related to environmental protection* (formerly Assembly Resolution A33-7, now A35-5), Appendices H and I of which relate to aircraft engine emissions<sup>3</sup>.

### **Methodological issues regarding aviation emissions**

Information on this subject was provided to SBSTA/20 in June and a side event was organized by ICAO on aviation emissions<sup>4</sup>. Significant developments since then include:

- ➔ Progress has been made in the development of modelled data that would enable comparisons to be made with the emissions estimates that are submitted to the UNFCCC Secretariat by Annex I Parties. ICAO aims to provide “official” ICAO figures on emissions for Annex I Parties, based on modelled data from emissions models made available to ICAO (i.e. SAGE and AERO2K), prior to SBSTA/22.
- ➔ ICAO is actively supporting the IPCC Technical Support Unit in the latest revision of the IPCC guidelines for national greenhouse gas inventories, and provided a substantive input to the Arusha meeting on energy in September.

### **Concluding remarks**

The ICAO Assembly recognized the considerable progress made in addressing aircraft engine emissions - through technical, operational and market-based measures - and emphasized ICAO’s leadership in these matters. The Assembly welcomed the excellent cooperation between ICAO and other UN bodies involved in emissions and recommended that the Council continue to cooperate closely with such bodies, notably the UNFCCC process and the IPCC, and to be responsive to their requests for information.

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1. Assembly working papers can be accessed on the ICAO website ([www.icao.int](http://www.icao.int), click on Meetings, then 35th Session of the Assembly). This report is working paper A35-WP/56, *Civil Aviation and the Environment*.

2. A35-WP/76, *Report by the Council on Market-based Measures Regarding Aircraft Engine Emissions*.

3. The full report of the Assembly’s consideration of emission-related issues, as well as the text of the new consolidated statement can be found in A35-WP/352.

4. The presentations from the side event are accessible on the UNFCCC website.