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

(Bonn, 4-13 June 2008)

It is a pleasure for the International Civil Aviation Organization to again report to SBSTA on major initiatives in the field of aviation and the environment.

During SBSTA 27, we reported on the results of ICAO’s work regarding aircraft engine emissions and, in particular, the outcome of the seventh meeting of ICAO’s Committee on Aviation Environmental Protection (CAEP/7) and decisions of the 36th Session of the ICAO Assembly. We also reported on the cooperation with the Intergovernmental Panel on Climate Change (IPCC) regarding methodological issues.

As a matter of principle, ICAO has made it a point to participate and contribute to the work of the SBSTA and the IPCC by providing information, studies and methodologies on the estimation and reporting of aviation emissions. Our objective has been to ensure the highest quality of data on aviation emissions, as policy decisions must be based on sound and reliable information. The input requested by SBSTA from ICAO has been delivered since SBSTA 22. Meanwhile, no further progress in the discussions on methodological issues related to bunker fuels has been observed. Progress on all fronts will be needed if we want to advance aviation’s action on climate change.

ICAO is continuing its work on aircraft emissions and standard setting, operational measures to reduce global emissions and market-based measures. In line with the request of the Assembly to regularly assess the impact of aviation on the environment, ICAO has continued to develop tools and methods for the purpose of estimating aviation emissions. Currently, CAEP is progressing with its aviation emissions modelling efforts in the assessment and review of four models made available to CAEP, namely the Aviation Environmental Design Tools System for Assessing Aviation’s Global Emissions (AEDT/SAGE) developed by the US FAA; the Advanced Emission Model (AEM) developed by EUROCONTROL in coordination with the US FAA; the European Commission AERO2K model; and the Future Aviation Scenario Tools (FAST) model developed by Manchester University.

These models will allow an assessment of the attainment of ICAO’s environmental objective of limiting or reducing the impact of aviation greenhouse gas emissions on the global climate and will produce, by June 2009, GHG emission trends for 2016, 2026, 2036 and 2050. This exercise will include the consideration of potential future technology and aviation carbon dioxide (CO₂) emissions operational improvements to compare with the business-as-usual scenario.

One recurring problem that needs to be addressed is the lack of data to feed the models. ICAO is working to collect radar data from States/regions where fuel burn data is not readily available and has requested States to provide information on aviation emissions \(^1\). Cooperation from all parties in the collection of this critical information would be appreciated.

As accurate information is paramount for sound policy decisions, any scenario projecting aviation growth needs to take a realistic account of the rapidly rising cost of oil and, by extension,

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\(^1\) State Letter ENV 1/1-08/44 requests States to reply to a questionnaire on aircraft operations fuel consumption, not later than 30 August 2008.
aviation fuel. Also, forecasts for aviation emissions brought to the attention of the UNFCCC process should provide a clear distinction between domestic and international aviation emissions, as Article 2.2 of the Kyoto Protocol addresses only the international portion of aviation.

Another significant development we would like to point out is the approval of a methodology to calculate CO$_2$ from air travel for the use in carbon offset programmes. The methodology formed the basis for the ICAO Carbon Emissions Calculator, a publicly available tool which makes it possible for anyone to estimate the emissions attributed to a specific flight. The Calculator requires a limited amount of information from the user, applies the best publicly available industry data and takes into account factors such as various aircraft types, city pairs, passenger load factors and cargo carried. ICAO envisages to constantly improve this initial version of the Calculator as more information becomes available and we look forward to your comments on how best to improve the tool from a user’s point of view. The ICAO Carbon Calculator will be officially launched on Thursday here in Bonn with a special presentation.

As reported to SBSTA 27, the 36th Session of the ICAO Assembly also requested the formation of a group for the purpose of developing and recommending to ICAO an aggressive Programme of Action on International Aviation and Climate Change. Consequently, the Group on International Aviation and Climate Change (GIACC) met in February and will be meeting again in July to develop proposals for consideration by a high-level ICAO meeting in connection with COP/15.

Climate change is not unique to aviation and international efforts are underway for swift and substantive action to address it. The collaboration between the UNFCCC and ICAO is imperative given the extraordinary complexity of this issue. Both organizations must work together to find effective solutions. Article 2.2 of the Kyoto Protocol calls for developed countries (Annex I parties) to pursue limitation or reduction of greenhouse gases from “aviation bunker fuels” working through ICAO. Moreover, the 36th Session of the Assembly underscored the need for ICAO and the aviation community to continue to cooperate with United Nations organizations involved in policy-making on global climate, notably the UNFCCC.

We look forward to progress in SBSTA in the upcoming sessions.

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