



International Civil Aviation Organization

WORKING PAPER

A37-WP/181
EX/32
10/9/10

ASSEMBLY — 37TH SESSION

EXECUTIVE COMMITTEE

Agenda Item 17: Environmental protection

**ADDRESSING GLOBAL CLIMATE CHANGE WITHIN THE FRAMEWORK OF
SUSTAINABLE DEVELOPMENT OF INTERNATIONAL AVIATION**

(Presented by the People's Republic of China)

EXECUTIVE SUMMARY

Climate change concerns the well-being of mankind and global sustainable development. It is an environmental issue, but more importantly, a development issue arising in the course of human development. The aims and objectives of ICAO are to develop the principles and techniques of international air navigation and to foster the planning and development of international air transport. The UNFCCC, Kyoto Protocol (KP) and Bali Action Plan (BAP) constitute the basic legal framework and the premise to address the GHG emissions from international aviation, the principle of “Common but Differentiated Responsibilities (CBDR)” is the fundamental principle for negotiation and cooperation on the issues of GHG emissions from international aviation, and ensuring equity is the key to resolve issues. Developed countries should take the lead in reducing carbon footprint substantially, leaving sufficient space for the development of international aviation in developing countries, while at the same time providing financial support and technology transfer to developing countries. China has long been pursuing the path of sustainable development and has, on its way of maintaining and promoting the development of air transportation, made very positive effects and significant contributions in addressing GHG emissions from international aviation.

Action: The Assembly is invited to:	
a) reaffirm that the UNFCCC, KP and BAP are the basic legal framework and the premise to address the GHG emissions from international aviation. The principle of CBDR is the fundamental principle to address GHG emissions from international aviation. ICAO should address the GHG emissions from international aviation under the framework of UNFCCC and under the principle of CBDR. Emphasize that developed countries assume their responsibility for their historical emissions, take the lead in reducing emissions dramatically and honour their commitments to provide financial support and technology transfer to developing countries;	
b) affirm that the goal of fuel efficiency or the metrics of historical cumulative emissions per capita from international aviation will be the most feasible options which integrate emissions control into the development. Request developed countries to make and implement active commitments to achieve targets of carbon neutral growth and absolute emissions reductions, and emphasize that targets of carbon neutral growth (CNG) and absolute emissions reductions are not aimed at developing countries;	
c) affirm that mitigation, adaptation, financial support and technology transfer are of the same significance. Collaborate and interface with UNFCCC negotiations so as to redesign the ICAO negotiation framework on international aviation and climate change by the 38th session of the ICAO Assembly by highlighting issues of adaptation, financial support and technology transfer, and actively exploring and establishing relevant mechanisms; and	
d) reaffirm that countries are voluntary to choose the basket of measures and make decisions to address aviation's greenhouse gas emissions in accordance with their own national circumstances; affirm the continuing validity of Assembly Resolution A36-22 Annex L which was approved by the 36th session of the ICAO Assembly; urge studies on market-based measures' (MBM) impact on the development of international aviation, particularly on that in developing countries, to be fully demonstrated; encourage developed countries to take the lead in introducing MBMs such as emission trading among themselves and make demonstrable progress for future sharing; and oppose to unilateral and non-differentiated mandatory implementation of global emissions trading.	
<i>Strategic Objectives:</i>	This working paper relates to Strategic Objective C, <i>Environmental Protection – minimize the adverse effects of global civil aviation on the environment.</i>
<i>Financial implications:</i>	No additional resources required.
<i>References:</i>	No references.

1. INTRODUCTION

1.1 Climate change concerns the well-being of mankind and global sustainable development, which is one of the most demanding challenges faced by mankind and calls for active response from the international community. Climate change is an environmental issue, but more importantly, a development issue, which should and can only be addressed in the course of development. The aims and objectives of ICAO are to develop the principles and techniques of international air navigation and to foster the planning and development of international air transport.

1.2 The *Declaration and Recommendation approved by the High-level Meeting on International Aviation and Climate Change (HLM)* in October 2009 reaffirmed the acknowledgement of the principle of “Common but Differentiated Responsibilities” (CBDR) and that the developed countries take the lead in emissions reduction. It established the medium and long-term aspirational goal of fuel efficiency improvement, and proposed that the specific national conditions of developing countries and their respective capabilities as well as the sustainable development of international aviation should be taken into account. Besides, the *Recommendations* by the HLM highlighted that measures to assist developing countries should be further elaborated on.

1.3 The design of different emission reduction mechanism may lead to the realization of the common objective of emissions reduction but the resolving of current issues will serve the basis for the discussion of future issues. Currently, equity should be reflected and become the key to tackle the issue. Developed countries should face up to their responsibilities for their cumulative sum of historical emissions and the status quo of their current high per capita emissions. On the other hand, developing countries will encounter arduous tasks to improve people's livelihood and promote the growth of international air transportation, in other words, international aviation emissions from developing countries are primarily survival emissions which ensure their people's basic needs for overseas flight.

2. CHINA'S GENERAL STAND ON INTERNATIONAL AVIATION AND CLIMATE CHANGE

2.1 The United Nations Framework Convention on Climate Change (UNFCCC), Kyoto Protocol (KP), and Bali Action Plan (BAP) constitute the basic legal framework and the premise to address the GHG emissions from international aviation. The principle of "Common but Differentiated Responsibilities (CBDR)" is the fundamental norm which plays a leading and core role in addressing climate change. Article 2.2 of KP provides that the developed countries (Annex I parties) shall take the lead in cutting substantially GHG emissions from international aviation and fulfil their international commitments to provide developing countries with financial, technical and capacity building support so as to enhance endogenous capacities of developing countries to tackle issues of international aviation and climate change.

2.2 In light of the terms and provisions in UNFCCC and KP, specific conditions of developing countries should be taken into account. Considerable differences exist between developing and developed countries with respect to cumulative sum of historical emissions, per capital enplanements, per capita emissions, aviation technology, infrastructure, aircraft per capita, funds, etc. While fully understanding and respecting developing countries needs of humanity development in air transportation, developed countries should take the lead in reducing emissions, honour their international commitments and provide developing countries with support in financing, technology transfer and capacity building in order to help developing countries improve fuel efficiency.

2.3 The *Declaration and Recommendations* by HLM approved in October 2009 should be fully supported. ICAO should redesign the framework for future negotiations, aiming at the comprehensiveness of agenda and the balance of interests. Specifically, the equal significance of mitigation, adaptation, financial support and technology transfer should be emphasized, and certain provisions should be clarified: first, responsibilities and emission reduction targets of developed countries to take the lead in emissions reductions should indicate stronger ambition; second, effective mechanisms should be established to ensure the scaled-up provision of finance, technology transfer and capacity building support by developed countries to developing countries; and third, in-depth discussion should be taken on adaptation, in particular the support to developing countries to implement adaptation actions in airport construction and air traffic management.

2.4 ICAO should put the development of international air transport as its first priority, bearing in mind the mandate of Article 44 on the aims and objectives of ICAO in the Chicago Convention. Among the global aspirational goals, the goal of fuel efficiency or the metrics of historical cumulative emissions per capita from international aviation will be the most appropriate measures which integrate emissions control into the development. Those goals which are in a one-sided pursuit of emissions reductions will pose a hindrance to development and hence are neither practical nor reasonable. China encourages developed countries to make and implement active commitments to achieve the goal of CNG or absolute emissions reductions, which, however, are not aiming at developing countries.

2.5 Of all the measures to foster the sustainable development of international aviation, technology and operations will provide the most feasible opportunities to cut emissions effectively and directly. China upholds the point that technological and operational measures will make considerably

potential contributions to developing countries' effort in aviation emissions reductions and remain the primary task and the best choice for them to reduce emissions currently. China recognizes the positive role of market-based measures (MBMs) in emissions reductions but believes that MBMs should not be implemented until substantial studies on the MBMs' impact on development, especially on international aviation development in developing countries, have been demonstrated. As well, developed countries should take the lead in introducing MBMs among themselves and make the demonstrable progress for future sharing. China opposes to unilateral, non-differentiated and mandatory implementation of a global emissions trading.

3. CASE: CHINA'S ACTIONS AND ACHIEVEMENTS ON THE CONTROLLING OF INTERNATIONAL AVIATION EMISSIONS

3.1 "Sustainable development" of civil aviation, for China, is defined as "the development of civil aviation towards a resource-economical and environment-friendly industry by actively promoting energy conservation and emissions reductions". The Civil Aviation Administration of China (CAAC) is mobilizing and implementing measures within the scope of its powers and capabilities to minimize aviation emissions, which includes, *inter alia*, developing "Plan to Reduce Energy Consumption and GHG Emissions from Aviation"; establishing its own data-collecting, monitoring and evaluation procedures for China's aviation energy consumption and emissions; boosting its supervision and management mechanism aiming at airlines and airports; enhancing the flexible use of airspace to minimize flight distances; promoting the replacement of APU operations by ground power units and air conditioning units to reduce surface emissions; and publicizing extensively its energy-saving and emissions-reduction programme throughout the industry.

3.2 Through CAAC efforts on the routing of aircraft into "provisional straight & efficient line", a total of 15.8 million kilometres of flying distance was saved in 2009, resulting in a reduction of 88,000 tonnes of fuel burn and approximately 280,000 tonnes of CO₂ emissions. Through a trial programme of replacing APU operations with ground power units and air conditioning units at international airports such as Beijing Capital (PEK), Shanghai Pudong (PVG) and Guangzhou Baiyun (CAN), 38,000 tonnes of fuel has been saved and around 120,000 tonnes of CO₂ emissions have been reduced in 2009. Stimulated by CAAC, airlines in China, one after another, have taken actions to improve operations and/or offset carbon footprint under the theme of "Fly Green". Actions taken include continuous optimization of flight route structures and flying distances. In addition, airlines in China phase-in new types of aircraft and engines and phase-out old ones despite financial difficulties, and the average age of the Chinese fleet is consequently less than eight years, surpassing the average age of world fleet.

3.3 CAAC will consolidate efforts to further reduce carbon emissions by seeking international cooperation in the development and deployment of alternative aviation fuels.

4. RECOMMENDATION

4.1 The Assembly is invited to consider and adopt for inclusion in the resolution the proposed text of a) through d) in the executive summary.