International Civil Aviation Organization

WORKING PAPER

HIGH-LEVEL MEETING ON INTERNATIONAL AVIATION AND CLIMATE CHANGE

Montréal, 7 to 9 October 2009

Agenda Item 2: Proposals for strategies and measures to achieve emissions reductions

MARKET-BASED INSTRUMENTS AND CLIMATE CHANGE

(Presented by the Secretariat)

SUMMARY

This paper provides information on the GIACC discussions related to market-based measures, on relevant work carried out by ICAO and on a proposal put forward by the aviation industry, for the consideration of the HLM-ENV.

Action by the HLM-ENV is in paragraph 6.

1. INTRODUCTION

1.1 The Assembly Resolution A36-22 Appendix K "ICAO Programme of Action on International Aviation and Climate Change" noted that, to promote sustainable growth of aviation, a comprehensive approach, consisting of work on technology and standards, and on operational and market based measures (MBMs) to reduce emissions is necessary. Accordingly, this Appendix requested the Council to develop an aggressive Programme of Action that encompasses strategies and measures to achieve emissions reduction, including MBMs.

2. MBM DISCUSSIONS IN GIACC

2.1 In the GIACC/4 meeting, its MBM working group reported that MBMs implemented by States or by Regions with different policies and parameters, in the absence of a framework developed by ICAO, were far from optimal. It concluded that a scenario where each State would adopt its own measures, but within an ICAO framework that would define agreed principles for the implementation of MBMs was an intermediate option. This was seen as preferable to other options in the sense that it would provide a coordinated plan so that individual State's policies, although voluntary, constitute building blocks towards a global system. This scenario could include, inter alia, emissions charges and emissions trading schemes.

2.2 The working group recommended that the process to develop a framework for MBMs for international aviation should properly address major issues related to their implementation, in particular that: (a) the principles of non-discrimination and equal and fair opportunities set forth in the Chicago Convention are fully taken into account; (b) the specific circumstances and different capabilities of each Contracting State and Region are fully taken into account; (c) only the most effective and efficient measures are chosen; (d) industry compliance is facilitated; (e) market-based measures can be coordinated and are not duplicative; and (f) the geographical scope issues are considered.

2.3 Given diverging views on the application of market-based measures across national borders, there was no consensus in GIACC on the application of global market-based measures to international civil aviation. The GIACC recommended that the ICAO Council establish a process to expeditiously develop a framework for market-based measures in international aviation, taking into account the conclusions of this High-level Meeting on the subject and the outcome of the UNFCCC COP15.

3. MBM INVESTIGATED BY SECRETARIAT

3.1 The CAEP has continued its work on mitigation measures, including the market-based measures to reduce aviation emissions. ICAO developed a template in 2004 for voluntary agreements between aviation industries and public organizations, and collected and shared information on voluntary actions to reduce aviation GHG emissions by Contracting States and various stakeholders in 2007. In the same year, ICAO also published guidance for States for incorporating international aviation emissions into their trading schemes (*The Guidance on the Use of Emissions Trading for Aviation,* Doc 9885). In addition, guidance on local emissions-related charges (*Guidance on Aircraft Emissions Charges Related to Local Air Quality*, Doc 9884) had earlier been published.

3.2 CAEP is now conducting a study on issues related to linking open emissions trading systems involving aviation. With the implementation of different emissions trading schemes throughout the world, the increased harmonization of features and processes may facilitate the linkage of such schemes, thus enabling the creation of a global scheme. CAEP is also developing a study on the potential for carbon offset measures to mitigate the impact of aviation on climate change recognizing its potential for implementation in the short term. In this regard, the ICAO Carbon Emissions Calculator should be noted as an internationally accepted tool for estimating CO_2 emissions per passenger, that could be used in aviation offsetting schemes.

4. PROPOSALS FROM IATA

4.1 The IATA submitted, on behalf of the aviation industry, a paper to the GIACC/4 (GIACC/4-IP/6), in which the industry can only support economic measures which are cost-effective and non-discriminatory. These measures could include emissions trading, carbon funds, offsets or other similar mechanisms as long as they are implemented globally, on the basis of consensus, provide full and open access to the global carbon market and under the auspices of ICAO.

4.2 The industry believes that any economic measures applied to aviation under a global sectoral approach must offer the greatest environmental benefit while simultaneously providing the most cost-effective outcome for the industry. Economic measures must not create “carbon leakage” where emissions transfer between countries or carriers leading to market distortions.

4.3 It was emphasized that any revenues from the economic measures under a global scheme should address aviation emissions as well as be clearly earmarked for environmental purposes. A proportion of such revenues should be re-invested in additional measures to directly improve the emissions profile of aviation, with a focus on the first three pillars of the industry's 4 pillar strategy. The balance of such revenues may be used to acquire certificated emission reductions derived from recognised climate mitigation and adaptation projects, provided that airlines are able to gain the benefit of these reductions. The global sectoral approach should also incentivise operators to acquire more fuel efficient aircraft and to purchase low carbon jet fuels, i.e. fuels that offer net carbon reductions over their full life cycle, and ensure that they receive credits for the related CO_2 benefits.

5. MARKET BASED MEASURES UNDER THE UNFCCC PROCESS

5.1 Under the Kyoto Protocol, developed countries with limitation or reduction targets can fulfil their commitments through the implementation of actions within their national boundaries, and through the use of three market-based instruments (known as Kyoto Mechanisms), namely Joint Implementation (JI), Clean Development Mechanism (CDM) and Emissions Trading.

5.2 Over the course of the last four years, the implementation of the Kyoto Mechanisms has led to the creation of a global carbon market that has in turn stimulated sustainable development through technology transfer and investment in developing countries. It has also encouraged the private sector and developing countries to contribute to emission reduction efforts. As an example, the 1,780 registered CDM projects are expected to bring about reductions of GHGs of about 1.6 billion tonnes by the end of 2012.

5.3 Under the present rules and modalities, the Kyoto Mechanisms cannot be used for the purpose of addressing GHG emissions from international aviation, since these emissions are excluded from the national total emissions of all Parties to the Kyoto Protocol.

5.4 During the on-going negotiations within the UNFCCC process on a new global agreement on climate change, governments have been debating how to optimize the rules and modalities of all three Kyoto Mechanisms in order to improve their operational effectiveness in the future. As regards the international aviation sector, references have been made in relation to the possible future use of the Kyoto Mechanisms in order to address the GHG emissions from the sector.

5.5 Furthermore, several Parties have linked the possible future use of such mechanisms with proposals to raise resources through, for example, the introduction of levies or charges and the auctioning of emissions allowances for international aviation. No decision has however been taken on any of these issues, but the discussions will continue and intensify until the COP15 meeting in December 2009.

5.6 An area of particular interest for ICAO would be to ensure that the international aviation sector has full access to all instruments, including market based mechanisms (existing or new), that may form part of any future global climate change agreement under the UNFCCC.

5.7 In addition to proposals by governments under the UNFCCC process, some airlines have elaborated their own ideas on how to address GHG emissions from international aviation in the context of a future global agreement. For example, at a side event during the UNFCCC climate talks held in Bonn, Germany, from 29 March to 8 April 2009, the Aviation Global Deal (AGD)[1] group proposed a global sectoral framework on MBMs based on an open emissions trading scheme, with full open access to global carbon markets. Key elements of the proposed framework are:

- no allocation responsibility by States for international aviation emissions. Rather, a global emissions allowance for international aviation sector would be set through UNFCCC negotiations by aligning with broader Copenhagen agreement targets (thus international aviation sector would be treated as a separate "country" with its own emissions allowance);

- a proportion of this global allowance (also set through UNFCCC negotiations) could be allocated to airlines without charge, with the remainder being allocated through auctioning. The number of allowances would be based upon carbon content of fuels, giving incentive for the use of biofuels; and

- this sectoral system would be administrated by a new or existing UN body called "Global Carbon Authority" All airlines would obtain their free and auctioning allowances individually from the Global Carbon Authority and from other sources e.g. CDM / JI credits and potentially deforestation avoidance credits. They would surrender their allowances to the Global Carbon Authority; and the Global Carbon Authority would manage the revenues generated from auctioning of allowances and would disburse them to a set of clearly defined, transparent and verified emissions-reduction projects.

5.8 The AGD group advocates that this global sectoral framework must be simple, universally applicable and straightforward to implement and administer. Also this approach could maintain equal treatment among airlines thus avoiding carbon leakage and competitive distortion, while creating differentiation between developed and developing countries through differential use of revenue collected from auctioning.

6. ACTION BY THE HIGH-LEVEL MEETING

6.1 The HLM-ENV is invited to:

a) re-emphasize the importance of addressing GHG emissions from international aviation by employing a broad range of tools, including market-based measures in order to ensure the cost effectiveness of action to be taken by the sector;

b) highlight that it is essential for the international aviation sector to have full access to all market-based instruments that will form part of any new global agreement on climate change;

c) acknowledge that the use of certain market-based measures for the international aviation sector would generate financial resources which could be used for mitigation and adaptation activities; and

[1] The AGD Group is a coalition of aviation industry stakeholders (Air France/KLM, BAA, British Airways, Cathay Pacific Airways, Finnair, Qatar Airways and Virgin Atlantic Airways) supported by the Climate Group (environmental NGO).

d) recommend ICAO to establish a process to develop a framework for market-based measures in international aviation, taking into account the conclusions of the HLM-ENV and the outcome of the COP15, for the consideration of the 37th Session of the ICAO Assembly in 2010.

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