



WORKING PAPER

**HIGH-LEVEL MEETING ON INTERNATIONAL AVIATION
AND CLIMATE CHANGE**

Montréal, 7 to 9 October 2009

Agenda Item 1: Aspirational goals and implementation options

REPORT OF THE GROUP ON INTERNATIONAL AVIATION AND CLIMATE CHANGE

(Presented by the Secretariat)

INFORMATION PAPER

SUMMARY

This paper provides the HLM-ENV with the results of the meetings and deliberations of the Group on International Aviation and Climate Change (GIACC).

1. INTRODUCTION

1.1 This paper provides a consolidated reference to the results of the meetings and deliberations of the Group on International Aviation and Climate Change (GIACC) and the Programme of Action (Appendix A), which was agreed by consensus by the GIACC and subsequently approved by the 187th Session of the ICAO Council. The paper also submits a set of recommendations prepared under the responsibility of the Chairman and Vice-Chairman of the fourth meeting of GIACC (Appendix B).

2. BACKGROUND

2.1 The fourth and final meeting of the GIACC was held in Montreal from 25 to 27 May 2009 with the previous day (24 May) devoted to working group meetings. Fourteen of the fifteen participants attended the meeting.

2.2 The meeting completed its agenda. Daily summaries were not prepared by the Chairman as the results of the deliberations were captured in the Programme of Action (Appendix A), the Chairman's recommendations (Appendix B), and the Chairman's report. The Chairman's recommendations and report were not accepted by Council on the basis that it did not reflect the consensus of the GIACC.

3. SUMMARY OF MEETING

3.1 The fourth meeting of the GIACC was recognized as its final meeting whereupon the mandate of Assembly Resolution A36-22 Appendix K must be fulfilled. Therefore the GIACC focused its energy to resolve the open issues related to aspirational goals and with respect the market based measures. It completed its mandate by producing a report which contained a “Programme of Action” in response to its mandate.

3.2 A total of three working papers and twelve information papers were provided to the meeting to assist and inform their deliberations. Information papers were provided by the Secretariat, and in addition, by: the International Air Transport Association (IATA); the International Coordinating Council of Aerospace Industry Associations (ICCAIA); and the International Coalition for Sustainable Aviation (ICSA), none of whom attended the meeting, and two information papers from the United States participant, as well as two from the MBM working group.

4. DEVELOPMENTS WITH RESPECT TO GOALS

4.1 The Co-chairperson of the Goals Working Group (WG/4), presented Working Paper No. 2 and reported that WG/4 was able to recommend global aspirational goals in the form of fuel efficiency for the short, medium and long-term, however, the working group was not able to achieve consensus on developing goals which demonstrate a stronger ambition.

4.2 The working group recommended, and the GIACC subsequently adopted, the following global aspirational goals; an annual fuel efficiency improvement until 2012 of 2% for the short-term, an annual fuel efficiency improvement of 2% until 2020 or 2025 for the medium-term (GIACC agreed 2020) and an annual fuel efficiency improvement of 2% from 2021 to 2050 for the long-term.

4.3 According to Working Paper No. 2, this compares to the goals expressed by IATA, which are the equivalent of a short-term goal in 2012 of about 2.1% annual fuel efficiency improvement, about 1.9% per annum in the medium-term of 2020 and about 1.1% per annum in the long-term of 2050.

5. DEVELOPMENTS WITH RESPECT TO MARKET-BASED MEASURES

5.1 The Chairman of the Market-Based Measures (MBMs) Working Group, presented Working Paper No. 3 and reported that the working group had reviewed the past work of ICAO, received input from various sources including industry and discussed the various MBMs that could be applied to international aviation. The working group generally agreed that MBMs implemented by States or by Regions with different policies and parameters, in the absence of a global framework developed by ICAO, are far from optimal.

5.2 The working group developed three scenarios to implement MBMs and concluded that their scenario C where each Contracting State would adopt its own measures, but within an ICAO framework that would define agreed principles for the implementation of MBMs including how they should contribute to global goals, was an intermediate option. It was seen as preferable to the other options in the sense that it would provide a coordinated plan so that individual Contracting State's policies, although voluntary, constitute building blocks towards a global system. This scenario could include both emissions charges and emissions trading schemes.

5.3 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: (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.

5.4 The working group provided a summary of their discussion points and a compendium of draft main conclusions of their work. These formed the basis for further discussion at the fourth meeting, which concluded that there was no consensus in GIACC on the application of market-based measures to international civil aviation.

6. OVERVIEW OF GIACC CONCLUSIONS

6.1 After discussing the new information provided in the fourth meeting and taking into consideration the work of the previous three meetings, the GIACC focused its efforts on developing a Programme of Action that was agreed by consensus. While a similar process was intended to be followed with respect to a series of recommendations to be delivered by the GIACC to the Council, this could not be completed within the scheduled three day meeting after a number of GIACC participants departed on the adjournment of the third day and before this discussion was finalized.

6.2 The recommendations were subsequently taken up by the Chairman and the Vice-Chairman as the fourth meeting was followed by two days of drafting the recommendations and the GIACC report. This session was attended by a minority of the participants and some advisors, and their comments, were incorporated into the final products. As a result, these recommendations do not reflect a consensus of the GIACC.

6.3 GIACC's recommended approach is for a Programme of Action where individual States develop action plans to suit their circumstances, guided by global aspirational goals for emissions and drawing on support from ICAO as appropriate.

6.4 The GIACC was successful in agreeing by consensus, short, medium and long-term goals in the form of fuel efficiency as reported in para 4.2. There was no consensus to go beyond these goals to indicate a stronger ambition. However, the GIACC recommended the goals be reviewed on a periodic basis in light of scientific and technological advances.

6.5 The goals agreed by GIACC will not attribute specific obligations to individual States. The different circumstances, respective capabilities and contribution of developing and developed States to the concentration of aviation GHG emissions in the atmosphere will determine how each State may contribute to achieving global aspirational goals.

6.6 The GIACC expressed support for the development of a CO₂ standard for new aircraft types.

6.7 The GIACC agreed to a basket of measures that can be selected by States to apply to their international aviation sector in line with their circumstances and capabilities and, which include measures to facilitate access to assistance, particularly for developing countries.

6.8 The role of market-based measures to reduce the climate impact of international aviation was thoroughly discussed but consensus to apply those measures was not achieved.

6.9 The GIACC recommended the Council establish a process to develop a framework for market-based measures in international aviation, taking into account the conclusions of the HLM-ENV meeting and the UNFCCC COP15, with a view to complete this process expeditiously.

6.10 The need for accurate and complete data on aviation traffic and fuel burn was recognized and further work by the Secretariat under its Article 67 authority is recommended, including the provision of technical and financial support to developing countries to assist them in this regard.

6.11 The GIACC recommended that the Council encourage States to develop action plans which articulate the proposed approach in that State to reduce the climate effects from their international aviation sector and to file those plans with ICAO.

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APPENDIX A

GIACC PROGRAMME OF ACTION

This Programme of Action was adopted by consensus in GIACC

1. GIACC recognizes the critical importance of addressing climate change, and thus recognizes the need to strive to find ways and means to limit or reduce the impact of greenhouse gas emissions from international civil aviation on the global climate.
2. GIACC agreed that decisions of this group shall not prejudice the outcome of the negotiations under the UNFCCC and Kyoto Protocol.
3. GIACC acknowledges the principles and provisions on common but differentiated responsibilities and respective capabilities, and with developed countries taking the lead under the UNFCCC and the Kyoto Protocol.
4. GIACC acknowledges the principles of non-discrimination and equal and fair opportunities to develop international aviation set forth in the Chicago Convention.
5. While there was no consensus, some GIACC Members are of the view that the Programme of Action does not address the commitments under article 2.2 of the Kyoto Protocol.
6. Notwithstanding the substantial fuel efficiency improvements achieved by the aviation sector and the impact of the current economic downturn, GIACC recognises that the projected growth of international air traffic will outweigh the gains made by currently projected fuel efficiency improvements resulting in an average year over year increase in total fuel burned.
7. GIACC recommends a strategy for efforts to achieve global aspirational goals.
8. The short term goal to 2012 agreed by the GIACC is for improvements in the in-service fleet average fuel efficiency of international aviation operations at the rate of 2% per year, calculated on the basis of volume of fuel used per Revenue Tonne Kilometre performed.
9. Agreement was reached in GIACC on goals in the form of fuel efficiency for the medium and longer terms. Specifically, the Group recommends an annual improvement of 2% over the medium term until 2020. For the long term, the GIACC recommends an aspirational global fuel efficiency improvement rate of 2 % per annum from 2021 to 2050.
10. These goals are established on the basis of forecasts and GIACC recommends that they be reviewed on a periodic basis in light of scientific and technological advances. To achieve these goals will require a significant investment in technological development.
11. In addition to fuel efficiency goals, the group considered goals that could indicate stronger ambition. For the medium term, the discussions focused on a goal of carbon neutral growth by 2020. For the

long term, the GIACC discussed carbon emissions reductions. No consensus was reached in either case, and GIACC recommends further work on both medium and long term goals.

12. While there was no consensus, some GIACC members are of the view that it would be necessary and feasible to achieve carbon neutral growth in the medium term, relative to a baseline of 2005, and to achieve substantial CO₂ emissions reduction for the long term for global international aviation.
13. Under the recommended strategy, goals would not attribute specific obligations to individual States. The different circumstances, respective capabilities and contribution of developing and developed States to the concentration of aviation GHG emissions in the atmosphere will determine how each State may contribute to achieving the global aspirational goals.
14. GIACC recommends that the Council should adopt the basket of measures developed by GIACC, from which States may choose (<http://www.icao.int/>), covering aircraft-related technology development, improved air traffic management and infrastructure use, more efficient operations, economic/market-based measures, and regulatory measures. The basket includes measures to facilitate access to assistance, particularly for developing countries.
15. GIACC has provided an initial table showing the basket of measures, which can be further developed through ICAO. GIACC also recommends that ICAO should continue to develop, and update as necessary, guidance to States on the adoption of those measures, including measures to assist developing countries, as well as access to financial resources, technology transfer and capacity building.
16. GIACC acknowledges that there remains disagreement on the application of market-based measures across national borders. GIACC recommends that the ICAO Council establish a process to develop a framework for market-based measures in international aviation, taking into account the conclusions of the High-Level Meeting and the outcome of the UNFCCC COP-15 with a view to complete this process expeditiously.
17. GIACC recommends that Council should encourage States, to develop action plans which articulate the proposed approach in that State, and file those plans with ICAO.
18. GIACC recommends that Council direct the Secretariat to develop and implement a mechanism under Article 67 of the Convention to collect annually from States data on traffic and fuel consumption.
19. GIACC also recommends that Council seek to develop approaches for providing technical and financial assistance in the reporting process to developing countries.
20. GIACC also recommends that the Council seek to develop a CO₂ standard for new aircraft types.
21. The cumulative progress achieved by States on a global level should be reported by ICAO on a triennial basis to the Assembly.

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APPENDIX B

GIACC/4 CHAIRMAN'S RECOMMENDATIONS

This is not a consensus document and was not adopted through a GIACC plenary

Consider the actions recommended below for the implementation of the Programme of Action adopted by consensus by GIACC.

1. Request CAEP to adjust its timelines for reporting and forecasting on international aviation and climate change to coincide with UNFCCC timelines, wherever possible.
2. Request CAEP to continue to expeditiously develop a new fuel efficiency metric that best represents the actual performance of international aviation in terms of emissions of CO₂ and consider the development of a new net CO₂ intensity metric, which also takes fully into account the mitigation achieved from alternative fuels and market-based measures as they become available.
3. Request CAEP to develop a CO₂ standard for new aircraft types.
4. Request CAEP to establish a standard average weight for passengers (across carriers on a given route) to be used in calculating the fuel efficiency metric.
5. Request Contracting States to report annually to ICAO, in an agreed format, data on fuel consumption and traffic in accordance with Article 67 of the Chicago Convention.
6. Request CAEP to assist the ICAO Secretariat in the development of practical and internationally consistent methodologies for computing and reporting data on progress by Contracting States in achieving the global aspirational goals.
7. Task the ICAO Secretariat to continue to provide technical assistance to Contracting States for data collection, monitoring and reporting, and recommend to Council approaches for providing technical and financial assistance in the reporting process, to developing countries.
8. Further develop GIACC's basket of measures, from which Contracting States may choose including measures to assist developing countries, as well as access to financial resources, technology transfer and capacity building. Task the ICAO Secretariat and CAEP to consider setting priorities for the updating of Circular 303.
9. Establish a process to develop a framework for market-based measures in international aviation, taking into account the conclusions of the high-level meeting and the outcome of the UNFCCC COP-15 meeting with a view to completing this process expeditiously.
10. To ensure that, under the process to develop a framework for market-based measures for international aviation, major issues related to their implementation are properly addressed and,

in particular: (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.

11. Request CAEP to report on options for enhanced environmental goals for 2012, 2020, and scenarios for 2050 or such other timelines consistent with the UNFCCC process.
12. Encourage Contracting States to develop and file with ICAO action plans for addressing emissions from their international aviation sector, which also articulate their proposed approach to the global aspirational goals. Ask the Secretariat to develop options for a de minimis exception for Contracting States that do not have a substantial level of international aviation activity.
13. Task the ICAO Secretariat to report every three years, at the triennial ICAO Assembly, the results of the Programme of Action to assess progress towards the global aspirational goals and to identify any adjustments that may be required to the Programme of Action.
14. Establish arrangements for further work, as required, building upon the GIACC report in the lead-up to the 2010 ICAO Assembly.

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