



WORKING PAPER

**GROUP ON INTERNATIONAL AVIATION AND CLIMATE CHANGE (GIACC)
THIRD MEETING**

Montréal, 17 to 19 February 2009

Agenda Item 2: Review of aviation emissions related activities within ICAO and internationally

RECENT DEVELOPMENTS IN OTHER UNITED NATIONS BODIES

(Presented by the Secretariat)

1. INTRODUCTION

1.1 As part of the Bali Road Map, important environmental related meetings of UN agencies which could have implications on ICAO's work on aviation environmental protection have taken place since the second meeting of the GIACC. This paper presents information on recent developments, including the results of the United Nations Framework Convention on Climate Change (UNFCCC) Accra Climate Change Talks and Poznan Climate Change Conference, the International Maritime Organization (IMO) 58th Session of the Maritime Environmental Protection Committee (MEPC58), and from the activities of the United Nations Environment Programme (UNEP) Environment Management Group (EMG).

2. UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE (UNFCCC) PROCESS IN 2008

2.1 The UNFCCC held four meetings on climate change in 2008 in preparation for COP15: the Bangkok (March/April), Bonn (June), and Accra (August) Climate Change Talks, and the Poznan Climate Change Conference – COP14 (December). The results of the Bangkok and Bonn meetings were presented to the second meeting of the GIACC in GIACC/2-WP/3.

2.2 Accra Climate Change Talks

2.2.1 The Accra meeting took place in Accra, Ghana, from 21 to 27 August and included the third session of the Ad-hoc Working Group on Long-term Cooperative Action under the Convention (AWG-LCA) and the completion of part 1 of the sixth session of the Ad-Hoc Working Group on further commitments for Annex I Parties under the Kyoto Protocol (AWG-KP).

2.2.2 The main focus of the meeting (in particular, during the discussions in the AWG-LCA) was on how to get developing countries to commit in some way to reducing pollution levels. This issue has divided countries seeking to craft a new climate change agreement. Most of the attention in the AWG-LCA discussions was on reducing emissions through deforestation, and on cooperative sectoral approach and sector specific actions, the "sectoral approach". The Accra meeting made clear that sectoral approaches were not about establishing mandatory targets. Discussions also focussed on the need for finance and technology transfer for mitigation and adaptation. Of note is that aviation was mentioned by

some parties as an example of source of revenue for these measures. Governments requested the Chair of the AWG-LCA to compile proposals in order to establish a basis for discussions at the Climate Change Conference in Poznan in December (the “Assembly” paper).

2.2.3 The ICAO Secretariat, in cooperation with aviation manufacturers (ICCAIA), airlines (IATA) and air navigation providers (CANSO) held a side event entitled “Aviation Actions and Initiatives on Climate Change”. Information was presented on the main achievements and current work to address emissions from international aviation at both technological and operational levels. ICAO also provided the meetings with information on the development of ICAO’s Carbon Calculator, the results of the second GIACC meeting, and the results of the ICAO’s Aviation and Carbon Markets Workshop.

2.3 Poznan Climate Change Conference

2.3.1 The 14th session of the Conference of the Parties to the Climate Change Convention (COP14) took place in conjunction with the 4th Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol (CMP 4) in Poznan, Poland, from 1 to 13 December 2008. The conference included the 29th sessions of the Convention’s two subsidiary bodies - Subsidiary Body for Scientific and Technological Advice (SBSTA) and Subsidiary Body for Implementation (SBI) – as well as the 4th session of the AWG-LCA and the 2nd part of the 6th session of the AWG-KP. ICAO prepared two written submissions to the AWG LCA on “Shared Vision” and “Technology Progress” and four Statements to the subsidiary bodies and high level part of the COP meeting (see www.icao.int/icao/en/env/statements.htm).

2.3.2 The main focus in Poznan was on long-term cooperation and the post-2012 period, when the Kyoto Protocol’s first commitment period would expire. In addition to the Poznan work programme on technology transfer, the only concrete outcome of the Poznan conference was the operationalization of the Adaptation Fund which led to the enabling of all three tracks to access funds (implementing entities, accredited national entities, and direct access by parties). The Fund is expected to start financing adaptation projects and programmes in developing countries in the next year.

2.3.3 A key event at the Conference was a ministerial round table discussion on a shared vision on long-term cooperative action on climate change. Ministers were engaged with a view to achieving an ambitious and comprehensive deal in Copenhagen that can be ratified by all.

2.3.4 Aviation, as in the Accra meeting, was not the main item on the agenda although international bunker fuels were addressed by SBSTA, AWG-LCA and AWG-KP. An important development of the Conference was the publication of the national greenhouse gas inventory data for the period 1990–2006 which reflected, *inter alia*, that international aviation emissions increased by 65.9 per cent in Annex I countries (based on fuel purchase). For maritime the growth was reported to be 18.4 per cent.

2.3.5 The “Assembly Paper”, prepared by the AWG LCA chair, included proposals presented by Parties on the elements contained in para. 1 of the Bali Action Plan, and also took into account the ideas and proposals from ICAO and other accredited organizations. A draft COP decision that welcomed this document was approved and it was confirmed that the document will serve as basis for further work in 2009.

2.3.6 Much time was devoted to “a shared vision for long-term cooperative action”. A common understanding seemed to emerge in Poznan that “a shared vision” includes a global goal for emission reductions and covers all the key building blocks of the Action Plan, namely mitigation, adaptation, technology and finance. Progress was made on the concept of monitoring, reporting and verifying (MRV) and pursuing the idea of a registry for nationally appropriate mitigation actions in developing countries.

2.3.7 For the AWG-KP, the focus was on a strategic discussion of all the key items on its agenda and on the work programme for 2009, with a view to agreeing on further actions required to finalize Annex I countries' post-2012 commitments in Copenhagen. The issue of social consequences, including spillover effects, of tools, policies, measures and methodologies available to Annex I parties was a main item. This is an issue of particular interest to aviation as actions taken towards addressing aviation emissions might have negative effects on developing countries. In its conclusions the AWG-KP, *inter alia*: noted that there could be both negative and positive potential consequences; recognized that the level of impact of potential consequences will vary among parties and that attention should be given to the negative consequences on developing countries; and noted that parties will continue discussing these issues at the workshop referred to in its work programme for 2009.

2.3.8 There were expectations for a clear decision on the aggregate range of mid-term emission reductions by industrialized countries. However, the conclusion only reflected the agreement that Annex I countries' further commitments should "principally" take the form of quantified emission limitation and reduction objectives.

2.3.9 As agreed during its previous session in Bonn, SBSTA29 noted the information received from the Secretariats of ICAO and IMO on their ongoing work relating to emissions from fuel used for international aviation and maritime transport, and the views expressed by Parties on this information. The SBSTA invited the Secretariats of ICAO and IMO to report, at future sessions of the SBSTA, on the outcomes of their work on this issue.

2.3.10 While progress was made at the Poznan meeting, there were no significant breakthroughs, and negotiators have less than a year of talks leading up to the critical deadline of COP15. The agenda was exceptionally full, with six bodies considering more than 90 agenda items and sub-items. The current administrative procedures make it very difficult for ICAO to provide information to the UNFCCC process. COP14 also took place at a very significant time in a global economic and political context (US Election, EU Climate Change Package). Many of these factors influenced the discussions, creating low expectations although there were several high level statements indicating that the financial crisis would not delay action and could promote change through cleaner technologies, alternative fuels and innovative mitigation measures.

2.3.11 In addition to addressing a very busy agenda from the main UNFCCC bodies, the Poznan Conference offered a large number of parallel events as well as opportunities for side meetings. The following events were of particular note:

- a) an informal meeting between IMO and ICAO to update information and enhance cooperation between our organizations (IMO also held a side event on maritime emissions);
- b) two EU side events related to international aviation:
 - *European Assessment of Impacts from Transport on Climate Change and Ozone Depletion*; and
 - *Aviation in the European Union Emissions Trading System* where criticism of ICAO action on climate change was expressed, in particular during the introductory remarks of a Member of the European Parliament (MEP) (speech available at http://ec.europa.eu/environment/climat/pdf/poznan/speech_liese.pdf);

- c) a side meeting with members of the European Parliament to discuss progress on addressing emissions from international aviation; and
- d) a Senior Officials meeting of the Environmental Management Group, attended by 30 UN agencies and bodies, to discuss, *inter alia*, the UN climate neutral initiative. The meeting welcomed ICAO's Aviation Carbon Emissions Calculator and invited ICAO to further develop an interface for the use of the UN. The meeting noted the uncertainties on the climate change effects of aviation non-CO₂ emissions and invited ICAO and UNEP to convene a meeting to provide further guidance on this question.

2.4 Next steps

2.4.1 The Poznan meeting marked the halfway point, as set out in the Bali Action Plan (December 2007), to reach an agreed outcome and adopt a decision at COP15 (December 2009) on the full, effective and sustained implementation of the Convention. The next major UNFCCC gathering will take place from 29 March to 8 April in Bonn, Germany. A clear commitment was received from governments to shift into full negotiating mode during 2009 in order to shape an ambitious and effective international response to climate change, to be agreed in Copenhagen at the end of 2009. Parties agreed that the first draft of a concrete negotiating text should be available at a UNFCCC gathering in Bonn in June of 2009. A calendar of upcoming activities is attached in Appendix A.

3. 58TH SESSION OF THE IMO MARINE ENVIRONMENT PROTECTION COMMITTEE (MEPC 58)

3.1 The 58th Session of the IMO Marine Environment Protection Committee (MEPC) was held in London from 6 to 10 October 2008. MEPC progressed in developing: technical and operational measures to address GHG emissions from ships including the development of an energy efficiency design index for new ships and an energy efficiency operational index, with associated guidelines for both; an efficiency management plan suitable for all ships; and a voluntary code on best practices in energy efficient ship operations. The Committee results can be found in Appendix B. Further work on the limitation and reduction of GHGs from ships will continue at an intersessional meeting early in 2009, for presentation to MEPC 59 in July 2009. The 2009 calendar of IMO emissions activities can be found in Appendix C.

3.2 The IMO shares the same difficulties with the common but differentiated responsibility (CBDR) principle present in ICAO discussions. A closer cooperation between ICAO and IMO has been achieved and further coordination is envisaged, in preparation for COP15.

4. CONCLUSIONS

4.1 The path forward regarding international aviation emissions is still not clear in the UNFCCC process. ICAO continues to be perceived by some parties in this forum as not delivering the necessary action to address international aviation emissions reductions.

4.2 A window of opportunity for the proposal of how best to deal with aviation has been created by the AWG-LCA deliberations on a "shared vision". The fact that all the building blocks will be included is also considered positive and leaves room for ICAO proposals. The GIACC should also be aware of the discussions concerning the use of aviation to finance action on climate change and possible conflicts in these proposals with ICAO's legal framework for charges and taxes.

4.3 The time is limited between now and COP15. Definition of ICAO's Programme of Action on International Aviation and Climate Change is urgent. The GIACC schedule, as planned, would allow for this programme to be considered at the High-level Meeting on International Aviation and Climate Change of ICAO in a way that the organization could demonstrate its leadership by defining its concrete solutions to international aviation emissions to the UNFCCC process.

5. ACTION BY THE GROUP

5.1 The Group is invited to:

- a) note the importance of national coordination so that States express aligned positions to both the UNFCCC process and ICAO;
- b) note progress in IMO and the necessity of enhanced cooperation with IMO in developing possible common strategies leading to COP15; and
- c) reaffirm the importance and urgency of demonstrating ICAO's leading role in addressing GHG emissions by providing concrete proposals on the ICAO programme of action in connection to COP15.

APPENDIX A
UNFCCC MEETINGS IN 2009

DATE	MEETING	VENUE
29 March to 8 April	AWG-KP7 and AWG-LCA5 Seventh session of the AWG-KP and fifth session of the AWG-LCA	Bonn
1 to 12 June	SB30, AWG-KP8 and AWG-LCA6 Thirtieth sessions of the UNFCCC Convention subsidiary bodies - SBSTA and SBI, eighth session of the AWG-KP and the sixth session of the AWG-LCA	Bonn
August/September	AWG-KP9 and AWG-LCA7 Ninth session of the AWG-KP and the seventh session of the AWG-LCA	at a venue to be determined
7 to 18 December	COP15 and CMP5 Fifteenth session of the Conference of the Parties (COP), and Fifth session Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol (CMP), and sessions of the Subsidiary Bodies	Copenhagen, Denmark

APPENDIX B

INTERNATIONAL MARITIME ORGANIZATION (IMO) RESULTS OF MEPC 58 PREVENTION OF AIR POLLUTION FROM SHIPS ¹

“Reduction of greenhouse gas emissions from ships

1 MEPC 58 considered follow-up actions to resolution A.963(23) on “IMO policies and practices related to reduction of greenhouse gas emissions from ships”, including progress made in line with the “Work plan to identify and develop the mechanisms needed to achieve the limitation or reduction of CO₂ emissions from international shipping”.

2 The Committee considered the outcome of the intersessional GHG Working Group meeting held in Oslo, Norway in June 2008 (GHG-WG 1), general comments thereon and other documents on application of measures and matters of principle and policy. MEPC 58 thanked the Government of Norway for its generosity and hard work in organizing the meeting, as well as for its warm hospitality. Without the intersessional meeting, the Committee would not be in a position to further advance the GHG issues at the present session and, although some points under discussion could not be finalized due to lack of time, further progress could be made due to all the delegates who, through hard work and tireless dedication, had contributed to the success of the meeting.

3 During the debate on application of measures and matters of principle and policy, many delegations spoke in favour of the principle of common but differentiated responsibility (CBDR) under the UNFCCC. In their view, any mandatory regime aiming at reducing GHG emissions from ships in international trade should be applicable to developed countries listed in Annex I of the UNFCCC only. Many other delegations expressed the opinion that, given the global mandate of IMO, as regards safety of ships and the protection of the marine and atmospheric environment from all sources of ship pollution, including emissions, the IMO regulatory framework on GHG emissions should be applicable to all ships, irrespective of the flags they fly.

4 The Committee noted with appreciation a summary of the main findings of Phase 1 of the updated 2000 IMO Study on GHG emissions from ships, in particular that:

1. CO₂ emissions from international shipping had been estimated both from activity data and from international fuel statistics and it was concluded that the activity-based estimates with use of detailed activity data (for different ship sizes and types) gave a better prediction of global fuel consumption and CO₂ emissions than fuel statistics due to apparent under-reporting of marine bunker sales;
2. the consensus estimate for 2007 CO₂ emissions from international shipping amounts to 843 million tonnes which represents about 2.7% of the global total anthropogenic CO₂ emissions; and
3. future emissions from international shipping had been estimated based on global developments outlined by the Intergovernmental Panel on Climate Change (IPCC). Assuming that there were no explicit regulations on CO₂ emissions from ships, CO₂ emissions were predicted to increase by a factor of 2.4 to 3.0 by 2050. For 2020, the increases ranged from a factor of 1.1 to 1.3. These predictions took into account

¹ This information on the result of GHG discussions during the 58th Session of the Marine Environmental Protection Committee (MEPC 58) was received from IMO.

significant efficiency improvements resulting from expected long-term increases in energy prices.

5 The Committee also noted with appreciation the information by the delegation of Japan that the Japanese Shipowners Association had made a donation of US\$100,000 as a contribution to the funding of the Study and any follow-up work.

6 The Committee maintained its momentum and made substantive progress in developing technical and operational measures to address GHG emissions from ships, including:

1. development of the Energy Efficiency Design Index (EEDI) for new ships and approved the usage of the interim Guidelines on the method of calculation for trial purposes with a view to further refinement and improvement. MEPC 58 invited delegations and industry observers to disseminate the Interim Guidelines on the EEDI to the maritime community at large, so that adequate experience could be gained on its adequacy as a tool to improve energy efficiency for new ships;
2. continued review of the Energy Efficiency Operational Index (MEPC/Cir.471) but was unable to finalize the work due to time constraint and established an intersessional correspondence group co-ordinated by Japan to further advance the work with a view to finalization at MEPC 59; and
3. further development of the basis for a Management Tool and Guidance on best practices for fuel-efficient operation of ships and agreed that the Guidance text had been finalized and could be used in conjunction with the ship's Energy Efficiency Management Plan under consideration by the Committee.

7 The Committee approved the holding of an intersessional meeting of the GHG Working Group back-to-back with BLG 13, from 9 to 13 March 2009, to carry out further necessary work in accordance with the GHG work plan which culminates at MEPC 59 that is expected to adopt a package of technical and operational measures intended to enhance the energy efficiency in ship design and operation.

8 The Committee held a considerable debate on possible introduction of market-based measures to control GHG emissions from ships as called for by resolution A.963(23). A number of delegations opposed the development of any market-based measures as long as the issue of CBDR was not resolved in full recognition of article 2.2 of the Kyoto Protocol. In any case, in the view of those delegations, the matter could not be settled until after COP15 in December 2009. Other delegations were of the view that, notwithstanding several interesting proposals before the Committee at the current session on market-based measures, the issue was still at a preliminary stage and further information and studies were needed before the Committee could reach an informed decision on such a highly complex matter.

9 It was recognized that further submissions addressing all matters pertaining to market-based measures, including their feasibility, were needed to enable the Committee to hold an in-depth discussion and it was agreed to dedicate enough time to do this MEPC 59. The Committee, therefore, requested delegations to provide as much information as possible to MEPC 59 with a view to facilitating a more focused debate at that session.

10 The Committee noted that a number of documents had not been introduced and others not thoroughly considered due to time constraint and agreed to keep them in abeyance for consideration at MEPC 59 as appropriate.”

APPENDIX C

IMO EMISSIONS ACTIVITIES IN 2009¹

DATE	MEETING
2 to 6 March	Thirteenth session of the Sub-Committee on Bulk Liquids and Gases (BLG 13) Technical work on guidelines related to prevention of air pollution (SO _x , NO _x , VOC)
9 to 13 March	IMO Greenhouse Gas Working Group 2 (GHG-WG 2) Technical and operational GHG reduction measures (design and operational indices, best practices, energy efficiency management plan)
[8 to 10 July]	[Workshop on market-based GHG reduction instruments]
13 to 17 July	Fifty-ninth session of the Marine Environment Protection Committee (MEPC 59) Full GHG debate, adoption of a package of technical and operational reduction measures expected, in-depth debate on market-based reduction instruments, decisions on further work/meetings and report to COP 15
[October, as decided by MEPC 59]	[IMO Greenhouse Gas Working Group 3 (GHG-WG 3)] Further development of market-based reduction instruments
23 November to 4 December ²	26th Session of the IMO Assembly GHG debate on the outcome of MEPC 59, possible adoption of new Assembly resolution on GHG policy and practices (to take over for resolution A.963(23))

— END —

¹ The two meetings in [square brackets] are not yet confirmed. The holding of the market-based GHG reduction instruments workshop (8 - 10 July) will be decided by the Secretariat shortly, and the holding of GHG-WG 3 (October) will be considered and decided by MEPC 59.

² Date tentative