



WORKING PAPER

GROUP ON INTERNATIONAL AVIATION AND CLIMATE CHANGE (GIACC)

SECOND MEETING

Montréal, 14 to 16 July 2008

Agenda Item 3: Planning of actions and policy elements to be developed by the Group

CONSOLIDATED GIACC TEMPLATE

(Presented by the Secretariat)

1. BACKGROUND

1.1 The GIACC agreed at its first meeting to adopt a template process in order to determine where consensus exists or is lacking in respect of the elements to be used for the development of a programme of action, including an implementation framework, as described in Assembly Resolution A36-22, Appendix K (GIACC/1-SD/3). A timeline to produce a consolidated template to form the basis for discussions at the second meeting of GIACC was agreed upon.

1.2 Members agreed to submit proposals, in the form of questions, to be integrated into the template by 30 March. Ten Members responded and the Secretariat consolidated the comments into a template of 26 questions that was distributed to the Members on 30 April.

1.3 Members were requested to respond to the template questions by 30 May. Four Members responded by the deadline and four additional responses were received in the first week of June. These responses were posted on the secure site on Monday, 9 June.

1.4 The Secretariat consolidated the responses from the 8 Members into the final template, which was posted on the website on 20 June. Responses received after the first week of June are not included in this final template and will be taken into consideration during the discussion of the template at the second meeting on the initiative of the Members.

2. PURPOSE

2.1 The GIACC is tasked with developing and recommending to the Council an aggressive programme of action including an implementation framework of economically efficient and technologically feasible strategies and measures that Contracting States can use to achieve emissions reductions.

2.2 The template reflects the Members' interpretation of the 12 framework programme elements contained in the GIACC's terms of reference and is structured to provide a synthesis of the 8 Members' responses. Where consensus is apparent it is noted and summarized. Where lack of consensus is apparent, the differences are noted.

2.3 The template is intended to be used to facilitate the discussions of the implementation framework elements. The objective is to focus these discussions on topics where consensus has not been achieved. By doing so, significant progress on resolving differences will hopefully occur.

3. **DISCUSSION**

3.1 This second meeting of the GIACC is envisioned to demonstrate substantial progress in developing the programme of action. However, it is recognized that there are aspects where consensus may not yet exist. By using the template, targeted discussions to resolve differences will be possible.

3.2 Accordingly, the programme for the meeting devotes more time for discussion of this topic than any other. Members are therefore encouraged to make the best use of this time by becoming well informed of the views of their colleagues and to participate in the meeting with a spirit of consensus building.

3.3 Recognizing the significance of the programme of action to States, it is possible that at this meeting consensus will not be achieved on all elements. Therefore, the Members are encouraged to consider mechanisms to progress this work in the interim between the second and third meetings. This topic will be taken up on day 3 of this meeting.

4. **ACTION BY THE GIACC**

4.1 The GIACC Members are:

- a) encouraged to provide template responses as soon as possible if they have not yet done so in order for their responses to be posted on the secure website prior to the second meeting;
- b) requested to carefully evaluate the final template and to consider the comments of the other Members as shown in their responses posted on the secure website;
- c) encouraged to seek clarification and exchange views with other Members in the spirit of achieving consensus prior to the second meeting;
- d) encouraged to express their views at the appropriate time in the discussion of the template at the second meeting; and
- e) encouraged to consider mechanisms to progress the work of the Group in the interim between the second and third meetings, including being prepared to commit time and resources that will contribute to this work during this intervening period.

APPENDIX

GIACC Template – 13.6.08

	Question	ToR	Participants Views
1.	What input or data do you consider is needed to enable GIACC to develop a fuel efficiency goal? Should it be quantitative or qualitative? Based upon intensity or absolute?	1. a	<p><u>Consensus:</u></p> <ul style="list-style-type: none"> - Goal should be quantitative in nature using an intensity based metric and using existing available data. - (Payload X distance)/Fuel burn - RTK/litres
2.	What short, medium and long term goals should the GIACC suggest, taking into account that any ICAO proposals should respect the different circumstances of various countries' aviation markets, be considered acceptable and credible by third parties and improve public opinion? Should it focus on international aviation or all aviation on a global basis? What are the options?	1. a	<p><u>Consensus:</u></p> <ul style="list-style-type: none"> - Goal focused on fuel efficiency in the short-term, carbon neutral growth in medium term recognizing the post 2012 UNFCCC mechanism. <p><u>Differences:</u></p> <ul style="list-style-type: none"> - Int. aviation vs all aviation - Medium Term absolute vs rate - role of CBDR - role of ETS vs offsets - absolute emissions intensity vs no cap on growth - enforceability by mutual agreement
3.	What time scale should be considered by GIACC when setting short, medium and long term goals for international aviation?	1. a	<p><u>No consensus:</u></p> <ul style="list-style-type: none"> - Range of dates: - Short term: 5 years to 15 years - Medium term: 2012-2033 - Long term: 2020-2050 - Link to UNFCCC timescales - Link to IATA - No need for S, M, LT goals
4.	How should GIACC deal with other aviation emissions that have climate forcing characteristics? Should GIACC make specific recommendations to deal with the significant scientific uncertainties?	1. a	<p><u>No consensus:</u></p> <ul style="list-style-type: none"> - majority focuses on CO2 - All 6 Kyoto GHG's - Study non CO2 Green House Gases' further <ul style="list-style-type: none"> - CAEP? - IPCC? - Global Warming Potential adopted by UNFCCC

Question		ToR	Participants Views
5.	GIACC's report to Council will need to encompass goals, a menu of options to limit or reduce emissions and ways to measure progress. What should be the balance between these elements of the report?	1. a-b	<p><u>Consensus:</u> - Address all 3 elements, goals, measures and monitoring in the report in a balanced manner.</p> <p><u>Differences:</u> - Limit to States that contribute more than 1% of international aviation emissions. - Options for offsetting - Focus where there is consensus</p>
6.	What type of metric should be the basis of a fuel efficiency goal: global in-service fleet, regional, national, by operator?	1. a	<p><u>No consensus:</u> - Majority RTK/fuel unit</p> <p><u>Differences:</u> - Global vs national or operator - Further analysis required - o-d pair basis - Carbon-calculator estimate</p>
7.	For those elements of GIACC's work which do not feed through to fuel efficiency improvements such as market based measures, carbon offsets and bio fuel, how should GIACC deal with them in the goal setting process?	1. b	<p><u>No consensus</u></p> <p><u>Differences:</u> - Don't focus on fuel efficiency alone - Do not deal with these in the form of goals - Base goals on net carbon foot print - Seek CAEP's advice</p>
8.	Should GIACC recommend reporting requirements for States? What form should they take?	1. b	<p><u>No consensus</u></p> <p><u>Differences:</u> - GIACC could recommend - GIACC should not recommend - Each Member State will develop - Not limited to fuel use - Include information on operations and freight - measure should facilitate communication - monitor actions taken by States - consistent with UNFCCC - provide auditing procedures</p>

	Question	ToR	Participants Views
9.	What are the key elements that would be needed to demonstrate an urgent programme of action on climate change?	2. a-f	<p><u>No consensus</u></p> <p><u>Differences:</u></p> <ul style="list-style-type: none"> - Efficiency measures - monitoring and reporting - comprehensive manner - measures and metrics States might choose - reporting commitment - in line with UNFCCC and IPCC - renovation at aircraft - improve ATM - sense of urgency - consistent with implementation framework AR36-22 - aircraft specific performance date
10.	Taking into account the information received at GIACC/1, what are your views about the range of potential emission reductions that might be achieved by these elements? Which do you think offer the greatest scope for improvements?	2. a-f	<p><u>No consensus</u></p> <ul style="list-style-type: none"> - GIACC should not establish level for emissions - comprehensive multi path approach - no regulatory action needed - market-based incentives adequate - degree of commitment by States - efficiency gains will not offset growth - role of MBM's - technology transfer - alternative fuels - best practice sharing - not the role for ICAO

	Question	ToR	Participants Views
11.	<ul style="list-style-type: none"> • What is the role for improved operational and maintenance practices in reducing aviation emissions? Should recommendations be included in the action plan? • What are actions that can be taken at airports to reduce emissions (night ops, better zoning, more efficient ground movements, CDA, gate power, decentralized parking, etc.) • Should an element of the Programme include an accelerated fleet renewal by airlines? Early retirement of inefficient aircraft? • What is the role of market based measures such as emissions trading and/or compensatory measures such as the clean development mechanism in addressing aviation emissions? • Will the GIACC consider positive economic incentives directed at aircraft, airlines, manufacturers, infrastructure, etc.? • What measures can Member States take to facilitate increased research and development in new technologies, alternative fuels and long term solutions? • What can be done to stimulate the development and use of renewables such as biofuels? 	2. a-e	<p><u>Consensus:</u></p> <ul style="list-style-type: none"> - continued R&D - technological advances air/ground - modernize ATM - dissemination of best practices <p><u>Differences:</u></p> <ul style="list-style-type: none"> - positive economic incentives - no compulsory retirement of aircraft - ICAO manual on airport climate change strategies - MBM should be complementary - technology transfer to developing countries - CDM & JI eligibility

Question		ToR	Participants Views
12.	<ul style="list-style-type: none"> Should the GIACC framework require adoption of all measures or allow each State to decide how it will meet the goals for its aviation sector? What mechanism should be established to ensure that States can make their own selection from a menu of measures while avoiding unwanted effects such as distortion of competition? 	2. a-f 4.	<p><u>Consensus:</u> - States should choose from among options</p> <p><u>Differences:</u> - must be compatible with initial normative system - global emission standard and reduction targets - equivalency</p>
13.	What are your views on the short, mid and long term measures which might be adopted within your region, related to emissions reduction potential in your region?	2. a-f	<p><u>No consensus</u></p> <p><u>Differences:</u> - Technological standards - modernize ATM - improved operational practices - alternative fuels - MBM's under Kyoto Protocol - carrier offered voluntary offsets - ETS scheme - national offset program - carbon taxes</p>

	Question	ToR	Participants Views
14.	<ul style="list-style-type: none"> • What are the possible barriers to achieving emissions reductions and what are your views on the possible mechanisms that could assist States in overcoming these barriers and achieving emissions reductions? • How should the special situation of developing countries and of the differential nature of their actions in mitigating aircraft GHG emissions be recognized? What are their expectations and how are they different from developed countries? Should GIACC describe a financing mechanism to assist developing countries? • What recommendations does your State/Region have for fostering innovation and dissemination of technology, how best to deal with technological interdependencies and the roles and responsibilities of industry stakeholders? 	2. a-f 4.	<p><u>Consensus:</u></p> <ul style="list-style-type: none"> - cost and/or access to financial mechanisms - timescale and access to new technology <p><u>Differences:</u></p> <ul style="list-style-type: none"> - lack of political will or State capacity - avoid market distortion - financing mechanism - link to UNFCCC systems - uncertainty of technological breakthrough & degrees of difficulty - inefficient airport planning - CBDR - voluntary offset uptake by passengers slow - international aviation only - differentiate between developed and developing States - growth in travel demand - lack of alternatives to long-haul - Local Air Quality vs climate change trade-off - lack of experience with ETS - currency of State regulations
15.	What is ICAO's value added versus that of the UNFCCC?	2. b	<p><u>No consensus</u></p> <p><u>Differences:</u></p> <ul style="list-style-type: none"> - UNFCCC sets global objective and global carbon market - UNFCCC and ICAO are separate processes - ICAO cooperates with UNFCCC - ICAO strategy compliments UNFCCC mechanisms - ICAO should take initiative for global solutions

Question		ToR	Participants Views
16.	How can existing ICAO work inform GIACC? How does ICAO's work on MBM add value? What are the aviation specific issues with MBM? What is the available ICAO data? How reliable is it?	2. b	<p><u>Consensus:</u> - work of CAEP is relevant and valued</p> <p><u>Differences:</u> - open ETS as most economically efficient - no unilateral implementation of ETS - MBM adds value - increasing carbon footprint - circulate CAEP reports to GIACC</p>
17.	What future framework should there be for collecting data and keeping them updated?	2. b 2. c 3.	<p><u>No consensus</u></p> <p><u>Differences:</u> - ICAO as focal point for data collection - use third party expertise - use readily available data - fuel consumption from States - monitor progress on fuel efficiency - data exists under UNFCCC - ICAO audits</p>
18.	Will GIACC identify mechanisms to extend the availability of voluntary offset schemes, to ensure the effectiveness of offset schemes and to increase the levels of take-up by passengers? What is the role of voluntary offset mechanisms?	2. c	<p><u>No consensus</u></p> <p><u>Differences:</u> - voluntary offsets are not a complete solution - one State does not recognize voluntary offsets - voluntary offsets offer a high short term potential to reduce carbon footprint - require a comprehensive policy with overall cap in which voluntary offsets are complementary - up to State or airline to decide</p>
19.	What data can you provide about current and projected emissions and the fuel efficiency performances of the carriers operating in your region?	3. a-d	<p><u>Consensus:</u> - States can provide some level of data on fuel burn</p> <p><u>Differences:</u> - comprehensive data by flight movement - track fuel efficiency for commercial fleet - can provide data at national and international levels - can estimate emissions from tracked data - currently developing comprehensive tool</p>

Question		ToR	Participants Views
20.	What are the mechanisms required for collection, consolidation and reporting data? What should be the respective role of ICAO, Member States, UNFCCC, industry and other stakeholders?	3. c	<p><u>Consensus:</u> - member States should collect data and provide to ICAO</p> <p><u>Differences:</u> - IATA or ICCAIA provide data on voluntary basis - ICAO data in line with UNFCCC requirements - GIACC make this a priority issue - ICAO should use data to monitor progress of fuel efficiency by State - UNFCCC could set target, ICAO could set reporting requirements and audit to target - confidentiality of information</p>
21.	How can a framework be established for linking measures adopted on a bilateral or regional basis towards a global approach?	4.	<p><u>No consensus</u></p> <p><u>Differences:</u> - link aviation to a global carbon market - incorporate into the bilateral air services agreements - link national scheme for MBM's into regional and global structures - global measure based upon consensus under ICAO - request briefing by CAEP MBM task force</p>
22.	From what areas of CAEP's work could GIACC benefit? What other information should GIACC solicit from States, CAEP, industry, others? What other sources of information are relevant? What are possible legal or practical barriers in providing information?	4.	<p><u>Consensus</u> - GIACC could benefit from wealth of information developed by CAEP</p> <ul style="list-style-type: none"> • MBM Task Force • Modelling TF • WG/3 • FESG • Operational measures <p><u>Differences:</u> - need further discussions on national fuel efficiency metric - develop models to measure operational emissions - identify hierarchy of measures and practices to reduce emissions - ICAO Legal Bureau appropriate body to identify possible legal barriers</p>

Question		ToR	Participants Views
23.	How can the GIACC make sure that it cooperates adequately with other UN bodies, such as UNFCCC? What is necessary to keep in line with developments in UNFCCC?	4.	<p><u>No consensus</u></p> <p><u>Differences:</u></p> <ul style="list-style-type: none"> - possibly seek more direct discussions between GIACC and UNFCCC - up to Assembly and Council to decide actions GIACC should undertake - create a group comprised of advisors from IPCC, UNFCCC universities, research centres to brief at GIACC meetings - presentation by UNFCCC at GIACC/2 - ICAO Program of Action should be recognized and respected UNFCCC - allow UNFCCC to include international aviation in UNFCCC targets
24.	How should GIACC organize itself to deliver its terms of reference in time for the high level meeting planned in September 2009 as requested by ICAO Council?	4.	<p><u>No consensus</u></p> <p><u>Differences:</u></p> <ul style="list-style-type: none"> - responses to template will form basis for discussion - more intensive interchange between GIACC members and advisors - add a meeting to the GIACC schedule - avoid overlap with CAEP - form working groups of GIACC
25.	Should a new role for ICAO be identified, such as environmental audits? Can ICAO identify and disseminate best practices?	4.	<p><u>No consensus</u></p> <p><u>No differences:</u></p> <ul style="list-style-type: none"> - premature to decide now - no new role for ICAO in audits - audits require binding environmental audits - ICAO should monitor and disclose information on actions by States and progress on fuel efficiency - ICAO should conduct audits - ICAO already disseminates info on best practices - this should be a decision taken at the High Level Meeting

Question		ToR	Participants Views
26.	Should we identify communications and public relations as a key issue for ICAO to address? What is the appropriate role for ICAO in this regard?	4.	<p><u>Consensus:</u> - effective communication is important</p> <p><u>Differences:</u> - ICAO has been active and should continue to lead - encourage activities like the ICAO Colloquium and Environment Report - ICAO more proactive with UNFCCC in promoting air transportation, its efficiency, economic impact and environmental achievement - any ICAO communication should not be seen as industry self-promotion.</p>

— END —