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**Submission by the International Civil Aviation Organization (ICAO) to the
Transitional Committee for the design of Green Climate Fund**

Work stream I: Scope, guiding principles, and cross-cutting issues

Work stream III: Operational modalities

Executive Summary

The Transitional Committee has been mandated to design a Green Climate Fund (GCF) with a goal of mobilizing 100 billion USD annually by 2020. As agreed at COP/16, such financing would come from a wide variety of sources. One of the options as presented in the report of the High-level Advisory Group on Climate Change Financing (AGF) relates to the potential generation of revenue through the application of market-based measures to international aviation.

This submission, for consideration of the Transitional Committee (TC), describes the main outcome from the 37th Session of the ICAO Assembly on international aviation and climate change and the further progress being achieved on actions requested by the Assembly, as well as the possible political, legal and practical implications of the work of the AGF on ICAO's existing policies and practices, including the Resolution adopted by the Assembly on climate change.

1. ICAO ASSEMBLY RESOLUTION AND NEXT STEPS

1.1 ICAO would like to advise the Transitional Committee (TC) for the design of Green Climate Fund (GCF) of the very positive and important advancements achieved by the 37th Session of the ICAO Assembly held in October 2010. Resolution A37-19 adopted by the Assembly provides a solid framework towards the achievement of an environmentally sustainable future for international aviation (the full text of the Resolution is included in Appendix A).

1.2 This Resolution makes international aviation the first sector with global aspirational goals of 2 per cent annual improvement of fuel efficiency up to 2050, and stabilizing CO₂ emissions from 2020 at the same levels. The Assembly also agreed on the guiding principles for market-based measures (MBMs) and decided to explore a global scheme for international aviation. A global CO₂ certification Standard for aircraft is aimed to be developed by 2013. Sustainable alternative fuels for aviation offer one of the most promising opportunities to reduce aviation CO₂ emissions, and it was agreed that the Organization would continue to be at the forefront of facilitating the development and deployment of such fuels on a global basis. The agreement on the voluntary submission of action plans from States to ICAO will lead to a dynamic shift of the Organization from "Standard policy setting" to "implementation" mode.

1.3 ICAO is taking the necessary steps to make further progress on actions requested by the Assembly, focusing on four key areas: 1) States' action plans and assistance to States, 2) sustainable alternative fuels for aviation, 3) MBMs, and 4) global aspirational goals.

States' Action Plans

1.4 The voluntary submission of States' action plans to ICAO will allow States to identify their measures to address CO₂ emissions from international aviation as well as any assistance needs to implement such measures. This will enable ICAO to assess the progress towards the achievement of the global aspirational goals and address the specific assistance needs of the States. In this connection, ICAO has developed guidance material and a web-based interface, and is holding five regional workshops from May to July 2011, in order to assist its member States in preparing and submitting their action plans to the Organization by June 2012.

Sustainable Alternative Fuels for Aviation

1.5 Building upon the achievements of the ICAO Workshop and Conference on sustainable alternative fuels for aviation held in 2009 and the results of the 37th session of the ICAO Assembly in 2010, ICAO will hold another workshop on this subject from 18 to 20 October 2011, in Montreal (www.icao.int/sustaf). This workshop will provide a forum for the exchange of information on the state of worldwide activities on sustainable alternative fuels for aviation. Discussions will revolve around the latest developments and future challenges related to the global harmonization of life cycle analysis methodologies, sustainability criteria, and legal and regulatory frameworks to ensure the availability of sustainable alternative fuels for aviation. The role of sustainable alternative fuels as part of the measures available to States for inclusion in their action plans, will also be addressed.

Market-based Measures (MBMs)/ Global Aspirational Goals

1.6 Apart from the agreement on MBMs as described in paragraph 1.2 above, the 37th Session of the ICAO Assembly also agreed to review the medium-term global aspirational goal as adopted, and to explore a long-term global aspirational goal for international aviation. The Secretariat is coordinating technical studies in these areas, which will serve as the basis for further policy discussions within ICAO and in other UN bodies.

2. GREEN CLIMATE FUND / AGF REPORT

2.1 One of the milestones reached at COP16 in Cancun was related to long-term financing, agreeing on the establishment of the GCF to be designed by the TC with a goal of mobilizing 100 billion USD annually by 2020. It was agreed that such financing would come from a wide variety of sources, including alternative sources, and COP16 took note of the report of the High-level Advisory Group on Climate Change Financing (AGF). One of the options presented in the AGF report relates to potential generation of revenue through the application of MBMs to international aviation.

2.2 In this connection, ICAO would like to express some concerns with the AGF report as it relates to the above-mentioned option (including the 10th paragraph in Executive Summary; paragraphs 31, 42, 53 (a) iv. and 79 of the AGF main report; and pages 45 to 46 in Annex II). Such proposals could have political, legal and practical implications on ICAO's existing policies and practices, including the aforementioned Resolution, as well as its ongoing efforts related to international aviation and climate change.

Risk of Undermining ICAO's Mitigation Efforts

2.3 ICAO and its member States have been actively working to develop global solutions for the sustainable development of international aviation, by setting global goals for the sector as well as developing and facilitating the global implementation of mitigation activities, including

technological, operational and MBMs. Resources to facilitate the implementation of these measures in all ICAO States and regions are critical to the achievement of these goals.

2.4 If the international aviation sector is singled out as a source of revenue, this is likely to result in a shortage of resources to facilitate mitigation activities by the international aviation sector itself. In addition, it would lead to a disproportionate contribution of resources from this sector as compared to other economic sectors, considering that CO₂ emissions from aviation (domestic and international operations) currently account for approximately 2 per cent of total global CO₂ emissions, approximately 60 per cent of which are from international aviation (approximately 1.2 per cent).

2.5 One of guiding principles agreed by the 37th Session of the ICAO Assembly (Annex to Appendix A) clearly stipulate that “*MBMs should ensure the fair treatment of the international aviation sector in relation to other sectors.*” The Assembly also resolved that “*where revenues are generated from MBMs, it is strongly recommended that they should be applied in the first instance to mitigating the environmental impact of aircraft engine emissions.*” In this context, any MBMs involving international aviation should be designed to mitigate the impact of international aviation GHG emissions, which are aimed at achieving the global aspirational goals of the sector adopted by the Assembly.

Legal Issues and Practical Implementation Aspects of Levies (Charges / Taxes)

2.6 The proposed “fuel levy” and “passenger ticket tax” for international aviation in the AGF report does not reflect a challenge associated with the legal status of emissions-related levies for international aviation.

2.7 Generally, levies refer to charges and taxes. Article 15 of the *Convention on International Civil Aviation* (Chicago Convention) contains provisions regarding charges imposed by States for the use of airports and air navigation facilities, and its related ICAO policies (Doc 9082, *ICAO’s Policies on Charges for Airports and Air Navigation Services*) make a conceptual distinction between a “charge” and a “tax”, in that a charge is a levy that is designed and applied specifically to recover the costs of providing facilities and services for civil aviation, and a tax is a levy that is designed to raise national or local government revenues which are generally not applied to civil aviation in their entirety or on a cost-specific basis.

2.8 Article 24 of the Chicago Convention addresses the exemption of taxes on fuels, lubricants and other technical supplies onboard aircraft, and its related ICAO policies (Doc 8632, *ICAO’s Policies on Taxation in the Field of International Air Transport*) recommends the reciprocal exemption from all taxes levied on fuel purchased for international flights, and also calls on States to reduce or eliminate taxes related to the sale or use of international air transport.

2.9 In practical terms, the reciprocal exemption of taxes for international aviation has already been implemented in approximately 95 per cent of 4,000 existing bilateral air services agreements between States.

2.10 On 9 December 1996, the ICAO Council adopted a policy statement in the form of a resolution, wherein the Council strongly recommended that “any emission-related levies be in the form of charges rather than taxes, and that the funds collected should be applied in the first instance to mitigating the environmental impact of aircraft engine emissions,” which is in line with the recommendation by the 37th Session of the ICAO Assembly on the allocation of revenues generated from MBMs for international aviation.

Challenges for Differentiation

2.11 The AGF report does not fully address the challenges associated with possible differentiated application of MBMs for international aviation.

2.12 It should be fully recognized that several peculiar characteristics of international aviation led to its inclusion in Article 2.2 of the Kyoto Protocol. While emissions from domestic aviation can be considered using the same approach applied to emissions from other sectors occurring within a State, emissions from international aviation differ, as they are not contained within a single State, and may occur within the territory of other States, or in areas outside of recognized national boundaries such as over the high seas.

2.13 There has been a long debate under the UNFCCC over the allocation of international transport emissions to individual States, and no agreement has been reached on the way to proceed. The differentiated application of MBMs for international aviation, as in the AGF report, would have clear implications on this debate.

2.14 ICAO would like to emphasize that its work in this area relates to considering international aviation as a whole, and not with dealing with any specific obligations on individual States. As is the practice of the Organization, ICAO takes into account the special needs and circumstances of its member States. In this regard, States' action plans on international aviation and climate change will play an important role in identifying the different assistance needs they might have.

3. CONCLUSIONS

3.1 A global agreement was reached at the 37th Session of the ICAO Assembly on how to address international aviation and climate change. It is of utmost importance that the design and implementation of MBMs for international aviation should be treated as one element of ICAO's comprehensive mitigation strategy to achieve its global aspirational goals, as part of global solutions for the sustainable future of international aviation.

3.2 It is noted that a clear assessment of the points raised herein are not included in the AGF report, thus ICAO would like the TC to be fully apprised of all aspects of this matter, while giving due recognition to ICAO's achievements and continued efforts to limit or reduce CO₂ emissions from international aviation, as well as the critical legal issues associated with emissions-related levies and practical challenges arising from the global nature of international aviation emissions.

3.3 The involvement of all the relevant stakeholders is critical to facilitation of world-wide discussions for a comprehensive global climate change deal. Any discussion related to international aviation, including that in the TC, should therefore be undertaken in coordination with ICAO.

3.4 ICAO will continue to keep relevant UN bodies informed of its achievements in order to seek consistency and avoid unnecessary duplication of work, and further strengthen cooperation between UN bodies on the issue of international aviation and climate change.

APPENDIX A

ICAO Assembly Resolution A37-19: Consolidated statement of continuing ICAO policies and practices related to environmental protection – Climate change

Whereas ICAO and its member States recognize the critical importance of providing continuous leadership to international civil aviation in limiting or reducing its emissions that contribute to global climate change;

Reemphasizing the vital role which international aviation plays in global economic and social development and the need to ensure that international aviation continues to develop in a sustainable manner;

Whereas the ultimate objective of the United Nations Framework Convention on Climate Change (UNFCCC) is to achieve stabilization of greenhouse gas (GHG) concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system;

Whereas the Kyoto Protocol, which was adopted by the Conference of the Parties to the UNFCCC in December 1997 and entered into force on 16 February 2005, calls for developed countries (Annex I Parties) to pursue limitation or reduction of greenhouse gases from “aviation bunker fuels” (international aviation) working through ICAO (Article 2.2);

Acknowledging that international aviation emissions, currently accounting for less than 2 per cent of total global CO₂ emissions, are projected to grow as a result of the continued development of the sector;

Whereas a comprehensive assessment of aviation’s impact on the atmosphere is contained in the special report on *Aviation and the Global Atmosphere*, published in 1999, which was prepared at ICAO’s request by the Intergovernmental Panel on Climate Change (IPCC) in collaboration with the Scientific Assessment Panel to the Montreal Protocol on Substances that Deplete the Ozone Layer;

Whereas the IPCC special report recognized that the effects of some types of aircraft emissions are well understood, it revealed that the effects of others are not, and identified a number of key areas of scientific uncertainty that limit the ability to project aviation’s full impacts on climate and ozone;

Whereas ICAO requested that the IPCC include an update of the main findings of the special report in its Fourth Assessment Report, published in 2007 and its Fifth Assessment Report to be published in 2014;

Noting the scientific view that the increase in global average temperature above pre-industrial levels ought not to exceed 2°C;

Acknowledging 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;

Also acknowledging the principles of non-discrimination and equal and fair opportunities to develop international aviation set forth in the Chicago Convention;

Recognizing that this Resolution does not set a precedent for or prejudge the outcome of negotiations under the UNFCCC and its Kyoto Protocol nor represent the position of the Parties to the UNFCCC and its Kyoto Protocol;

Noting that, consistent with Assembly Resolution A36-22, the High-level Meeting on International Aviation and Climate Change in October 2009 (HLM-ENV/09) endorsed the Programme of Action on International Aviation and Climate Change which included global aspirational goals in the form of fuel efficiency, a basket of measures and the means to measure progress;

Recognizing that the aspirational goal of 2 per cent annual fuel efficiency improvement is unlikely to deliver the level of reduction necessary to stabilize and then reduce aviation's absolute emissions contribution to climate change, and that goals of more ambition will need to be considered to deliver a sustainable path for aviation;

Noting that, to promote sustainable growth of aviation, a comprehensive approach, consisting of work on technology and standards, and on operational and market-based measures to reduce emissions is necessary;

Noting that the HLM-ENV/09 declared that ICAO would establish a process to develop a framework for market based measures in international aviation, taking into account the conclusions of the HLM-ENV/9 and outcome of the UNFCCC COP 15 and bearing in mind relevant ICAO Assembly resolutions and the appendices with a view to complete this process expeditiously;

Noting that the Conference on Aviation and Alternative Fuels in November 2009 (CAAF/09) endorsed the use of sustainable alternative fuels for aviation, particularly the use of drop-in fuels in the short to mid-term, as an important means of reducing aviation emissions;

Also noting that the CAAF/09 established an ICAO Global Framework for Aviation Alternative Fuels (GFAAF);

Recognizing the different circumstances among States in their capacity to respond to the challenges associated with climate change and the need to provide necessary support, in particular to developing countries and States having particular needs;

Affirming that specific measures to assist developing States as well as to facilitate access to financial support, technology transfer and capacity building should be initiated;

Whereas the Kyoto Protocol provides for different flexible instruments (such as the Clean Development Mechanism — CDM) which would benefit projects involving developing States;

Affirming that addressing GHG emissions from international aviation requires the active engagement and cooperation of States and the industry, and *noting* the collective commitments announced by Airports Council International (ACI), Civil Air Navigation Services Organisation (CANSO), International Air Transport Association (IATA), and International Coordinating Council of Aerospace Industries Associations (ICCAIA) on behalf of the international air transport industry to continuously improve CO₂ efficiency by an average of 1.5 per cent per annum from 2009 until 2020, to achieve carbon neutral growth from 2020 and reducing its carbon emissions by 50 per cent by 2050 compared to 2005 levels;

Recognizing the need to monitor and report the potential impacts of climate change on international aviation operations and related infrastructure;

Recognizing the progress made by ICAO in its implementation of the Climate Neutral UN initiative and the significant support provided by ICAO to the initiative, in particular through the development of a common methodology for calculating GHG emissions from air travel;

The Assembly:

1. *Resolves* that this Resolution, together with Resolution A37-18: Consolidated statement of continuing ICAO policies and practices related to environmental protection - General provisions, noise and local air quality, supersede Resolution A36-22 and constitute the consolidated statement of continuing ICAO policies and practices related to environmental protection;

2. *Requests* the Council to:

- a) ensure that ICAO exercise continuous leadership on environmental issues relating to international civil aviation, including GHG emissions;
- b) continue to study policy options to limit or reduce the environmental impact of aircraft engine emissions and to develop concrete proposals and provide advice as soon as possible to the Conference of the Parties of the UNFCCC, encompassing technical solutions and market-based measures, and taking into account potential implications of such measures for developing as well as developed countries; and
- c) continue to cooperate with organizations involved in policy-making in this field, notably with the Conference of the Parties to the UNFCCC;

3. *Reiterates* that:

- a) ICAO should continue to take initiatives to promote information on scientific understanding of aviation's impact and action undertaken to address aviation emissions and continue to provide the forum to facilitate discussions on solutions to address aviation emissions; and
- b) emphasis should be on those policy options that will reduce aircraft engine emissions without negatively impacting the growth of air transport especially in developing economies;

4. *Resolves* that States and relevant organizations will work through ICAO to achieve a global annual average fuel efficiency improvement of 2 per cent until 2020 and an aspirational global fuel efficiency improvement rate of 2 per cent per annum from 2021 to 2050, calculated on the basis of volume of fuel used per revenue tonne kilometre performed;

5. *Agrees* that the goals mentioned in paragraph 4 above would not attribute specific obligations to individual States, and 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 voluntarily contribute to achieving the global aspirational goals;

6. *Also resolves* that, without any attribution of specific obligations to individual States, ICAO and its member States with relevant organizations will work together to strive to achieve a collective medium term global aspirational goal of keeping the global net carbon emissions from international aviation from 2020 at the same level, taking into account:

- a) the special circumstances and respective capabilities of developing countries;
- b) that the different circumstances, respective capabilities and contribution of States to the concentration of aviation GHG emissions in the atmosphere will determine how each State may contribute to achieving the global aspirational goals;

- c) that some States may take more ambitious actions prior to 2020, which may offset an increase in emissions from the growth of air transport in developing States;
- d) the maturity of aviation markets;
- e) the sustainable growth of the international aviation industry; and
- f) that emissions may increase due to the expected growth in international air traffic until lower emitting technologies and fuels and other mitigating measures are developed and deployed;

7. *Agrees* to review, at its 38th Session, the goal mentioned in paragraph 6 above in light of progress towards the goal, new studies regarding the feasibility of achieving the goal, and relevant information from States;

8. *Requests* the Council to explore the feasibility of a long term global aspirational goal for international aviation, through conducting detailed studies assessing the attainability and impacts of any goals proposed, including the impact on growth as well as costs in all countries, especially developing countries, for the progress of the work to be presented to the 38th Session of the ICAO Assembly. Assessment of long term goals should include information from member States on their experiences working towards the medium term goal.

9. *Encourages* States to submit their action plans outlining their respective policies and actions, and annual reporting on international aviation CO₂ emissions to ICAO;

10. *Invites* those States that choose to prepare their action plans to submit them to ICAO as soon as possible preferably by the end of June 2012 in order that ICAO can compile the information in relation to achieving the global aspirational goals, and the action plans should include information on the basket of measures considered by States, reflecting their respective national capacities and circumstances, and information on any specific assistance needs;

11. *Requests* the Council to facilitate the dissemination of economic and technical studies and best practices related to aspirational goals and to provide guidance and other technical assistance for the preparation of States' action plans prior to the end of June 2012, in order for States to conduct their necessary studies and to voluntarily submit their action plans to ICAO;

12. *Resolves* that a *de minimis* threshold of international aviation activity of 1 per cent of total revenue ton kilometres should apply to the submission of States' action plans as follows:

- a) States below the threshold are not expected to submit action plans towards achieving the global goals; and
- b) States below the threshold but that otherwise have agreed to voluntarily contribute to achieving the global goals are expected to submit action plans;

13. *Requests* the Council, with the support of member States, to undertake work to develop a framework for market-based measures (MBMs) in international aviation, including further elaboration of the guiding principles listed in the Annex, for consideration by the 38th Session of the ICAO Assembly;

14. *Urges* States to respect the guiding principles listed in the Annex, when designing new and implementing existing MBMs for international aviation, and to engage in constructive bilateral and/or multilateral consultations and negotiations with other States to reach an agreement;

15. *Resolves* on a *de minimis* threshold of international aviation activity, consistent with the guiding principles in the Annex, of 1 per cent of total revenue ton kilometres to MBMs as follows:

- a) commercial aircraft operators of States below the threshold should qualify for exemption for application of MBMs that are established on national, regional and global levels; and
- b) States and regions implementing MBMs may wish to also consider an exemption for other small aircraft operators;

16. *Requests* the Council to review the *de minimis* threshold to MBMs in paragraph 15, taking into account specific circumstances of States and potential impacts on the aviation industry and markets, and with regard to the guiding principles listed in the Annex, by the end of 2011;

17. *Urges* States to review existing and planned MBMs for international aviation to ensure their consistency with the guiding principles listed in the Annex and the provisions in paragraphs 15 and 16 above;

18. *Requests* the Council, with the support of member States and international organizations, to continue to explore the feasibility of a global MBM scheme by undertaking further studies on the technical aspects, environmental benefits, economic impacts and the modalities of such a scheme, taking into account the outcome of the negotiations under the UNFCCC and other international developments, as appropriate, and report the progress for consideration by the 38th Session of the ICAO Assembly;

19. *Recognizes* that in the short term voluntary carbon offsetting schemes constitute a practical way to offset CO₂ emissions, and *invites* States to encourage their operators wishing to take early actions to use carbon offsetting, particularly through the use of credits generated from internationally recognized schemes such as the CDM;

20. *Requests* the Council to collect information on the volume of carbon offsets purchased in relation to air transport, and to continue to develop and disseminate best practices and tools, such as the ICAO Carbon Emissions Calculator, that will help harmonize the implementation of carbon offset programmes;

21. *Requests* the Council to regularly report CO₂ emissions from international aviation to the UNFCCC, as part of its contribution to assessing progress made in the implementation actions in the sector based on information approved by its member States;

22. *Requests* the Council to:

- a) study, identify and develop processes and mechanisms to facilitate the provision of technical and financial assistance, as well as facilitate access to existing and new financial resources, technology transfer and capacity building, to developing countries and report on its progress, including processes and mechanisms developed, results achieved as well as further recommendations, preliminarily by the end of 2012 and at the 38th Session of the Assembly; and
- b) initiate specific measures to assist developing States as well as to facilitate access to financial resources, technology transfer and capacity building;

23. *Requests* States to:

- a) promote scientific research aimed at continuing to address the uncertainties identified in the IPCC special report on Aviation and the Global Atmosphere and in the Fourth Assessment report;
- b) ensure that future international assessments of climate change undertaken by IPCC and other relevant United Nations bodies include updated information, if any, on aircraft-induced effects on the atmosphere;
- c) accelerate investments on research and development to bring to market even more efficient technology by 2020;
- d) accelerate the development and implementation of fuel efficient routings and procedures to reduce aviation emissions;
- e) accelerate efforts to achieve environmental benefits through the application of satellite-based technologies that improve the efficiency of air navigation and work with ICAO to bring these benefits to all regions and States;
- f) reduce legal, security, economic and other institutional barriers to enable implementation of the new ATM operating concepts for the environmentally efficient use of airspace;
- g) develop policy actions to accelerate the appropriate development, deployment and use of sustainable alternative fuels for aviation;
- h) work together through ICAO and other relevant international bodies, to exchange information and best practices; and
- i) consider measures to support sustainable aviation alternative fuels research and development, investments in new feedstock cultivations and production facilities, as well as incentives to stimulate commercialisation and use of sustainable alternative fuels for aviation to accelerate the reduction of aviation CO₂ emissions;

24. *Requests* the Council to:

- a) continue to develop and keep up-to-date the guidance for member States on the application of policies and measures aimed at reducing or limiting the environmental impact of emissions from aviation, and conduct further studies with respect to mitigating the impact of aviation on climate change;
- b) encourage States to cooperate in the development of predictive analytical models for the assessment of aviation impacts;
- c) continue evaluating the costs and benefits of the various measures, including existing measures, with the goal of addressing aircraft engine emissions in the most cost-effective manner, taking into account the interests of all parties concerned, including potential impacts on developing world;
- d) provide the necessary guidance and direction to ICAO's Regional Offices to assist member States with studies, evaluations and development of procedures, in collaboration with other States in the region, to limit or reduce GHG emissions on a global basis and work together collaboratively to optimize the environmental benefits that can be achieved through their various programmes;

- e) develop a global CO₂ Standard for aircraft aiming for 2013;
- f) further elaborate on relevant fuel efficiency metrics, including for international business aviation, and develop medium and long term technological and operational goals for aircraft fuel burn;
- g) encourage member States and invite industry to actively participate in further work on sustainable alternative fuels for aviation;
- h) work with financial institutions to facilitate access to financing infrastructure development projects dedicated to sustainable aviation alternative fuels and incentives to overcome initial market hurdles;
- i) continue to develop the necessary tools to assess the benefits associated with ATM improvements, and intensify its efforts on the development of new guidance on operational measures to reduce international aviation emissions;
- j) implement an emphasis on increasing fuel efficiency in all aspects of the ICAO's Global Air Navigation Plan, and encourage States and stakeholders to develop air traffic management that optimize environmental benefits and to promote and share best practices applied at airports in reducing the adverse effects of GHG emissions of civil aviation;
- k) identify appropriate standard methodologies and a mechanism to measure/estimate, monitor and verify global GHG emissions from international aviation, and States support the work of ICAO on measuring progress through the reporting of annual data on traffic and fuel consumption;
- l) request States to continue to support the efforts of ICAO on enhancing the reliability of measuring/estimating global GHG emissions from international aviation;
- m) undertake a study on the possible application of CDM of the Kyoto Protocol to international aviation;
- n) monitor and disseminate relevant information on the potential impacts of climate change on international aviation operations and related infrastructure, in cooperation with other relevant international organizations and the industry; and
- o) continue to cooperate with the Climate Neutral UN initiative, remain at the forefront of developing methods and tools for quantifying aviation's GHG emissions with respect to the initiative, and further develop and implement the strategy for reducing GHG emissions and enhancing in-house sustainability management practices of the Organization.

Annex

The guiding principles for the design and implementation of market-based measures (MBMs) for international aviation:

- a) MBMs should support sustainable development of the international aviation sector;
- b) MBMs should support the mitigation of GHG emissions from international aviation;
- c) MBMs should contribute towards achieving global aspirational goals;
- d) MBMs should be transparent and administratively simple;
- e) MBMs should be cost-effective;
- f) MBMs should not be duplicative and international aviation CO₂ emissions should be accounted for only once;
- g) MBMs should minimize carbon leakage and market distortions;
- h) MBMs should ensure the fair treatment of the international aviation sector in relation to other sectors;
- i) MBMs should recognize past and future achievements and investments in aviation fuel efficiency and in other measures to reduce aviation emissions;
- j) MBMs should not impose inappropriate economic burden on international aviation;
- k) MBMs should facilitate appropriate access to all carbon markets;
- l) MBMs should be assessed in relation to various measures on the basis of performance measured in terms of CO₂ emissions reductions or avoidance, where appropriate;
- m) MBMs should include *de minimis* provisions;
- n) where revenues are generated from MBMs, it is strongly recommended that they should be applied in the first instance to mitigating the environmental impact of aircraft engine emissions, including mitigation and adaptation, as well as assistance to and support for developing States; and
- o) where emissions reductions are achieved through MBMs, they should be identified in States' emissions reporting.

— END —