



DIRECTORS GENERAL OF CIVIL AVIATION-MIDDLE EAST REGION

Second Meeting (DGCA-MID/2)
(Jeddah, Saudi Arabia, 20-22 May 2013)

Agenda Item 8: Environmental Protection

SAUDI ARABIA POSITION TO THE DRAFT RESOLUTION A38-XX: CONSOLIDATED STATEMENT OF CONTINUING ICAO POLICIES AND PRACTICES RELATED TO ENVIRONMENTAL PROTECTION –CLIMATE CHANGE

(Presented by Saudi Arabia)

SUMMARY

ICAO council in its 197th session, requested the President of the Council to establish a Council High-Level Group (HGCC) composed of senior government officials, to develop policy recommendations for the Council in accordance with Operative Clauses 13, 18, 22 and any other provisions of Assembly Resolution A37-19 regarding elements for the 2013 Assembly Resolution, The main output of this HGCC is the draft of the 38th ICAO assembly resolution on climate change.

Action by the meeting is at paragraph 3

REFERENCES

- A 37-19
- C-DEC 197/6
- Kyoto protocol
- HGCC/3- IP/5
- HGCC/3-WP/1
- HGCC/3-WP/5

1. INTRODUCTION

1.1 ICAO council in its 197th session, requested the President of the Council to establish a Council High-Level Group (HGCC) composed of senior government officials nominated by their administrations, ensuring geographical representation and taking into account levels of international civil aviation activities with the mandate to develop policy recommendations for the Council in accordance with Operative Clauses 13, 18, 22 and any other provisions of Assembly Resolution A37-19 regarding elements for the 2013 Assembly Resolution.

1.2 The main output of this HGCC is the draft of the 38th ICAO assembly resolution on climate change which is an amendment of Assembly Resolution A37-19, the HGCC member States were invited by the chair of group to reflect on the draft, Saudi Arabia final position can be found in **Appendix A** to this working paper.

2. DISCUSSION

2.1 Article 2.2 of Kyoto protocol states "The Parties included in Annex I shall pursue limitation or reduction of emissions of greenhouse gases not controlled by the Montreal Protocol from aviation and marine bunker fuels, working through the International Civil Aviation Organization and the International Maritime Organization, respectively.", This protocol has been extended to a second commitment period to the end of 2020 by the last Conference of Parties in Doha (COP18), and its well known that all Middle East Region states are non-annex I countries thus no commitments to reduce or limit GHG emissions prior 2020 to our region.

2.2 The four pillars (Basket of Measures) to address GHG emissions adopted by IATA and industry are: technological, operational, infrastructure and market-based measures. Industry is confident that technology, operations and infrastructure measures will provide the long-term solution for aviation's sustainable growth. And, indeed, these are the most crucial pillars, as they bring emissions reductions within aviation sector.

2.3 ICAO medium term global aspirational goal of keeping the Global Net Carbon (GNC) emissions from international aviation from 2020 at the same level, which has been adopted by 37th assembly resolution in 2010 is under reservation by 43 member states including both developed and developing countries. In addition, studying the feasibility of this aspirational goal still undergoing by ICAO Committee on Aviation Environmental Protection (CAEP).

2.4 Development and deployment of alternative fuel in aviation should be subject to studies and assessments on the social and economic consequences including, inter alia, food security, water, poverty eradication and land using; on the industries producing conventional fuels; as well as on the consequences of the countries deploying them, especially developing countries.

2.5 With regard to the economic measures, MBM looks actually as:

- a) Indirect taxation on the fuel carried on the aircraft while the Chicago convention article 24 prohibited any charges or levies on the fuel carried aircraft.
- b) Offsetting aviation emissions out the sector with the available credits on the global market, since MBM actually doesn't reduce the aviation emissions.

2.6 There is also a need to ensure compatibility of the MBMs with other instruments under Chicago, UNFCCC and WTO agreements.

2.7 Assistance to States should not be linked only to assistance needs identified in States' action plans, and focus should be on assistance to developing countries.

2.8 Develop effective measures to help and assist developing States to build their capacity and ease the technology transfer.

3. ACTION BY THE MEETING

3.1 The meeting is invited to adopt Saudi Arabia's position on the draft ICAO 38th resolution on Consolidated Statement of Continuing ICAO Policies and Practices Related to Environmental Protection – Climate Change as a unified position from Middle East Region member States, as per **Appendix A** to this working paper.

APPENDIX A

DRAFT 38TH ASSEMBLY RESOLUTION TEXT ON MARKET-BASED MEASURES (MBMS)

1. Framework for MBMs

(Amendments to Appendix of HGCC/3-WP/3 to reflect views expressed at the HGCC/3 meeting)

A. Preamble

A1 *Recalling* Assembly Resolution A37-19 requesting 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;

A2 *Emphasizing* 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; **{ from A37-19 }**

A3 *Also recognizing* the critical importance of ICAO providing leadership to the contribution of international aviation to address CO₂ emissions that contribute to global climate change; **{ from A37-19 }**

A4 *Aware* that a variety of measures have been, and will be, put in place by ICAO member States to contribute to the realization of the aspirational global goal, and recognizing that MBMs to address CO₂ emissions from international aviation [can be among these measures];

A5 *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; **{ from A37-19 }**

A6 *Also acknowledging* the principles of non-discrimination and equal and fair opportunities to develop international aviation set forth in the Chicago Convention; **{ from A37-19 }**

A7 *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; **{ covered in A37-19 }**

A8 *Acknowledging*, at the same time, that in all scenarios modelled for carbon neutral growth to be achieved after 2020, approximately 95% of the emission reduction are accomplished by the international civil aviation sector purchasing emission units from outside the sector;

A9 *Recognising* that MBMs should promote actions with the international aviation sector, not just to buy credits from international carbon market;

A10 *Recognizing* the need to ensure compatibility and coherence of framework for MBMs and MBMs with mutually agreed instruments being adopted under the UNFCCC and the Kyoto Protocol;

A11 *Also recognizing* the need to avoid multiplicity of approaches for the design and implementation of MBM framework and MBM schemes;

A12 *Noting* that the UNFCCC is in the process of discussing a new market-based mechanism taking into account, inter alia, ensuring voluntary participation of Parties and safeguarding environmental integrity;

A13 *Recognizing* that the feasibility of MBMs has not been established in the various studies made in this context;

B. Purpose of a Framework for MBMs

B1 The Framework for MBMs outlines the guiding principles and key elements for States to conform to should a State or group of States voluntarily choose to implement and a State voluntarily chooses to agree to participate in an MBM applicable to CO₂ emissions from international aviation on aircraft registered in that States.

B2 States designing or implementing an MBM applicable to international aviation CO₂ emissions should seek to demonstrate that the MBM is compatible with the Framework.

B3-3 Mutual consent of both adopting and participating States is necessary for any framework for MBMs.

B4 The Framework does not prejudge or set the precedence for negotiations under the United Nations (UN) Framework Convention on Climate Change or other UN bodies. *{ covered in A37-19 }*

B5 The Framework is mutually agreed among States but does not prejudge any State of its legal rights under international laws, including but not limited to the Chicago Convention.

B6 This Framework is not intended to prejudge the implementation of a global MBM scheme for CO₂ emissions from international aviation and its design, although it could serve as a guide for its development; should a global MBM scheme be put in place, this Framework will cease to apply.

B7 The Framework shall be compatible and coherent with mutually agreed instruments being adopted under the UNFCCC and the Kyoto Protocol.

B8 The Framework shall avoid multiplicity of approaches for the design and implementation of MBM schemes.

C. Guiding Principles

The guiding principles for the design and implementation of MBMs are:

- a) MBMs should support the sustainable development of the international aviation sector; and should not impose an inappropriate economic burden on international aviation, particularly in developing countries;

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- b) MBMs should support the mitigation of CO₂ emissions from international aviation;
- c) MBMs shall not be duplicative and international aviation CO₂ emissions should be accounted for only once;
- d) MBMs shall not lead to carbon leakage and market distortions;
- e) MBMs should respect the principle of non-discrimination and equal and fair opportunities among carriers;
- f) MBMs should abide by the principle of common but differentiated responsibilities and respective capabilities and address Special Circumstances of States;
- g) MBMs should recognize past and future achievements and further encourage and incentivize investments in aviation fuel efficiency and in other measures to reduce aviation emissions;
- h) MBMs should not generate revenue, and MBMs should not be a resource generation measure but focus exclusively on mitigation of emissions within the international aviation sector, and where revenues are generated from MBMs, they shall be applied to mitigating the environmental impact of aircraft CO₂ emissions, including mitigation and adaptation, as well as assistance to and support for developing States;
- i) MBMs should be cost-effective;
- j) MBMs should be transparent and administratively simple;
- k) MBMs should facilitate appropriate access to all carbon markets; and
- l) MBMs should ensure the fair treatment of the international aviation sector in relation to other sectors.
- m) 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; *{ from principle L in A37-19, Annex }*
- n) where emissions reductions are achieved through MBMs, they should be identified in States' emissions reporting; *{ from principle O in A37-19, Annex }*
- o) MBMs shall not be implemented unilaterally by one State on another, but only through mutual consent of the participating State;
- p) MBMs shall not be disguised restriction on international services and trade;
- q) MBMs shall be coherent and compatible with the UNFCCC instruments and measures;
- r) MBMs shall be consistent and compatible with the Framework for MBMs;

D. Key Elements

D1 States should meet the following agreed elements in the design and implementation of an MBM to address CO₂ emissions from international aviation if they choose to apply the MBM on aircraft registered in other States with mutual consent of participating State.

Participants

D3 States should provide notice of their intent to put in place an MBM and provide an opportunity for other States to provide their input with respect to their aircraft operators.

D4 Upon finalization, national MBMs should be applied to all aircraft of those States which have consented to such application as well as operating into or out of the State]

D5 The participants will only be States which participate voluntarily in the framework for MBMs.

D6 States shall consult with the other participating States bilaterally to reach a mutual agreement before any such MBMs are implemented.

Geographic Scope

D7-6 MBMs application shall be limited to the national boundaries of a State, limited to its national carriers, and if a State decides to implement MBM to air carriers of third States, there shall be an agreement in place.

Non Duplication

D8 MBMs should be designed to ensure that a particular tonne of CO₂ emission is covered by only one MBM, and not multiple MBMs or other economic instruments.

Administrative Simplicity

D13 An MBM should be designed and implemented in a way that is administratively simple, non-intrusive and protects the confidentiality of relevant data for participants. To this end, a State [or region] putting in place an MBM should as far as possible, adopt the same methods and approaches that are already in use in the ICAO or industry such as regulatory financial reporting obligations for monitoring and reporting of participants' compliance with the MBM.

D14 The administrative cost should be kept minimal in order not to impose unnecessary cost burden on the air operators.

Compatibility

D15 An MBM should be designed and implemented in a way that is compatible with WTO agreements and regulations.

2. Global MBM Scheme

(Proposals made at the HGCC/3 meeting)

B5 *Recognizes* that the feasibility of the global MBM scheme has not yet been established.

Requests the Council to continue to explore the feasibility of a global MBM scheme, as per paragraph 18 of the Assembly Resolution A37-19, taking into account the outcome of the negotiations under the UNFCCC.

**DRAFT 38TH ASSEMBLY RESOLUTION ON INTERNATIONAL AVIATION AND
CLIMATE CHANGE
WITHOUT THE PROVISIONS ON MARKET-BASED MEASURES (MBMS)**

**Resolution A38-xx: 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;

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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 prejudice 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;

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;

Acknowledging the significant technological progress made in the aviation sector, with aircraft produced today being about 80 per cent more fuel efficient per passenger kilometre than in the 1960's;

Welcoming the agreement by the Committee on Aviation Environmental Protection (CAEP) of certification requirements for a global CO₂ Standard for aircraft;

Recognizing that air traffic management (ATM) measures under the ICAO's Global Air Navigation Plan contribute to enhanced operational efficiency and the reduction of aircraft CO₂ emissions;

Welcoming the adoption of the Aviation System Block Upgrades (ASBUs) strategy at the ICAO Twelfth Air Navigation Conference in November 2012;

{ Preamble Paragraph(s) for MBMs – to be developed }

Noting that the Conference on Aviation and Alternative Fuels in November 2009 (CAAF/09) endorsed the use of sustainable alternative fuels for aviation, and established an ICAO Global Framework for Aviation Alternative Fuels (GFAAF);

Acknowledging that, to initiate viable commercial production of sustainable alternative fuels for aviation, one of the goals which will be to create a long-term market perspective.

Noting the importance of a sustainable production that should ensure a long term continued production capacity of the natural resources, in an economically feasible, socially and environmentally acceptable way;

Noting the challenges associated with the emergence of disparate policies and procedures for alternative fuels for aviation, and *recognizing* the need for increased harmonization of the approaches to sustainability without hindering the development of the parties nor adding extra burdens, especially on developing countries;

Noting that, consistent with Assembly Resolution A37-19, the Council provided guidance and other technical assistance for the preparation and submission of States' action plans, including the holding of hands-on training workshops and the development of guidance material, an interactive web-interface and the ICAO Fuel Savings Estimation Tool (IFSET);

Welcoming that, as of 30 June 2013, XX member States that represent more than XX per cent of global international air traffic voluntarily prepared and submitted their action plans to ICAO;

Noting that the ICAO "Assistance for Action – Aviation and Climate Change" Seminar in October 2012 highlighted the active involvement of member States and international organizations in the activities related to States' action plans, and provided an opportunity to share information and build partnerships in order to facilitate assistance identified by States for the preparation and implementation of their action plans;

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;

{ Preamble Paragraph(s) for MBMs/CDM – to be developed }

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 A38-yy: Consolidated statement of continuing ICAO policies and practices related to environmental protection - General provisions, noise and local air quality, supersede Resolutions A37-18 and A37-19 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;

Global Aspirational Goals – paragraphs 4 to 8

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 bis. *Recognizes* the many actions that ICAO member States have taken and intend to take in support of the achievement of the collective aspirational goals, including air traffic management modernization, acceleration of the use of fuel-efficient aircraft technologies, and the development and deployment of sustainable alternative fuels, and *encourages* further such efforts;

7. *Agrees* to review, at its 39th 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 continue 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 39th 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.

States' Action Plans / Assistance to States – paragraphs 9 to 12

9. *Further encourages* States to submit their voluntary 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 or update their action plans to submit them to ICAO as soon as possible preferably by the end of June 2015 and once every three years thereafter, in order that ICAO can continue to 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, information on the expected environmental benefits from the implementation of the measures chosen from the basket, and information on any specific assistance needs;

10 bis. *Encourage* States that already submitted their action plans to share information contained in their action plans and build partnerships with other member States in order to support those States that have not prepared their action plans;

10 ter. *Encourage* States to make their action plans available to the public, taking into account the commercial sensitivity of information contained in States' action plans;

11. *Requests* the Council to facilitate the dissemination of economic and technical studies and best practices related to aspirational goals and to continue to provide guidance and other technical assistance for the preparation and update of States' action plans prior to the end of June 2015, in order for States to conduct their necessary studies and to voluntarily submit their action plans to ICAO;

11 bis. *Also requests* the Council, as part of the provision of technical assistance above, to hold workshops and to update the *Guidance Material for the Development of States' Action Plans*, interactive web-interface and relevant tools, particularly in order to assist States to include information on the expected environmental benefits from the implementation of the measures chosen for their action plans, consistent with the guidance;

{ Operative Paragraph(s) for MBMs – to be developed }

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;

Assistance to States – paragraph 22

22. *Requests* the Council to:

- c) continue to play a pivotal role in providing assistance to its member States through the dissemination of the latest information on best practices and the provision of guidance and other technical assistance to enhance capacity building and technology transfer, including through the ICAO Technical Cooperation Programme;
- d) consolidate and build on the partnership with other international organizations to meet the assistance needs of ICAO's member States, including through their action plans, which will bring about reductions in international aviation emissions;
- a) c) continue to 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 2015 and at the 39th Session of the Assembly; and
- b) d) continue to 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:

- e) 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;
- f) 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;

Technological and Operational Measures – paragraphs 23. b)-2 to f)

- b)-2 consider policies to encourage the introduction of more fuel efficient aircraft in the market;
- g) accelerate investments on research and development to bring to market even more efficient technology by 2020;
- h) accelerate the development and implementation of fuel efficient routings and procedures to reduce aviation emissions;

- i) accelerate efforts to achieve environmental benefits through the application of technologies that improve the efficiency of air navigation and work with ICAO to bring these benefits to all regions and States, taking into account the Aviation System Block Upgrades (ASBUs) strategy;
- j) reduce legal, security, economic and other institutional barriers to enable implementation of the new ATM operating concepts for the environmentally efficient use of airspace;

Sustainable Alternative Fuels – new paragraphs 23 bis. and 23 ter. that replace 23. g) h) i)

23 bis. *invites* States to:

- k) set coordinated approach in their national administrations in order to develop voluntarily policy actions to accelerate the appropriate development, deployment and use of sustainable alternative fuels for aviation;
- l) To continue to encourage and support research and development as well as demonstration steps in processing technology and feedstock production in order to decrease costs and encourage scale-up of sustainable production pathways up to commercial scale;

23 ter. *Urges* States to:

- a) develop alternative fuels for aviation in accordance with their national circumstances;
- b) recognize existing approaches to assess the sustainability of all alternative fuels in general, including those for use in aviation, which should:
 - 1) achieve net GHG emissions reduction, compared to conventional jet fuel;
 - 2) respect the areas of high importance for biodiversity, conservation and benefits for people from ecosystems;
 - 3) contribute to local social and economic development, and competition with food and water should be minimized;
- c) building on existing approaches or combination of approaches, and monitor, at a national level, of the production of alternative fuels for aviation;
- d) work together through ICAO and other relevant international bodies, to exchange information and best practices, including on the sustainability of alternative fuels for aviation;
- e) assess all the impacts of the deployment of alternative fuels in aviation and on the social and economic consequences on the industries producing conventional fuels as well as on the consequences of the countries deploying them, especially developing countries;

24. *Requests* the Council to:

- m) 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 adapting and mitigating the impact of aviation on climate change; as well as conducting studies on the measures taken and their impacts on the economies of the parties, especially developing countries.
- n) encourage States to cooperate in the development of predictive analytical models for the assessment of aviation impacts;
- o) 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;
- p) 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;

Technological and Operational Measures – paragraphs 24. e) f) i) j) and j)-2

- q) develop a global CO₂ Standard for aircraft aiming to finalize analyses by late 2015 and adoption by the Council in 2016;
- r) further elaborate on relevant fuel efficiency metrics, including for international business aviation, and develop and update medium and long term technological and operational goals for aircraft fuel burn;
- i) maintain and update guidance on ATM improvements and other 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;
- j)-2 continue to develop and update the necessary tools and guidance to assess the benefits associated with ATM improvements, and assess the environmental benefits associated with the implementation of the Aviation System Block Upgrades (ASBUs) strategy;

Sustainable Alternative Fuels – new paragraphs 24. j)-3 to j)-5 that replace 24. g) and h)

- j)-3 encourage member States and invite industry, financial institutions and other international organizations to participate in exchange of information and best practices under ICAO on sustainable alternative fuels for aviation; and how these practices will impact developing countries, conventional fuel markets, and both social and economic sustainability to both the industry and parties."
- j-4) continue to maintain the Global Framework for Aviation Alternative Fuels (GFAAF) and to explore the development of guidance material to support States and facilitate the development and deployment of sustainable alternative fuels in aviation;
- j-5) collect information on progress of alternative fuels in aviation, including through States' action plans, to give a global view of the future use of alternative jet fuels and to account for changes in life cycle GHG emissions in order to assess progress toward achieving global aspirational goals;
- k) maintain and enhance 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) ***{ Operative Paragraph(s) for MBMs/CDM – to be developed }***
- 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.