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EXECUTIVE COMMITTEE

Agenda Item 17: Environmental Protection

ADDRESSING CO₂ EMISSIONS FROM AVIATION

(Presented by the Airports Council International (ACI), the Civil Air Navigation Services Organisation (CANSO), the International Air Transport Association (IATA), the International Business Aviation Council (IBAC) and the International Coordinating Council of Aerospace Industries Associations (ICCAIA))

EXECUTIVE SUMMARY

The aviation industry recognizes the growing need to address the global challenge of climate change and is committed to playing its part. The industry is confident that technology, operations and infrastructure measures will provide the long-term solution for aviation's sustainable growth through concerted industry and government investment and engagement. However, the industry recognizes that a market-based measure (MBM) may be needed to fill any remaining emission gap in the interim. In this paper, industry calls on ICAO Member States to agree to develop for adoption by 2016 a single, global MBM for aviation, based on the principles set out in the Appendix.

Action: The Assembly is invited to support the proposals described in Paragraph 3.

<i>Strategic Objectives:</i>	This working paper relates to Strategic Objective C – <i>Environmental Protection and Sustainable Development of Air Transport.</i>
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<i>Financial implications:</i>	No additional resources required.
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<i>References:</i>	No references.
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1. INTRODUCTION

1.1 Aviation is a catalyst for growth, a vital conduit for world trade and a major global employer. Nearly 57 million jobs and \$2.2 trillion in global GDP are supported by aviation. Aviation plays a key role in promoting sustainable development and should remain safe, affordable and accessible in order to ensure mobility on an equitable basis to all sectors of society.

1.2 With these benefits comes an impact on the environment. In 2012, aviation produced 689 million tonnes of CO₂, or around 2 per cent of the global total. The aviation sector recognises the need to address the global challenge of climate change and is playing its part: in 2009 it adopted an ambitious set of commitments for the short-, medium- and long-term, including that of carbon-neutral growth from 2020 contingent upon critical aviation infrastructure and technology advances achieved by the industry and government.

1.3 In 2010, the 37th Session of the ICAO Assembly adopted the following goals for aviation:

- 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; and
- a collective medium-term global aspirational goal of keeping the global net carbon emissions from international aviation from 2020 at the same level (CNG2020).

1.4 To achieve these goals, there needs to be a strong commitment from all stakeholders, including governments and non-governmental organisations working together through the four pillar strategy: improved technology, more efficient aircraft operations, infrastructure improvements, and a properly-designed market-based measure (MBM) to fill any remaining emissions gap. ICAO must continue to play the leading role in these efforts.

1.5 The industry is contributing towards these goals by developing fuel efficient technology such as lighter weight materials and advanced engine technologies, improving operational efficiency, supporting the deployment of modernized infrastructure and the commercialisation of sustainable alternative fuels. In addition, the industry is also supporting the work of ICAO's Committee on Aviation Environmental Protection (CAEP) on an aircraft CO₂ Standard.

2. DISCUSSION

2.1 The industry is confident that technology, operations and infrastructure measures will provide long-term solutions for aviation's sustainable growth. However, the industry recognizes that some form of MBM may be needed to fill any remaining emissions gap in the interim. Thus, an MBM for aviation should only be considered as part of a broader package of measures to address aviation's CO₂ emissions; it should not be focused on suppressing demand for air travel or raising general revenues.

2.2 Any MBM applied to aviation must be global in scope, preserve fair competition, and take account of different types and levels of operator activity. The safe, orderly and efficient functioning of today's air transport system relies on a high degree of uniformity in regulations, standards and procedures. The use of unilateral measures undermines this foundation. Particular attention needs to be

given to avoid duplication with existing measures, or the layering of measures within a State or a group of States.

2.3 Many operators fly into dozens of different jurisdictions on a daily basis, with some large network carriers serving over a hundred different countries each day; they need to have a single point of accountability. Also, small operators would face overwhelming administrative challenges in complying with a multiplicity of different schemes. To promote transparency and keep down administration costs, the monitoring, reporting and verification (MRV) requirements related to an MBM should be kept as simple as possible and should be scalable to accommodate both large and small operators, while ensuring data integrity.

2.4 Of the three policy mechanisms under consideration at ICAO for a possible global MBM (carbon offsetting; carbon offsetting with revenue generating component; and a global ETS), industry believes that a simple carbon offsetting scheme would be the quickest to implement, the easiest to administer and the most cost-efficient.

2.5 In June 2013, the worldwide memberships of ACI and IATA adopted resolutions and CANSO and IBAC issued statements aimed at urging States and other stakeholders to work collaboratively through ICAO to reach an agreement on measures to address CO₂ emissions from aviation as part of a comprehensive package.

2.6 As work within ICAO continues to develop a comprehensive proposal towards a single, global MBM, any other measure that a State proposes or continues to impose with respect to international aviation on the operators from another State in the meantime, should only be in accordance with agreed ICAO principles. This includes elements respecting sovereign airspace and consent from the operators' state of registry. These principles should be based on and adhere to the guiding principles from the Annex to ICAO's previous Assembly Resolution on climate change, A37-19.

3. CONCLUSION

3.1 The Assembly is invited to:

- a) recognize the importance of the four-pillar strategy to address aviation's CO₂ emissions and call on ICAO Member States to support the continued investment in airframe and engine technology, and introduce appropriate policies and incentives for sustainable alternative fuels, improved air traffic management and airport infrastructure, and more efficient operations;
- b) recommend further development of State Action Plans to include more information on mitigation measures and benefits, and expansion of the program to include more States, thereby confirming government action in support of emissions reductions; and
- c) recognize the complementary and transitional nature of market-based measures in the context of the four-pillar strategy.

3.2 The Assembly is also invited to:

- a) reaffirm support for the collective medium-term goal of carbon neutral growth from 2020;
- b) establish a clearly defined process for the Council to develop, for adoption at the 39th Assembly in 2016, a single, global MBM based on the principles set out in the Appendix;
- c) request the Council to develop an ICAO Standard for the monitoring, reporting and verification of emissions, and agree on the principle that each operator should report its emissions to one State only;
- d) request the Council to establish a mechanism to define acceptable types of verified carbon credits under a global offset mechanism;
- e) agree that aviation CO₂ emissions should be accounted for only once and duplication with existing MBMs must be avoided;
- f) agree that a global MBM should take account of different types and levels of operator activity;
- g) agree on the scope of application of a global MBM respecting each State's exclusive jurisdiction over its sovereign airspace; and
- h) reaffirm that, while ICAO continues to develop a single, global MBM, any MBM that a State proposes or continues to impose with respect to international aviation should be consistent with the guiding principles for MBMs adopted as part of Resolution A37-19, including elements respecting sovereign airspace and consent from the operators' state of registry.

APPENDIX

PRINCIPLES FOR DETERMINING RESPONSIBILITIES FOR INDIVIDUAL AIRCRAFT OPERATORS UNDER A SINGLE, GLOBAL MBM TO SUPPORT CNG2020

1. Market-based measures (MBMs) for aviation should only be considered as part of a broader package of measures to address aviation's CO₂ emissions that cannot otherwise be achieved through cost-effective, in-sector reduction measures.
2. MBMs should not be designed or used to raise general revenues or to suppress demand for air travel.
3. Given the globally competitive nature of the aviation industry, any MBM agreed by governments must be cost-efficient and preserve fair competition.
4. Any MBM for aviation must fulfil the key criteria of maximizing environmental integrity, while minimizing competitive distortion and administrative complexity.
5. When agreeing to an MBM for aviation, only governments can decide whether to take into account – and, if so, how – the Special Circumstances and Respective Capabilities of States (SCRC). However, if they choose to do so, it should be done in such a way as to minimize market distortion by granting equal treatment to all operators on a given route.
6. Any MBM to operationalize CNG2020 should be easy to implement and administer as well as cost-efficient. The industry believes that alignment with this principle would be better achieved with a single mandatory carbon offsetting scheme than with alternative schemes.
7. The following principles for determining individual operator responsibilities under CNG2020 would help ensure that the collective industry CNG2020 commitment to offset its growth post-2020 is equitably and fairly distributed among carriers:
 - the collective industry emissions baseline for CNG2020 should be defined as the average annual total emissions over the period 2018-2020;
 - individual operator baselines should be defined as and fixed at each operator's average annual total emissions over the period 2018-2020;
 - a new entrant provision should be included that provides an adjustment for the first two years of operation;
 - individual carrier responsibilities should be fairly determined using an equitable balance between an 'emissions share' element (reflecting the individual carrier's share of total industry emissions) and a post-2020 'growth' element (reflecting the individual carrier's growth above baseline emissions);

- specific adjustments for fast- and high-growth should be applied when determining individual carrier responsibilities so as to alleviate the burden on fast-growing carriers;
- an early movers provision, based on a 15-year benchmarking timeframe (2005-2020) and combined with a five-year sunset clause (2020-2025) should be incorporated to recognize carbon reduction measures taken prior to 2020;
- an additional adjustment should be made to ensure any net reductions in emissions below an individual carrier's baseline are captured for use by the industry as a whole;
- data integrity should be ensured through an industry-accepted ICAO Standard for the monitoring, reporting and independent verification of emissions data;
- emissions data reporting should be kept simple with flexibility for operators to select from a hierarchy of reporting methodologies;
- a periodic CNG2020 performance review cycle should be mandated to assess the proper functioning of the mechanism and to revise individual elements and parameters as appropriate.

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