



ASSEMBLY — 39TH SESSION

EXECUTIVE COMMITTEE

**Agenda Item 22: Environmental Protection – International Aviation and Climate Change – Policy, Standardization and Implementation Support**

**CONSOLIDATED STATEMENT OF CONTINUING ICAO POLICIES AND PRACTICES RELATED TO ENVIRONMENTAL PROTECTION – GLOBAL MARKET-BASED MEASURE (MBM) SCHEME**

(Presented by the Council of ICAO)

**EXECUTIVE SUMMARY**

Submitted for adoption is a proposal for the Assembly Resolution text relating to a global market-based measure (MBM) scheme, *Consolidated statement of continuing ICAO policies and practices related to environmental protection – Global Market-based Measure (MBM) scheme*, which will supersede the MBM-related provisions of Assembly Resolution A38-18, *Consolidated statement of continuing ICAO policies and practices related to environmental protection – Climate change*.

The proposed Assembly Resolution text has been developed in light of the work of the Organization towards the development of a global MBM scheme since the 38th Session of the Assembly. For reference purpose, each paragraph of the proposed Assembly Resolution text is accompanied by explanatory text.

**Action:** The Assembly is invited to:

- a) acknowledge the activities undertaken by the Organization in response to the request of the 38th Session of the ICAO Assembly with respect to the development of a global MBM scheme for international aviation, as summarized in Appendix A; and
- b) adopt the proposed Assembly Resolution on the consolidated statement of continuing ICAO policies and practices related to environmental protection – Global Market-based Measure (MBM) scheme, presented in the Appendix B.

<i>Strategic Objectives:</i>	This working paper relates to Strategic Objective E, <i>Environmental Protection</i> .
<i>Financial implications:</i>	The activities referred to in this Assembly working paper will be undertaken subject to the resources available in the 2017 – 2019 Regular Programme Budget and/or from extra budgetary contributions.
<i>References:</i>	Doc 10022, <i>Assembly Resolutions in Force</i> (as of 4 October 2013)

## 1. INTRODUCTION

1.1 The 38th Session of the ICAO Assembly in 2013, through Resolution A38-18 (paragraphs 18 and 19), decided to develop a global MBM scheme for international aviation, and requested the Council, with the support of Member States, to:

- a) finalize the work on the technical aspects, environmental and economic impacts and modalities of the possible options for a global MBM scheme, including on its feasibility and practicability, taking into account the need for development of international aviation, the proposal of the aviation industry and other international developments, as appropriate, and without prejudice to the negotiations under the UNFCCC;
- b) organize seminars, workshops on a global scheme for international aviation participated by officials and experts of Member States as well as relevant organizations;
- c) identify the major issues and problems, including for Member States, and make a recommendation on a global MBM scheme that appropriately addresses them and key design elements, including a means to take into account special circumstances and respective capabilities as provided for in paragraphs 20 to 24 below, and the mechanisms for the implementation of the scheme from 2020 as part of a basket of measures which also include technologies, operational improvements and sustainable alternative fuels to achieve ICAO's global aspirational goals; and
- d) report the results of the work in sub-paragraphs a), b) and c) above, for decision by the 39th Session of the Assembly.

1.2 Since the 38th Assembly, extensive efforts were made by the Organization, including the establishment of the Environment Advisory Group (EAG) of the Council that held 15 meetings from March 2014 to January 2016 to assess various approaches for a global MBM scheme, with technical support provided by the Committee on Aviation Environmental Protection (CAEP) and the Secretariat.

1.3 In addition, the Secretariat conducted two rounds of Global Aviation Dialogues (GLADs) during April 2015 and March-April 2016, covering all ICAO regions, to provide all States with information on the relevant ICAO work and receive their feedback on the development of the scheme.

1.4 The EAG/15 meeting in January 2016 considered a draft Assembly Resolution text on a global MBM scheme, which was developed taking into account the progress achieved and views expressed during previous EAG deliberations. The Council endorsed the EAG recommendation to establish the High-level Group on a Global MBM Scheme (HLG-GMBM), which met twice (February and April 2016) to make progress towards improving and clarifying the draft Assembly Resolution text.

1.5 In May 2016, the High-level Meeting on a Global MBM Scheme (HLM-GMBM) was convened to discuss the draft Assembly Resolution text and make recommendations, for consideration by the Council to finalize the draft text, for submission to the 39th Session of the Assembly.

1.6 In August 2016, the Friends of the President meeting was convened to consider the results of bilateral and multilateral consultations by States related to the draft Assembly Resolution text, with a view to developing compromise text for consideration by the Council.

1.7 More detailed information on the work of the Organization on a global MBM scheme since the 38th Session of the ICAO Assembly is provided in Appendix A.

## 2. MAIN ISSUES

2.1 The approach for phased implementation of a global MBM scheme would be on the basis of voluntary participation by States in the pilot phase (from 2021 through 2023) and first phase (from 2024 through 2026), followed by the second phase (from 2027 through 2035) in which all other States except for exempted ones would participate.

2.2 In operationalizing this approach, the following issues were considered: 1) options for States that participate in the pilot phase; 2) scope of exemptions for the second phase; 3) review of the phased implementation; 4) dynamic approach for distribution of offsetting requirements; 5) baseline emissions for calculation of offsetting requirements.

### **Options for States that participate in the pilot phase**

2.3 Some States expressed the view that offset requirements during the pilot phase (from 2021 through 2023) should be calculated on the basis of Nationally Determined Contributions by each participating State. There was convergence of views that, for the pilot phase, each participating State could choose the basis of calculating their operator's offsetting requirements from two options: either the operator's emissions in a given year (i.e. 2021, 2022 and 2023) or the operator's emissions referring back to a single year of 2020.

2.4 In addition, there should not be a list of volunteer States attached to the Assembly Resolution itself, and the Secretariat would make public updated information on the States that volunteered to participate in the pilot and first phases. Those States that notify to voluntarily participate in the scheme (opt-in) should also be able to voluntarily opt-out from the scheme, as reflected in paragraphs 7 c) and 7 e).

### **Scope of exemptions for the second phase**

2.5 Regarding the scope of exemptions from the second phase of the scheme in paragraph 7 of the draft Assembly Resolution text, there was convergence of views on the exemptions applied to Least Developed Countries (LDCs), Small Island Developing States (SIDS) and Landlocked Developing Countries (LLDCs). Convergence of views was also reached on the exemptions to additional States on the basis of an individual share of international aviation activities in RTKs in year 2018 below 0.5 per cent of total RTKs or cumulative share of 90 per cent RTKs. It was noted that exempted States are encouraged to voluntarily participate in the scheme.

### **Review of the phased implementation**

2.6 The importance of the periodic review of the CORSIA every three years starting in 2022 was highlighted, which will allow the Council to make informed decisions on whether it is necessary to make adjustments to the next phases of the scheme. The importance of providing clarity to design elements of the scheme from 2021 through 2035 as a package was also highlighted.

### **Dynamic approach for distribution of offsetting requirements**

2.7 The concept of a dynamic approach for the distribution of offsetting requirements (paragraph 9 of the draft Assembly Resolution text) was considered, starting from 100 per cent sectoral rate (and 0 per cent individual rate) and moving gradually to higher percentages of an individual rate, starting from the second compliance cycle of the second phase, as follows:

- a) for the pilot and first phases as well as the first compliance cycle of the second phase (from 2021 through 2029), 100 per cent sectoral rate (and 0 per cent individual rate) would be applied; and
- b) from the second compliance cycle of the second phase, at least 20 per cent individual rate would be applied from 2030 to 2032; and at least 70 per cent individual rate would be applied from 2033 to 2035.

2.8 Some States were of the view that the percentages of sectoral and individual rates in the later compliance cycles of the second phase would need further consideration of their implications.

### **Baseline emissions for calculation of offsetting requirements**

2.9 Regarding the baseline emissions of operators to calculate annual increase of emissions, and thus to calculate offsetting requirements (paragraph 9 of the draft Assembly Resolution text), there was convergence of views on the use of average emissions covered by CORSIA “between 2019 and 2020”, taking into account the time needed for the development and implementation of MRV features.

### **Other Issues**

2.10 States also exchanged views on whether it would be necessary to specify which States are expected to take the lead by voluntarily participating in the scheme. Two proposals for new Assembly Resolution text under paragraph 7 were considered:

- a) some States were of the view that the Assembly Resolution text should encourage developed States to take the lead, as follows:

“All States are strongly encouraged to voluntarily participate in the scheme, recognizing that the developed States will take the lead;”

- b) Other States felt that such a call for voluntary participation should be addressed to all States, on account of the fact that some developing States had already informed of their intention to voluntarily participate in the pilot phase, thus taking the lead themselves, as follows:

“*Urges* all States to voluntarily participate in the pilot phase and first phase of the scheme, recognizing that developed States and some developing States are taking the lead;”.

2.11 Further consultations would be needed toward possible compromise text on this issue.

2.12 It was also recognized that the work in the areas of: Monitoring, Reporting and Verification (MRV); Emissions Unit Criteria (EUC); and Registries will continue after the Assembly, and technical material will be developed by CAEP. Therefore, current text should not go into unnecessary prescriptive details. In this regard, the importance of sharing information on further progress of technical work and providing adequate capacity building for implementation to all States was emphasized. The importance of linkage between ICAO’s work and the work under the UNFCCC process was also emphasized, while recognizing that the Paris Agreement has not yet entered into force. The following paragraph was considered for the draft Assembly Resolution text, but there were different views with regard to what extent such linkage should be reflected in the text, and further consultations would be needed toward possible compromise text on this issue:

“17bis. *Decides* that emissions units generated from mechanisms established under the UNFCCC and the Paris Agreement are eligible for use in CORSIA, provided that they align with decisions by the Council, with the technical contribution of CAEP, on eligible vintage and timeframe; ***{Eligible emissions units}***”.

2.13 Regarding paragraph 4 of the draft Assembly Resolution text on the implementation of a global MBM scheme, some States were of the view that other options for a global MBM scheme should not be excluded for further evaluation, proposing specific amendments to draft text:

“4. *Decides* to implement and evaluate a GMBM scheme in the form of the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) as one of the possible options to address any annual increase in total CO<sub>2</sub> emissions from international civil aviation (i.e. civil aviation flights that depart in one country and arrive in a different country) above the 2020 levels, taking into account special circumstances and respective capabilities; ***{GMBM is Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA)}***”

2.14 There were different views on the proposed amendments above, as a number of different options for a global MBM scheme had been considered and evaluated prior to the decision on the CORSIA, and that further evaluation would be undertaken as part of its review process following the implementation of the scheme. Therefore, the Council decided to maintain paragraph 4 of the draft Assembly Resolution text as contained in Appendix B, and further consultations would be needed toward possible compromise text on this issue.

### 3. CONCLUSION

3.1 Significant work has been undertaken by ICAO and its Member States, in cooperation with the aviation industry and other stakeholders, in responding to the request by the 38th Session of the Assembly to develop a global MBM scheme for international aviation. The Appendix B to this working paper presents the draft Assembly Resolution text, for consideration by the 39th Session of the Assembly. Among others, paragraph 7 (phased implementation) and paragraph 9 (distribution of offsetting requirements) of the draft text continue to be the most crucial component that the Assembly is invited to further consider, together with other issues described in paragraph 2 above, with a view to adopting the best possible consensus text at the Assembly toward the full operationalization of the scheme.

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## APPENDIX A

### ICAO WORK ON THE DEVELOPMENT OF A GLOBAL MARKET-BASED MEASURE (MBM) SCHEME

#### 1. ENVIRONMENT ADVISORY GROUP

1.1 Following the 38th Assembly, the ICAO Council established the Environment Advisory Group (EAG), which was composed of 17 Council Members to oversee all work related to the development of a global MBM scheme, with technical support provided by CAEP and the Secretariat. The EAG held 15 meetings from March 2014 to January 2016.

1.2 The EAG achieved initial progress using a “Strawman” approach, which started with a basic proposal for a global MBM scheme with a view to generating discussion and analyses on advantages and disadvantages of design elements thus allowing for improvements of the Strawman proposal.

1.3 The initial set of technical analyses on the Strawman proposal requested by the EAG and Council included the assessment of: volumes of future CO<sub>2</sub> emissions from international aviation and overall cost impacts to achieve the carbon neutral growth from 2020; cost impacts of using combinations of the individual operator’s growth factor of emissions and the international aviation sector’s average growth factor, for distribution of offsetting requirements; adjustments of offsetting requirements, such as for fast growers, early movers and new entrants; and technical exemptions and exemptions of routes to/from low emitting States. The CAEP completed the initial analyses and presented the related results to the EAG/7 meeting in October 2014.

1.4 Additional analyses were requested in late 2014 that focused on the assessment of various approaches for distribution of offsetting requirements, including:

- a) refinement of technical analyses presented to the EAG/7 meeting, including the use of variable (dynamic) growth factors over time;
- b) analyses of a route-based approach, including the definition of routes, using different criteria, as well as metrics for categorization of routes;
- c) analyses of an accumulative approach based on historical emissions; and
- d) comparison of various approaches for distribution of offsetting requirements.

1.5 The CAEP completed the additional analyses and presented the results of all technical analyses to the EAG/15 meeting in January 2016.

1.6 In addition, the EAG was frequently kept updated of CAEP’s work in developing recommendations on technical design elements of a global MBM scheme, namely: Monitoring, Reporting and Verification (MRV); Emissions Unit Criteria (EUC); and Registries. The CAEP/10 meeting in February 2016 accepted the recommendations, as submitted to the meeting, to be used as the basis of CAEP future work, and subject to further decisions on a global MBM scheme by the Council and the 39th Assembly.

## 2. HIGH-LEVEL GROUP AND DRAFT ASSEMBLY RESOLUTION TEXT

2.1 The EAG/15 meeting in January 2016 considered a draft Assembly Resolution text on a global MBM scheme, which was developed taking into account the progress achieved and views expressed during previous EAG deliberations.

2.2 The EAG/15 meeting recommended, and the Council endorsed, that a High-level Group on a Global MBM Scheme (HLG-GMBM) be established to facilitate the convergence of views in order to finalize draft Assembly Resolution text on a global MBM scheme, to be later considered by the Council. The Group was composed of high-level aviation and/or transport representatives of 18 Member States of the Council, taking into account geographical representation.

2.3 The High-level Group met twice (24 to 25 February and 13 to 15 April 2016) to review the draft Assembly Resolution text, and make progress towards improving and clarifying a number of provisions in the draft text. The Group recognized that paragraphs 7, 8 and 9 of draft Assembly Resolution text would be the most crucial component for which divergent views remained, and for which all States were encouraged to undertake bilateral and multilateral consultations with other States with a view to bridging the views and developing possible compromise text, to be presented to the High-level Meeting in May 2016 (see paragraph 4).

## 3. GLOBAL AVIATION DIALOGUES

3.1 In response to the Assembly request to organize seminars and workshops on a global MBM scheme for international aviation (A38-18, paragraph 19 b)), the Secretariat concluded two rounds of Global Aviation Dialogues<sup>1</sup> (GLADs) during April 2015 and March-April 2016, covering all ICAO regions. The objective of the GLADs were to: share information regarding MBMs and their role in a basket of measures to address CO<sub>2</sub> emissions from international aviation; provide up-to-date information on the ICAO work to develop a global MBM scheme; familiarize participants with the draft Assembly Resolution text; provide opportunities to receive feedback from Member States and relevant organizations; and serve as preparation for the High-level Meeting (see paragraph 5) and subsequently for the 39th Assembly.

3.2 The major considerations for the design of a global MBM scheme, as identified during the 2015 GLADs, such as administrative simplicity, environmental integrity, cost effectiveness and differentiation/non-discrimination, were highlighted in the 2016 GLADs as being closely linked to specific paragraphs of the draft Assembly Resolution text, in particular paragraphs 7 (phased implementation), 8 (route-based exemptions) and 9 (distribution of offsetting requirements). Most participants indicated that the draft text would be a good basis to move forward, while further improvements and clarification of text would be needed, in particular those paragraphs specified above.

3.3 The participants also discussed the roles of different stakeholders and there was high commonality in all GLADs in their roles for various aspects of implementing a global MBM scheme, such as MRV system and Registries. There was also convergence on the need for ICAO to provide capacity building and training, as well as the need for Standards, guidance, tools, toward the full implementation of a scheme.

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<sup>1</sup> All material related to 2015 and 2016 GLADs is available at: <http://www.icao.int/meetings/GLADs-2015/Pages/default.aspx> and <http://www.icao.int/Meetings/GLADs-2016/Pages/default.aspx>, respectively.



#### 4. HIGH-LEVEL MEETING ON A GLOBAL MBM SCHEME

4.1 The High-level Meeting on a Global MBM Scheme<sup>2</sup> (HLM-GMBM) was convened in Montréal, Canada from 11 to 13 May 2016 to discuss draft Assembly Resolution text on a global MBM scheme and make recommendations to the Council. The Meeting was attended by 311 representatives from 65 Member States and 17 international organizations.

4.2 The Meeting clarified and improved a number of provisions in the draft text, while it recognized a number of concerns and possible alternative approaches and ideas, in particular for paragraph 7 (phased implementation) and paragraph 9 (distribution of offsetting requirements).

4.3 The Meeting recognized that paragraphs 7 and 9 of the draft Assembly Resolution text would continue to be the most crucial component that remained divergent views, for which Member States were encouraged to continue bilateral and multilateral consultations to bridge their views and find possible compromise text.

#### 5. FRIENDS OF THE PRESIDENT INFORMAL GROUP MEETING

5.1 The Friends of the President Informal Group Meeting<sup>3</sup> was convened in Montréal, Canada from 22 to 23 August 2016 to consider the results of the bilateral and multilateral consultations by States related to the draft Assembly Resolution text, in particular related to paragraphs 7 and 9 of draft text, with a view to developing compromise text for consideration by the Council.

5.2 Based on the outcome of bilateral and multilateral consultations that had taken place prior to the meeting, a new approach for the phased implementation was presented and well-received by the meeting: voluntary participation by States in the pilot phase (from 2021 through 2023) and first phase (from 2024 through 2026), followed by the second phase (from 2027 through 2035) in which all other States except for exempted ones will participate.

5.3 The meeting focused on how to operationalize the approach, and concentrated its discussion on the following five issues: 1) options for States that participate in the pilot phase; 2) scope of exemptions for the second phase; 3) review of the phased implementation; 4) dynamic approach for distribution of offsetting requirements; 5) baseline emissions for calculation of offsetting requirements. The results of the meeting were reported to the Council, for its consideration in approving the draft Assembly Resolution text, for submission to the 39th Session of the Assembly.

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<sup>2</sup> All material related to HLM-GMBM is available at: <http://www.icao.int/Meetings/HLM-MBM/Pages/default.aspx>

<sup>3</sup> All material related to Friends of the President Informal Group Meeting is available at: <http://www.icao.int/Meetings/GMBMFP/Pages/default.aspx>



## APPENDIX B

### **Resolution A39-XX: Consolidated statement of continuing ICAO policies and practices related to environmental protection – Global Market-based Measure (MBM) scheme**

*Whereas* Assembly Resolution A38-18 decided to develop a global market-based measure (GMBM) scheme for international aviation, for decision by the 39th Session of the Assembly; ***{Existing text from A38-18, paragraph 18}***

*Recalling* that Assembly Resolution A38-18 requested the Council, with the support of Member States, to finalize the work on the technical aspects, environmental and economic impacts and modalities of the possible options for a GMBM scheme, including on its feasibility and practicability, taking into account the need for development of international aviation, the proposal of the aviation industry and other international developments, as appropriate, and without prejudice to the negotiations under the UNFCCC; ***{Existing text from A38-18, paragraph 19 a)}***

*Also recalling* that Assembly Resolution A38-18 requested the Council, with the support of Member States, to identify the major issues and problems, including for Member States, and make a recommendation on a GMBM scheme that appropriately addresses them and key design elements, including a means to take into account special circumstances and respective capabilities, and the mechanisms for the implementation of the scheme from 2020 as part of a basket of measures which also include technologies, operational improvements and sustainable alternative fuels to achieve ICAO's global aspirational goals; ***{Existing text from A38-18, paragraph 19 c)}***

*Recognizing* that ICAO is the appropriate forum to address emissions from international aviation, and the significant amount of work undertaken by the Council, its Environment Advisory Group (EAG) and its Committee on Aviation Environmental Protection (CAEP) to develop a recommendation for a GMBM scheme and its design elements and implementation mechanisms, including the analyses of various approaches for distribution of obligations; ***{New text to reflect the work since A38}***

*Further recalling* that Assembly Resolution A38-18 requested the Council, with the support of Member States, to organize seminars, workshops on a GMBM scheme for international aviation participated by officials and experts of Member States as well as relevant organizations; ***{Existing text from A38-18, paragraph 19 b)}***

*Recognizing* the convening of two rounds of Global Aviation Dialogues (GLADs) seminars held in 2015 and 2016 for all regions; ***{New text to reflect the work since A38}***

*Noting* the support of the aviation industry for a single global carbon offsetting scheme, as opposed to a patchwork of State and regional MBMs, as a cost effective measure to complement a broader package of measures including technology, operations and infrastructure measures; ***{Existing text from A38-18 preamble}***

*Recognizing* that MBMs should not be duplicative and international aviation CO<sub>2</sub> emissions should be accounted for only once; ***{Based on text from A38-18, Annex paragraph f}***

*Emphasizing* that the decision by the 38th Session of the Assembly to develop a global MBM scheme for international aviation reflects the strong support of Member States for a global solution for the international aviation industry, as opposed to a possible patchwork of State and regional MBMs; ***{Reflecting the background for a global solution compared to patchwork of MBMs}***

*Reaffirming* the concern with the use of international civil aviation as a potential source for the mobilization of revenue for climate finance to the other sectors, and that MBMs should ensure the fair treatment of the international aviation sector in relation to other sectors; ***{Based on text from A38-18, paragraph 30, and guiding principle h)}***

*Recalling* the UNFCCC and the Paris Agreement and *acknowledging* its principle of common but differentiated responsibilities and respective capabilities, in light of different national circumstances; ***{Updated to reflect Paris Agreement }***

*Also acknowledging* the principles of non-discrimination and equal and fair opportunities to develop international aviation set forth in the Chicago Convention; ***{Existing text from A38-18 preamble}***

*Welcoming* the adoption of the Paris Agreement under the UNFCCC and *recognizing* that the work related to a global MBM scheme for international aviation and its implementation will contribute to the achievement of the goals set out in the Paris Agreement; ***{Recognition of the Paris Agreement}***

*Whereas* the UNFCCC and the Paris Agreement provide for mechanisms, such as the Clean Development Mechanism (CDM) and a new market mechanisms under the Paris Agreement, to contribute to the mitigation of GHG emissions to support sustainable development, which benefit developing States in particular; ***{New text reflecting Paris Agreement}***

*Welcoming* the cooperation between the United Nations Framework Convention on Climate Change (UNFCCC) and ICAO on the development of CDM methodologies for aviation; ***{New text on CDM methodologies}***

*The Assembly:*

1. *Resolves* that this Resolution, together with Resolution A39-YY: *Consolidated statement of continuing ICAO policies and practices related to environmental protection - General provisions, noise and local air quality* and Resolution A39-ZZ: *Consolidated statement of continuing ICAO policies and practices related to environmental protection – Climate change*, supersede Resolutions A38-17 and A38-18 and constitute the consolidated statement of continuing ICAO policies and practices related to environmental protection;

1bis. *Acknowledges* the progress achieved on all elements of the basket of measures available to address CO<sub>2</sub> emissions from international aviation, including aircraft technologies, operational improvements, sustainable alternative fuels and a GMBM scheme and any other measures, and *affirms* the preference for the use of aircraft technologies, operational improvements and sustainable alternative fuels that provide the environmental benefits within the aviation sector; ***{Basket of measures and preference for non-MBM measures}***

2. *Also acknowledges* that, despite this progress, the environmental benefits from aircraft technologies, operational improvements and sustainable alternative fuels may not deliver sufficient CO<sub>2</sub> emissions reductions to address the growth of international air traffic, in time to achieve the global aspirational goal of keeping the global net CO<sub>2</sub> emissions from international aviation from 2020 at the same level; ***{Recognition of not achieving CNG 2020 by non-MBM measures}***

3. *Emphasizes* the role of a GMBM scheme to complement a broader package of measures to achieve the global aspirational goal, without imposing inappropriate economic burden on international aviation; ***{Complementary role of GMBM to achieve CNG 2020}***

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4. *Decides* to implement a GMBM scheme in the form of the Carbon Offsetting and Reduction Scheme for International Aviation (CORSA) to address any annual increase in total CO<sub>2</sub> emissions from international civil aviation (i.e. civil aviation flights that depart in one country and arrive in a different country) above the 2020 levels, taking into account special circumstances and respective capabilities; ***{GMBM is Carbon Offsetting and Reduction Scheme for International Aviation (CORSA)}***
5. *Requests* the Council to continue to ensure all efforts to make further progress on aircraft technologies, operational improvements and sustainable alternative fuels be taken by Member States and reflected in their action plans to address CO<sub>2</sub> emissions from international aviation, and to monitor and report the progress on implementation of action plans, and that a methodology should be developed to ensure that an aircraft operator's offsetting requirements under the scheme in a given year can be reduced through the use of sustainable alternative fuels, so that all elements of the basket of measures are reflected; ***{Further progress on non-MBM measures}***
- 5bis. *Request* the Council to continuously monitor the implementation of all elements of the basket of measures, and consider the necessary policies and actions to ensure that progress is achieved in all of the elements in a balanced way with an increasing percentage of emissions reductions accruing from non-MBM measures over time;
6. *Acknowledges* special circumstances and respective capabilities of States, in particular developing States, in terms of vulnerability to the impacts of climate change, economic development levels, and contributions to international aviation emissions, among other things, while minimizing market distortion; ***{Recognition of special circumstances of States}*** – **Support Differentiation**
7. *Decides* the use of a phased implementation for the CORSA to accommodate the special circumstances and respective capabilities of States, in particular developing States, while minimizing market distortion, as follows: ***{Phased implementation}*** – **Support Differentiation**
- a) Pilot phase applies from 2021 through 2023 to States that have volunteered to participate in the scheme. States participating in this phase may determine the basis of their aircraft operator's offsetting requirements from paragraph 9 e) i) below; ***{Pilot phase for volunteer States, with options for calculation of offsetting requirements}***
  - b) First phase applies from 2024 through 2026 to States that voluntarily participate in the pilot phase, as well as any other States that volunteer to participate in this phase, with the calculation of offsetting requirements in paragraph 9 a) below; ***{1st phase for volunteer States}***
  - c) The Secretariat will make public on the ICAO website updated information on the States that volunteered to participate in the pilot phase and first phase; ***{Update of information reflecting voluntary participation}***
  - d) Second phase applies from 2027 through 2035 to all States that have an individual share of international aviation activities in RTKs in year 2018 above 0.5 per cent of total RTKs or whose cumulative share in the list of States from the highest to the lowest amount of RTKs reaches 90 per cent of total RTKs, except Least Developed Countries (LDCs), Small Island Developing States (SIDS) and Landlocked Developing Countries (LLDCs) unless they volunteer to participate in this phase; ***{2nd phase for all States with 0.5%, 90% RTK, with exemptions of LDCs, SIDS and LLDCs unless they volunteer}***
  - e) States that are exempted or have not yet participated are strongly encouraged to voluntarily

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participate in the scheme as early as possible, in particular those States that are members of a regional economic integration organization. States who decide to voluntarily participate in the scheme, or decide to discontinue the voluntary participation from the scheme, may only do so from 1 January in any given year and they shall notify ICAO of their decision by no later than 30 June of the preceding year; *{Voluntary participation, and 6 month notification}*

- f) Starting in 2022, the Council will conduct a review of the implementation of the CORSIA every three years, including its impact on the growth of international aviation, which serves as an important basis for the Council to consider whether it is necessary to make adjustments to the next phase or compliance cycle and, as appropriate, to recommend such adjustments to the Assembly for its decision; *{Review for adjustments}*

8. *Decides* that the CORSIA shall apply to all aircraft operators on the same routes between States with a view to minimizing market distortion, as follows:

- a) all international flights on the routes between States, both of which are included in the CORSIA by paragraph 7 above, are covered by the offsetting requirements of the CORSIA;
- b) all international flights on the routes between a State that is included in the CORSIA and another State that is not included in the CORSIA by paragraph 7 above are exempted from the offsetting requirements of the CORSIA, while retaining simplified reporting requirements; and – **Support Differentiation**
- c) all international flights on the routes between States, both of which are not included in the CORSIA by paragraph 7 above, are exempted from the offsetting requirements of the CORSIA, while retaining simplified reporting requirements; *{Minimize market distortion}* – **Support Differentiation**

9. *Decides* that the amount of CO<sub>2</sub> emissions required to be offset by an aircraft operator in a given year from 2021 is calculated every year as follows:

- a) an aircraft operator's offset requirement = [ % Sectoral × (an aircraft operator's emissions covered by CORSIA in a given year × the sector's growth factor in the given year)] + [ % Individual × (an aircraft operator's emissions covered by CORSIA in a given year × that aircraft operator's growth factor in the given year);
- b) where the sector's growth factor = (total emissions covered by CORSIA in the given year – average of total emissions covered by CORSIA between 2019 and 2020) / total emissions covered by CORSIA in the given year;
- c) where the aircraft operator's growth factor = (the aircraft operator's total emissions covered by CORSIA in the given year – average of the aircraft operator's emissions covered by CORSIA between 2019 and 2020 ) / the aircraft operator's total emissions covered by CORSIA in the given year;
- d) where the % Sectoral = (100% – % Individual) and;
- e) where the % Sectoral and % Individual will be applied as follows:
- i) from 2021 through 2023, 100% sectoral and 0% individual, though each participating State

may choose during this pilot phase whether to apply this to:

- a) an aircraft operator's emissions covered by CORSIA in a given year, as stated above, or
- b) an aircraft operator's emissions covered by CORSIA in 2020;
- ii) from 2024 through 2026, 100 % sectoral and 0% individual;
- iii) from 2027 through 2029, 100 % sectoral and 0% individual;
- iv) from 2030 through 2032, at least 20% individual, with the Council recommending to the Assembly in 2028 whether and to what extent to adjust the individual percentage;
- v) from 2033 through 2035, at least 70% individual, with the Council recommending to the Assembly in 2028 whether and to what extent to adjust the individual percentage;
- f) the aircraft operator's emissions and the total emissions covered by CORSIA in the given year do not include emissions exempted from the scheme in that year;
- g) the scope of emissions in paragraphs 9 b) and 9 c) above will be recalculated at the start of each year to take into account routes to and from all States that will be added due to their voluntary participation or the start of a new phase or compliance cycle; *{Distribution with dynamic approach}* – **Support Differentiation**

10. *Decides* that a new entrant<sup>4</sup> is exempted from the application of the CORSIA for three years or until the year in which its annual emissions exceed 0.1 per cent of total emissions in 2020, whichever occurs earlier. From the subsequent year, the new entrant is included in the scheme and treated in the same way as the other aircraft operators. *{New entrants}* – **Support Differentiation**

11. *Decides* that, notwithstanding with the provisions above, the CORSIA does not apply to low levels of international aviation activity with a view to avoiding administrative burden: aircraft operators emitting less than 10,000 metric tonnes of CO<sub>2</sub> emissions from international aviation per year; aircraft with less than 5,700 kg of Maximum Take Off Mass (MTOM); or humanitarian, medical and firefighting operations; *{Technical exemptions}*

12. *Decides* that the emissions that are not covered by the scheme, as the results of phased implementation and exemptions, are not assigned as offsetting requirements of any aircraft operators included in the scheme; *{No redistribution of exempted emissions}* – **Support Differentiation**

13. *Notes* the work of the Council, with the technical contribution of CAEP, on: a) the monitoring, reporting and verification (MRV) system; b) recommended criteria for emissions units to be purchased by aircraft operators that take into account developments in the UNFCCC process; c) and registries under the CORSIA, and *requests* the Council, with the technical contribution of CAEP, to complete its work as soon as possible including the provision of capacity building and assistance, so as to enable the full implementation of the CORSIA from 2020; *{MRV, EUC, Registries – CAEP recommendations}*

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<sup>4</sup> A new entrant is defined as any aircraft operator that commences an aviation activity falling within the scope of the scheme on or after its entry into force and whose activity is not in whole or in part a continuation of an aviation activity previously performed by another aircraft operator.

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14. *Decides* a three year compliance cycle, starting with the first cycle from 2021 to 2023, for aircraft operators to reconcile their offsetting requirements under the scheme, while they report the required data to the authority designated by the aircraft operator's State of registry every year; ***{Compliance cycle}***

15. *Decides* on the need to provide for safeguards in the CORSIA to ensure the sustainable development of the international aviation sector and against inappropriate economic burden on international aviation, and *requests* the Council to decide the basis and criteria for triggering such action and identify possible means to address these issues; ***{Cost safeguard}***

16. *Decides* that a periodic review of the CORSIA is undertaken by the Council, for consideration by the Assembly, every three years from 2022 for the purpose referred to in paragraph 7 f) above and to contribute to the sustainable development of the international aviation sector and the effectiveness of the scheme. This will involve, inter alia:

- a) assessment of: progress towards achieving the ICAO's global aspirational goal; the scheme's market and cost impact on States and aircraft operators and on international aviation; and the functioning of the scheme's design elements;
- b) consideration of the scheme's improvements that would support the purpose of the Paris Agreement, in particular its long-term temperature goals; and update the scheme's design elements to improve implementation, increase effectiveness, and minimize market distortion, taking into account the consequential impact of changing the scheme's design elements, e.g., to MRV requirements; and
- c) a special review by the end of 2032 on termination of the scheme, its extension or any other improvements of the scheme beyond 2035, including consideration of the contribution made by aircraft technologies, operational improvements and sustainable alternative fuels towards achieving the ICAO's environmental objectives; ***{Duration and Review}***

16bis. *Determines* that the CORSIA or any other scheme decided by the Assembly is to be the market-based measure applying to CO<sub>2</sub> emissions from international aviation; ***{No duplicative application of MBMs beyond CORSIA}***

17. *Requests* the following actions be taken, with a view to establishing necessary mechanisms for implementation of the CORSIA from 2020:

Regarding the implementation of the MRV system,

- a) the Council to develop, with the technical contribution of CAEP, the SARPs and related guidance material for the implementation of the MRV system under the CORSIA, including simplified MRV procedures, for adoption by the Council by 2018; ***{MRV rules development}***
- b) all Member States whose aircraft operator undertakes international flights to develop the necessary arrangements, in accordance with the MRV SARPs, for implementation from 1 January 2019; ***{MRV rules implementation}***

Regarding the Emissions Unit Criteria (EUC),

- c) the Council to develop, with the technical contribution of CAEP, the SARPs and related guidance material for Emissions Unit Criteria (EUC) to support the purchase of appropriate emissions units



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by aircraft operators under the scheme, taking into account relevant developments in the UNFCCC and Article 6 of the Paris Agreement, for adoption by the Council as soon as possible but not later than 2018; *{EUC guidance development}*

- d) the Council to establish, with the technical contribution of CAEP, a standing technical advisory body on the Emissions Unit Criteria (EUC) to make recommendations to the Council on the eligible emissions units for use by the CORSIA; *{Eligible programmes}*
- e) the Council, with the technical contribution of CAEP, to periodically review the EUC SARPs and related guidance material, as appropriate, to promote compatibility with future relevant decisions under the Paris Agreement; *{EUC review}*

Regarding the establishment of Registries,

- f) the Council to develop, with the technical contribution of CAEP, policies and related guidance material to support the establishment of registries under the scheme, for adoption by the Council by 2018; *{Registry guidance development}*
- g) the Council to establish a consolidated central registry under the auspices of ICAO, for operationalization no later than 1 January 2021; *{Central registry establishment}*
- h) Member States to develop necessary arrangements for the establishment of their own registries or group registries established by groups of States, or to arrange for participation in other registries, in accordance with the ICAO guidance; *{Registry establishment for States}*

Regarding the governance of the CORSIA,

- i) the Council to oversee the functioning of the CORSIA, with support provided by the standing technical advisory body and CAEP as needed; *{Governance}*

Regarding the regulatory framework,

- j) Member States to take necessary action to ensure that the necessary national policies and regulatory framework be established for the compliance and enforcement of the scheme by 2020. *{Regulatory framework}*

18. *Decides* that ICAO and Member States take all necessary actions in providing the capacity building and assistance and building partnerships for implementation of the CORSIA from 2020, including: – **Support Differentiation**

Regarding the implementation of the MRV system,

- a) the Council to take necessary action to expand the provision of capacity building and assistance for the preparation and implementation on Member States' action plans, in order to accommodate capacity building and assistance for implementation of the MRV system by Member States from 1 January 2019, including organization of seminars and training in all regions from 2017, and facilitation of financial support where needed, in particular for those States that volunteer to participate in the pilot phase and require support to do so; *{Capacity building on MRV}*
- b) Member States to build partnerships among themselves to cooperate on the implementation of the

MRV system; *{Partnerships on MRV}*

Regarding the establishment of Registries,

- c) the Council to take necessary action to expand the provision of capacity building and assistance for the preparation and implementation on Member States' action plans, in order to accommodate capacity building and assistance for establishment of registries by States, including organization of seminars and training in all regions from 2017, and facilitation of financial support where needed, in particular for those States that volunteer to participate in the pilot phase and require support to do so; *{Capacity building on Registry }*
- d) Member States to build partnerships among themselves to cooperate on the establishment of their own registries or group registries established by groups of States, and possible pilot implementation; *{Partnerships on Registry}*

19. *Decides* that the CORSIA will use emissions units that meet the Emissions Unit Criteria (EUC) in paragraph 17 above; *{Eligible emissions units}*

19bis. *Requests* the Council to promote the use of emissions units generated that benefit developing States, and *encourages* States to develop domestic aviation-related projects; *{Further actions on the use of emissions units}* – **Support Differentiation**

20. *Requests* the Council to explore further development of aviation-related methodologies for use in offsetting programmes, including mechanisms or other programmes under the UNFCCC, and *encourages* States to use such methodologies in taking actions to reduce aviation CO<sub>2</sub> emissions, which could further enable the use of credits generated from the implementation of such programmes by the CORSIA, without double-counting of emissions reduction; *{Further actions on aviation-related methodologies }*

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