



International Civil Aviation Organization

**WORKING PAPER**

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**HIGH-LEVEL MEETING ON A GLOBAL MARKET-BASED  
MEASURE SCHEME**

**Montréal, 11 to 13 May 2016**

**Agenda Item 1: Review of draft Assembly Resolution text on a global MBM scheme for  
international aviation**

**ALTERNATIVE PROPOSAL ON METRICS FOR PHASING-IN OF STATES  
FOR THE GLOBAL MARKET-BASED MEASURE SCHEME**

(Presented by Cook Islands, Fiji, Guyana, Kiribati, Marshall Islands, Micronesia  
(Federal States of), Nauru, Palau, Papua New Guinea, Samoa, Seychelles,  
Singapore, Solomon Islands, Tonga, Trinidad and Tobago, and Vanuatu)

**EXECUTIVE SUMMARY**

The Carbon Offsetting Scheme for International Aviation (COSIA) as presented in the Appendix to HLM-GMBM-WP/2 is a “route-based approach”. The method to determine the phasing-in of States and their air routes is key to COSIA. The metric(s) used must be equitable, fair, relevant to aviation and aviation-related carbon emissions, and ensure a level playing field in the aviation sector.

Revenue Tonne Kilometres (RTK) is a familiar and well-understood aviation metric. Its use as a metric is appropriate since major aviation States have benefited the most from aviation and are also the main contributors to aviation-related carbon emissions.

Gross National Income (GNI) per capita will however result in distortionary effects on small States and States with small population. Put simply, dividing any GNI figure by a small population will result in a disproportionately higher resultant value. This unfairly skews / inflates the scale of these States even though they may have smaller aviation sectors. Use of per capita metrics at ICAO would set the precedence for per capita metrics to be used in other United Nations (UN) forums. The concerns on use of GNI per capita as a metric for COSIA are elaborated in paragraphs 3.1 – 3.8.

States may wish to play a larger part in the global effort to address international aviation emissions, it would be worthwhile to strengthen the voluntary component in the Appendix of HLM-GMBM-WP/2. States that are otherwise exempted could volunteer into the scheme or earlier phasing-in.

The proposed revised text is in paragraph 5.

Action by the HLM-GMBM is in paragraph 6.

## 1. INTRODUCTION

1.1 The draft Assembly Resolution for the Global Market-based-Measure (GMBM) Scheme, or Carbon Offsetting Scheme for International Aviation (COSIA), provides a basis for deliberation and negotiations at this High Level Meeting. Ongoing efforts of ICAO and Member States to move discussions forward on this issue are to be applauded.

1.2 COSIA as presented is a “route-based approach”. Carbon emissions are required to be offset on some air routes from 2021 (Phase 1) or 2026 (Phase 2), while exempted on others. The method to determine the phasing-in of States and their air routes is key and **must be equitable, fair, relevant to aviation and aviation-related carbon emissions, and ensure a level playing field in the aviation sector.**

1.3 Differentiation of air routes under the current draft text is based on the phasing-in of States according to two metrics, Gross National Income (GNI) per capita, and Revenue Tonne Kilometres (RTK), as set out in paragraphs 7a 1) and 2) and 7b 1) and 2) of the draft Assembly Resolution (Appendix of HLM-GMBM-WP/2).

## 2. RTK IS THE APPROPRIATE METRIC FOR THE GMBM

2.1 We are of the view that it is appropriate for RTK to be the metric to determine how States should be phased into the GMBM scheme. This is because a RTK metric offers the most direct relationship to aviation-related carbon emissions. Major aviation States will be included in Phase 1. States with moderate-sized aviation sectors will be included in Phase 2, whilst States with less developed aviation sectors would be exempted. **This is fair since major aviation States have benefited the most from aviation and are also the main contributors to aviation-related carbon emissions.**

2.2 **RTK data is a familiar and well-understood aviation metric.** It is reported by States, obtained directly from their air operators, and used widely in ICAO and the industry. **There was strong support for the use of RTK as a metric at the Global Aviation Dialogues and the High Level Group on a GMBM.**

## 3. DISTORTIONARY EFFECTS OF GNI PER CAPITA

3.1 **We hold strong objections against the use of GNI per capita as contained in paragraphs 7a 1) and 7b 1) of the draft Assembly Resolution to supplement the RTK approach and arbitrarily increase the coverage of the GMBM.**

3.2 As the denominator of any per capita metric is the population of the State, States with small populations will naturally have disproportionately higher resultant values. The use of GNI per capita, and other per capita criteria such as emissions per capita or RTK per capita, for differentiation will unfairly skew and inflate the scale of States with small populations even though they may have smaller aviation sectors.

3.3 The use of the per capita metric also does not take into account the heavy reliance of small States on international aviation as an important channel for the supply of resources as they cannot rely on limited domestic trade, resources and products due to the challenges of restricted physical land spaces. For some, in particular Small Island Developing States (SIDS), international aviation is the main driver for trade and tourism to support the country’s economy.

3.4 **The use of per capita metric for differentiation will also result in a disproportionately heavier burden on small States who already face unique constraints and limitations, while States with relatively lower per capita but larger absolute values will have**

**comparatively less responsibility. The inclusion of GNI per capita as set out in the draft Assembly Resolution is also unnecessary as small States with large aviation sectors would already be included under the RTK approach. It only results in small States with small aviation sectors being unfairly penalized.**

3.5 While it may be argued that many small States by virtue of paragraph 7c would be exempted from offsetting requirements for carbon emissions on air routes to Small Island Developing States (SIDS), Least Developed Countries (LDCs) and Land-locked Developing Countries (LLDCs), not all are. Indeed, in every region, there are States with small populations with comparatively lower absolute RTK, which are categorized in an earlier phase due to the use of GNI per capita metric and receive no exemption.

3.6 **Allowing the use of per capita metrics at ICAO would set the precedence for per capita metrics to be used in other United Nations (UN) forums, arbitrarily penalizing all States with small population.** Furthermore, as we have seen at the UN scales negotiations and the UN Framework Convention on Climate Change (UNFCCC), the proposed use of per capita indicators is highly contentious and divisive. The concern against the use of GNI per capita was also clearly expressed by many States at the Global Aviation Dialogues and at the High Level Group on a GMBM Scheme. **The push to use any per capita metric in the GMBM Scheme will only lead to further polarization and undermine our efforts to reach an international agreement on a GMBM Scheme which is fair, inclusive and effective.**

3.7 In any case, there is no linkage between GNI and the size or strength of a State's aviation sector. There is also no correlation between GNI and a State's contribution to global aviation-related carbon emissions. GNI is also not relevant as the COSIA is structured such that air operators and not the States will be purchasing carbon offsets.

3.8 **We therefore propose that RTK is the appropriate metric to classify how States should be phased into the GMBM scheme to cover routes with high aviation activities.** Nonetheless, if necessary, we are also open to additional metric(s) to supplement RTK. However it is essential that these do not put any States at an unfair disadvantage, as what per capita metrics would do. Ideally, the additional metric(s) should be familiar and relevant metrics that have already been accepted and used at ICAO, for example, the ICAO Scale of Assessment.

#### 4. VOLUNTARY EARLIER PHASING

4.1 We should recognize that some States may wish to play a larger part in the global effort to address international aviation emissions. To support the laudable intentions of these States, it would be worthwhile to strengthen the voluntary component of the provision to allow for States that are otherwise exempted to volunteer into the scheme or for earlier phasing-in. By doing so, we will also help the GMBM to achieve a more substantial coverage and hence achieve higher environment integrity.

#### 5. PROPOSED TEXT

5.1 The revised text for the alternative (working off the text in the Appendix of HLM-GMBM-WP/2) is as follows:-

7. *Decides the use of a phased implementation for the COSIA to accommodate the special circumstances and respective capabilities of States, in particular developing States, while minimizing market distortion, as follows: **{Phased implementation}***

a) *First implementation phase applies from 2021 to ~~the following:~~*

- 1) ~~States that are classified as high income States in terms of gross national income (GNI) per capita in year 2018 (as calculated and published by the World Bank method); or~~
- 2) ~~States that either have an individual share of international aviation activities in Revenue Tonnes Kilometers (RTKs) in year 2018 above 1.0 per cent of total RTKs, or whose cumulative share in the list of States from the highest to the lowest amount of RTKs reaches 80 per cent of total RTKs;~~
- b) ~~Second implementation phase applies from 2026 to the following:~~
- 1) ~~States that are classified as upper middle income States in terms of GNI per capita in year 2018 (as calculated and published by the World Bank method); or~~
- 2) ~~States that either 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 95 per cent of total RTKs;~~
- c) ~~the COSIA does not apply to States which are classified as the Least Developed Countries (LDCs), Small Island Developing States (SIDS) or Landlocked Developing Countries (LLDCs), unless those States meet the both criteria 1) and 2) in sub-paragraphs a) and b) above; {Exemptions of LDCs, SIDS and LLDCs}~~
- d) ~~nevertheless, States that are not included in the COSIA or classified in the second implementation phase may volunteer covered by the provisions in sub-paragraph a) or b) above are encouraged to voluntarily determine to participate in the scheme, in particular States with significant international civil aviation sectors or those States that are members of a regional economic integration organizations with strong impetus to address international aviation emissions are encouraged to volunteer. The list of States is shown in Annex. {Voluntary participation}~~

## 6. ACTION BY THE HLM-GMBM

### 6.1 The HLM-GMBM is invited to:

- a) support the use of RTK as the appropriate aviation-related metric for differentiation;
- b) object to the use of GNI per capita and other per capita metrics for differentiation as a matter of principle arising from the unfair and hugely distortionary effect which disadvantages States with small population; and
- c) consider the proposed alternative to paragraph 7 of the draft Assembly Resolution text on the differentiation for phasing at paragraph 5.1 above.

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