

# 2016 Global Aviation Dialogues (GLADs) on Market-Based Measures to address Climate Change

## 2. Draft Assembly Resolution Text - Design Elements -



ICAO

Environment, Air Transport Bureau  
International Civil Aviation Organization (ICAO)



# Draft Assembly Resolution Text on a global MBM scheme

## Main Elements

- Opening and role of a global MBM (paragraphs 1 to 6)
- Phase-in and distribution of obligation (paragraphs 7 to 9)
- Exemptions and adjustments (paragraphs 10 to 12)
- Technical and administrative issues (paragraphs 13 to 16)



## **Opening and role of a global MBM (paragraphs 1 to 6)**



## *The Assembly:*

1. *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;

***This paragraph acknowledges the progress achieved  
in all elements of the basket of measures  
and affirms 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, and 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;

***This paragraph recognizes not achieving CNG 2020  
by non-MBM measures***

3. *Emphasizes* the complementary role of a GMBM scheme to the other elements of a basket of measures, as a temporary emissions gap filler to achieve the global aspirational goal, without imposing inappropriate economic burden on international aviation;



***This paragraph emphasizes the complementary role of a global MBM as a temporary gap filler to achieve CNG 2020***



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

***This paragraph decides the global MBM in the form of Carbon Offsetting Scheme for International Aviation (COSIA)***



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 the progress on implementation of action;

***This paragraph requests further progress  
on non-MBM measures through “State Action Plans”***





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, while minimizing market distortion;

***This paragraph recognizes  
special circumstances and respective capabilities of States***



## **Phase-in and distribution of obligation (paragraphs 7 to 9)**



## Paragraph 7 - Phased Implementation

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:

**First**  
implementation  
phase:  
**2021**

**Second**  
implementation  
phase:  
**2026**

**Two criteria for 2018 are used to determine which States are included in the global MBM scheme:**

- Gross National Income (GNI) per capita:  
<http://data.worldbank.org/about/country-and-lending-groups>
- International Aviation Activities in Revenue Tonnes Kilometers (RTKs) :  
<http://www.icao.int/Meetings/GLADs-2016/Documents/RTK.pdf>

***This paragraph decides the use of  
phased implementation in two phases***

***\* Note: Divergent views remain on paragraph 7 \****



## Paragraph 7 a) - Phased Implementation: Criteria

- 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;

***This paragraph describes the  
criteria for the first implementation phase:  
States with High Income, or 1% RTK (or 80% RTK group)***



# Illustrative Example: Phased Implementation - 7 a)

State	High Income	>1% ind. RTK	Top 80% RTK		Phased Implementation
State A	X	X	X		Included from 2021
State B	X				Included from 2021
State C		X	X		Included from 2021
State D			X		Included from 2021
State E	<i>- State does not meet criteria -</i>				Excluded from 2021



## Paragraph 7 b) - Phased Implementation: Criteria

- 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;

***This paragraph describes the  
criteria for the second implementation phase:  
States with Upper Middle Income, or 0.5% RTK (or 95% RTK group)***



# Illustrative Example: Phased Implementation - 7 a), 7 b)

State	High Income	>1% ind. RTK	Top 80% RTK	Upper Middle Income	>0.5% ind. RTK	Top 95% RTK	Phased Implementation
State A	X	X	X				Included from 2021
State B	X						Included from 2021
State C		X	X				Included from 2021
State D			X				Included from 2021
State E				X	X	X	Included from 2026
State F				X			Included from 2026
State G					X	X	Included from 2026
State H						X	Included from 2026
State I	<i>- State does not meet criteria -</i>						Excluded



## Paragraph 7 c) and 7 d) - Exemptions and Adjustments

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 both criteria 1) and 2) in sub-paragraphs a) and b) above;

**States are excluded from the scheme if they are classified as LDCs, SIDS, LLDCs:**

- Lists of LDCs, SIDS, LLDCs:

<http://unohrlls.org/>

**unless those States meet both criteria 1) and 2)**

d) nevertheless, States that are not covered by the provisions in sub-paragraph a) or b) above are encouraged to voluntarily determine to participate in the scheme, in particular those States that are members of a regional economic integration organization;

***These sub-paragraphs exempt LDCs, SIDS, LLDCs  
and encourage for voluntary participation in the COSIA***





# Illustrative Example: Phased Implementation - 7 a), 7 b), 7 c)

State	High Income	>1% ind. RTK	Top 80% RTK	Upper Middle Income	>0.5% ind. RTK	Top 95% RTK	LDC, SIDS, LLDC	Phased Implementation
State A	X	X	X					Included from 2021
State B	X							Included from 2021
State C		X	X				X	Excluded
State D	X	X	X				X	Included from 2021
State E				X	X	X		Included from 2026
State F					X	X		Included from 2026
State G						X	X	Excluded
State H				X		X	X	Included from 2026
State I	- State does not meet criteria -						X	Excluded



## Paragraph 8 - Minimize Market Distortion

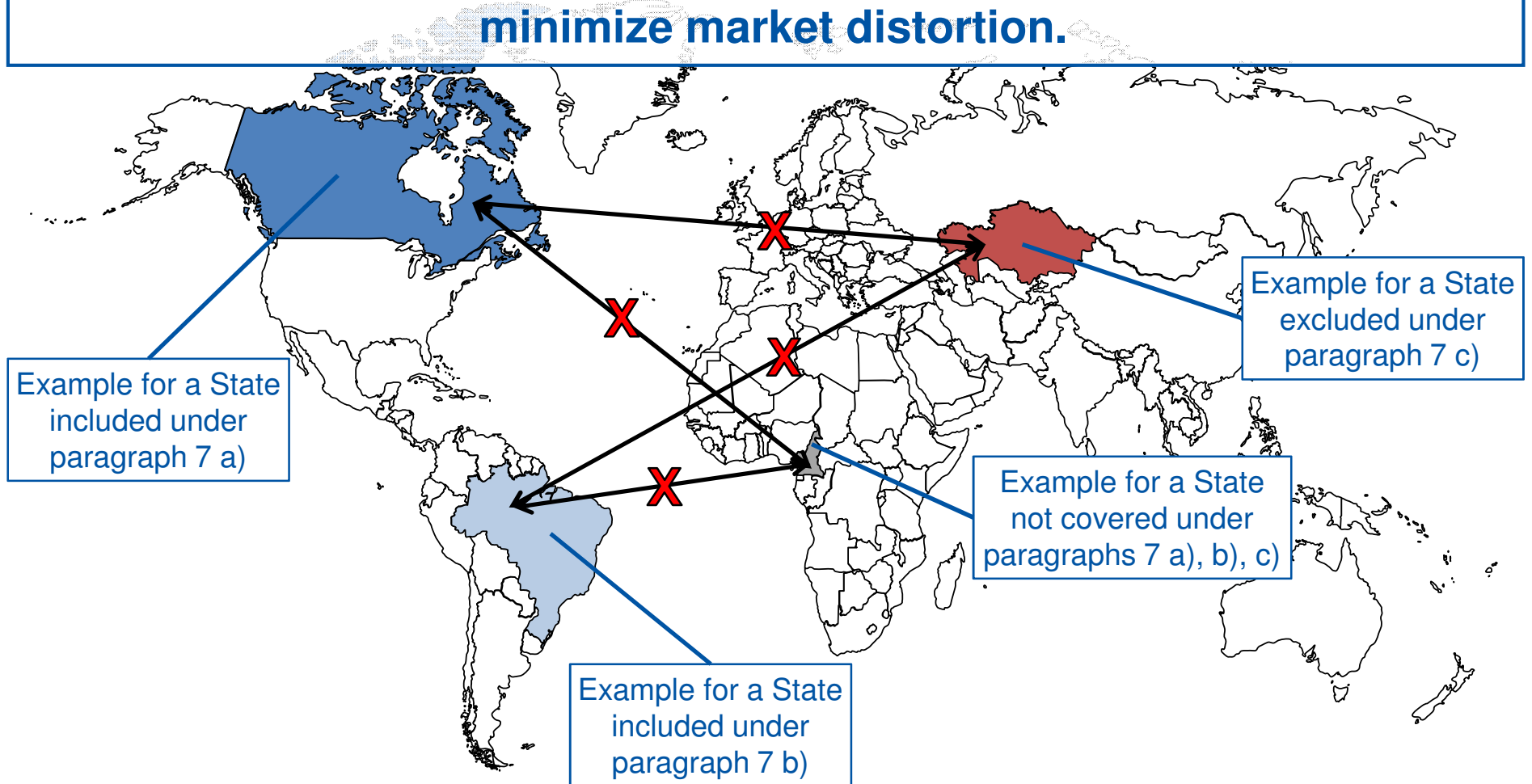
8. *Decides* that same requirements and rules shall apply to all aircraft operators on the same routes between States in the COSIA with a view to minimizing market distortion, and all international flights on the routes to and from a State that is not included in the COSIA by paragraph 7 above are exempted from the offsetting requirements of the COSIA, but would retain simplified reporting requirements;

***This paragraph equally treats all operators on the same routes, thus minimizing market distortion in the COSIA***



# Illustrative Example: Minimize Market Distortion

All routes between participating States and non-participating States in COSIA will be excluded from the scheme in order to minimize market distortion.





## Paragraph 9 - Distribution of Obligation

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 by multiplying its annual emissions in the given year with the growth rate of the international aviation sector's total emissions in the given year compared to the 2020 levels;

<i>Offset obligation for operator <math>x</math> in year <math>y</math></i>	=	<i>Emissions for operator <math>x</math> in year <math>y</math></i>	*	<i>Sectoral growth rate in year <math>y</math></i>
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***This paragraph decides the distribution of obligations to aircraft operators with a 100% sectoral rate, without adjustments for fast growers or early movers***

***\* Note: Divergent views remain on paragraph 9 \****



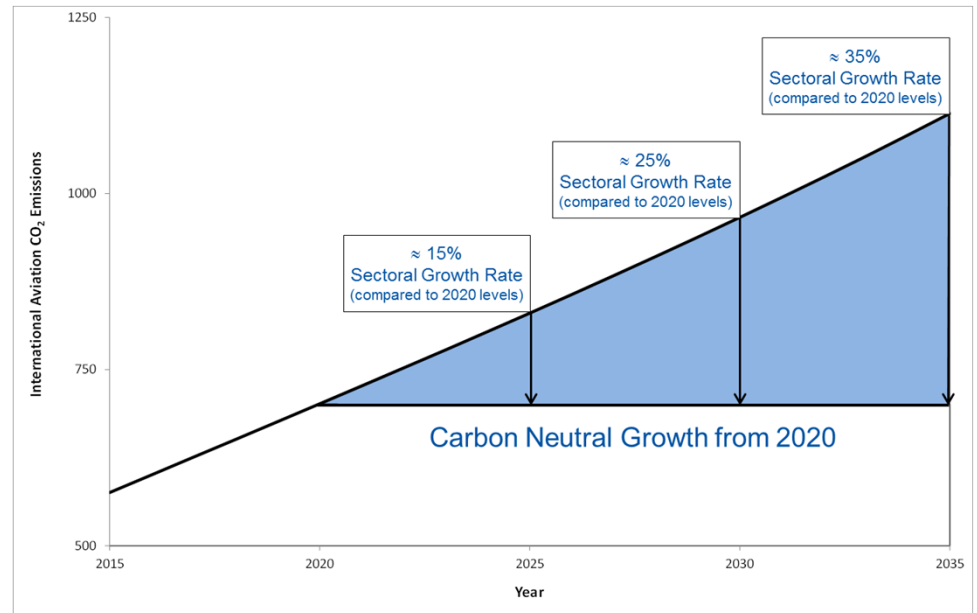
# Formulas: Distribution of Obligation with 100% Sectoral Growth Rate

## Sectoral growth rate:

$$SR_y = (TE_y - TE_{2020}) / TE_y$$

where:

- $SR_y$ : sectoral growth rate in year  $y$
- $TE_y$ : total emissions in year  $y$
- $TE_{2020}$ : total emissions in year 2020



## Calculation of obligation:

$$OB_{xy} = E_{xy} * SR_y$$

where:

- $OB_{xy}$ : offset obligation for operator  $x$  in year  $y$
- $E_{xy}$ : emissions for operator  $x$  in year  $y$
- $SR_y$ : sectoral growth rate in year  $y$



## **Exemptions and adjustments (paragraphs 10 to 12)**



## Paragraph 10 - Exemptions and Adjustments

*10. Decides that a new entrant\*\* is exempted from the application of the COSIA 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 operators.*

\*\*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.

***This paragraph exempts new entrants\*\*  
from the COSIA for 3 years or until 0.1% of total emissions***



## Paragraph 11 - Exemptions and Adjustments

*11. Decides that, notwithstanding with the provisions above, the COSIA 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;*

***This paragraph decides further technical exemptions  
from the COSIA***





## Paragraph 12 - Coverage of the COSIA

*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 operators included in the scheme;

***This paragraph decides  
no redistribution of exempted emissions***



## **Technical and administrative issues (paragraphs 13 to 16)**



## Paragraph 13 - Work of the Council and CAEP

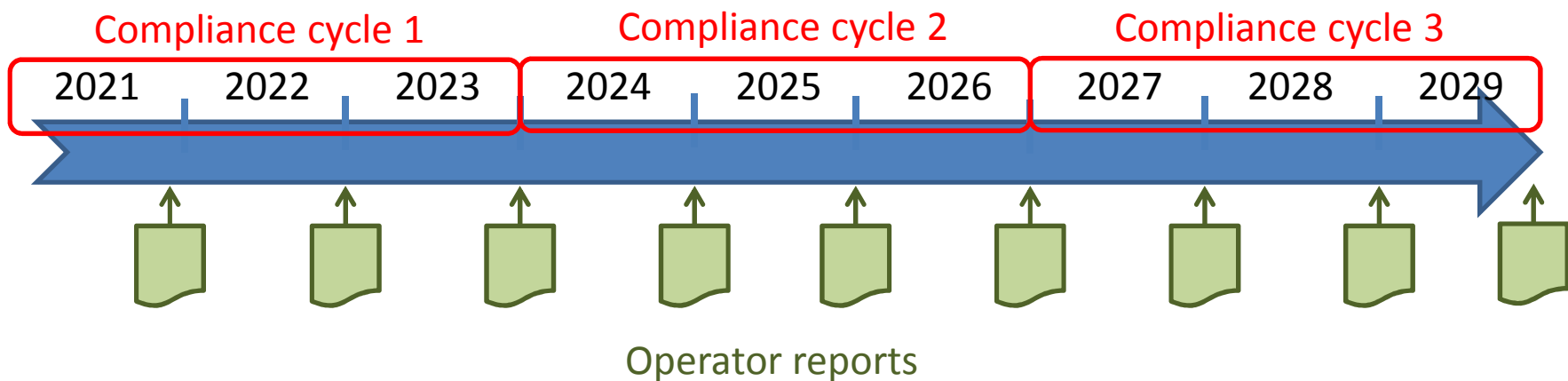
13. *Notes* the work of the Council, with the technical contribution of CAEP, on the monitoring, reporting and verification (MRV) system, criteria for emissions units to be purchased by aircraft operators, and registries under the COSIA, and *requests* the Council, with the technical contribution of CAEP, to complete its work so as to enable the full implementation of the COSIA from 2020;

***This paragraph endorses the progress so far, and requests further work of the Council/CAEP on MRV, EUC and Registries (Implementation mechanisms are further described in paragraph 17)***



# Paragraph 14 - Compliance Cycle

14. *Decides* a three year compliance cycle, starting with the first cycle from 2021 to 2023, within which aircraft operators reconcile their offsetting requirements under the scheme, while they report the required data to a single State authority every year;



***This paragraph decides a three year compliance cycle for operators under the COSIA***



## Paragraphs 15 and 16 - Cost Safeguard, Duration and Review

15. *Decides* the need to provide for safeguards in the COSIA to ensure the sustainable development of the international aviation sector and against inappropriate economic burden on international aviation due to market failure, such as excessive pricing of emissions units or restrictions to carbon market access; where under such circumstances, the Council should intervene to review the COSIA and consider possible means to address these issues;
16. *Decides* that the design elements of the COSIA apply until the end of 2035, with a periodic review every three years including the need for suspension of the scheme as a result of achieving the global aspirational goals through non-MBM measures, and the cost impact of the scheme such that it may affect the sustainable development of the aviation industry, and a review for any extension of the scheme beyond 2035 is undertaken by end 2032;

***These paragraphs decide a cost safeguard and the duration and periodic review of the COSIA***