

# ICAO High-level Meeting on a Global Market-Based Measure (MBM) Scheme

## ICAO Pre-event Briefing

### 2. Introduction to the Draft Assembly Resolution Text (Appendix to HLM-GMBM-WP/2)



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



# Draft Assembly Resolution text on a global MBM scheme

## Main Elements

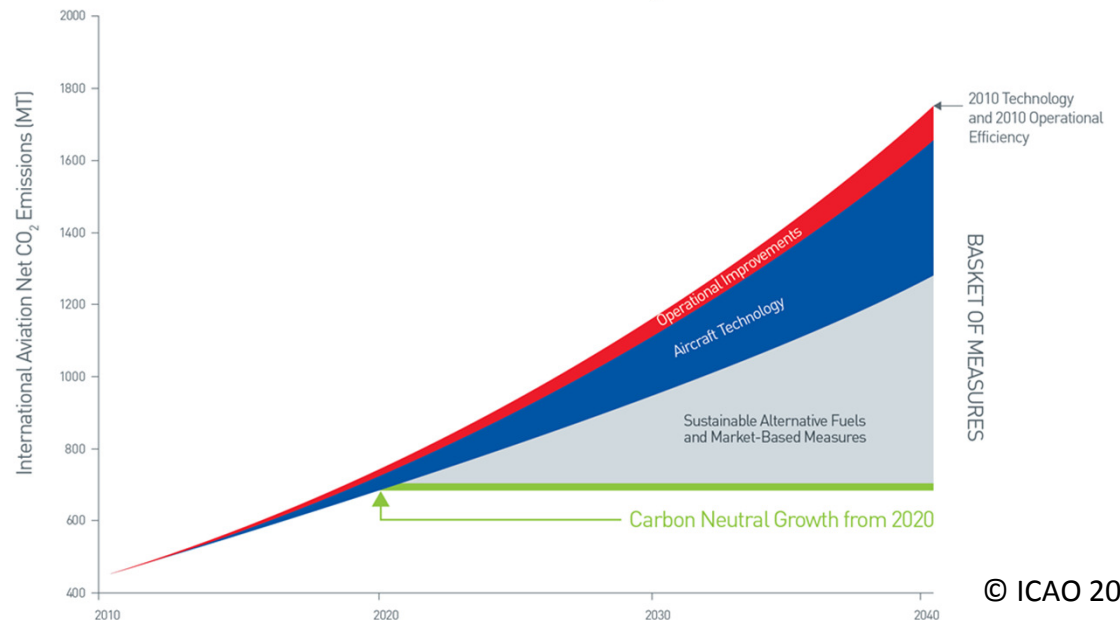
Opening and role of a global MBM scheme	paragraphs 1 to 6
Phased implementation	paragraph 7
Route-based exemptions	paragraph 8
Distribution of offsetting requirements	paragraph 9
Exemptions and adjustments	paragraphs 10 to 12
Technical and administrative issues	paragraphs 13 to 16
Implementation mechanisms	paragraphs 17 to 20
<ul style="list-style-type: none"><li>• MRV, EUC, Registries, Governance, Regulatory framework</li><li>• Capacity building, Partnerships</li><li>• Further actions on the use of emissions units</li><li>• Further actions on aviation-related methodologies</li></ul>	

# Paragraphs 1 to 6 -

# Opening and role of a global MBM scheme

- Paragraph 1 acknowledges the progress achieved on all elements of the basket of measures and affirms preference for non-MBM measures
- Paragraph 2 recognizes not achieving CNG 2020 by non-MBM measures
- Paragraph 3 emphasizes the complementary role of a global MBM as a temporary gap filler to achieve CNG 2020

Contribution of Measures for Reducing International Aviation Net CO<sub>2</sub> Emissions





- Paragraph 4 decides to implement a global MBM scheme in the form of **Carbon Offsetting Scheme for International Aviation (COSIA)** to address any annual increase in total CO<sub>2</sub> emissions above the 2020 levels, taking into account special circumstances and respective capabilities
- Paragraph 5 requests further progress on non-MBM measures through “State Action Plans”
- Paragraph 6 recognizes special circumstances and respective capabilities of States, in particular developing States



## Paragraph 7 - Phased implementation

Paragraph 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/HLM-MBM/Pages/background\\_information.aspx](http://www.icao.int/Meetings/HLM-MBM/Pages/background_information.aspx)  
"2014 International RTK list per States"

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

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



Paragraph 7 a) - First implementation phase applies from 2021 to the following States:

- 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)

7 a) 1)

7 a) 2)

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	- State does not meet criteria -				Excluded from 2021



Paragraph 7 b) - Second implementation phase applies from 2026 to the following additional States:

- 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)

7 a) 1)      7 a) 2)      7 b) 1)      7 b) 2)

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	- State does not meet criteria -						Excluded



## Paragraph 7 c) to 7 d) - Exemptions and Voluntary participation

- Paragraph 7 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)**

- Paragraph 7 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

# Illustrative example: Phased implementation - 7 a), 7 b), 7 c)

State	7 a) 1)		7 a) 2)		7 b) 1)		7 b) 2)		7 c)	Phased Implementation
	High Income	>1% ind. RTK	Top 80% RTK	Upper Middle Income	>0.5% ind. RTK	Top 95% RTK	LDC, SIDS, LLDC			
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



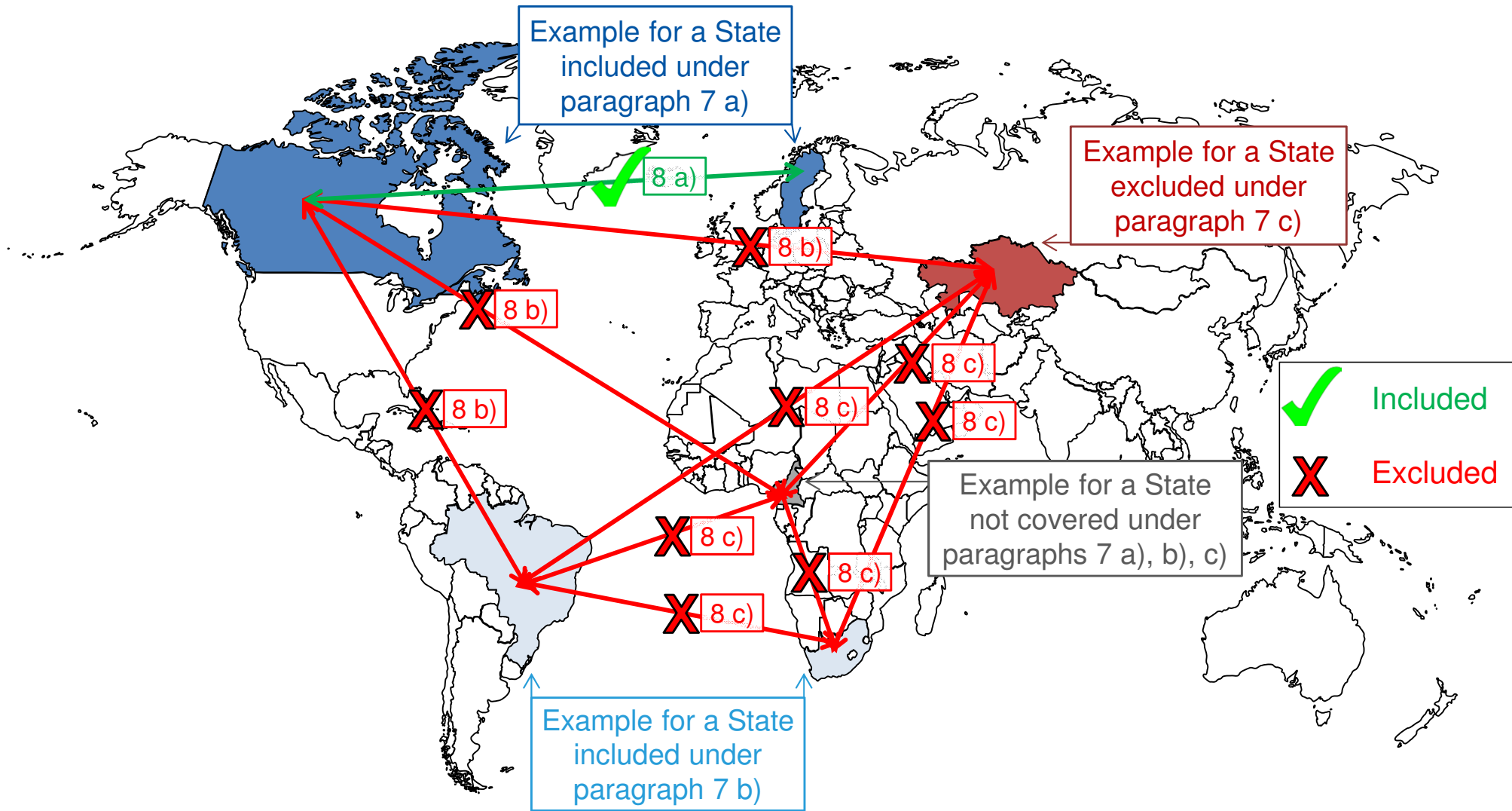
## Paragraph 8 - Route-based exemptions

Paragraph 8 decides that the COSIA 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 COSIA by paragraph 7 above, are covered by the offsetting requirements of the COSIA
- b) all international flights on the routes between a State that is included in the COSIA and another State that is not included in the COSIA by paragraph 7 above are exempted from the offsetting requirements of the COSIA, while retaining simplified reporting requirements and
- c) all international flights on the routes between States, both of which are not included in the COSIA by paragraph 7 above, are exempted from the offsetting requirements of the COSIA, while retaining simplified reporting requirements

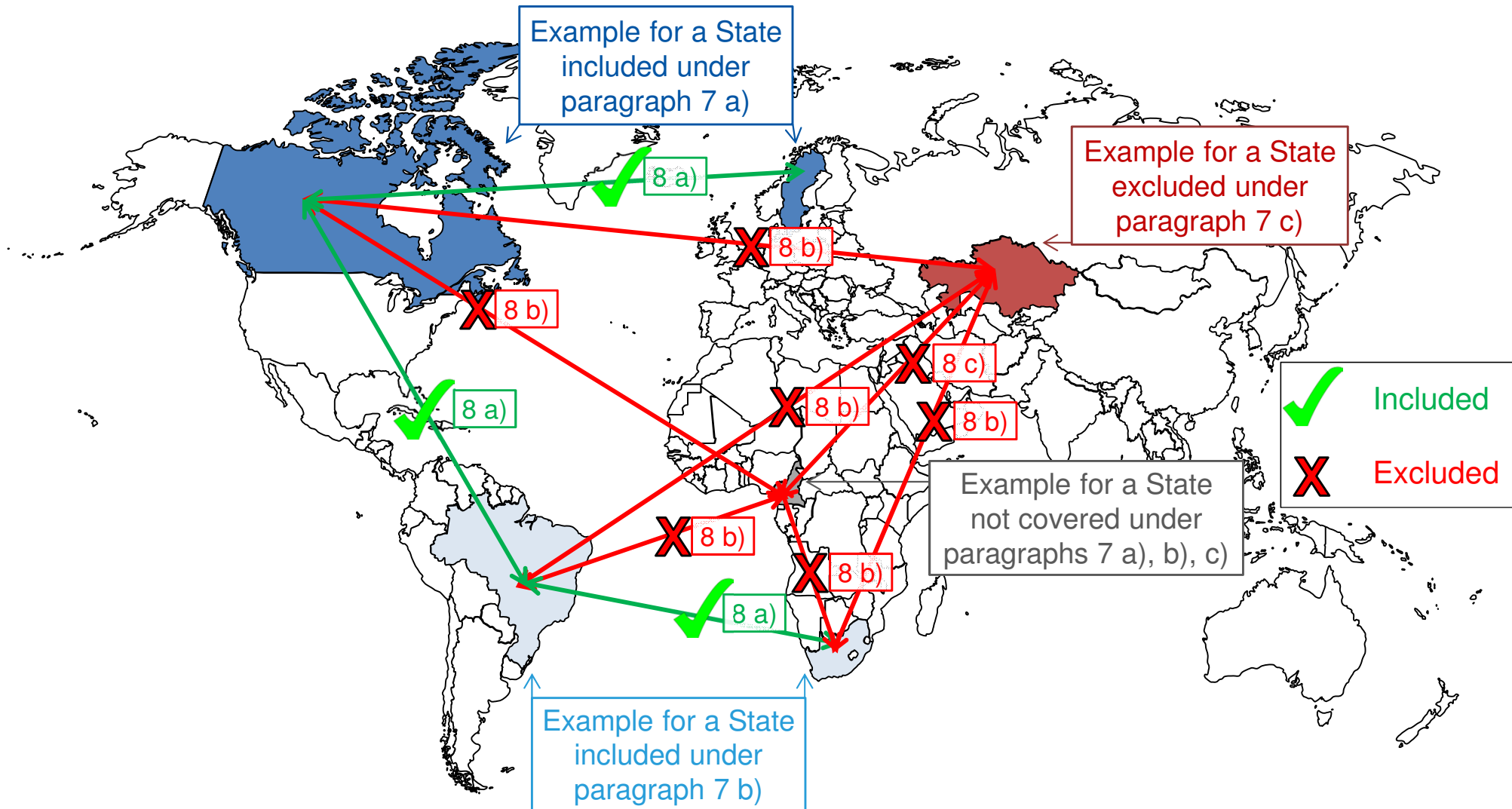
***This paragraph equally treats all operators on the same routes, thus minimizing market distortion in the COSIA***

# Illustrative example - First phase (2021): Route-based exemptions - 8 a), 8 b), 8 c)



***From 2021, only international flights on routes between States included in the first implementation phase (paragraph 7) are covered by offsetting requirements***

# Illustrative example - Second phase (2026): Route-based exemptions - 8 a), 8 b), 8 c)



**From 2026, international flights on routes between States included in the first and second implementation phase (paragraph 7) are covered by offsetting requirements**



## Paragraph 9 -

# Distribution of offsetting requirements

Paragraph 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) amount of offsets = an operator's emissions covered by COSIA in a given year × sector's growth factor in the given year
- b) where the sector's growth factor = (total emissions covered by COSIA in the given year – total emissions covered by COSIA at the 2020 levels) / total emissions covered by COSIA in the given year and
- c) the total emission covered by COSIA in the given year do not include emissions exempted from the scheme in that year

***This paragraph decides the distribution of offsetting requirements to aircraft operators with a 100% sectoral growth factor, without adjustments for fast growers or early movers***

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

# Formulas: Distribution with 100% sectoral growth factor - 9 a), 9 b), 9 c)

## Sector's Growth Factor :

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

where:

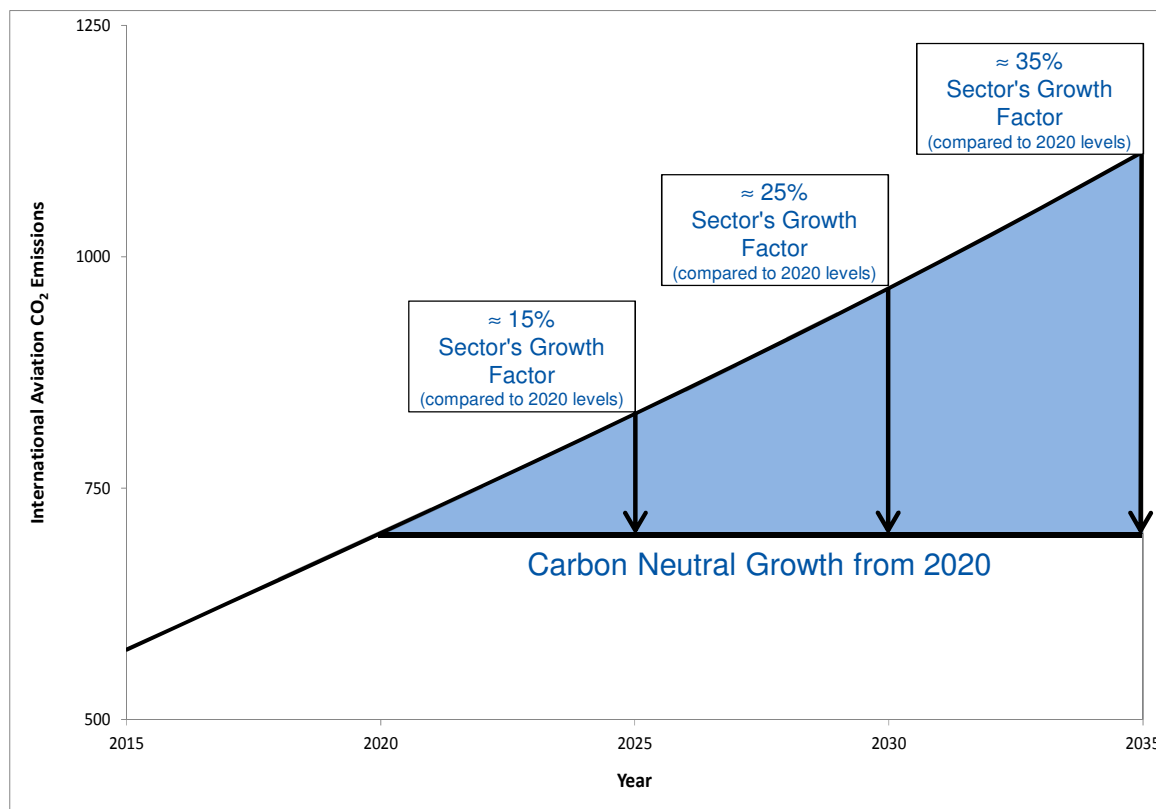
- $SG_y$ : sector's growth factor in year y
- $TE_y$ : total emissions covered by COSIA in year y
- $TE_{2020}$ : total emissions covered by COSIA in year 2020

## Amount of Offsets:

$$AO_{xy} = E_{xy} * SG_y$$

where:

- $AO_{xy}$ : amount of offsets for operator x in year y
- $E_{xy}$ : emissions covered by COSIA for operator x in year y
- $SG_y$ : sector's growth factor in year y





# Numerical example: Distribution with 100% sectoral growth factor - 9 a), 9 b), 9 c)

This example illustrates the offsetting requirements for different aircraft operators in different years. For simplicity reasons it is assumed that the scheme covers only three operators.

[CO <sub>2</sub> emissions in Million Tonnes]	Reference year 2020	2021	2022	2023	2024	2025
Emissions and growth of operator A ( <i>growing</i> )	100.0	110.0 (10.0%)	120.0 (20.0%)	130.0 (30.0%)	140.0 (40.0%)	150.0 (50.0%)
Emissions and growth of operator B ( <i>stable</i> )	100.0	100.0 (0.0%)	100.0 (0.0%)	100.0 (0.0%)	100.0 (0.0%)	100.0 (0.0%)
Emissions and growth of operator C ( <i>declining</i> )	100.0	97.5 (-2.5%)	95.0 (-5.0%)	92.5 (-7.5%)	90.0 (-10.0%)	85.0 (-15.0%)
Total emissions of the sector		307.5	315	322.5	330.0	335.0
<b>Sector's Growth Factor</b>	300.0	<b>2.4%</b>	<b>4.8%</b>	<b>7.0%</b>	<b>9.1%</b>	<b>10.4%</b>

Offsetting requirements operator A ( <i>growing</i> )	-	2.7	5.7	9.0	12.7	15.7
Offsetting requirements operator B ( <i>stable</i> )	-	2.4	4.8	7.0	9.1	10.4
Offsetting requirements operator C ( <i>declining</i> )	-	2.4	4.5	6.5	8.2	8.9
<b>Total offsetting requirements</b>	-	<b>7.5</b>	<b>15.0</b>	<b>22.5</b>	<b>30.0</b>	<b>35.0</b>



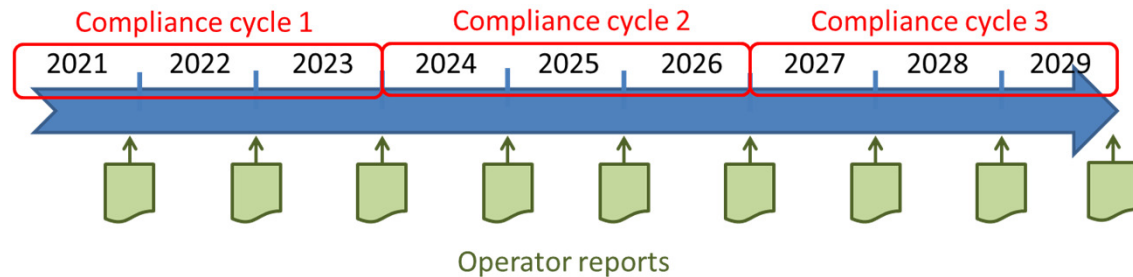
## Paragraphs 10 to 12 - Exemptions and adjustments

- Paragraph 10 exempts a new entrant from the COSIA for 3 years or until that year in which its annual emissions exceed 0.1% of total emissions in 2020
- Paragraph 11 decides technical exemptions for low levels of international aviation activity from the COSIA 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; aircrafts with less than 5,700 kg of Maximum Take Off Mass (MTOM); humanitarian, medical and firefighting operations)
- Paragraph 12 decides no redistribution of exempted emissions

## Paragraphs 13 to 16 -

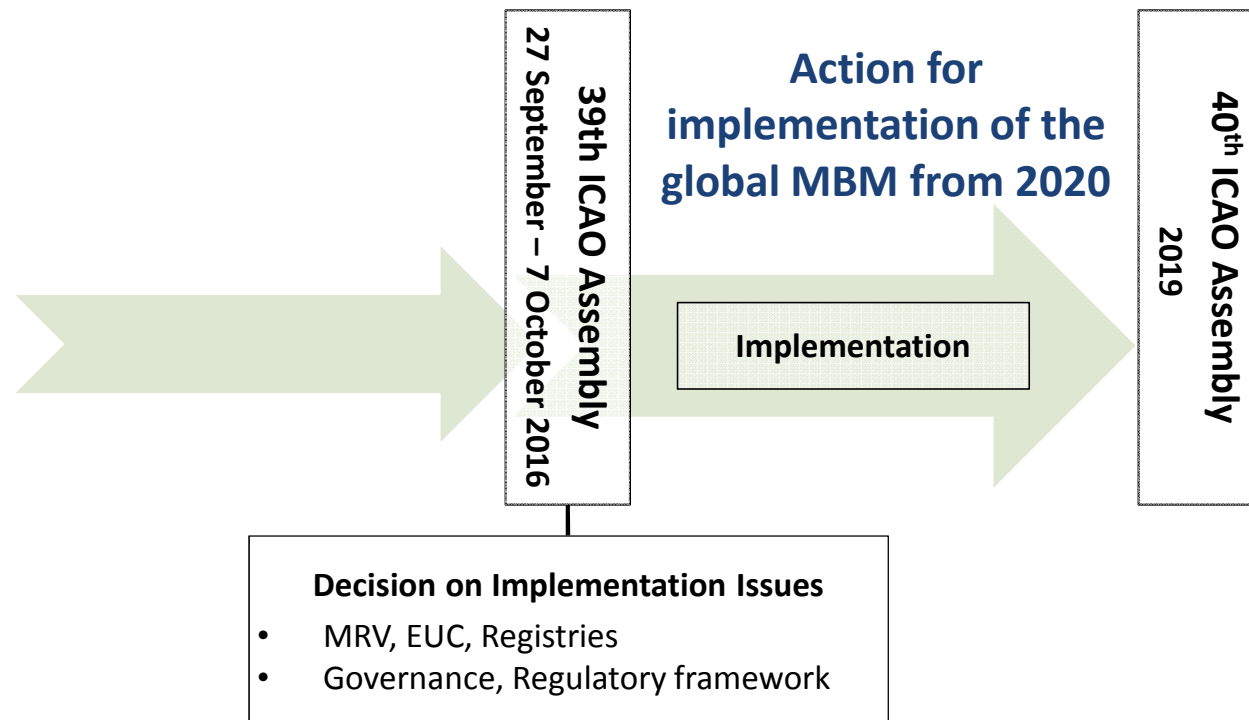
### Technical and administrative issues

- Paragraph 13 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 decides a three year compliance cycle for operators under the COSIA
- Paragraph 15 decides the need to provide for safeguards in the COSIA against inappropriate economic burden on international aviation
- Paragraph 16 decides that the design elements of the COSIA apply until the end of 2035, with a periodic review every three years from 2022



## Paragraph 17 - Implementation mechanisms

Paragraph 17 requests the following actions be taken, with a view to establishing necessary mechanisms for implementation of the COSIA from 2020:



***Note: paragraph 17 should be considered “work in-progress”***



## Paragraph 17 a) to d) - Implementation mechanisms

- Paragraph 17 a) - the Council/CAEP to develop SARPs and related guidance material for the implementation of the MRV system for adoption by the Council by June 2017
- Paragraph 17 b) - all Member States to develop the necessary arrangements for the implementation of the MRV system from 1 January 2018, in accordance with the MRV SARPs
- Paragraph 17 c) - the Council/CAEP to develop necessary guidance material for Emissions Unit Criteria (EUC) for adoption by the Council by 2018
- Paragraph 17 d) - the Council/CAEP to establish a standing technical advisory body on the EUC to support the application of the EUC by Member States



## Paragraph 17 e) to h)- Implementation mechanisms

- Paragraph 17 e) - the Council/CAEP to develop necessary guidance material to support the establishment of registries for adoption by the Council by 2018
- Paragraph 17 f) - the Council to establish a consolidated central registry under the auspices of ICAO for operationalization from 1 January 2021
- Paragraph 17 g) - Member States included in the first implementation phase to establish their own registries or group registries by groups of States for operationalization from 1 January 2021
- Paragraph 17 h) - Member States included in the second implementation phase to establish their own registries or group registries by groups of States for operationalization from 1 January 2026



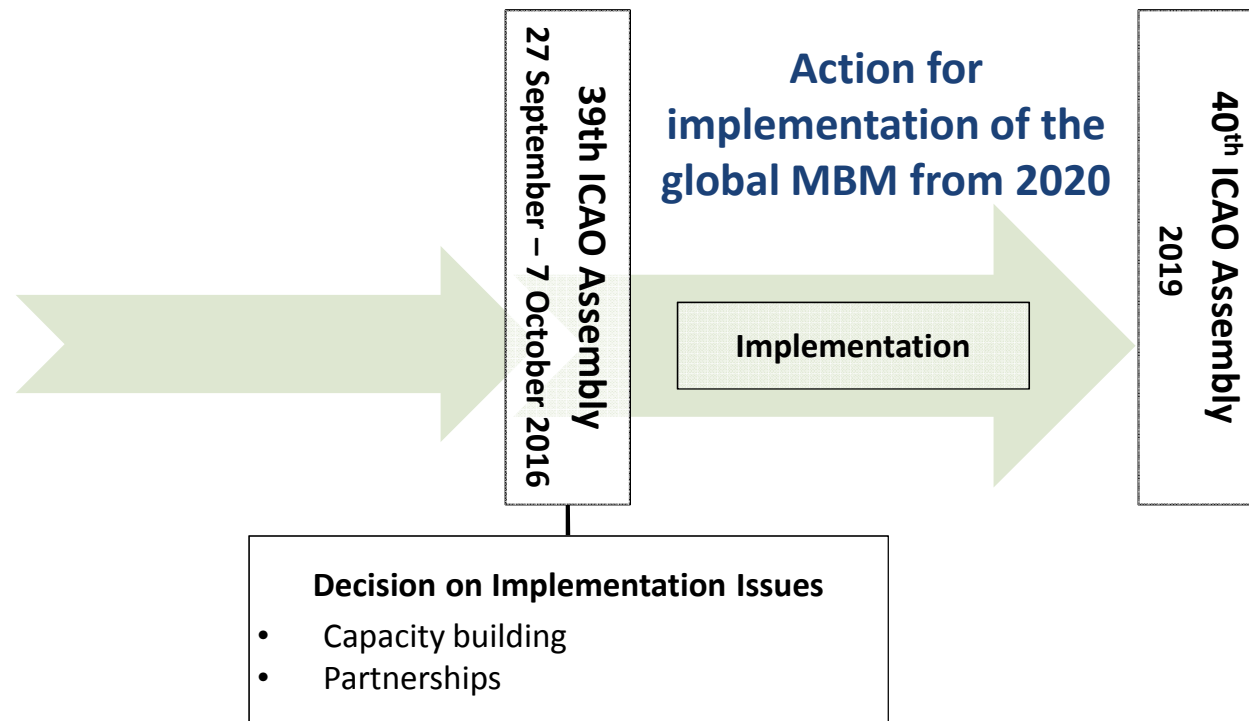
## Paragraph 17 i) to j)- Implementation mechanisms

- Paragraph 17 i) - the Council to oversee the functioning of the COSIA, with support provided by the standing technical advisory body and CAEP, as needed, including the review of the design elements of the scheme
- Paragraph 17 j) - Member States to take necessary action to ensure that the necessary national regulatory framework be established for the compliance and enforcement of the scheme by 2020



# Paragraph 18 - Implementation mechanisms

Paragraph 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 COISA from 2020, including:







## Paragraph 18 a) to b) - Implementation mechanisms

- Paragraph 18 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 2018, including organization of seminars and training in all regions from 2017, and facilitation of financial support where needed
- Paragraph 18 b) - Member States to build partnerships among themselves to cooperate on the implementation of the MRV system



## Paragraph 18 c) to d) - Implementation mechanisms

- Paragraph 18 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
- Paragraph 18 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



## Paragraphs 19 to 20 - Further actions

- Paragraph 19 requests the Council to promote the use of emissions units generated from programmes that meet the EUC and would benefit projects involving developing States by the COSIA, including emissions units generated from the CDM, new market mechanisms or other programmes under the UNFCCC, and encourages States to develop aviation-related projects
- Paragraph 20 requests the Council to explore further development of aviation-related methodologies, including mechanisms or other programmes under the UNFCCC, and encourages States to use such methodologies