CONCI - Mrty o

International Civil Aviation Organization

A41-WP/4681 EX/216 31/8/22

# WORKING PAPER

## ASSEMBLY — 41ST SESSION

## **EXECUTIVE COMMITTEE**

#### Agenda Item 18: Environmental Protection - Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA)

#### PROPOSALS ON THE IMPLEMENTATION OF CORSIA THROUGH NATIONALLY DETERMINED CONTRIBUTIONS AND THE DEVELOPMENT OF CORSIA PERIODIC REVIEW METHODOLOGIES

(Presented by China)

## EXECUTIVE SUMMARY

In 2016, the 39th Session of the ICAO Assembly resolved to establish the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA). The current CORSIA implementation programmes and standards, not strictly adhering to the guiding principles for the design and implementation of market-based measures (MBMs) for international aviation listed in the appendix of the Assembly resolutions on climate change, has burdened developing countries with inappropriate and unfair emission reduction obligations, which seriously violates the principle of common but differentiated responsibilities (CBDR) and causes discriminatory market distortions to the disadvantage of developing countries in the development of international aviation. China and other countries have serious concerns about the unfairness of current CORSIA implementation programmes and standards. In addition, in order to promote a broader and fairer implementation of CORSIA, China proposes a designing framework of nationally determined plans to implement the CORSIA (NDPIC) and methodologies on CORSIA periodic review.

Action: The Assembly is invited to:

- a) request countries to develop successive NDPICs in accordance with paragraph 2 of this paper and encourage them to submit the first NDPIC to ICAO by the end of 2026;
- b) request the Council, with the support and participation of Member States, to research and formulate relevant technical review systems and guidelines in accordance with 2.3.2 of this paper; and
- c) request the Council to design and develop a CORSIA periodic review system in accordance with paragraph 3 of this paper.

paragraph e or an	° pup • · ·
Strategic Objectives:	This working paper relates to the Strategic Objective – Environmental Protection.
Financial	The activities referred to in this Assembly working paper will be undertaken
implications:	subject to the resources available in the 2023-2025 Regular Programme Budget
	and/or from extra budgetary contributions.

<sup>&</sup>lt;sup>1</sup> English and Chinese versions provided by China.

References:	The United Nations Framework Convention on Climate Change (UNFCCC) and
	its Paris Agreement
	Assembly Resolutions A40-18 and A40-19
	Annex 16 — Environmental Protection, Volume IV
	C-WP/15326

#### 1. **INTRODUCTION**

1.1 The ICAO Assembly Resolutions recognise that international aviation and climate change should comply with the principles of equity, CBDR and respective capabilities enshrined in the UNFCCC and its Paris Agreement.

1.2 The Paris Agreement recognises the nationally determined contributions (NDCs) as the approach to address global climate change.

1.3 Since 2013, the Assembly Resolutions on international aviation and climate change have listed the guiding principles for the design and implementation of international aviation MBMs, which the design, implementation and periodic review of CORSIA should follow.

1.4 Since 2010, the Assembly Resolutions on international aviation and climate change have recognised the need for the CNG2020 goal, without any attribution of specific obligations to individual States, to take into account: the special circumstances and respective capabilities of States, in particular developing countries; the maturity of aviation markets; the sustainable growth of the international aviation industry; and that emissions may increase due to the expected growth in international air traffic until lower emitting technologies and fuels and other mitigating measures are developed and deployed. However, in ignorance of the above CNG2020 prerequisites, the current CORSIA implementation programmes and standards have substantially attributed the obligations of this goal to individual States.

1.5 According to the research by the ICAO Committee on Aviation Environmental Protection (CAEP), the current design of the CORSIA mechanism will result in greater offsetting responsibility for aeroplane operators with higher growth rate, which will cause serious market distortions to the disadvantage of developing countries.

1.6 The COVID-19 pandemic has a significantly negative impact on the global aviation industry, especially in developing countries, which are more vulnerable and in greater need of financial resources, technology transfer and capacity-building. To move forward international aviation and climate change, developed countries shall fulfil their obligations on historical accumulated emissions by taking the lead in significantly reducing international aviation emissions ahead of developing countries, and providing new, additional and adequate financial resources, technology transfer and capacity-building assistance to developing countries.

## 2. DESIGNS OF NATIONALLY DETERMINED PLANS TO IMPLEMENT THE CORSIA (NDPIC)

2.1 According to C-WP/15326, it can be deduced that after 2020, the growth rate and increment of international aviation emissions in developing countries would be higher than that in developed countries, and under the current CORSIA implementation programmes and standards, the offset obligations and costs per tonne of carbon emissions for international aviation in developing countries would be significantly higher than that in developed countries, which usually sees much lower growth rates. As a result, serious

market distortions to the disadvantage of developing countries would be caused. (See Appendix A for details).

2.2 In order to avoid the market distortions caused by the deployment of CORSIA, and to improve the effectiveness of CORSIA implementation, taking into account the concerns of all parties, this paper proposes a designing framework of nationally determined plans to implement the CORSIA (NDPIC) (see Appendix B for details).

2.3 Key design and implementation elements of the NDPIC programme are as follows:

2.3.1 All countries develop, submit and update successive NDPICs at their own discretion to the ICAO Council, which includes:

2.3.1.1 Offsetting baseline: Each country determines on its own international aviation offsetting baseline in accordance with its own national circumstances, developing stages and coping capabilities.

2.3.1.2 MRV standards: Each country determines on its own MRV regulations or standards in light of relevant requirements and guidelines formulated by ICAO.

2.3.1.3 Eligible emission units: Each country determines on its own accredited eligible emission reduction programmes or emission allowances in light of relevant requirements and guidelines formulated by ICAO. Countries are encouraged prioritise the use of eligible emission units approved by the ICAO Council with the support of TAB.

2.3.1.4 Sustainable Aviation Fuel (SAF) and Low-Carbon Aviation Fuels (LCAF): Each country determines on its own accredited SAF and low-carbon aviation fuels in light of relevant requirements and guidelines formulated by ICAO.

2.3.1.5 Support needed to implement the CORSIA: Developing countries are invited to propose a list of financial resources, technology transfer and capacity-building assistance needed to better design and implement their NDPICs.

2.3.2 ICAO technical review: Respectful of national sovereignty, the ICAO Council conducts technical dialogue and consultation on States' NDPICs in a facilitative, non-intrusive and non-punitive manner, and puts forward feasible suggestions on improvement for States' consideration.

### 3. **PROPOSALS ON THE DEVELOPMENT OF CORSIA PERIODIC REVIEW METHODOLOGIES**

3.1 In order to improve the effectiveness of the CORSIA implementation, the ICAO Assembly has resolved that the Council will conduct a periodic review of CORSIA every three years. Since CORSIA is the international aviation emission reduction market mechanism established by ICAO, its periodic review procedures and methods should comply with the guiding principles for the design and implementation of market-based measures (MBMs) for international aviation specified in the Annex to the Assembly resolution on international aviation and climate change.

3.2 ICAO Assembly requests the Council to conduct CORSIA periodic reviews with the technical support of CAEP. In order to facilitate the relevant work of the Council, China puts forward the proposals on the development of CORSIA periodic review methodologies as follows:

3.2.1 A working group on CORSIA review should be established under the Council, with an equitable and balanced representation of the group members ensured. At the same time, ICAO should provide sufficient financial support for members from developing countries, especially the least developed countries, to participate in relevant work (mainly including transportation, accommodation and other expenses);

3.2.2 The working group on CORSIA review should propose a system of assessment indicators (both quantitative and qualitative) based on the guiding principles for the design and implementation of MBMs for international aviation specified in the Assembly resolution by consensus, and submit it to the 42nd Session of the ICAO Assembly for consideration;

3.2.3 The ICAO Assembly should encourage countries to actively submit their NDPICs and the efficacy and impacts of the CORSIA implementation, which should work as the significant basis for the CORSIA review;

3.2.4 The CORSIA review report should be submitted to the ICAO Assembly for consideration. Once approved by the Assembly, it will serve as an important basis for Member States to improve, suspend or terminate the implementation of CORSIA.

4.1 The Assembly is invited to:

- a) request countries to develop successive NDPICs in accordance with paragraph 2 of this paper and encourage them to submit the first NDPIC to ICAO by the end of 2026;
- b) request the Council, with the support and participation of Member States, to research and formulate relevant technical review systems and guidelines in accordance with 2.3.2 of this paper; and
- c) request the Council to design and develop a CORSIA periodic review system in accordance with paragraph 3 of this paper.

\_\_\_\_\_

## APPENDIX A

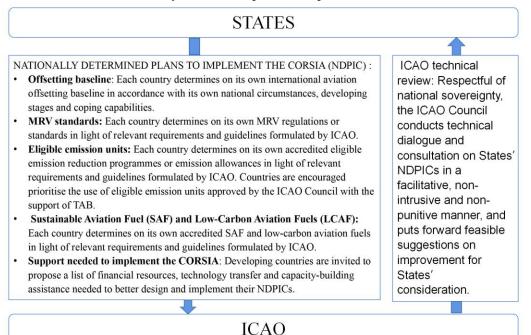
ICAO ENVIROI	(cont.)			
phased implement	ments (and differences a tation of CORSIA (i.e., St	ates' participation), (2		
Pilot Phase (2021-2023	(ransition to individual a ) 1 <sup>st</sup> Phase (2024-2026)	2 <sup>nd</sup> Phase (2027-2029)	2 <sup>nd</sup> Phase (2030-2032)	2 <sup>nd</sup> Phase (2033-203
Note. – Each bubble represe aeroplane operator. The size proportional to the operato from international aviation f	of the bubble is 's CO <sub>2</sub> emissions			^°
				:
к.	·	· ···@>-·> H		- 6-
s				
-2m, m, 2m, 55 Average YoY Growth in CO- Emissio	s Average YoY Growth in CO <sub>2</sub> Emissions	Average YoY Growth in CO <sub>2</sub> Emissions	Average YoY Growth in CO <sub>2</sub> Emissions	Average YoY Growth in CO <sub>2</sub> Emis
re of CO <sub>2</sub> Emissions		Arcinge for dromotine cost entraneira	Harringe for Growth in Cost Entertaints	
to of Officetting		20 %	22 %	24
re of Offsetting juirements (all phases): Assumption		23 % ORSIA Baseline Ref. Year (2019 for 2021-2023 an	29 %	36
re of Offsetting juirements (all phases): Assumption	12 % Traffic and Emissions Profile (Mid Cavid 19 Scenario), C 2033-2035), States for Chapter 3 State Paris (Edition 2 Assessme	23 % ORSIA Baseline Ref. Year (2019 for 2021-2023 an	29 % d average 2019-2020 for 2024-2035, Sectoral/	36 Individual (80%/20% in 2030-2032, C-WP/15 Appendix
<ul> <li>ICAO ENVIRO</li> <li>Offsetting require phased implement baseline) and (3)</li> </ul>	12 % Traffic and Emissions Profile (Mid Cavid 3 Somarro), C 2033-2035), States for Chapter 3 State Pairs (Edition 2 MMENT MMENT Ements (and differences a attation of CORSIA (i.e., St transition to individual a	23 % ORSA Bassine Ref. Year (2019 for 2021-2023 an Jay 2021), New Entrant bassine option D. C-27 ent of CORSIA's im accross operators) evolv ates' participation), (2 pproach from 2030.	29 % d average 2019-2020 for 2024-2039, Sectored pact on Aeropla re over time and are ) Sector Growth Fact	C-WP/15 Appendix me Operators driven by (1) cor (e.g., CORSIA
<ul> <li>ICAO ENVIRO</li> <li>Offsetting require phasel implement baseline) and (3)</li> <li>Pilot Phase (2021-202</li> </ul>	12 % Traffic and Emissions Profile (Mid Cavid 9 Somarro), C 2013-2015), State for Chapter 3 State Pars (Edition 2 MMENT Assessme (cont.) ements (and differences a fatation of CORSIA (i.e., St transition to individual a 1 <sup>st</sup> Phase (2024-2026)	23 % ORSA Baseline Ref. Year (2019 for 2021-2023 an July 2021), New Entrant baseline option D. C-27 Pent of CORSIA's im accross operators) evolv ates' participation), (2	29 % d averager 2019-2020 for 2024-2035), Sectored/ pact on Aeropla ve over time and are	C-WP/15 Appendix ne Operators driven by (1)
ICAO ENVIRO      ICAO      ICAO ENVIRO      ICAO      ICAO	12 % Traffic and Emissions Profile (Mid Cavid 19 Somarrol), C 2033-2035), States for Chapter 3 State Pairs (Edition 2: MMENT Assessme (cont.) ements (and differences a intation of CORSIA (i.e., St transition to individual a 3) 1 <sup>st</sup> Phase (2024-2026) ents for	23 % ORSA Bassine Ref. Year (2019 for 2021-2023 an Jay 2021), New Entrant bassine option D. C-27 ent of CORSIA's im accross operators) evolv ates' participation), (2 pproach from 2030.	29 % d average 2019-2020 for 2024-2039, Sectored pact on Aeropla re over time and are ) Sector Growth Fact	C-WP/15 Appendix me Operators driven by (1) cor (e.g., CORSIA
ICAO ENVIRO     Offsetting require     phased implement     baseline) and (3)     Pilot Phase (2021-202     Note - Each bubble repress     a modeled aeropiane opera     independent of the size of to     operator.	12 % Traffic and Emissions Profile (Mid Cavid 19 Somarrol), C 2033-2035), States for Chapter 3 State Pairs (Edition 2: MMENT Assessme (cont.) ements (and differences a intation of CORSIA (i.e., St transition to individual a 3) 1 <sup>st</sup> Phase (2024-2026) ents for	23 % ORSA Bassine Ref. Year (2019 for 2021-2023 an Jay 2021), New Entrant bassine option D. C-27 ent of CORSIA's im accross operators) evolv ates' participation), (2 pproach from 2030.	29 % d average 2019-2020 for 2024-2039, Sectored pact on Aeropla re over time and are ) Sector Growth Fact	C-WP/15 Appendix me Operators driven by (1) cor (e.g., CORSIA
ICAO ENVIRO     ICAO ENVIRO     Offsetting require     phased implement     baseline) and (3)     Pilot Phase (2021-202     Note. – Each bubble repress     a modeled aeropiane opera     independent of the size of t     operator.	12 % Traffic and Emissions Profile (Mid Cavid 19 Somarrol), C 2033-2035), States for Chapter 3 State Pairs (Edition 2: MMENT Assessme (cont.) ements (and differences a intation of CORSIA (i.e., St transition to individual a 3) 1 <sup>st</sup> Phase (2024-2026) ents for	23 % ORSA Bassine Ref. Year (2019 for 2021-2023 an Jay 2021), New Entrant bassine option D. C-27 ent of CORSIA's im accross operators) evolv ates' participation), (2 pproach from 2030.	29 % d average 2019-2020 for 2024-2039, Sectored pact on Aeropla re over time and are ) Sector Growth Fact	C-WP/15 Appendix me Operators driven by (1) tor (e.g., CORSIA 2 <sup>nd</sup> Phase (2033-2035)
ICAO ENVIRO     ICAO ENVIRO     Offsetting require     phased implement     baseline) and (3)     Pilot Phase (2021-202     Note Each bubble repres     a modeled aeropiane opera     in modeled     in modeled     in modeled     in modeled	12 % Traffic and Emissions Profile (Mid Cavid 3 Somarro), C 2033-2035), States for Chapter 3 State Pairs (Edition 2: MMENT Assessme (cont.)  ements (and differences a ntation of CORSIA (i.e., St transition to individual a 3) 1 <sup>st</sup> Phase (2024-2026)  ents for he	23 % ORSA Bassine Ref. Year (2019 for 2021-2023 an Jay 2021), New Entrant bassine option D. C-27 ent of CORSIA's im accross operators) evolv ates' participation), (2 pproach from 2030.	29 % d average 2019-2020 for 2024-2039, Sectored pact on Aeropla re over time and are ) Sector Growth Fact	C-WP/15 Appendix me Operators driven by (1) tor (e.g., CORSIA 2 <sup>nd</sup> Phase (2033-2035)
ICAO ENVIRO      ICAO ENVIRO      Offsetting require     phased implement     baseline) and (3)      Pilot Phase (2021-202      Note - Each bubble repres     and cled aeropine opera     independent of the size of t	12 % Traffic and Emissions Profile (Mid Cavid 19 Somarrol), C 2033-2035), States for Chapter 3 State Pairs (Edition 2: MMENT Assessme (cont.) ements (and differences a intation of CORSIA (i.e., St transition to individual a 3) 1 <sup>st</sup> Phase (2024-2026) ents for	23 % ORSA Baseline Ref. Year (2019 for 2021-2023 an C-27 ent of CORSIA's im accross operators) evolv rates' participation), (2 pproach from 2030. 2 <sup>nd</sup> Phase (2027-2029)	29 % d average 2019-2020 for 2024-2039, Sectored pact on Aeropla re over time and are ) Sector Growth Fact	C-WP/15 Appendix me Operators driven by (1) tor (e.g., CORSIA 2 <sup>nd</sup> Phase (2033-2035)

Assumptions: Traffic and Emissions Profile (Mid Covid19 Scenario), CORSA Baseline Ref. Year (2019 for 2021-2023 and average 2019-2026 for 2024-2035), Sectoral/Individual (80%/20% in 2030-2032), 30% / 70% in 2033-2035), States for Chapter 3 State Pairs (Edition 2 - July 2021), New Entrant baseline option D. App. 6

A41- WP/468 EX/216 Appendix B English only

#### **APPENDIX B**

Framework of nationally determined plans to implement the CORSIA (NDPIC)



— END —