



**WORKING PAPER**

**COMMITTEE ON AVIATION ENVIRONMENTAL PROTECTION (CAEP)**

**TWELFTH MEETING**

**7 to 18 February 2022**

**Agenda Items 5: CORSIA – Monitoring Reporting and Verification (MRV)  
7: CORSIA – Tools and Analysis**

**VIEWS OF THE UNITED STATES AND RECOMMENDATIONS ON THE WG4 WORK  
PROGRAMME**

(Presented by the United States of America)

**SUMMARY**

This Working Paper provides the U.S. views on the final recommendations of WG4. This paper also highlights the needs for continuing technical work related to CORSIA from WG4 and provides feedback for efficiencies to improve WG4's effectiveness in next CAEP cycle.

Action by the CAEP is in paragraph 4.

**1. INTRODUCTION**

1.1 Since its creation at CAEP/11, WG4 has done substantial work to maintain and update the SARPs, ETM, and Implementation Elements that enable CORSIA's success. In addition, the analytical work carried out by the group has proven to be fundamental in assisting CAEP and Council in their understanding of the impacts of COVID-19 on CORSIA and whether adjustments were necessary to ensure CORSIA's effectiveness. In addition, WG4's continued maintenance and development of the CORSIA CERT is a key item in enabling the successful global implementation of CORSIA.

1.2 The United States supports the efforts of WG4. Section 2 provides feedback on a key question before CAEP. Section 3 offers suggestions for the WG4 work program during CAEP/13. Actions are in Section 4.

## 2. KEY DECISIONS AND RECOMMENDATIONS

2.1 A key item for CAEP to consider is the recommendation related to the CORSIA baseline for new entrants. From 2030 onwards, due to the introduction of the individual growth factor component, a proportion of the offsetting requirements of each operator will be calculated, in part, based on its individual baseline, i.e., the average of its emissions in 2019 and 2020 according to Annex 16, Volume IV. As operators that cross the Chapter 2 scope of applicability threshold after 2020 (i.e., new entrants and new operators) will not have reported emissions in those years, it is necessary to define how the individual baselines for those operators will be calculated, and we recognize that this is an issue likely to affect many, if not all, ICAO Member States.

### 2.2 New entrants baseline and recommendations

2.2.1 As described in CAEP/12-WP/19, WG4 defined and evaluated six options for a new entrant baseline ranging from Option A (no baseline i.e.,  $OEB_{y} = 0 \text{ tCO}_2$ ) towards generally increasing baseline levels to Option E (i.e., average of operator's actual  $\text{CO}_2$  emissions in Years 2 and 3 of offsetting exemption period), as well as an Option F, which is equivalent to 100% sectoral approach for new entrants only. Details about options are presented in section 2.1 of CAEP/12-WP/19.

2.2.2 Based on the technical analyses conducted by the WG4, we support "Option E" defined as the average of operator's actual  $\text{CO}_2$  emissions in Years 2 and 3 of offsetting exemption period.

2.2.3 First, Option E mirrors the baseline definition of operators that were within the scope of CORSIA in 2019 and 2020 and have a defined baseline (the average of operator's actual  $\text{CO}_2$  emissions in 2019 and 2020). Second, Option E is compatible with the monitoring and offsetting requirements rules for new entrants. For a new entrant that crosses the CORSIA (Chapter 2) applicability threshold of 10,000  $\text{tCO}_2$  in Year 1, the operator's baseline would rely on  $\text{CO}_2$  emissions from years 2 and 3. Those three years, and the reference in years 2 and 3, are compatible with the three-year grace period for new entrants where operators would start to offset on year 4. Finally, Option E treats new entrants and operators that were in scope in the reference years equally regarding the sectoral/individual approach after 2030. When viewed from a "whole of CORSIA" position, Option E is the most technically robust.

2.2.4 The United States does not support Option F as a viable option for a new entrant baseline. This option defined under an overly complicated technical term of "operator's share of  $\text{CO}_2$  emissions in year y applied to the sector's baseline in year y" is mathematically equivalent to applying a 100% sectoral approach to new entrants only from 2030. During this same time period, all other operators would be subject to a mix of sectoral/individual approach for their offsetting. We note that, based on historical data, the emergence of new operators (i.e., new entrants) is not limited to a particular State, groups of States or regions but is rather a global phenomenon. For a given State, treating its operators differently solely based on the year of entry into the scope of CORSIA would not be appropriate and could create unintended incentives and consequences. Finally, we note that using the WG4-CTAG analyses to "minimize the difference in offsetting percentages between NEs and AOs in scope" is an inappropriate use of the data and results as the time scale of both underlying datasets of operators are fundamentally different. These comparisons are misleading without appropriate background information and context.

### 2.3 New operators baseline considerations and recommendations

2.3.1 We acknowledge that WG4 addressed CAEP's request from CAEP12-SG/3 as contained in CAEP-SG/20213-WP/13 action d) where CAEP noted the gap in Annex 16, Volume IV regarding the definition of the individual baseline for future new operators that are not new entrants (i.e., subsidiaries),

and noted WG4's intention to assess options for a baseline for this type of operators towards a recommendation at the CAEP/12 Meeting.

2.3.2 Considering WG4s assessment of the six baseline options, we support WG4's recommendation that CAEP agree to Option C for this situation of new operators (i.e., subsidiaries).

## 2.4 Recommendation on Chapter 3 de minimis mechanism and threshold

2.4.1 Regarding options addressing the situation of aeroplane operators with minimal offsetting requirements in a pragmatic and administratively simple way (i.e., request from CAEP at SG2019, reference: CAEP-SG/2019-SD/1), the United States supports the WG4 recommendation on a mechanism and threshold for a Chapter 3 de-minimis (i.e., flexibility through potential exception for low offsetting requirements) based on mechanism Option A2 (i.e., a compliance cycle threshold) with a threshold of 3,000 tonnes of CO<sub>2</sub> per compliance cycle.

## 3. FUTURE WORK

3.1 With active experts in all of WG4s tasks, the United States would like to offer some suggestions based on our lessons learned.

- While WG4 can produce high-quality technical work and analyses, CAEP should be mindful of the time needed for such work. Often during CAEP/12, deadlines were set that were unreasonably short. Despite the extraordinary circumstances resulting from the global COVID-19 pandemic, the WG4 was able to deliver on such requests. However, in order to ensure sufficient time for conducting best possible work, appropriate coordination with other CAEP groups when necessary, allowing reasonable time to carry out and review future work would be desirable.
- In addition to ensuring that WG4 has sufficient time to carry out analyses (and that CAEP has sufficient time to review the work), it is also important CAEP ensure there are sufficient resources available for such analytical work and that the analytical requests are technically feasible. During the CAEP/12 cycle, the WG4 has demonstrated its ability to address complex questions (e.g., market distortion assessment based on operator level analyses) and work well beyond the planned work for the CAEP/12 cycle, which was and can be at the expense of other work priorities.

3.2 In addition, while carrying out this critical analytical work, WG4 has developed a number of tools and models for these tasks. In order to ensure harmonization not only among WG4, but among CAEP more broadly, it would be beneficial for these models and analytical capabilities to be documented and coordinated to ensure that all experts are able to contribute effectively to future technical work within CAEP. This kind of documentation takes place in other CAEP groups (e.g., MDG), and allows for verification and validation of models developed by multiple expert contributors. New models are also documented and validated. This process ensures robustness in the group's results and recommendations. We believe that a similar process within WG4 should be carried out for these same reasons (especially as WG4 starts its second CAEP cycle). We anticipate this work to be best carried out as a subtask under the C.08 (CORSA Technical Analyses) task group (i.e., no need to create another task or subgroup).

4. **ACTION BY THE CAEP**

4.1 The CAEP is invited to:

- a) agree to “Option E” for the new entrant baseline and “Option C” for new operators that are subsidiaries to existing operators when considering WG4’s recommendations in CAEP/12-WP/19; and
- b) agree that WG4 should document existing models in support of CORSIA Analyses and formalize a process for documenting, reviewing and validating CORSIA models as described in paragraph 3.2.

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