

# The 2025 CORSIA periodic review

By ICAO Secretariat

## Introduction

The implementation of the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) is founded upon a series of design elements that represent the “conceptual architecture” of the scheme. These design elements define key aspects of CORSIA such as its phased implementation, the equal consideration of flights operating a same route, the calculation of offsetting requirements, the applicability of CORSIA to new operators, or which international aviation activities are exempted from the scheme.

When ICAO Member States agreed to adopt CORSIA at the 39th Session of the ICAO Assembly in 2016, the CORSIA design elements were defined on the basis of a wealth of knowledge supported by technical inputs from the Committee on Aviation Environmental Protection (CAEP). The agreement also established a periodic review mechanism that, every three years from 2022, would serve as the basis to assess the need to make adjustments to the CORSIA design elements.

The rationale for the establishment of the periodic review mechanism is easily understood considering the timeline of CORSIA implementation. The historical agreement on CORSIA in 2016 embarked the international aviation community on an ambitious journey to implement the first global market-based scheme applicable to any sector at least up to the end of 2035. Hence, ICAO Member States considered it necessary to periodically assess the circumstances under which CORSIA would be implemented, in order to determine whether the CORSIA design elements, as defined in 2016, would still be “fit for purpose”.

The cautious approach imbued in the CORSIA periodic review mechanism also serves as the rationale for the CORSIA safeguards provision, whose application is envisaged to serve as a response to circumstances that may

prevent CORSIA implementation from contributing its fair share to the sustainable development of the international aviation sector.

As later events showed, it did not take long to prove that this cautious approach was well justified.

## The impact of the COVID-19 pandemic and the 2022 CORSIA periodic review

In line with the schedule established in 2016, the first CORSIA periodic review was to be conducted by the ICAO Council, with the technical contribution of CAEP, according to a process and timeline that would result in a series of Council recommendations to the 41st Session of the ICAO Assembly in October 2022.

In March 2020, prior to the start of Council's work on the 2022 CORSIA periodic review, the outbreak of the COVID-19 pandemic had a significant impact on the international aviation sector. In June 2020, the Council considered an initial analysis of CAEP's inputs on the impact of the COVID-19 pandemic on CORSIA and decided to apply the CORSIA safeguards provision by deciding that 2020 emissions should not be used during CORSIA's pilot phase (2021–2023) to define the scheme's baseline.

When, in March 2021, the Council agreed on the process and methodology for the 2022 CORSIA periodic review, there was no doubt that this first review would be greatly influenced by the impact of the COVID-19 pandemic on CORSIA implementation, whose assessment featured prominently on the subsequent technical inputs regularly provided by CAEP. Council's recommendations arising from the 2022 CORSIA periodic review included the following adjustments to the CORSIA design features:

- for the CORSIA baseline, using 2019 emissions for the pilot phase (2021–2023), and using 85% of 2019 emissions after the pilot phase (2024–2035);
- for the calculation of CORSIA offsetting requirements, changing the percentage use of the sectoral and individual operator's growth factors as 100% sectoral and 0% individual (for 2030–2032 period), and 85% sectoral and 15% individual (for 2033–2035 period); and
- for the new entrant threshold, change of reference emissions from 2020 to 2019.

The ICAO Assembly, at its 41st Session, considered Council's recommended adjustments to the CORSIA design features listed above and incorporated them in Assembly Resolution A41-22, *Consolidated statement of continuing ICAO policies and practices related to environmental protection – Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA)*.

## Operationalizing the 2025 CORSIA periodic review

The 2025 CORSIA periodic review began in earnest in March 2023, when the Council requested CAEP to undertake work to support the Council in this task. It is important to note that the Council requested CAEP to conduct its work building upon the process established for the 2022 CORSIA periodic review; in doing so, the Council acknowledged that the type of technical inputs provided by CAEP in the previous periodic review were adequate for the upcoming one, thus bringing an element of **continuity** that served as a connecting thread between both.

This continuity in process-related matters has to be considered in conjunction with an element of **novelty** derived from the fact that the circumstances in which the 2025 CORSIA periodic review is being undertaken significantly differ from those of the 2022 CORSIA periodic review. Two factors help explain such novelty:

1. The 2025 CORSIA periodic review is being undertaken without a disrupting factor of the caliber of what the COVID-19 pandemic represented to the 2022 CORSIA periodic review; the international aviation

sector has emerged from the crisis showing traffic volumes trending towards the high-recovery scenarios forecasted at the end of the 2022 CORSIA periodic review.

2. CORSIA implementation has progressed three more years; at the time when the Council presented its 2022 CORSIA periodic review recommendations to the 42nd Session of the ICAO Assembly, the scheme's pilot phase was still under way and this, together with the disruptive effect of the COVID-19 pandemic, limited the extent of the practical lessons that could be derived from CORSIA implementation. In contrast, the 2025 CORSIA periodic review can complement its forecasting analysis of CORSIA implementation in the first phase (2024–2026) and beyond with an assessment of the past implementation of CORSIA's pilot phase.

Since March 2024, CAEP has provided regular updates of its technical inputs to the Council, which has reviewed these inputs with the support of its Climate and Environment Committee (CEC). When necessary, the Council has provided CAEP with additional guidance on areas where subsequent iterations of its technical analysis should focus.

## Overview of CAEP's technical inputs to the 2025 CORSIA periodic review

The Council, since the start of the 2025 CORSIA periodic review, has provided an indication of the aspects of CORSIA implementation to which CAEP's technical inputs were expected to pay particular attention, namely: the assessment of the cost impact of the offsetting requirements generated in CORSIA; and the related assessment of supply, demand and price of CORSIA Eligible Emissions Units and CORSIA Eligible Fuels, as well as their regional distribution. In relation to the information provided by CAEP on matters related to CORSIA Eligible Emissions Units, it is important to acknowledge the contribution of the Council's Technical Advisory Body (TAB), which has provided the Council with regular updates on the supply of CORSIA Eligible Emissions Units, including with respect to their sectoral and geographic distribution.

For the sake of transparency, CAEP's inputs to the Council have been made publicly available (following Council's

consideration) in the ICAO website<sup>1</sup>; at the time of writing this article, the latest technical analysis by CAEP had been presented to the Council in March 2025.

The inputs provided by CAEP thus far allow for some initial insights, subject to the completion of the Council's work on the 2025 CORSIA periodic review, and without prejudging the final outcome of this work:

- The adjustments to the CORSIA design elements as per the recommendations of the 2022 CORSIA periodic review have strengthened the scheme's robustness and have helped CORSIA absorb the shock caused by the pandemic since its outset in early 2020.
- The most recent technical inputs provided by CAEP reaffirm the accuracy of past estimates, as shown by the following examples:
  - At the end of the 2022 CORSIA periodic review, the estimation of offsetting requirements that would be generated under the scheme through 2035 was calculated to range between 600 and 2100 million tonnes of CO<sub>2</sub> for the scenario whereby the CORSIA baseline would be defined using 85% of 2019 emissions after the pilot phase (2024–2035); the latest information provided by CAEP in the context of the 2025 CORSIA periodic review provides a range of offsetting requirements between 980 and 1500 million tonnes of CO<sub>2</sub>; this latter range is narrower than, and falls within, the one considered in 2022, which shows that the 2022 estimates were well-founded and that the successive iterations of the CAEP analysis have allowed for higher accuracy in the estimation of the offsetting requirements.
  - CAEP's latest estimate on the cost addressing offsetting requirements generated during CORSIA's first phase (2024 – 2026) ranges from 1.3 to 8.4 billion USD, which falls within the cost range estimated by CAEP to support deliberations towards the agreement on CORSIA in 2016; in particular, CAEP points out that this cost could represent between 0.07% and 0.46% of international aviation revenue.

- CORSIA implementation proceeds as expected, not only in relation to the analyses conducted in the context of the previous 2022 CORSIA periodic review, but also in relation to the technical information that served as the basis for the 2016 agreement on CORSIA.
- CAEP's inputs thus far seem to indicate that there is no technical reason to recommend adjustments to the CORSIA design elements in the context of the 2025 CORSIA periodic review, unlike what happened in the 2022 CORSIA periodic review as a result of the impact of the COVID-19 pandemic.

More information on CAEP's technical inputs can be found in the article on CAEP/13 updates concerning CORSIA in this chapter.

## The way forward

At the time of writing this article, the Council continues its work on the 2025 CORSIA periodic review. CAEP will provide further updates to its technical inputs to the Council in June 2025, including information on the supply of CORSIA Eligible Fuels and CORSIA Eligible Units, and their prices and subsequent costs of the scheme. Following this, the Council will produce a report that will be presented to the 42nd Session of the ICAO Assembly (23 September – 3 October 2025); the report will set out the Council's conclusions and recommendations for consideration by the Assembly.

Pending the Council's final report on the 2025 CORSIA periodic review, all the work undertaken thus far provides a picture of CORSIA characterized by the **stability** of its implementation. Notwithstanding the significant contextual differences between the 2022 and the 2025 CORSIA periodic reviews, the latter has benefited from the governance and procedural arrangements put in place at the time of the first CORSIA periodic review.

Looking beyond the completion of the 2025 CORSIA periodic review, it is important to note that the 2028 CORSIA periodic review will take place after the completion of CORSIA's first phase (2024 – 2026), during which

1 [www.icao.int/CORSIA](http://www.icao.int/CORSIA), section *CORSIA Periodic Review*.

offsetting requirements will be generated for the first time, thus leading to the practical implementation of CORSIA's provisions related to the cancellation of CORSIA Eligible Emissions Units and the claiming of emissions reductions from CORSIA Eligible Fuels. Therefore, the 2028 CORSIA periodic review will allow for the assessment of aspects of CORSIA implementation not considered by its two predecessors; the proven capacity of the Council, with the support of CEC, CAEP and TAB, to build upon previous work while adapting to new circumstances will be a guarantee of the successful completion of the task ahead.