

The CORSIA Central Registry

By ICAO Secretariat

INTRODUCTION

The CORSIA Central Registry (CCR) is one of the five Implementation Elements of the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) and in accordance with Annex 16, Volume IV, it is the specific means for States to report CORSIA-related information and data to ICAO.

The purpose of the CCR is to assist States by providing a standardized way to report information on the implementation of CORSIA (see Table 1), while enabling ICAO to consolidate this information and make it publicly available on the ICAO CORSIA website.

States have already started reporting information with the submission of their lists of aeroplane operators attributed to each State, and the list of the verification bodies accredited in each State (due by 30 April 2019)¹. However, the bulk of the information (CO₂ emissions, etc.) will be submitted starting in 2020.

Using the information reported by States, ICAO will calculate the baseline CO₂ emissions (2019-2020) for international aviation in 2021. Each year from 2022 onwards, ICAO will compile the reported CO₂ emissions for the previous year and determine the Sector's Growth Factor (SFG) for the previous year and report back to the States. States will use the SFG to determine the CO₂ offsetting requirements for each of their aeroplane operators.

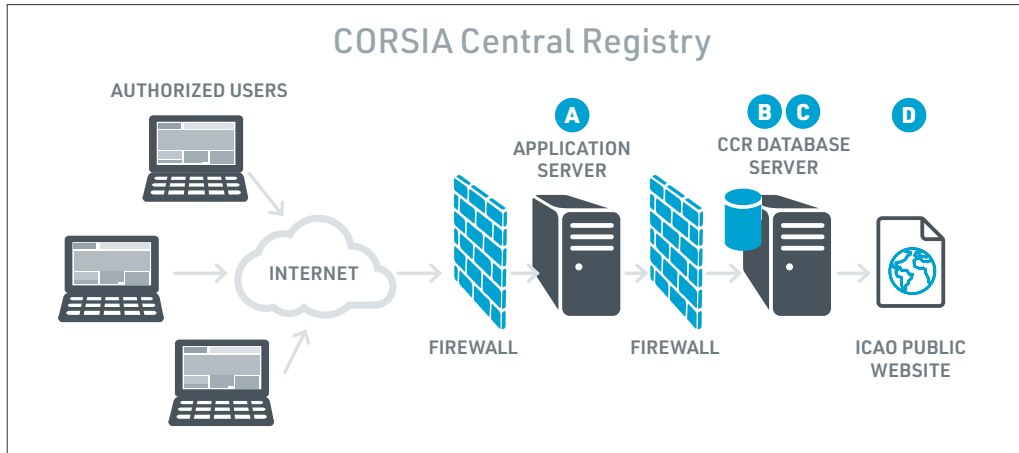
TABLE 1: Summary of CORSIA-relevant Information to be Reported by States to ICAO (2019-2026)

Information type	Baseline		Pilot Phase			First Phase		
	2019	2020	2021	2022	2023	2024	2025	2026
Aeroplane Operators	✓	✓	✓	✓	✓	✓	✓	✓
Verification Bodies	✓	✓	✓	✓	✓	✓	✓	✓
CO₂ Emissions		✓ 2019 data	✓ 2020 data	✓ 2021 data	✓ 2022 data	✓ 2023 data	✓ 2024 data	✓ 2025 data
CORSIA Eligible Fuels*		Optional 2019 data	Optional 2020 data	✓ 2021 data	✓ 2022 data	✓ 2023 data	✓ 2024 data	✓ 2025 data
Cancelled Emissions Units							✓ 2021-2023 data	

* Information can be reported annually or once at the end of each three-year cycle.

1 For 2019, ICAO developed and made available an online spreadsheet that States have used to submit information on aeroplane operators and verification bodies. The information submitted through the online spreadsheet will be incorporated into the CCR once it is operationalized.

FIGURE 1: Main Components of the CCR



COMPONENTS AND FEATURES OF THE CCR

The CCR is being implemented as an online web application supported by a database and a workflow engine, and comprises of the following components (see Figure 1):

- A. Web application with predefined forms and automated checks;
- B. Data transfer and storage;
- C. Administrative console to perform internal checks and manage data and users;
- D. ICAO website for the publication of information.

Each State will have one account on the CCR. Access to this account will be granted only to authorized users, who will be nominated by each State. Each State user will have unique login details (username and password) and will be given access to certain functions of the CCR based on a pre-defined list of permissions (see Table 2).

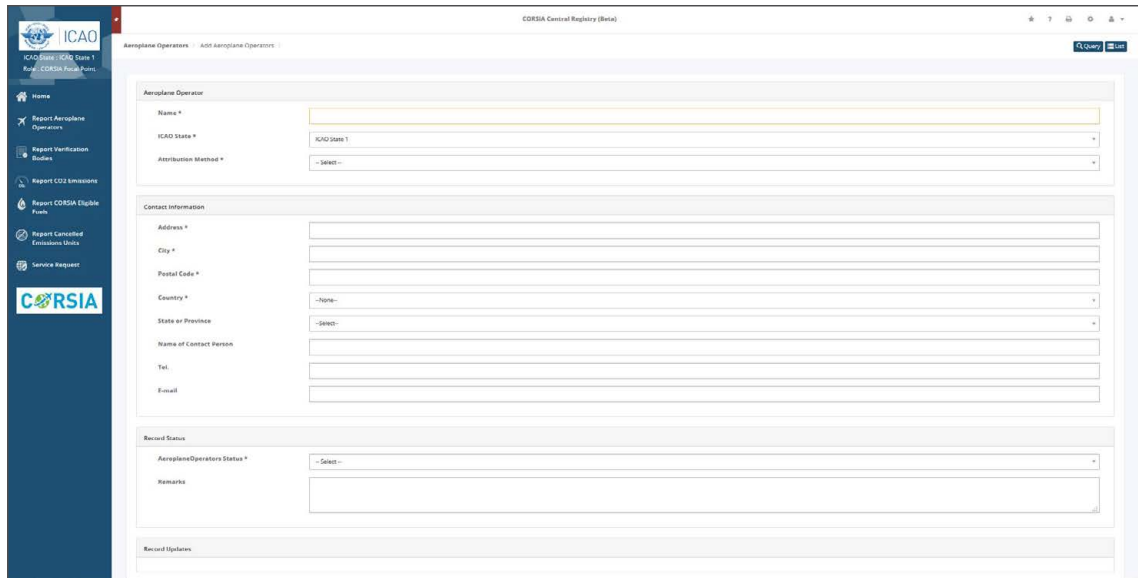
The State users will be able to provide new information and/or update previously submitted information. All user actions will be time-stamped and recorded (including the electronic signature of the State user who initiated an action) to ensure traceability and data integrity. If a State user needs to make changes to previously submitted information, the previous version of the information will not be deleted, but will be archived for future reference. It is important to note that only the CORSIA Focal Point can submit the data relevant to the State to ICAO.

Information and data will be uploaded on the CCR and submitted to ICAO using a secure web interface (web application/portal) through the use of predefined forms (see Figure 2 for an example). These forms facilitate entering information using, where possible, dropdown lists (for example list of ICAO States, attribution options, feedstocks used for CORSIA eligible fuels etc.) to minimize typing errors. Business rules have been created to check information and data before submitting to ICAO; for example, numerical data cannot contain letters or symbols, emissions data cannot be negative numbers etc.

TABLE 2: Examples of Permissions to CCR Main Functions per User Group

User Group	CCR Functions			
	View Data	Add, Edit, Delete Data	Submit Data to ICAO	Manage Other Users
CORSIA Focal Point	Yes	Yes	Yes	Yes (State Users)
State User	Yes	Yes	No	No

FIGURE 2: Example of the CCR Form to Enter Information on an Aeroplane Operator



(This image is provided for illustrative purposes based on the alpha version of the CCR and may not be a precise depiction of the final design of the CCR.)

OUTPUTS OF THE CCR

The information and data uploaded in the CCR will be used to produce five ICAO documents that are mentioned in Annex 16, Volume IV. Specifically:

1. ICAO Document “*CORSIA Central Registry (CCR): Information and Data for the Implementation of CORSIA*” is an umbrella document that contains:
 2. ICAO Document “*CORSIA Aeroplane Operator to State Attributions*” that contains a list of Aeroplane Operators and the State to which they are attributed
 - Availability: 31 May 2019 (First Edition published; to be updated regularly)
 3. ICAO Document “*CORSIA 2020 Emissions*” that contains the total 2020 CO₂ emissions to determine the first year in which a new entrant has offsetting requirements
 - Availability: As soon as practicable during the second half of 2021
 4. ICAO Document “*CORSIA Annual Sector’s Growth Factor*”
 - Availability: 31 October 2022 (to be updated annually)

5. ICAO Document “*CORSIA Central Registry (CCR): Information and Data for Transparency*” contains:

- List of verification bodies accredited in each State
- Total average CO₂ emissions for 2019 and 2020 aggregated for all aeroplane operators on each State pair route
- Total annual CO₂ emissions aggregated for all aeroplane operators on each State pair (with identification of State pairs subject to offsetting requirements)
- Information and data for each aeroplane operator
- Information and data on CORSIA eligible fuels claimed
- Offsetting requirements and emissions units cancelled (at State and global aggregate level for a specific compliance period)
 - Availability: 31 May 2019 (First Edition published; to be updated regularly)

All five ICAO documents will be published on the ICAO CORSIA website, following their approval by the ICAO Council, in accordance with the above timelines.

DEVELOPMENT TIMELINE

In accordance with Assembly Resolution A39-3 (paragraph 20 g)), the CCR should be established for operationalization no later than 1 January 2021. ICAO initiated the process for the development of the CCR in October 2018 with the publication of the tender document on the ICAO website. The documentation included the terms of reference, which were based on the CCR functional requirements that were approved by the ICAO Council in June 2018.

The successful vendor was selected in early 2019 and following contractual negotiations, the development work started in mid-March 2019. The beta version of the CCR was delivered in early July 2019 for testing by ICAO. According to the agreed timeline, version 1 of the CCR is expected to be ready for deployment in late 2019 or early 2020. After the CCR is deployed, training will be provided to ensure that the potential State users are familiar with all of its functions.