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ENVIRONMENT

Session 3: ICAO CORSIA CO₂ Estimation and Reporting Tool (CERT)

ICAO Secretariat





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The role of the CERT within CORSIA



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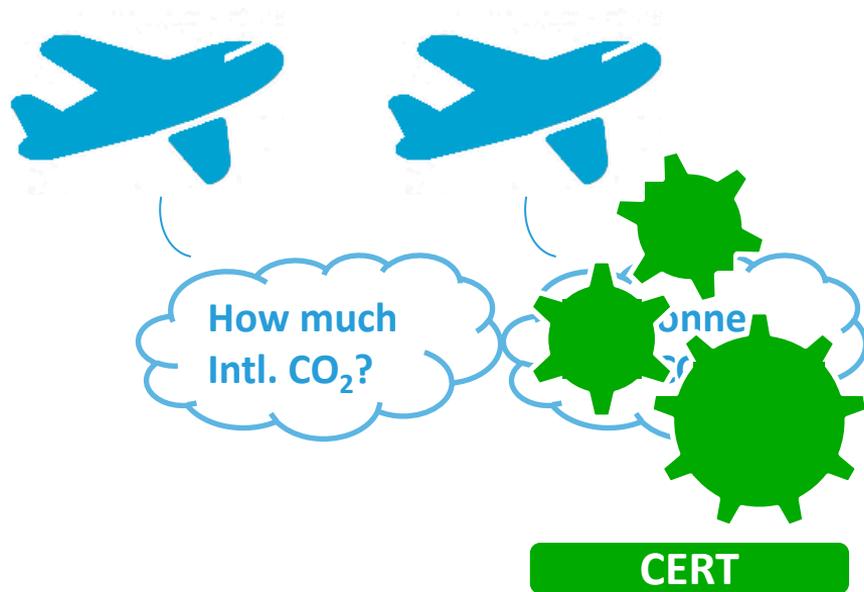
CORSIA

CERT

CORSIA

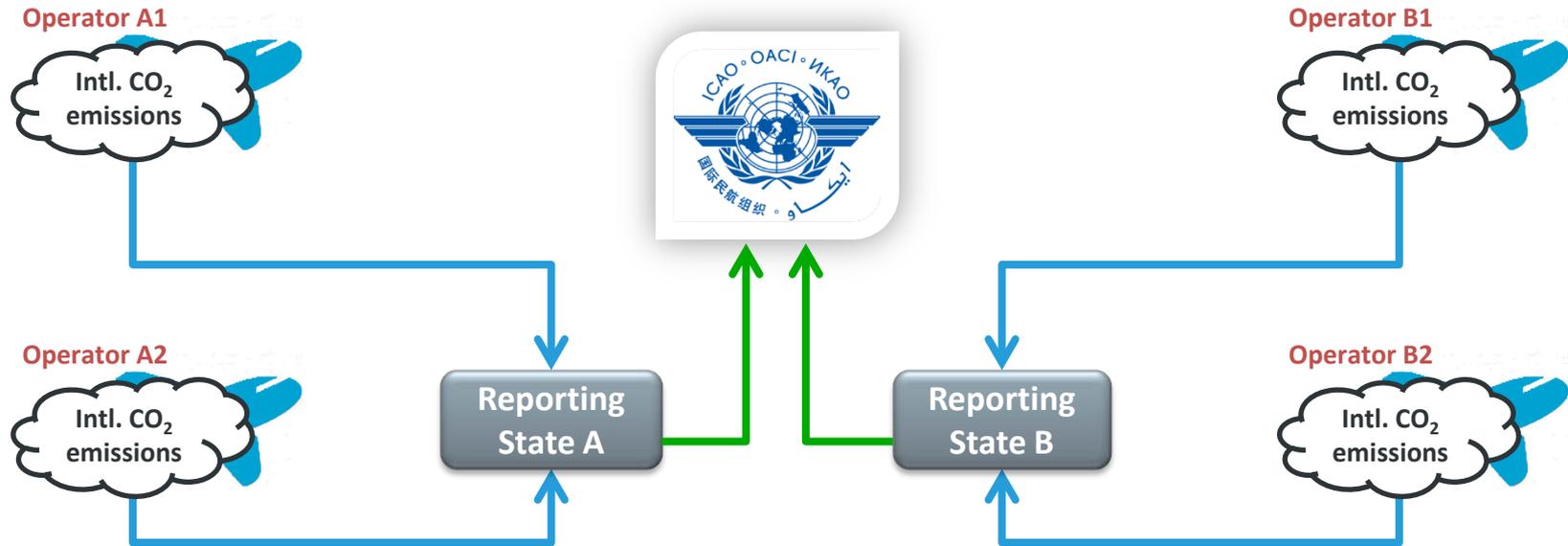


CERT is an ICAO tool to help Aeroplane Operators estimate and Report their international aviation emissions





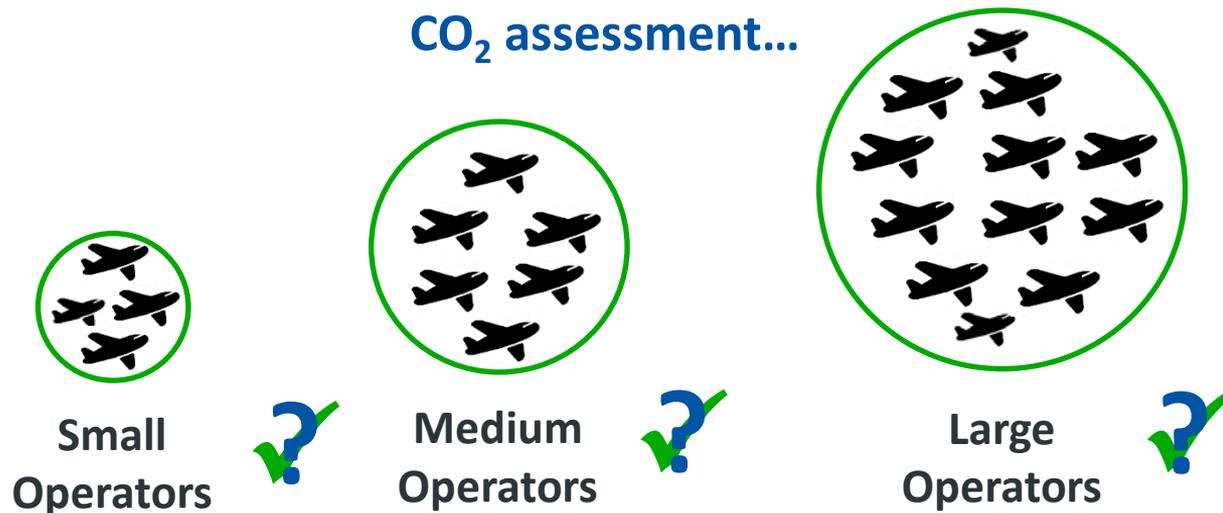
International Aviation Emissions Monitoring and Reporting from **Aeroplane Operators** is a CORSIA requirement



Note: Aeroplane Operators eligible to use the CERT, are also encouraged to use one of the five Fuel Use Monitoring Methods to monitor CO₂ emissions from international flights.



ALL Aeroplane Operators can use the CERT for a preliminary CO₂ assessment...



... but only some Aeroplane Operators can use the CERT as primary* means for CO₂ Estimation and Reporting

* Note: All Aeroplane Operators can use the CERT to fill data gaps (up to a certain number of flights)



CERT	Aeroplane Operators International CO ₂ Emissions (tonnes) 2019-2020*		
	≤ 10K CO ₂	< 500K CO ₂	≥ 500K CO ₂
Function / Use			
Preliminary CO ₂ Assessment	✓	✓	✓
CO ₂ Estimation & Reporting	No CORSIA requirement	✓	Not Eligible to use CERT **
Filling Data Gaps	No CORSIA requirement	✓	✓

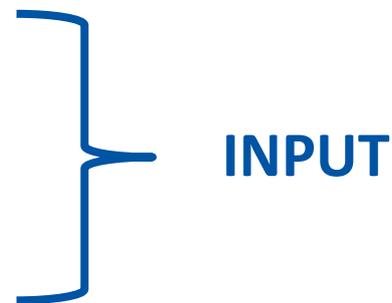
* Note: from 2021-2035 operators can use CERT to estimate and report emissions if their annual emissions from international flights subject to offsetting requirement are < 50 000 tonnes of CO₂ annually.

** Note: If an aeroplane operator uses CERT for 2019 CO₂ estimation and reporting (based on their preliminary CO₂ assessment) but exceeds the threshold of 500 000 tonnes in 2019, the State could permit the operator to continue to use CERT during 2020.



CERT is a flight-by-flight*-based tool requiring only 3 elements of input:

- ❖ an **Aeroplane Type**
- ❖ an **Origin**
- ❖ a **Destination**



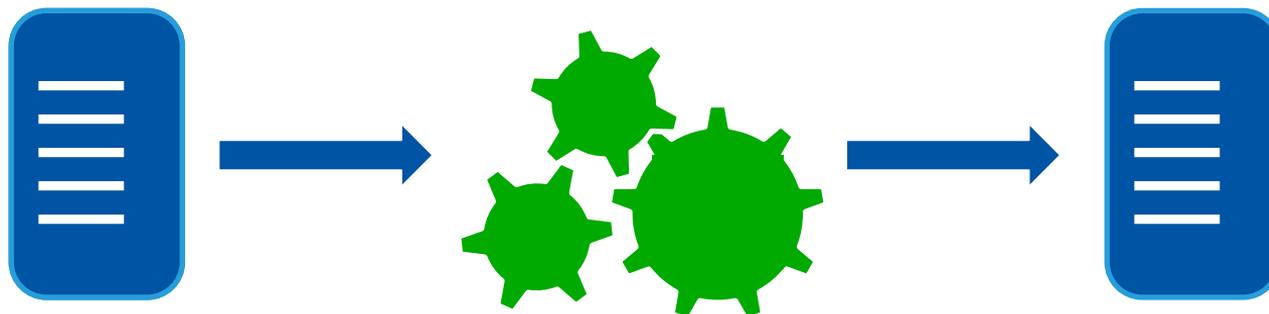
* Entry of batches of flights is allowed (i.e., number of flights in a year using the same aeroplane type and on the same aerodrome pair).



INPUT

CERT

OUTPUT

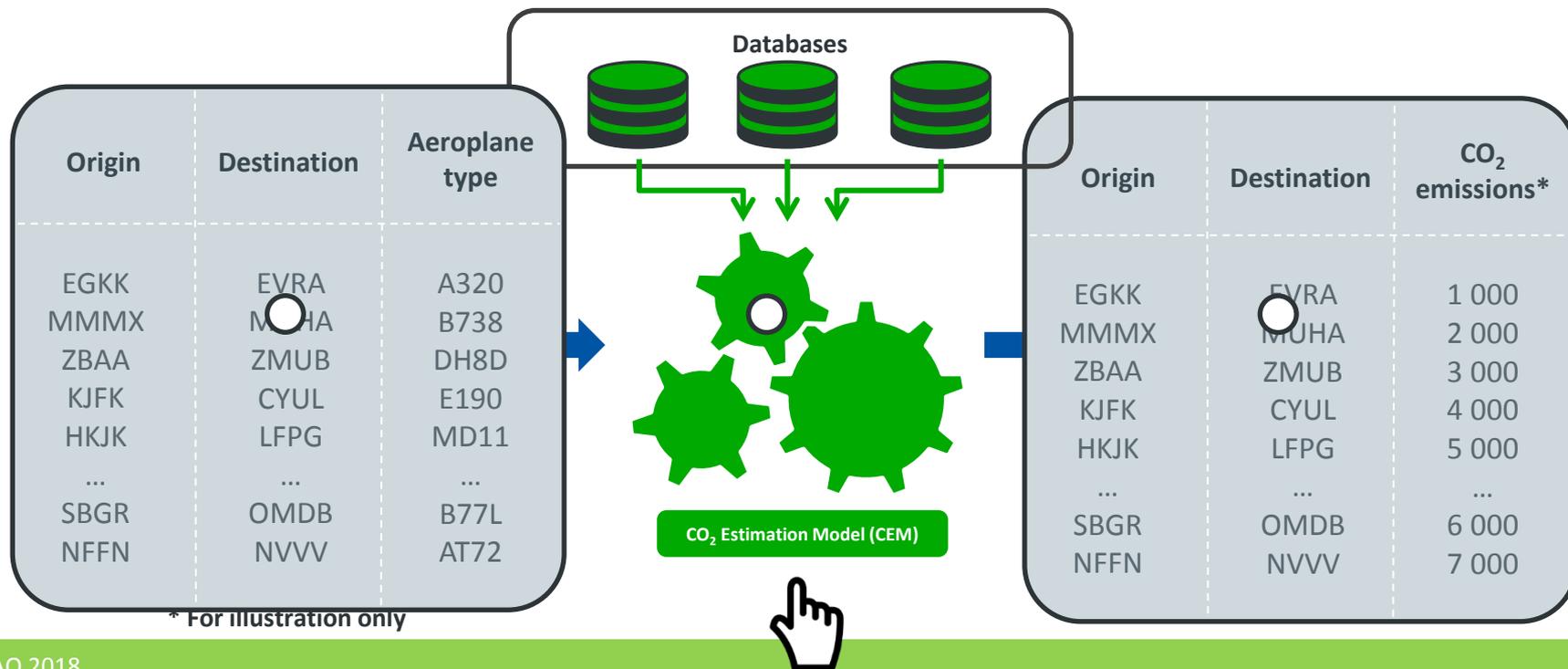




INPUT

CERT

OUTPUT





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Introduction to the CERT as a tool



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CORSIA - CERT



The CERT will have up to 4 functionalities:

CERT CO ₂ Estimation & Reporting Tool			
Year of Validity	2018 (Version 2018)	2019-2020 (Version 2019-2020)	2021-2035 (Version 2021-2035)
Estimation of CO ₂ for Determination of Simplified Compliance Procedures Eligibility	Yes	Yes	Yes
Report Generation Functionality	Partial*	Yes	Yes
Monitoring (Estimating CO ₂)	No	Yes	Yes
List of States pairs subject to offsetting requirement	No	No	Yes

* The 2018 Version of the CERT includes the functionality to generate a summary report of the assessment of the estimation of the Aeroplane Operators CO₂ emissions. The report can be used as supporting evidence for the operator's Emissions Monitoring Plan.



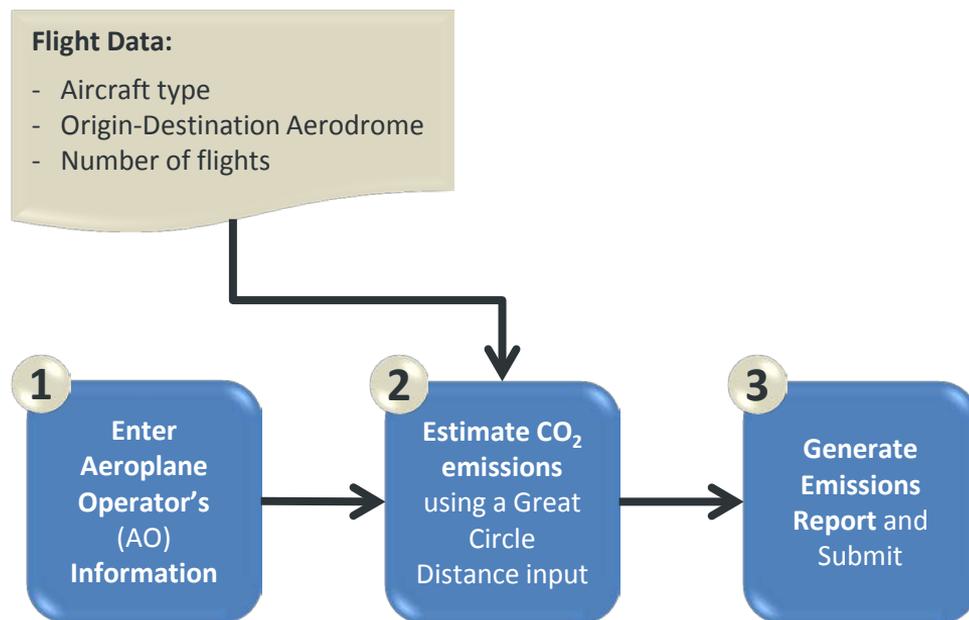
The CERT comprises a three-step process

(1) Entering Aeroplane Operator's Basic Information

(2) Entering Flight Data to estimate CO₂ Emissions by entering:

- Aeroplane Type by ICAO Type Designator
- Origin-Destination Aerodrome
- Number of flights (if batches of flights are entered)

(3) Generating the Summary Assessment report in support for EMP submission



How does the CERT work? – Step 1



STEP 1

Version 2018

Step 1. Aeroplane Operator Identification

Enter Aeroplane Operator and Contact Information below

Te estimate CO₂ emissions from International Flights. Click on →

AEROPLANE OPERATOR IDENTIFICATION

Note: Aeroplane Operator information is based on Annex 15 Volume 1, Appendix A.2.2 requirements and a subset of the Data from the Business Accounting Plan (BAP) (Doc 9853 Volume 1) to allow the identification of the Aeroplane Operator.

a) Name of the Aeroplane Operator
Please enter the name of the aeroplane Operator. This name should be the legal entity engaged in the aeroplane activities, or the regulatory entity to be the employer for the CORSIA administrator under a parent subsidiary arrangement.

b) Address of the Aeroplane Operator
Please enter the address of the Aeroplane Operator.

c) Aircraft Identification of the Aeroplane Operator for International Rights (Item 7 of the Flight plan)
Select one of the three options below for reporting flight activities under the CORSIA scheme. For the flight plan:

ICAO Designator
Data item 7 (aircraft identification) of the flight plan begins with an ICAO Designator according to ICAO Document 8643, Designator for Aircraft Operating Agencies, Aeronautical Authorities and Services (7th edn, please select "ICAO Designator" from the drop down list and complete it).

Registration Mark
Data item 7 (aircraft identification) of the flight plan commences with the nationality or common mark and registration mark, an aircraft related to an AOC (in response) if yes, please select "Registration Mark" from the drop down list.

d) Responsibility under the CORSIA

e) ICAO Designator
Please enter the ICAO Designator (or Designator) used for Air Traffic Control purposes, as listed in ICAO Document 8643 (Designator for Aircraft Operating Agencies, Aeronautical Authorities and Services) if the Aeroplane Operator has an ICAO Designator.

f) Do you have an Air Operator Certificate (AOC)?
The AOC (operator certificate) (AOC) is a certificate authorizing an operator to carry out specified commercial or transport operations i.e., an abatement issued by an Aeroplane Operator by a civil aviation authority which agrees that the aeroplane Operator is qualified to be the responsible entity and organization to ensure the safe operation of the aeroplane for the aviation activities specified in that certificate.

g) Identification code of the AOC
Please enter the unique identification number of the Air Operator Certificate of the issuing civil aviation authority. If you hold several AOCs, list the additional certificate in the field "Information about the certificate".

h) Date of issue
Please enter the date on which the Air Operator Certificate was issued. Use the entry format yyyy-mm-dd.

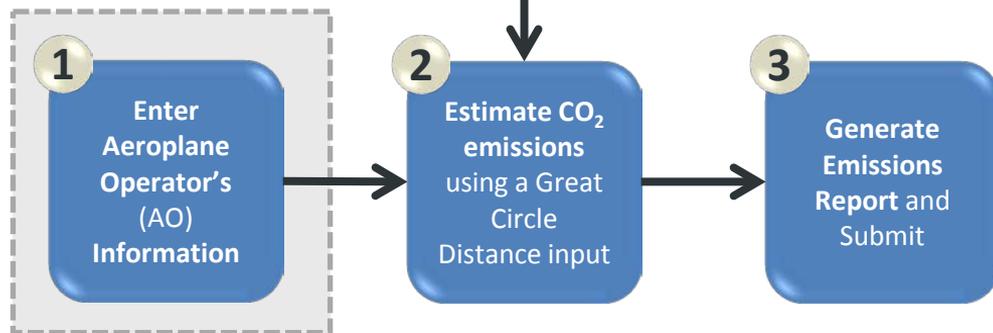
i) Date of expiry
Please enter the date on which the Air Operator Certificate expires (if applicable). Use the entry format yyyy-mm-dd.

j) Competent authority for the AOC
Please enter the address of the authority that issued the AOC.

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Flight Data:

- Aircraft type
- Origin-Destination Aerodrome
- Number of flights



How does the CERT work? – Step 1



CORSIA CO₂ Estimation & Reporting Tool (CERT) Version 2018

Step 1. Aeroplane Operator Identification

Enter Aircraft Operator and Contact Information below

To estimate CO₂ emissions from international flights. Click on →

AEROPLANE OPERATOR IDENTIFICATION

Note: - Aeroplane Operator Information is based on Annex 16 Volume IV, Appendix 4, 2.1 requirements and a subset of the fields from the Emissions Monitoring Plan (ICAO Doc 9501 Volume IV) to allow the identification of the Aeroplane Operator.

a) Name of the Aeroplane Operator
Please enter the name of the aeroplane operator. This name should be the legal entity engaged in the aeroplane operation, or the legal entity seeking to be the single entity for the CORSIA administration under a parent subsidiary arrangement.

b) Address of the Aeroplane Operator
Please enter the address of the Aeroplane Operator.

ICAO Designator
Data item 7 (origin identifier) of the flight plan begins with an ICAO Designator according to ICAO Document 8643, Designator for Aircraft Operating Agencies, Aeronautical Authorities and Services (7-yr), please select "ICAO Designator" from the drop down list and complete it.

Regulation Mark
Data item 7 (origin identifier) of the flight plan commencing with the nationality or country mark, and registration mark, or marks, related to an AOC. (See equivalent) If not, please select "Registration Mark" from the drop down list and complete it.

Responsibility under the CORSIA

Do you have an Air Operator Certificate (AOC)?
The AOC (Air Operator Certificate) is a certificate authorizing an operator to carry out specified commercial air transport operations i.e., an agreement issued by an Aeroplane Operator by a civil aviation authority which allows that the aeroplane operator is qualified for the performance of the specified operations and is responsible for the safe operation of the aeroplane for the aviation activities specified in the certificate.

Identification code of the AOC
Please enter the unique identification number of the Air Operator Certificate of the issuing civil aviation authority. If you hold several AOCs, list the certificate or certificates in the field "Information about the certificate".

Date of issue
Please enter the date on which the Air Operator Certificate was issued. Use the entry format yyyy-mm-dd.

Date of expiry
Please enter the date on which the Air Operator Certificate expires (if applicable). Use the entry format yyyy-mm-dd.

Competent authority for the AOC
Please enter the address of the authority that issued the AOC.

Go to Main Page

CORSIA CO₂ Estimation & Reporting Tool (CERT) Version 2018

Step 1. Aeroplane Operator Identification

Back To Step 2

Step: 1a Enter Aircraft Operator and Contact Information below

1b To estimate CO₂ emissions from international flights. Click on →

2. CO₂ Estimation

AEROPLANE OPERATOR IDENTIFICATION

Note. - Aeroplane Operator Information is based on Annex 16 Volume IV, Appendix 4, 2.1 requirements and a subset of the fields from the Emissions Monitoring Plan (ICAO Doc 9501 Volume IV) to allow the identification of the Aeroplane Operator.

a) Name of the Aeroplane Operator
Please enter the name of the Aeroplane Operator. This name should be the legal entity engaged in the aeroplane operation, or the legal entity seeking to be the single entity for the CORSIA administration under a parent-subsidary arrangement.

b) Address of the Aeroplane Operator
Please enter the address of the Aeroplane Operator.

Address Line:
City:
State/Province/Region:
Postcode/ZIP:
Country:

How does the CERT work? – Step 1



CO₂RSIA CO₂ Estimation & Reporting Tool (CERT) Version 2018

Step 1. Aeroplane Operator Identification

Enter Aeroplane Operator and Contact Information below

Enter aeroplane CO₂ emissions from International Flights. Click on →

AEROPLANE OPERATOR IDENTIFICATION

Note: Aeroplane Operator information is based on Annex 15 Volume II, Appendix A, 2.1 requirements and a subset of the Data from the Assessment Monitoring Plan (AMP) User 1995 Volume II) to allow the identification of the Aeroplane Operator.

a) Name of the Aeroplane Operator
Please enter the name of the aeroplane Operator. This name should be the legal entity engaged in the aviation activities, or the legal entity willing to be the employer for the CO₂ administrator under a parent subsidiary arrangement.

b) Address of the Aeroplane Operator
Please enter the address of the Aeroplane Operator.

c) Aircraft Identification of the Aeroplane Operator for International Rights (Item 7 of the Flight plan)
Select one of the three options below for reporting flight activities under the CERFA as shown in the Flight plan.

ICAO Designator
Data Item 7 (aircraft identification) of the flight plan begins with an ICAO Designator according to ICAO Document 8633, Designator for Aircraft Operating Agencies, Aeronautical Authorities and Services (7th ed., please select "ICAO Designator" from the drop down list and complete it).

Registration Mark
Data Item 8 (aircraft registration) of the flight plan commences with the nationality or common mark, and registration mark, or marks, related to an AOC (in response 1) if yes, please select "Registration Mark" from the drop down list.

d) Responsibility under the CERFA

e) ICAO Designator
Please enter the ICAO Designator (or Designator) used for Air Traffic Control purposes, as listed in ICAO Document 8633 (Designator for Aircraft Operating Agencies, Aeronautical Authorities and Services) (7th Edition) (Designator for an ICAO Designator).

Operator Name:

e) Do you have an Air Operator Certificate (AOC)?
The Aircraft Operator Certificate (AOC) is a certificate authorizing an operator to carry out specified commercial air transport operations i.e., a document issued to an Aeroplane Operator by a civil aviation authority which affirms that the Aeroplane Operator in question has the professional ability and organization to secure the safe operation of the aeroplane for the aviation activities specified in the certificate.

e1) Identification code of the AOC
Please enter the unique identification number of the Air Operator Certificate of the issuing civil aviation authority. If you hold several AOCs, list the additional certificates in the field "Information about the certificate".

e2) Date of issue
Please enter the date on which the Air Operator Certificate was issued. Use the entry format yyyy-mm-dd.

e3) Date of expiry
Please enter the date on which the Air Operator Certificate expires (if applicable). Use the entry format yyyy-mm-dd.

e4) Competent authority for the AOC
Please enter the address of the authority that issued the AOC.

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e) Do you have an Air Operator Certificate (AOC)?

The Aircraft Operator Certificate (AOC) is a certificate authorizing an operator to carry out specified commercial air transport operations i.e., a document issued to an Aeroplane Operator by a civil aviation authority which affirms that the Aeroplane Operator in question has the professional ability and organization to secure the safe operation of the aeroplane for the aviation activities specified in the certificate.

e1) Identification code of the AOC

Please enter the unique identification number of the Air Operator Certificate of the issuing civil aviation authority. If you hold several AOCs, list the additional certificates in the field "Information about the certificate".

e2) Date of issue

Please enter the date on which the Air Operator Certificate was issued. Use the entry format yyyy-mm-dd.

e3) Date of expiry

Please enter the date on which the Air Operator Certificate expires (if applicable). Use the entry format yyyy-mm-dd.

e4) Competent authority for the AOC

Please enter the address of the authority that issued the AOC.

Name of the Authority:	
Address Line:	
City:	
State/Province/Region:	
Postcode/ZIP:	
Country:	

Back to Main Page



How does the CERT work? – Step 2



STEP 2

Flight Data:

- Aircraft type
- Origin-Destination Aerodrome
- Number of flights



Step 2. CO₂ Emissions Estimation

← Back to Step 1 To Step 3 →

Step: 2. Collect flight information (aircraft type, aerodromes of origin and destination) for all flights during the relevant time period.

2. Enter the information for all flights by double clicking on the green cells below.
Note: For a given aerodrome pair flown by a particular aircraft type, all flights can be entered as a single entry by entering total number of flights during the relevant time period.
Note: Data can also be copied and pasted across input cells as needed.
Note: Data can also be imported from a csv file, structured to match the contents under the INPUT section below.

2. After entering input, compute CO₂ Emissions. Click on →

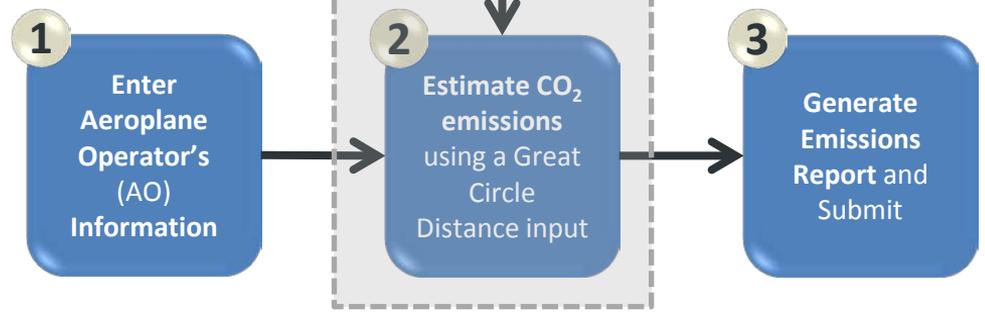
2. After computing CO₂ Emissions, generate a summary assessment of applicability of CORSIA and eligibility to use the CERT in 2019. Click on →

Import Input File (.csv)

Calculate CO₂ Emissions

Generate Summary Assessment

INPUT				OUTPUT			
Date (Optional)	Flight ID (Optional)	ICAO Aircraft Type Designator	Number of Flights	Great Circle Distance (in km)	CO ₂ Emissions (in tonnes of CO ₂)	Flight(s) subject to Scope of Applicability of CORSIA	
		<input type="text" value="Search Aircraft Code"/>				<input type="text" value="Search Airport Code"/>	



How does the CERT work? – Step 2



CORSIA | CO₂ Estimation & Reporting Tool (CERT) | Version 2018

Step 2. CO₂ Emissions Estimation

Back to Step 1 | To Step 3

Step 1: Collect, flight information (aircraft type, aerodromes of origin and destination) for all flights during the relevant time period.

Step 2: Enter the information for all flights by double-clicking on the green cells below. Note: For a given aerodrome and from/to a particular aircraft type, all flights can be entered as a single entry by entering total number of flights during the relevant time period. Note: Data can also be imported from a CSV file, structured to match the contents under the INPUT section below.

Step 3: After entering input, compute CO₂ Emissions. Click on >

Step 4: After computing CO₂ Emissions, generate a summary assessment of applicability of CORSIA and eligibility to use the CERT in 2019. Click on >

INPUT

Date (Optional)	Flight ID (Optional)	ICAO Aircraft Type Designator	Origin Airport	Destination Airport	Number of Flights	Great Circle Distance (in km)	CO ₂ Emissions (in tonnes of CO ₂)	Flight(s) subject to Scope of Applicability of CORSIA
		Search Aircraft Code	Search Airport Code					

CORSIA | CO₂ Estimation & Reporting Tool (CERT) | Version 2018

Step 2. CO₂ Emissions Estimation

Back to Step 1 | To Step 3

Step 1: Collect, flight information (aircraft type, aerodromes of origin and destination) for all flights during the relevant time period.

Step 2: Enter the information for all flights by double-clicking on the green cells below. Note: For a given aerodrome and from/to a particular aircraft type, all flights can be entered as a single entry by entering total number of flights during the relevant time period. Note: Data can also be imported from a CSV file, structured to match the contents under the INPUT section below.

Step 3: After entering input, compute CO₂ Emissions. Click on >

Step 4: After computing CO₂ Emissions, generate a summary assessment of applicability of CORSIA and eligibility to use the CERT in 2019. Click on >

INPUT

Date	Flight ID (Optional)	ICAO Aircraft Type Designator	Origin Airport	Destination Airport	Number of Flights	Great Circle Distance (in km)	CO ₂ Emissions (in tonnes of CO ₂)	Flight(s) subject to Scope of Applicability of CORSIA
		Search Aircraft Code	Search Airport Code					
		DH8D	EGKK	EVRA	100			
		A320	MMMX	MUHA	100			
		E190	KJFK	KMSY	100			
		B789	HKJK	LFPG	100			
		MD11	SBGR	OMDB	100			
		AT72	NFFN	NVVV	100			

CORSIA | CO₂ Estimation & Reporting Tool (CERT) | Version 2018

Step 2. CO₂ Emissions Estimation

Back to Step 1 | To Step 3

Step 1: Collect, flight information (aircraft type, aerodromes of origin and destination) for all flights during the relevant time period.

Step 2: Enter the information for all flights by double-clicking on the green cells below. Note: For a given aerodrome and from/to a particular aircraft type, all flights can be entered as a single entry by entering total number of flights during the relevant time period. Note: Data can also be imported from a CSV file, structured to match the contents under the INPUT section below.

Step 3: After entering input, compute CO₂ Emissions. Click on >

Step 4: After computing CO₂ Emissions, generate a summary assessment of applicability of CORSIA and eligibility to use the CERT in 2019. Click on >

INPUT

Date (Optional)	Flight ID (Optional)	ICAO Aircraft Type Designator	Origin Airport	Destination Airport	Number of Flights	Great Circle Distance (in km)	CO ₂ Emissions (in tonnes of CO ₂)	Flight(s) subject to Scope of Applicability of CORSIA
		Search Aircraft Code	Search Airport Code					
		DH8D	EGKK	EVRA	100	3,887	909	Yes
		A320	MMMX	MUHA	100	1,772	2,119	Yes
		E190	KJFK	KMSY	100	2,903	2,843	No (Domestic)
		B789	HKJK	LFPG	100	6,482	11,197	Yes
		MD11	SBGR	OMDB	100	12,217	97,055	Yes
		AT72	NFFN	NVVV	100	984	671	Yes

INPUT *				OUTPUT *			
ICAO Aircraft Type Designator	Origin Airport	Destination Airport	Number of Flights	Great Circle Distance (in km)	CO ₂ Emissions (in tonnes of CO ₂)	Flight(s) subject to Scope of Applicability of CORSIA	
DH8D	EGKK	EVRA	100				
A320	MMMX	MUHA	100				
E190	KJFK	KMSY	100				
B789	HKJK	LFPG	100				
MD11	SBGR	OMDB	100				
AT72	NFFN	NVVV	100				

* Illustrative numbers/data

How does the CERT work? – Step 2




CORSIA CO₂ Estimation & Reporting Tool (CERT) Version 2018

Step 2. CO₂ Emissions Estimation

Back to Step 1 To Step 3

Step 1: Collect, flight information (aircraft type, aerodromes of origin and destination) for all flights during the relevant time period.

Step 2: Enter the information for all flights by double-clicking on the green cells below.
 Note: For a given aerodrome and from by a particular aircraft type, all flights can be entered as a single entry by entering total number of flights during the relevant time period.
 Note: Data can also be imported from a CSV file, structured to match the contents under the INPUT section below.

Step 3: After entering input, compute CO₂ Emissions. Click on →

Step 4: After computing CO₂ Emissions, generate a summary assessment of applicability of CORSIA and eligibility to use the CERT in 2018. Click on →

Input Input File (CSV) | Calculate CO₂ Emissions | Generate Summary Assessment

INPUT				OUTPUT				
Date (Optional)	Flight ID (Optional)	ICAO Aircraft Type Designator (Search Aircraft Code)	Origin Airport (Search Airport Code)	Destination Airport (Search Airport Code)	Number of Flights	Great Circle Distance (in km)	CO ₂ Emissions (in tonnes of CO ₂)	Flight(s) subject to Scope of Applicability of CORSIA



CORSIA CO₂ Estimation & Reporting Tool (CERT) Version 2018

Step 2. CO₂ Emissions Estimation

Back to Step 1 To Step 3

Step 1: Collect, flight information (aircraft type, aerodromes of origin and destination) for all flights during the relevant time period.

Step 2: Enter the information for all flights by double-clicking on the green cells below.
 Note: For a given aerodrome and from by a particular aircraft type, all flights can be entered as a single entry by entering total number of flights during the relevant time period.
 Note: Data can also be imported from a CSV file, structured to match the contents under the INPUT section below.

Step 3: After entering input, compute CO₂ Emissions. Click on →

Step 4: After computing CO₂ Emissions, generate a summary assessment of applicability of CORSIA and eligibility to use the CERT in 2018. Click on →

Input Input File (CSV) | Calculate CO₂ Emissions | Generate Summary Assessment

INPUT				OUTPUT				
Date (Optional)	Flight ID (Optional)	ICAO Aircraft Type Designator (Search Aircraft Code)	Origin Airport (Search Airport Code)	Destination Airport (Search Airport Code)	Number of Flights	Great Circle Distance (in km)	CO ₂ Emissions (in tonnes of CO ₂)	Flight(s) subject to Scope of Applicability of CORSIA
		DH8D	EGKK	EVRA	100	1,697	969	Yes
		A320	MMMX	MUHA	100	1,772	2,119	Yes
		E190	KJFK	KMSY	100	1,903	1,843	No (Domestic)
		B789	HKJK	LFPG	100	6,481	13,197	Yes
		MD11	SBGR	OMDB	100	12,217	37,053	Yes
		AT72	NFFN	NVVV	100	968	473	Yes



CORSIA CO₂ Estimation & Reporting Tool (CERT) Version 2018

Step 2. CO₂ Emissions Estimation

Back to Step 1 To Step 3

Step 1: Collect, flight information (aircraft type, aerodromes of origin and destination) for all flights during the relevant time period.

Step 2: Enter the information for all flights by double-clicking on the green cells below.
 Note: For a given aerodrome and from by a particular aircraft type, all flights can be entered as a single entry by entering total number of flights during the relevant time period.
 Note: Data can also be imported from a CSV file, structured to match the contents under the INPUT section below.

Step 3: After entering input, compute CO₂ Emissions. Click on →

Step 4: After computing CO₂ Emissions, generate a summary assessment of applicability of CORSIA and eligibility to use the CERT in 2018. Click on →

Input Input File (CSV) | Calculate CO₂ Emissions | Generate Summary Assessment

INPUT				OUTPUT				
Date (Optional)	Flight ID (Optional)	ICAO Aircraft Type Designator (Search Aircraft Code)	Origin Airport (Search Airport Code)	Destination Airport (Search Airport Code)	Number of Flights	Great Circle Distance (in km)	CO ₂ Emissions (in tonnes of CO ₂)	Flight(s) subject to Scope of Applicability of CORSIA
		DH8D	EGKK	EVRA	100	1,697	969	Yes
		A320	MMMX	MUHA	100	1,772	2,119	Yes
		E190	KJFK	KMSY	100	1,903	1,843	No (Domestic)
		B789	HKJK	LFPG	100	6,481	13,197	Yes
		MD11	SBGR	OMDB	100	12,217	37,053	Yes
		AT72	NFFN	NVVV	100	968	473	Yes

INPUT *				OUTPUT *			
ICAO Aircraft Type Designator	Origin Airport	Destination Airport	Number of Flights	Great Circle Distance (in km)	CO ₂ Emissions (in tonnes of CO ₂)	Flight(s) subject to Scope of Applicability of CORSIA	
DH8D	EGKK	EVRA	100	1,697	969	Yes	
A320	MMMX	MUHA	100	1,772	2,119	Yes	
E190	KJFK	KMSY	100	1,903	1,843	No (Domestic)	
B789	HKJK	LFPG	100	6,481	13,197	Yes	
MD11	SBGR	OMDB	100	12,217	37,053	Yes	
AT72	NFFN	NVVV	100	968	473	Yes	

* Illustrative numbers/data



How does the CERT work? – Step 3



CORSIA CO₂ Estimation & Reporting Tool (CERT) Version 2018

Step 3. Summary of Assessment of Applicability of CORSIA and Eligibility to Use the CERT in 2019

Back to Step 2

Step 3

1 Review the Summary of Assessment of Applicability of Annex 16 Volume IV Chapter 1 and eligibility to use the ICAO CORSIA CERT in 2019.

2 If complete and accurate, generate a pdf copy of the assessment by clicking on → **Generate Copy of Summary Assessment**

3 Save a copy for your records. In accordance with Annex 16 Volume IV, Appendix A, Section 2.1.1.1.a) on the supporting information Methods and Means for calculating emissions from international flight, the Aeroplane Operator can submit to a copy to the Summary Assessment to its State along with the Emissions Monitoring Plan.

A. Aeroplane Operator Information

a) Name of the Aeroplane Operator

b) Address of the Aeroplane Operator
Address Line:
City:
State/Province/Region:
Postcode/ZIP:
Country:

c) Aircraft Identification of the Aeroplane Operator for

d) ICAO designator

e) Identification code of the AOC

f) Competent authority for the AOC
Name of the Authority:
Address Line:
City:
State/Province/Region:
Postcode/ZIP:
Country:

B. Estimated CO₂ Emissions and Status of Aeroplane Operator

1 Total Annual Estimated CO₂ Emissions (International): **53,811** t CO₂

Total Annual Estimated CO₂ Emissions (Domestic): **1,843** t CO₂

2 Status of Aeroplane Operator:
Aeroplane Operator under Scope of Applicability of CORSIA (i.e., Annex 16 Volume IV Chapter 2) Yes

Aeroplane Operator eligible to use: **ICAO CORSIA CERT** Yes

Fuel Use Monitoring Method Yes

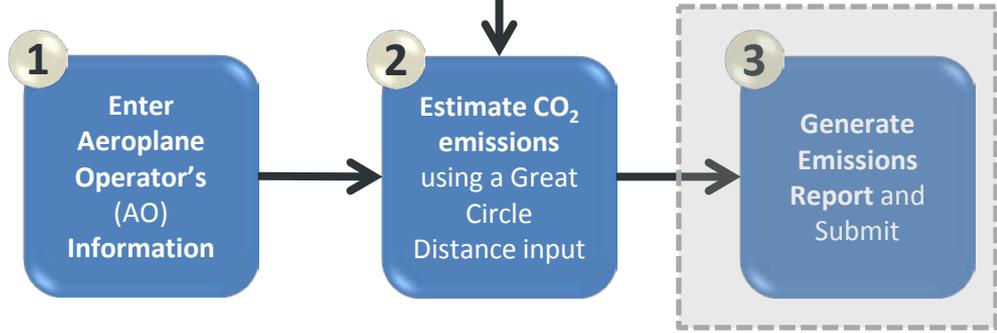
C. Detailed Estimated CO₂ Emissions by State Pairs

State of Origin (Aerodrome(s))	State of Destination (Aerodrome(s))	Flight(s) on Route under Scope of Applicability of CORSIA	CO ₂ Emissions (in tonnes of CO ₂)
Israel	United Arab Emirates	Yes	37,056
Fiji	Vietnam	Yes	475
Kenya	France	Yes	13,137
Mexico	Cuba	Yes	2,118
United Kingdom	Libya	Yes	90

STEP 3

Flight Data:

- Aircraft type
- Origin-Destination Aerodrome
- Number of flights





How does the CERT work? – Step 3



ICAO CORSIA - ICAO | **CORSIA** CO₂ Estimation & Reporting Tool (CERT) | Version 2018

Step 3. Summary of Assessment of Applicability of CORSIA and Eligibility to Use the CERT in 2019

Back to Step 2

3. Review the Summary of Assessment of Applicability of Annex 16 Volume IV Chapter 2 and eligibility to use the ICAO CORSIA CERT in 2019.

3. If complete and accurate, generate a pdf copy of the assessment by clicking on → **Generate Copy of Summary Assessment**

3. Save a copy for your records. In accordance with Annex 16 Volume IV, Appendix II, Section 2.3.1.1 a) on the supporting information on Methods and means for calculating emissions from international flight, the Aeroplane Operator can submit to a copy for the Summary Assessment to its State along with the Emissions Monitoring Plan.

A. Aeroplane Operator Information

a) Name of the Aeroplane Operator

b) Address of the Aeroplane Operator
Address Line:
City:
State/Province/Region:
Postcode/ZIP:
Country:

d) Aircraft Identification of the Aeroplane Operator for

d2) ICAO designator

e1) Identification code of the AOC

e) Competent authority for the AOC
Name of the Authority:
Address Line:
City:
State/Province/Region:
Postcode/ZIP:
Country:

B. Estimated CO₂ Emissions and Status of Aeroplane Operator

1. Total Annual Estimated CO₂ Emissions (International): t CO₂
Total Annual Estimated CO₂ Emissions (Domestic): t CO₂

2. Status of Aeroplane Operator:
Aeroplane Operator under Scope of Applicability of CORSIA (i.e., Annex 16 Volume IV Chapter 2) Yes No
Aeroplane Operator eligible to use: ICAO CORSIA CERT Yes No
Fuel Use Monitoring Method Yes No

C. Detailed Estimated CO₂ Emissions by State Pairs

State of Origin (Arrival/Origin)	State of Destination (Arrival/Origin)	Flight(s) on Route under Scope of Applicability of CORSIA	CO ₂ Emissions (in tonnes of CO ₂)
Brazil	United Arab Emirates	Yes	37,203
Fiji	Vietnam	Yes	475
Kenya	France	Yes	13,137
Mexico	Cuba	Yes	2,118
United Kingdom	Latvia	Yes	98

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Step 3. Summary of Assessment of Applicability of CORSIA and Eligibility to Use the CERT in 2019

Back to Step 2

3. Review the Summary of Assessment of Applicability of Annex 16 Volume IV Chapter 2 and eligibility to use the ICAO CORSIA CERT in 2019.

3. If complete and accurate, generate a pdf copy of the assessment by clicking on → **Generate Copy of Summary Assessment**

3. Save a copy for your records. In accordance with Annex 16 Volume IV, Appendix II, Section 2.3.1.1 a) on the supporting information on Methods and means for calculating emissions from international flight, the Aeroplane Operator can submit to a copy for the Summary Assessment to its State along with the Emissions Monitoring Plan.

A. Aeroplane Operator Information

a) Name of the Aeroplane Operator

b) Address of the Aeroplane Operator
Address Line:
City:
State/Province/Region:
Postcode/ZIP:
Country:

d) Aircraft Identification of the Aeroplane Operator for

d2) ICAO designator

e1) Identification code of the AOC



How does the CERT work? – Step 3



CORSIA CO₂ Estimation & Reporting Tool (CERT) Version 2018

Step 3. Summary of Assessment of Applicability of CORSIA and Eligibility to Use the CERT in 2019

1 Review the Summary of Assessment of Applicability of Annex 16 Volume IV Chapter 2 and eligibility to use the ICAO CORSIA CERT in 2019.

2 If complete and accurate, generate a pdf copy of the assessment by clicking on → **Generate Copy of Summary Assessment**

3 Save a copy for your records. In accordance with Annex 16 Volume IV, Appendix A, Section 2.1.1.3.a) on the supporting information Methods and Means for calculating emissions from international flights, the Aeroplane Operator can submit to a copy to the Summary Assessment to its State along with the Emissions Monitoring Plan.

A Aeroplane Operator Information

a) Name of the Aeroplane Operator

b) Address of the Aeroplane Operator
Address Line:
City:
State/Province/Region:
Postcode/ZIP:
Country:

c) Aircraft Identification of the Aeroplane Operator for

d) ICAO designator

e) Identification code of the AOC

e) Competent authority for the AOC
Name of the Authority:
Address Line:
City:
State/Province/Region:
Postcode/ZIP:
Country:

B Estimated CO₂ Emissions and Status of Aeroplane Operator

1 Total Annual Estimated CO₂ Emissions (International): **53,811** t CO₂

Total Annual Estimated CO₂ Emissions (Domestic): **1,843** t CO₂

2 Status of Aeroplane Operator:
Aeroplane Operator under Scope of Applicability of CORSIA (i.e., Annex 16 Volume IV Chapter 2) **Yes**

Aeroplane Operator eligible to use; **ICAO CORSIA CERT Yes**

Fuel Use Monitoring Method Yes

C Detailed Estimated CO₂ Emissions by State Pairs

State of Origin Aerodrome(s)	State of Destination Aerodrome(s)	Flight(s) on Route under Scope of Applicability of CORSIA	CO ₂ Emissions (in tonnes of CO ₂)
Brazil	United Arab Emirates	Yes	37,053
Fiji	Vanuatu	Yes	473
Kenya	France	Yes	13,197
Mexico	Cuba	Yes	2,119
United Kingdom	Latvia	Yes	969

e) Competent authority for the AOC

Name of the Authority:	
Address Line:	
City:	
State/Province/Region:	
Postcode/ZIP:	
Country:	

B Estimated CO₂ Emissions and Status of Aeroplane Operator

1 Total Annual Estimated CO₂ Emissions (International): **53,811** t CO₂

Note. - Emissions are for all International State Pairs. For the 2021 version of the CERT, this total will be split between State Pairs with offsetting requirements and State Pairs not subject to offsetting requirements (see Annex 16 Volume IV, Chapter 2)

Total Annual Estimated CO₂ Emissions (Domestic): **1,843** t CO₂

Note. - Domestic aviation is outside the scope of applicability of Annex 16 Volume IV. Information is provided for awareness of tool user in the event domestic flights are entered in the input tables.

2 Status of Aeroplane Operator:
Aeroplane Operator under Scope of Applicability of CORSIA (i.e., Annex 16 Volume IV Chapter 2) **Yes**

Aeroplane Operator eligible to use; **ICAO CORSIA CERT Yes**

Fuel Use Monitoring Method Yes

Note. - For details on Fuel Use Monitoring Methods refer to Annex 16 Volume IV Chapter 2 and Appendix 2 and ETM Volume IV.

C Detailed Estimated CO₂ Emissions by State Pairs

State of Origin Aerodrome(s)	State of Destination Aerodrome(s)	Flight(s) on Route under Scope of Applicability of CORSIA	CO ₂ Emissions [in tonnes of CO ₂]
Brazil	United Arab Emirates	Yes	37,053
Fiji	Vanuatu	Yes	473
Kenya	France	Yes	13,197
Mexico	Cuba	Yes	2,119
United Kingdom	Latvia	Yes	969



What are the benefits of the CERT?

- ✓ **Easy-to-use tool**
- ✓ **Simplifies CO₂ estimation tasks for all users**
(Operators and States)
- ✓ **ICAO-approved tool**
- ✓ **Available free of charge**
- ✓ **Available on the ICAO CORSIA website for download**





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And now a live demo of the CERT



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