



Session 2:

CORSIA MRV System – Practical demonstration of the ICAO CORSIA CO₂ Estimation and Reporting Tool (CERT)

ICAO Secretariat





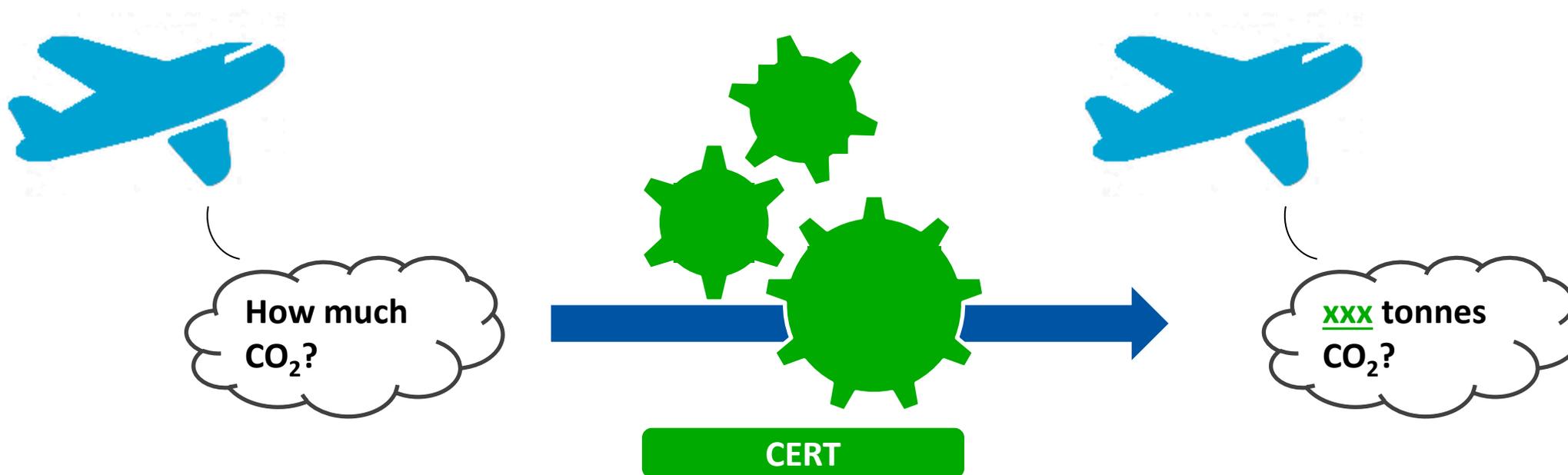
ICAO

CORSIA

CERT

CORSIA

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



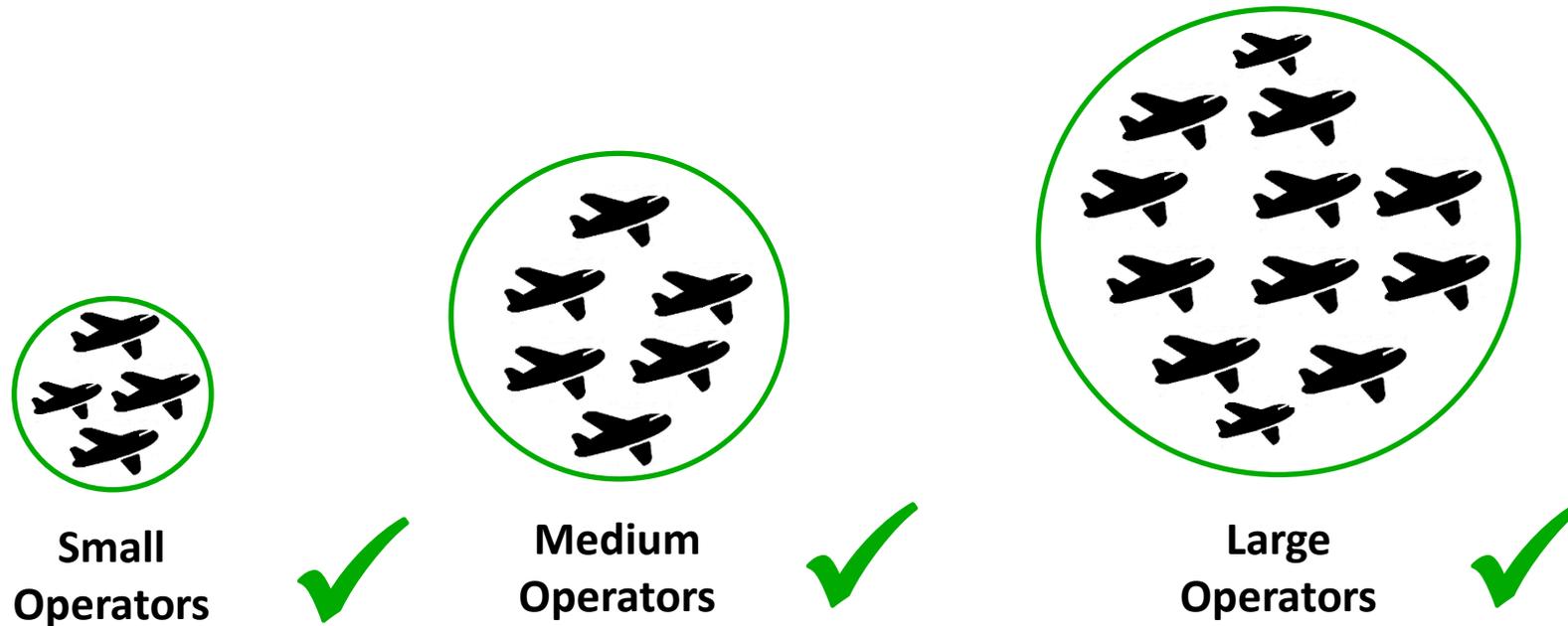
International Aviation Emissions Monitoring and Reporting from **Aeroplane Operators** is a CORSIA requirement



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.

Who can use the CERT?

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)

Who can use the CERT?

CERT	Aeroplane Operators International CO ₂ Emissions (tonnes) 2019-2020*		
	Function / Use	≤ 10K CO ₂	< 500K CO ₂
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**

INPUT



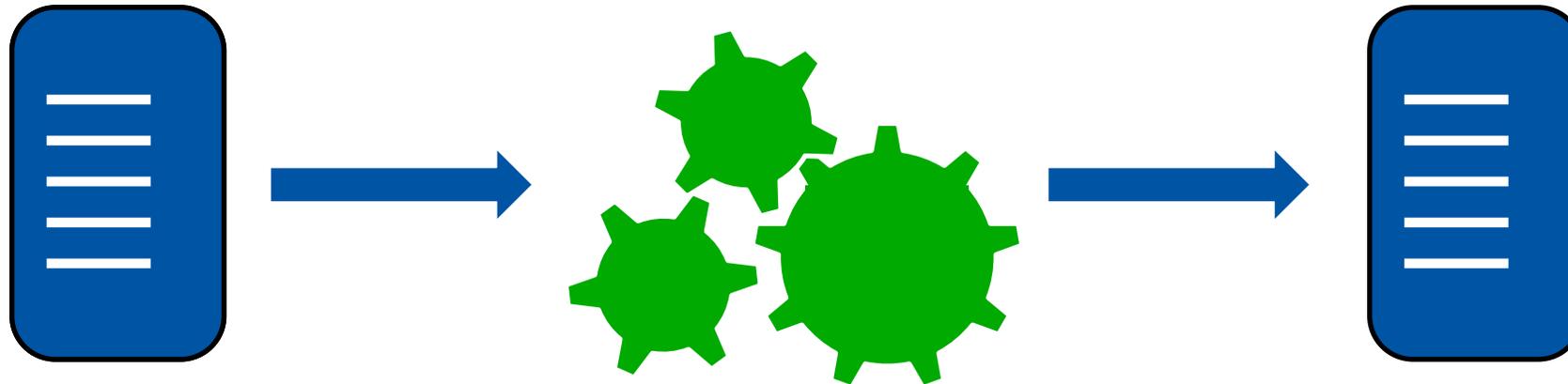
* Entry of batches of flights is allowed (i.e., number of flights in a year using the same aeroplane type and on the same aerodrome pair).

How does the CERT work?

INPUT

CERT

OUTPUT

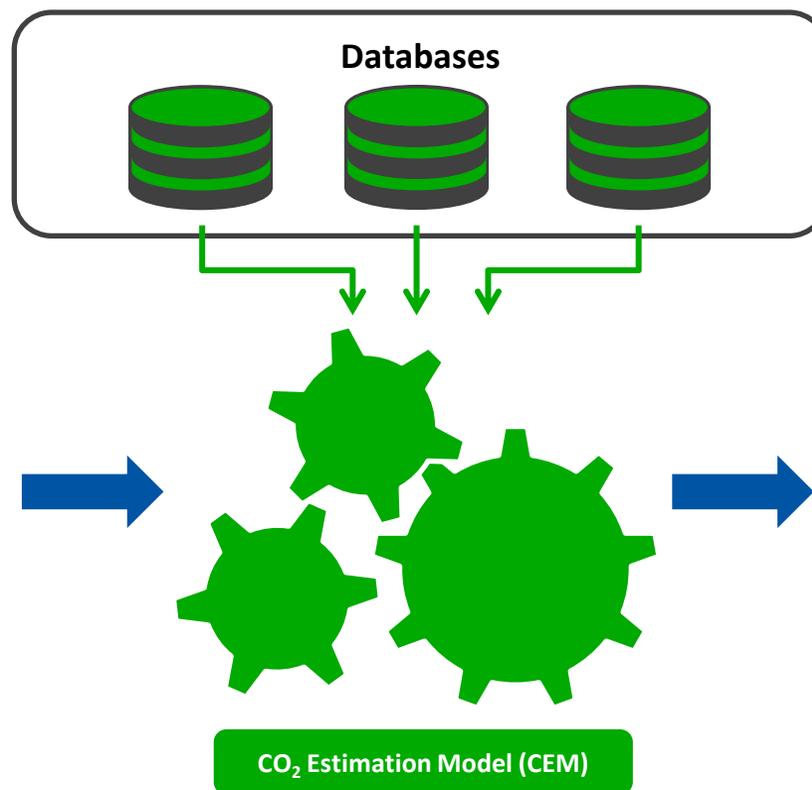


How does the CERT work?

INPUT

Origin	Destination	Aeroplane type
EGKK	EVRA	BCS3
MMMX	MUHA	SU95
ZBAA	ZMUB	C919
KJFK	CYUL	E190
HKJK	LFPG	B789
...
SBGR	OMDB	A359
NFFN	NVTV	AT72

CERT



OUTPUT

Origin	Destination	CO ₂ emissions*
EGKK	EVRA	1 000
MMMX	MUHA	2 000
ZBAA	ZMUB	3 000
KJFK	CYUL	4 000
HKJK	LFPG	5 000
...
SBGR	OMDB	6 000
NFFN	NVTV	7 000

* For illustration only



ICAO

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 to the operator's Emissions Monitoring Plan.

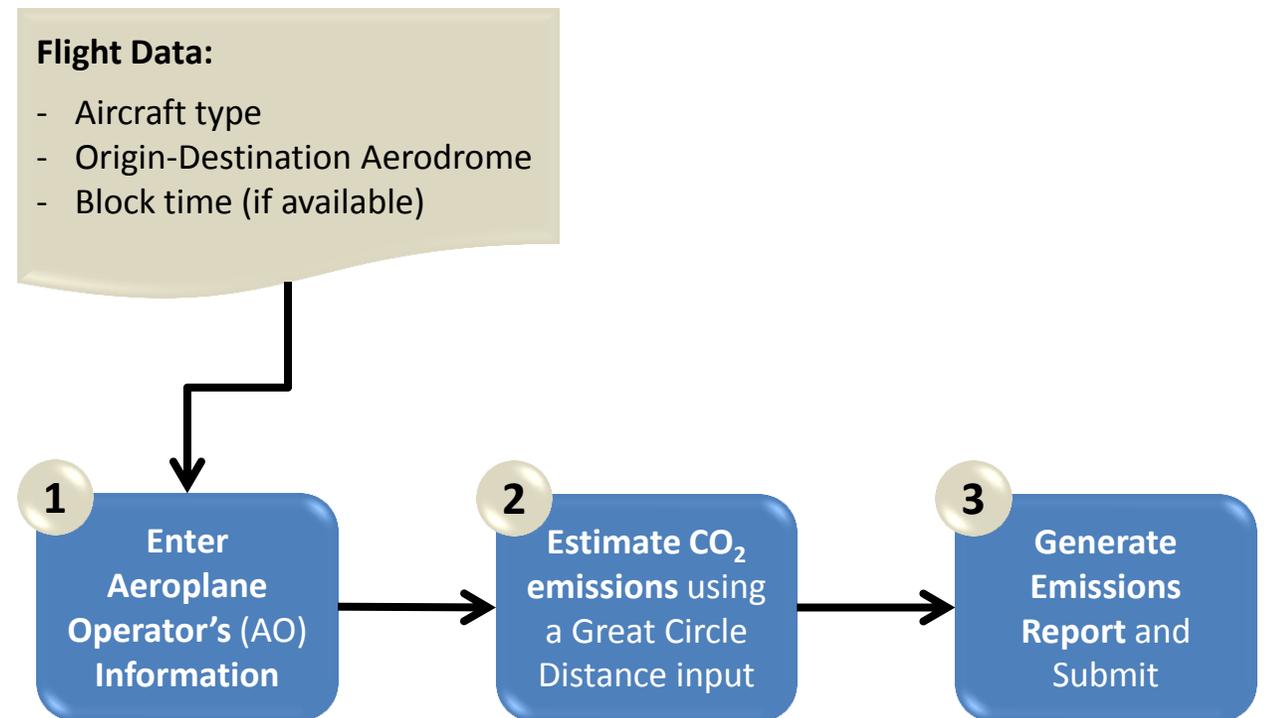
The CERT comprises a three-step process

(1) Entering Aeroplane Operator's Basic Information

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

- a) Aeroplane Type by ICAO Type Designator
- b) Origin-Destination Aerodrome
- c) 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

Prototype - Under Development - DO NOT DISTRIBUTE

CORSIA CO₂ Estimation & Reporting Tool (CERT) Version 2018 (v1.0)

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 9303 Volume I) 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.

d) Aircraft Identification of the Aeroplane Operator for international flights (Item 7 of the flight plan)
Select one of the three options below for reporting flight attribution under the CORSIA in item 7 of the flight plan.

ICAO Designator
Does Item 7 (aircraft identification) of the flight plan begin with an ICAO Designator according to ICAO Document 8555, Designators for Aircraft Operating Agencies, Aeronautical Authorities and Services, if yes, please select "ICAO Designator" from the drop down list and complete d2).

Registration Marks
Does Item 7 (aircraft identification) of the flight plan correspond to the registration mark or registration mark, as explicitly stated in an AOC (or equivalent) if yes, select "Registration Marks" from the drop down list and complete d3).

Emissions Monitoring Plan Code
Does Item 7 (aircraft identification) of the flight plan correspond to the code included in this EMP without AOC (or equivalent)? A "code" is an ICAO Designator, the registration mark and registration mark of an aeroplane, a three letters code equivalent to a registration mark, or though not included in the ICAO Document 8555, or any group of letters, figures or a combination thereof that the Aeroplane Operator has used in Item 7 of the flight plan of a flight falling under the CORSIA. If yes, please select "Emissions Monitoring Plan Code" from the drop down list, please use the list below (if applicable) for the list of Registration marks d3).

d1) Responsibility under the CORSIA

d2) ICAO designator
Provide ICAO designator (or Designators) used for Air Traffic Control purposes, as listed in ICAO Document 8555 (Designators for Aircraft Operating Agencies, Aeronautical Authorities and Services), if the Aeroplane Operator is an ICAO Designator(s).

d3) Registration Marks
Provide the registration mark (or marks) used for the aeroplane, as listed in ICAO Document 8555 (Designators for Aircraft Operating Agencies, Aeronautical Authorities and Services), if the Aeroplane Operator is an ICAO Designator(s).

d4) 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.

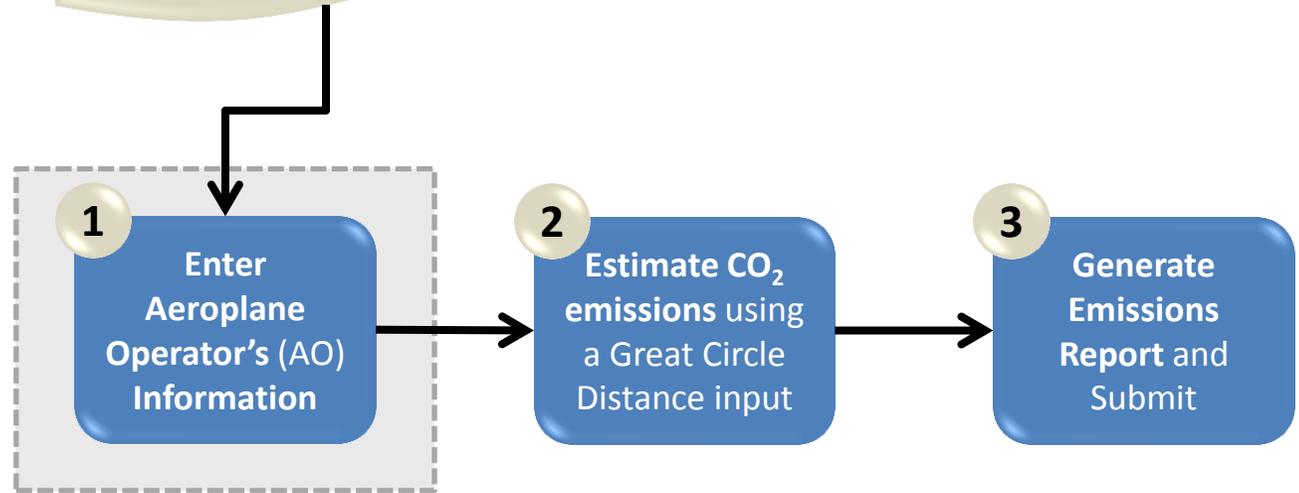
e4) Competent authority for the AOC
Please enter the address of the authority that issued the AOC.

Click to Main Page

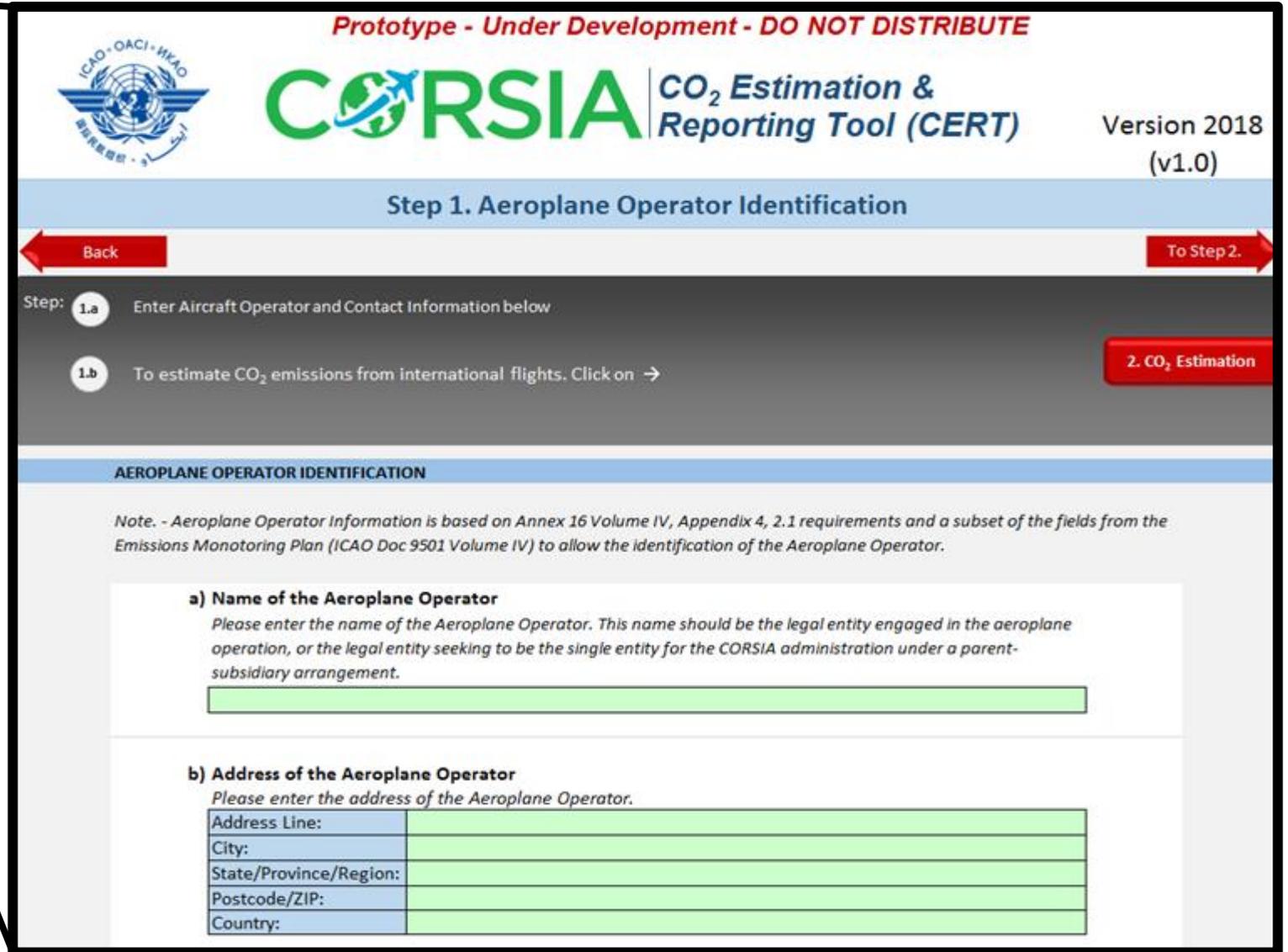
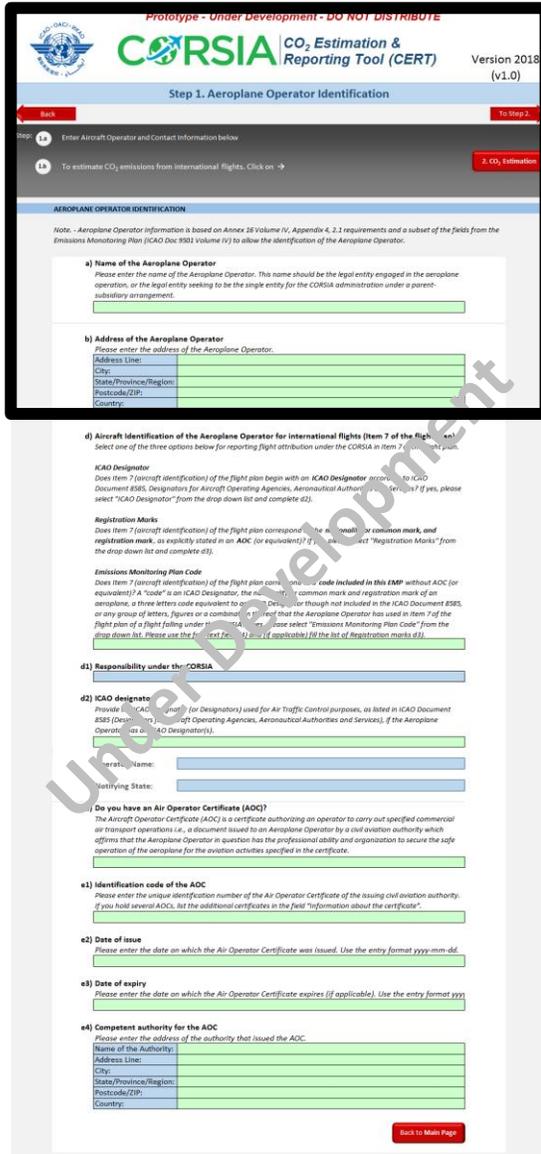
STEP 1

Flight Data:

- Aircraft type
- Origin-Destination Aerodrome
- Block time (if available)



How does the CERT work? – Step 1



How does the CERT work? – Step 1

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CORSIA CO₂ Estimation & Reporting Tool (CERT) Version 2018 (v1.0)

Step 1. Aeroplane Operator Identification

Back To Step 2

Step 1: Enter Aircraft Operator and Contact Information below

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 9953 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 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.

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

d) Aircraft Identification of the Aeroplane Operator for international flights (Item 7 of the flight plan)
Select one of the three options below for reporting flight attribution under the CORSIA in item 7 of the flight plan.

ICAO Designator
Does Item 7 (aircraft identification) of the flight plan begin with an ICAO Designator according to ICAO Document 8585, Designators for Aircraft Operating Agencies, Aeronautical Authorities and Services? If yes, please select "ICAO Designator" from the drop down list and complete d2).

Registration Marks
Does Item 7 (aircraft identification) of the flight plan correspond to the nationality or common mark, and registration mark, as explicitly stated in an AOC (or equivalent)? If yes, please select "Registration Marks" from the drop down list and complete d3).

Emissions Monitoring Plan Code
Does Item 7 (aircraft identification) of the flight plan correspond to a code included in this EMP without AOC (or equivalent)? A "code" is an ICAO Designator, the nationality or common mark and registration mark of an aeroplane, a three letters code equivalent to an ICAO Designator though not included in the ICAO Document 8585, or any group of letters, figures or a combination thereof that the Aeroplane Operator has used in Item 7 of the flight plan of a flight falling under the CORSIA. If yes, please select "Emissions Monitoring Plan Code" from the drop down list. Please use the free text field d4) and (if applicable) fill the list of Registration marks d3).

d1) Responsibility under the CORSIA

d2) ICAO designator
Provide the ICAO Designator (or Designators) used for Air Traffic Control purposes, as listed in ICAO Document 8585 (Designators for Aircraft Operating Agencies, Aeronautical Authorities and Services), if the Aeroplane Operator has an ICAO Designator(s).

Operator Name:
Notifying State:

Click to Main Page

d) Aircraft Identification of the Aeroplane Operator for international flights (Item 7 of the flight plan)
Select one of the three options below for reporting flight attribution under the CORSIA in Item 7 of the flight plan.

ICAO Designator

Does Item 7 (aircraft identification) of the flight plan begin with an ICAO Designator according to ICAO Document 8585, Designators for Aircraft Operating Agencies, Aeronautical Authorities and Services? If yes, please select "ICAO Designator" from the drop down list and complete d2).

Registration Marks

Does Item 7 (aircraft identification) of the flight plan correspond to the nationality or common mark, and registration mark, as explicitly stated in an AOC (or equivalent)? If yes, please select "Registration Marks" from the drop down list and complete d3).

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Operator Name:

Notifying State:

How does the CERT work? – Step 1

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Step 1. Aeroplane Operator Identification

Back To Step 2

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 9933 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
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d) Aircraft Identification of the Aeroplane Operator for international flights (Item 7 of the flight plan)
Select one of the three options below for reporting flight attribution under the CORSIA in item 7 of the flight plan.

ICAO Designator
Does item 7 (aircraft identification) of the flight plan begin with an ICAO Designator according to ICAO Document 8585, Designators for Aircraft Operating Agencies, Aeronautical Authorities and Services, Part 1? If yes, please select "ICAO Designator" from the drop down list and complete d2).

Registration Marks
Does item 7 (aircraft identification) of the flight plan correspond to the registration mark, or registration mark and registration mark, as explicitly stated in an AOC (or equivalent) or "AOC" Registration Marks" from the drop down list and complete d3).

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Secretariat Name

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

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

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STEP 2

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CORSIA CO₂ Estimation & Reporting Tool (CERT) Version 2018 (v1.0)

Step 2. CO₂ Emissions Estimation

← Back to Step | To Step 3 →

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

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

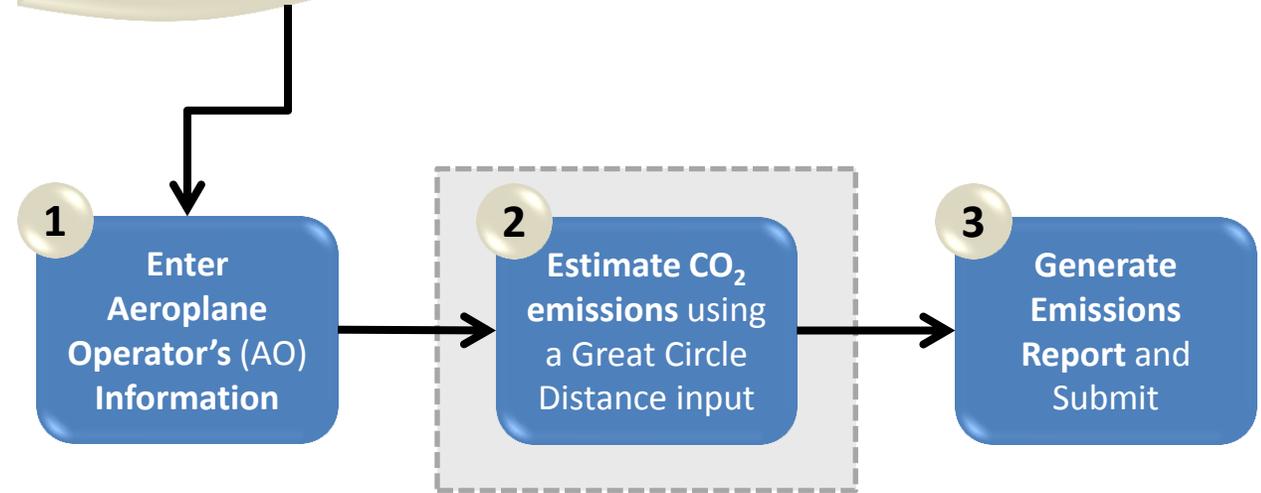
2.d After computing CO₂ Emissions, generate a summary assessment of applicability of CORSIA and eligibility to use the CERT in 2019. Click on →

Buttons: Import Input File (.csv), Calculate CO₂ Emissions, 3. Generate Summary Assessment

INPUT						OUTPUT		
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

Flight Data:

- Aircraft type
- Origin-Destination Aerodrome
- Block time (if available)



How does the CERT work? – Step 2

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CORSIA CO₂ Estimation & Reporting Tool (CERT) Version 2018 (v1.0)

Step 2. CO₂ Emissions Estimation

Back to Step To Step 3

Step: 2.a Collect flight information (aircraft type, aerodromes of origin and destination) for all flights during the relevant time period.
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Import Input File (.csv)
 Calculate CO₂ Emissions
 2.c After entering input, compute CO₂ Emissions. Click on →
 2.d After computing CO₂ Emissions, generate a summary assessment of applicability of CORSIA and eligibility to use the CERT in 2019. Click on →

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

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CORSIA CO₂ Estimation & Reporting Tool (CERT) Version 2018 (v1.0)

Step 2. CO₂ Emissions Estimation

Back to Step To Step 3

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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
		BCS3	100			
		SUS5	100			
		E190	100			
		B789	100			
		A359	100			
		AT72	100			

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CORSIA CO₂ Estimation & Reporting Tool (CERT) Version 2018 (v1.0)

Step 2. CO₂ Emissions Estimation

Back to Step To Step 3

Step: 2.a Collect flight information (aircraft type, aerodromes of origin and destination) for all flights during the relevant time period.
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 2.c After entering input, compute CO₂ Emissions. Click on →
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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
		BCS3	100	1,697	1,998	Yes
		SUS5	100	1,772	1,726	Yes
		E190	100	1,903	1,843	No (Domestic)
		B789	100	6,481	13,197	Yes
		A359	100	12,217	31,125	Yes
		AT72	100	968	473	Yes

* Illustrative numbers/data

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

How does the CERT work? – Step 2

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CORSIA CO₂ Estimation & Reporting Tool (CERT) Version 2018 (v1.0)

Step 2. CO₂ Emissions Estimation

Back to Step To Step 3

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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

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CORSIA CO₂ Estimation & Reporting Tool (CERT) Version 2018 (v1.0)

Step 2. CO₂ Emissions Estimation

Back to Step To Step 3

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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

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CORSIA CO₂ Estimation & Reporting Tool (CERT) Version 2018 (v1.0)

Step 2. CO₂ Emissions Estimation

Back to Step To Step 3

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* Illustrative numbers/data

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
BCS3	EGKK	EVRA	100			
SU95	MMMM	MUHA	100			
E190	KJFK	KMSY	100			
B789	HKJK	LFPG	100			
A359	SBGR	OMDB	100			
AT72	NFFN	NVVV	100			

How does the CERT work? – Step 2

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CORSIA CO₂ Estimation & Reporting Tool (CERT) Version 2018 (v1.0)

Step 2. CO₂ Emissions Estimation

Back to Step | To Step 3

Step: 2.1 Collect flight information (aircraft type, aerodromes of origin and destination) for all flights during the relevant time period.
 Step: 2.2 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.
 Step: 2.3 After entering input, compute CO₂ Emissions. Click on →
 Step: 2.4 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

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CORSIA CO₂ Estimation & Reporting Tool (CERT) Version 2018 (v1.0)

Step 2. CO₂ Emissions Estimation

Back to Step | To Step 3

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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
		BCS3	100	1,697	1,998	Yes
		SU95	100	1,772	1,726	Yes
		E190	100	1,903	1,843	No (Domestic)
		B789	100	6,481	13,197	Yes
		A359	100	12,217	31,125	Yes
		AT72	100	968	473	Yes

Prototype - Under Development - DO NOT DISTRIBUTE

CORSIA CO₂ Estimation & Reporting Tool (CERT) Version 2018 (v1.0)

Step 2. CO₂ Emissions Estimation

Back to Step | To Step 3

Step: 2.1 Collect flight information (aircraft type, aerodromes of origin and destination) for all flights during the relevant time period.
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		A359	100	12,217	31,125	Yes
		AT72	100	968	473	Yes

* Illustrative numbers/data

INPUT *				OUTPUT *		
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B789	HKJK	LFPG	100	6,481	13,197	Yes
A359	SBGR	OMDB	100	12,217	31,125	Yes
AT72	NFFN	NVVV	100	968	473	Yes

How does the CERT work? – Step 3

STEP 3

Prototype - Under Development - DO NOT DISTRIBUTE

CORSIA CO₂ Estimation & Reporting Tool (CERT), Version 2018 (v1.0)

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

Back to Step

Step 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.

- If complete and accurate, generate a pdf copy of the assessment by clicking on → **Generate Copy of Summary Assessment**
- Save a copy for your records. Aeroplane Operator can submit to the 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

42) ICAO designator

e1) Identification code of the AOC

e4) 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 Fuel Consumption (International): t CO₂ Note - Emissions are for all International State Pairs. For the 2022 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).

Total Annual Estimated CO₂ Emissions (Domestic): t CO₂ Note - Domestic aviation is outside the scope of applicability of Annex 16 Volume IV. Information 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 (Annex 16 Volume IV Chapter 2) Yes

Aeroplane Operator eligible to use: ICAO CORSIA CERT

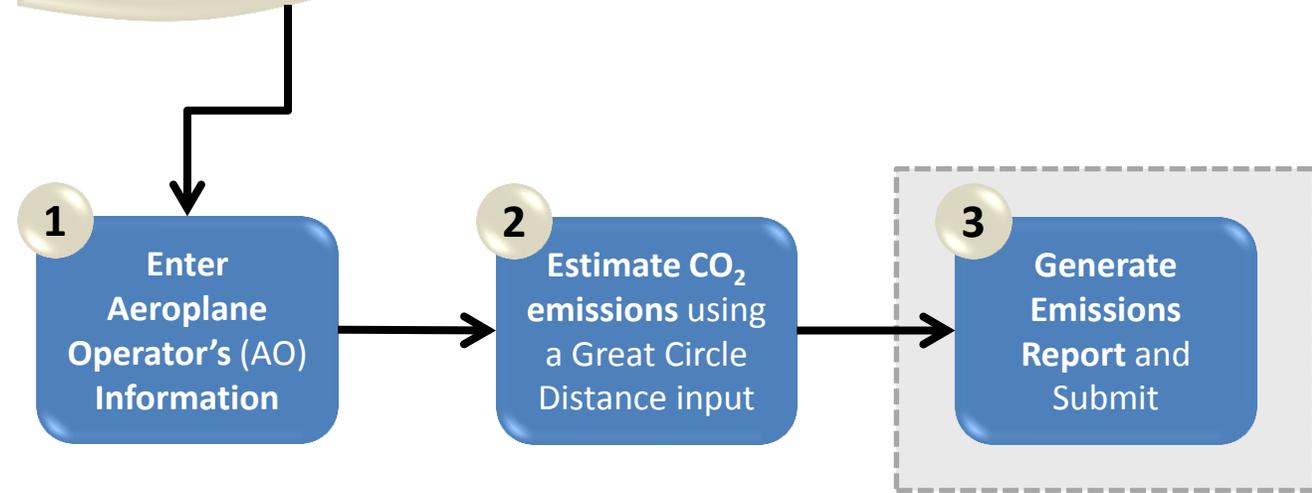
Fuel Use Monitoring Method Yes Note - For details on Fuel Use Monitoring Methods refer to Annex 16 Volume IV Chapter 2 and Appendix 2 and ETM Volume IV.

C Detailed Estimated CO₂ Emissions by State Pairs

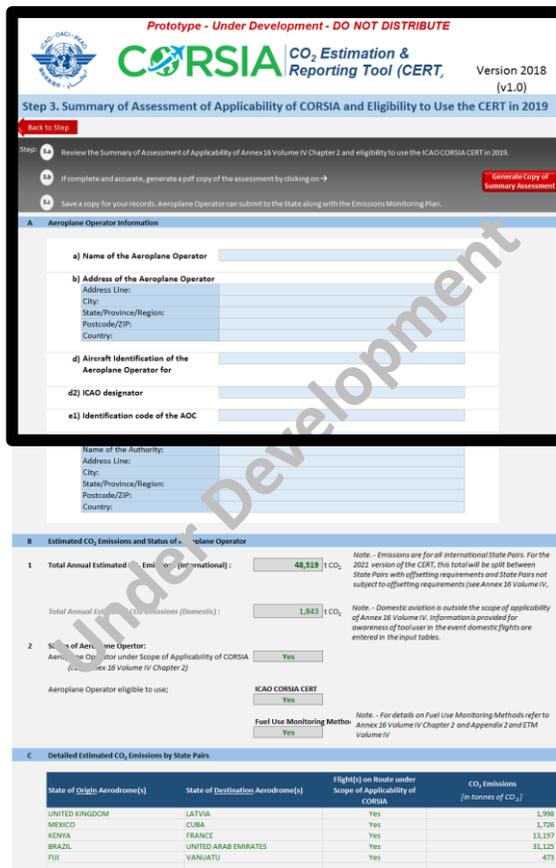
State of Origin Aerodrome(s)	State of Destination Aerodrome(s)	Flight(s) on Route under Scope of Applicability of CORSIA	CO ₂ Emissions (in tonnes of CO ₂)
UNITED KINGDOM	LATVIA	Yes	1,998
MEXICO	CUBA	Yes	1,726
KIRIVA	FRANCE	Yes	13,297
BRAZIL	UNITED ARAB EMIRATES	Yes	31,325
FJI	VANUATU	Yes	473

Flight Data:

- Aircraft type
- Origin-Destination Aerodrome
- Block time (if available)



How does the CERT work? – Step 3



Prototype - Under Development - DO NOT DISTRIBUTE

CO₂ Estimation & Reporting Tool (CERT)

Version 2018
(v1.0)

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

Back to Step

Step: 3.a 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.b If complete and accurate, generate a pdf copy of the assessment by clicking on →

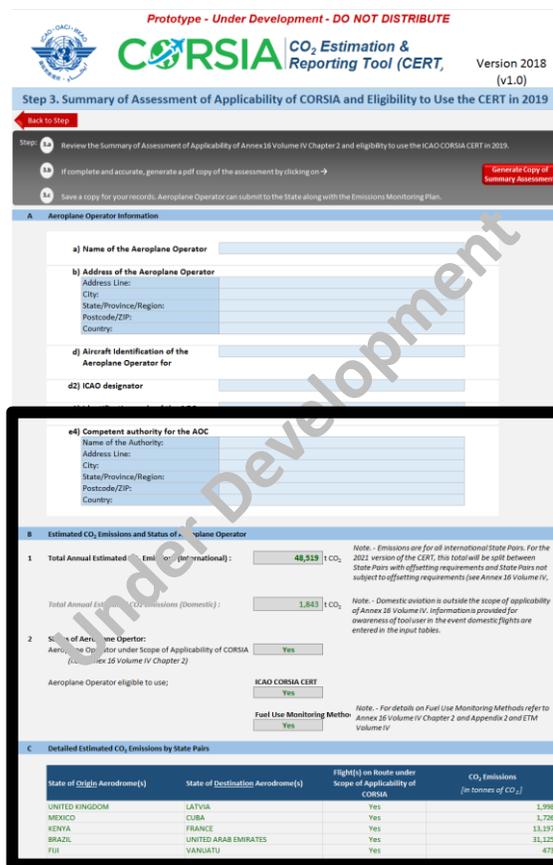
3.c Save a copy for your records. Aeroplane Operator can submit to the State along with the Emissions Monitoring Plan.

Generate Copy of Summary Assessment

A Aeroplane Operator Information

a) Name of the Aeroplane Operator	<input style="width: 90%;" type="text"/>
b) Address of the Aeroplane Operator	
Address Line:	<input style="width: 90%;" type="text"/>
City:	<input style="width: 90%;" type="text"/>
State/Province/Region:	<input style="width: 90%;" type="text"/>
Postcode/ZIP:	<input style="width: 90%;" type="text"/>
Country:	<input style="width: 90%;" type="text"/>
d) Aircraft Identification of the Aeroplane Operator for	<input style="width: 90%;" type="text"/>
d2) ICAO designator	<input style="width: 90%;" type="text"/>
e1) Identification code of the AOC	<input style="width: 90%;" type="text"/>

How does the CERT work? – Step 3



e4) 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 *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) : 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)*

Aeroplane Operator eligible to use;

Fuel Use Monitoring Method *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]
UNITED KINGDOM	LATVIA	Yes	1,998
MEXICO	CUBA	Yes	1,726
KENYA	FRANCE	Yes	13,197
BRAZIL	UNITED ARAB EMIRATES	Yes	31,125
FIJI	VANUATU	Yes	473

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 (online & for download)**
(expected in July 2018)





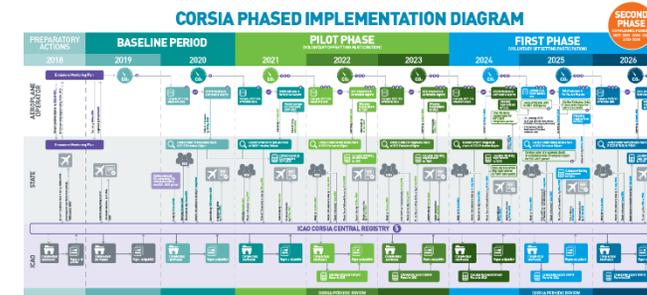
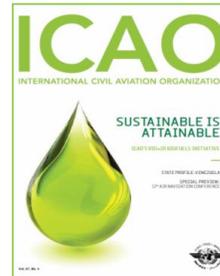
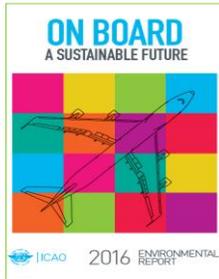
And now a live demo of the CERT



ICAO

CORSIA - CERT

Thank you!



For more information, please visit our website: <http://www.icao.int/env>