



ICAO

ENVIRONMENT

ICAO Seminar on CORSIA

Illustrative Exercise 3: Development of CORSIA CO₂ Emissions Report

ICAO Secretariat



Exercise 3 – Introduction and Assumption

Introduction:

Assumption Tables 5 and 6 provide information regarding the routes operated by Aircraft Operator B2 and respective CO₂ emissions in selected years and the aircraft used for these operations.

Now, the time for emissions reporting has come, and the State Authority needs to review the information submitted by the Aircraft Operator B2 in the Annual Emissions Report, which includes inconsistencies and errors compared to the actual operations.

Assumption:

Assumption Table 5: Information on the routes operated by Aircraft Operator B2 and respective CO₂ emissions in selected years (excerpt from Assumption Table 2 in Exercise 1-A)

State	Airline	From	To	CO ₂ (2019)	CO ₂ (2020)	CO ₂ (2021)	CO ₂ (2024)
B	B2	B	G	54	59	63	80
B	B2	B	H	54	59	63	80
B	B2	B	I	54	59	63	80
B	B2	B	J	54	59	63	80

Note: CO₂ emissions with green-highlights are from routes covered by CORSIA; CO₂ emissions with red-highlights are from routes not covered by CORSIA)

Assumption Table 6: Aircraft types and registration marks operated by Aircraft Operator B2

Aircraft type	Aircraft registration number
B744	B-BCDE
B744	B-BCXX
A320	B-DEFG
A320	B-EFYY

Exercise 3 / Instruction

Based on the actual information in Assumption Tables 5 and 6: Identify 6 inconsistencies/errors contained in the Annual Emissions Report below, compared to the Aircraft Operator B2's actual operations, with reasons.

#	Inconsistency/error	Reason
1		
2		
3		
4		
5		
6		

ANNUAL EMISSIONS REPORT

1. information on Aircraft Operator

A Aircraft Operator name

B Reporting year

2. Fleet and Operations Data

A Aircraft types, number of aircraft and registration numbers that have been used for international operations during the reporting period

Aircraft type	Registration marks
B744	B-BCDE
B744	B-CDEF
A340	B-DEFG
A320	B-EFYY

B Fuel(s) used during the reporting period

3. Emissions Information

A Total CO₂ emissions from international aviation (t CO₂)

B Total CO₂ emissions covered by CORSIA (t CO₂)

C Number of flights by country pair

State of origin	State of arrival	Number of flights	Route covered by CORSIA?
B	G	25	No
B	H	25	No
B	I	25	Yes
B	J	25	No

D CO₂ emissions by country pair

State of origin	State of arrival	CO ₂ emissions	Route covered by CORSIA?
B	G	80	No
B	H	80	No
B	I	80	Yes
B	J	80	No

Exercise 3 / Solution

Based on the actual information in Assumption Tables 5 and 6: Identify 6 inconsistencies/errors contained in the Annual Emissions Report below, compared to the Aircraft Operator B2's actual operations, with reasons.

#	Inconsistency/error	Reason
1	2.A:B744: wrong registration mark	Wrong/not updated fleet information, typo
2	2.A: B-DEFG: wrong a/c type	Wrong/not updated fleet information, typo
3	3.A: Total CO ₂ emissions from international aviation (t CO ₂) not correct	Not all routes from section 3.D have been summed up
4	3.B: Total CO ₂ emissions to be offset under the CORSIA not correct	Not all routes covered by CORSIA are included into the calculation
5	3.C: Number of flights: Route B-G should be covered by CORSIA	Outdated information regarding the participating States
6	3.D: CO ₂ emissions: Route B-G should be covered by CORSIA	Outdated information regarding the participating States

ANNUAL EMISSIONS REPORT

1. information on Aircraft Operator

A Aircraft Operator name

B Reporting year

2. Fleet and Operations Data

A Aircraft types, number of aircraft and registration numbers that have been used for international operations during the reporting period

Aircraft type	Registration marks
B744	B-BCDE
B744	B-CDEF (should be B-BCXX)
A340 (should be A320)	B-DEFG
A320	B-EFYY

B Fuel(s) used during the reporting period

3. Emissions Information

A Total CO₂ emissions from international aviation (t CO₂)

B Total CO₂ emissions covered by CORSIA (t CO₂)

C Number of flights by country pair

State of origin	State of arrival	Number of flights	Route covered by CORSIA?
B	G	25	No (should be Yes)
B	H	25	No
B	I	25	Yes
B	J	25	No

D CO₂ emissions by country pair

State of origin	State of arrival	CO ₂ emissions	Route covered by CORSIA?
B	G	80	No (should be Yes)
B	H	80	No
B	I	80	Yes
B	J	80	No