EASA
European Union Aviation Safety Agency

EU-CORSIA
Africa & Caribbean

This project is funded by the European Union
and implemented by EASA.

EU CORSIA Africa and Caribbean

REGIONAL WORKSHOP

CORSIA IMPLEMENTATION AFTER ICAO 41st GENERAL ASSEMBLY

Group Exercise

Working for quieter and cleaner aviation.

Johannesburg, 10-12 May 2023

Your safety is our mission.

Instructions

- You have 25 minutes to answer 5 questions
- Discuss with your team and write in a paper your answers
- We will review each question and will clarify any doubt

Question 1

ICAO published the value of the Baseline for 2021 as being: 341,380,188 tn CO2.

Given that the total 2021 CO2 emissions for all State pairs subject to offsetting requirements based on the participation of 88 States for 2021 was: 167,142,002 tn CO2, the Sector Growth Factor has been 0.

The baseline for the calculation of the Sector Growth Factor for 2022 will be?:

a) 341,380,188 tn CO2

b) The total 2019 CO2 emissions for all State pairs subject to offsetting requirements in 2022 based on the participation of 107 States

c) 85% of 341,380,188 tn CO2

Question 2

In March 2022 Zimbabwe notified its decision to voluntarily participate in CORSIA. Therefore:

a) All routes from and to Zimbabwe are covered by offsetting requirements from 2023 only for aeroplane operators administered by Zimbabwe

b) All routes from and to Zimbabwe to other countries participating in CORSIA from 2023 are covered by offsetting requirements

c) All routes from and to Zimbabwe to other countries participating in CORSIA during the pilot phase (2021-2023) are covered by offsetting requirements

Question 3

For 2027 (start of the compulsory phase) the aeroplane operator reports 200,000tn CO2 from all their international flights. 80% of these emissions are from routes with offsetting requirements.

Given the following data, please calculate the offsetting requirements for this operator for 2027

Baseline for 2027: 410 Mt CO2

Total annual CO_2 Emissions aggregated for all aeroplane operators on each State pair

State Pair	2027 CO_2 emissions (tonnes) (Hypothetical)	
	Subject to offsetting requirements	Not subject to offsetting requirements
Total aggregated	*550,000,000*	*110,000,000*

Question 4

Why is the Baseline in 2027 in question 3 higher than the Baseline as referred in question 1?

a) Because it is expected that there will be more States joining CORSIA in 2027 due to the start of the compulsory phase and the baseline will be adjusted accordingly

a) Because the emissions of the 88 States referred to in question 1 are expected to grow by 2027

Question 5

An aeroplane operator is using CEF in the year 2023 and claims its use and emissions reductions in the 2023 CORSIA emissions report. The operator's offsetting requirements for 2021-2023 is 1000 tn CO2. The volume of CEF it has purchased is 100 tonnes of a 50% blend (jet A1) produced using HEFA conversion process from used cooking oil (UCO). The Lsf of this fuel is 13.9 gCO2e/MJ. **Assuming the fuel complies with all the CEF sustainability requirements and that it is correctly reported by the operator, how much will its final offsetting requirements be?**

a) 1000 tn, since the operator cannot declare the use of CEF during the pilot phase

b) 867 tn CO2 because it can claim a reduction of 133tn CO2

c) 842 tn CO2 because it can claim a reduction of 158tn CO2 because the neat part of the CEF is considered as reducing 100% emissions

ANSWERS

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Question 3

Sector Growth: 550,000,000 – 410,000,000/ 550,000,000= 0,2545

Emissions with Offsetting requirements: 80% of 200,000= 160,000

Offsetting requirements calculation for the operator: 160,000 x 0,2545= 40,720

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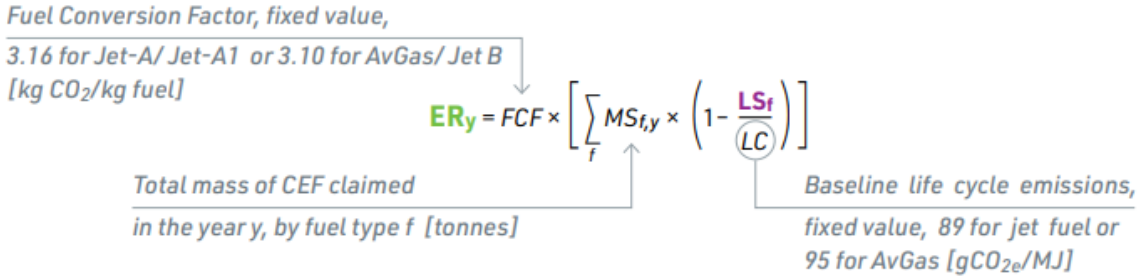
Explanation Question 5



Total offsetting in 2023= 1000 – ER_{2023}

ER_{2023}= 3.16 X [(100 X 0.5) X 1 – (13.9/89)] = 133.32

Therefore, total offsetting = 1000 – 133.32 = 866.68 tonnes

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End

Thank you for your attention

Working for quieter and cleaner aviation.

Your safety is our mission.

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