CIVIL AVIATION AUTHORITY OF NEPAL
FLIGHT SAFETY STANDARDS DEPARTMENT
AIRWORTHINESS INSPECTION DIVISION

Order of magnitude checklist for Emissions Report

Name of Air Operator	
Address	
AOC Reference	
EMP Approval Reference and Date	
EMP Version	
Name of Verification Body	
Address	
Verification Body Approval Certificate Reference	
Reporting Year	
CORSIA Focal Point	

S.No.	Question/Issue	Additional information	Status: OK/Yes/No/ Not Applicable	Notes and results of checks
I.	**Aeroplane operator**			
1.	Aeroplane operator/verification body both separately submit Emissions Report and Verification Report. Is the content of both submissions identical?	Minimum check: reported fuel consumption and number of flights. Get back to aeroplane operator in case of deviations.		
2.	Is the name of the aeroplane operator given and unambiguous?	Ensure unambiguous identification of aeroplane operator. Get back to aeroplane operator in case of uncertainties.		
3.	Is there a valid ICAO Designator for aeroplane operating agencies? Does it have the correct character length?	Ensure unambiguous identification of aeroplane operator. Get back to aeroplane operator in case of uncertainties.		
4.	Basic information (address, AOC, etc.) plausible?	Ensure unambiguous identification of aeroplane operator. Get back to aeroplane operator in case of uncertainties.		
5.	Has the aeroplane operator correctly identified CAAN?	If there is indication of another State being in charge, get back to relevant State and aeroplane operator.		
6.	Has the Emissions Report been submitted in due time?			
7.	Are the documents submitted complete? Any blank boxes? Verification Report included?	If not, contact aeroplane operator.		
8.	Does the verification body's Verification Report contain	Verification body's indications have to be paid special attention. If they		

	special indications to follow up on?	have an impact on the amount of emissions, get back to aeroplane operator.		
9.	Other defects/comments?			
II.	**Emissions Report information**			
10.	Has the latest Emissions Report template version been used?	Ensures capturing and reporting fuel consumption according to latest requirements.		
11.	Date of creation of Emissions Report within the underlying reporting period?	If so, there is the risk of incomplete reporting of flight data. End of year flights might be missing.		
12.	Requirement to report?	Check of threshold for annual CO_2 emissions from international flights are greater than 10,000 tonnes.		
13.	Are there any State pairs reported which are subject to offsetting requirements?	If so, in-depth investigation of these reported State pairs.		
14.	Has the Emissions Report been verified?	If verification is missing, get back to aeroplane operator and request verification of Emissions Report.		
15.	Has the Emissions Report been created on the basis of an Emissions Monitoring Plan which is available to CAAN?	If not, Emissions Monitoring Plan version used by aeroplane operator should be requested. Verification body notes should be considered.		
16.	Is the underlying Emissions Monitoring Plan approved by CAAN?	If not, investigate reason. Check and approve Emissions Monitoring Plan. It has to be ensured that the number of flights and fuel quantity are monitored completely.		

17.	Are any collateral clauses part of the approval of the Emissions Monitoring Plan?	If so, implementation has to be tracked and checked.		
18.	Have thresholds of approved Fuel Use Monitoring Methods been exceeded? Is the use of simplified procedure permissible?	In case of inappropriate deviation resulting in lower accuracy, get back to aeroplane operator.		
19.	Is there any deviation in capturing CO_2 emissions in relation to the approved Emissions Monitoring Plan?	Mainly data flow and monitoring method have to be checked in depth. Refer to the Verification Report.		
20.	If there is a deviation from approved Emissions Monitoring Plan, is it described accurately?	Is the deviation traceable? Did it lead to any material changes?		
21.	If applicable, how does the Verification Report assess deviations from the approved Emissions Monitoring Plan?	Has the verification body investigated and specified any deviation in its Verification Report?		
22.	In case of deviations, is reapproval of Emissions Monitoring Plan necessary?	If so, aeroplane operator has to be requested to amend Emissions Monitoring Plan and submit for approval.		
23.	Is the amount of reported CO_2 emissions roughly plausible?	Individual corresponding parameters like e.g. aeroplane activity and size of aeroplane fleet in relation to amount of emissions have to be considered and cross-checked.		
24.	Is the number of flights plausible?	Individual corresponding parameters like e.g. aeroplane activity and size of aeroplane fleet in relation to air activity have to be considered and cross-checked.		

25.	Other defects/comments?			
III.	**Aeroplane fleet**			
26.	Aeroplane fleet complete and plausible?	If applicable, cross-check with available data sources (e.g. website of aeroplane operator or public databases). Cross-check, if size of aeroplane fleet fits to reported aeroplane activities.		
27.	Have registration marks been indicated multiple times?	If so, get back to aeroplane operator.		
28.	Other defects/comments?			
OPTION 1 State pairs				
29.	Are the data sets complete?	Incomplete data sets have to be clarified by aeroplane operator.		
30.	Is the given information regarding number of flights plausible?	Does aeroplane operator report a noticeable small number of flights on typical destinations of the airline?		
31.	Are the types of fuel reported plausible and contained in Emissions Monitoring Plan?	Since emissions factor is fuel type-specific, deviation might lead to implausible amount of calculated emissions.		
32.	Generally, is the reported fuel consumption plausible?	In this regard, historical data should be consulted for plausibility checks.		
33.	Have outbound and inbound flight been reported separately?	Outbound and inbound flight have to be reported separately. Aggregation is not possible. In case of uncertainty get back to aeroplane operator.		
34.	In case of usage of multiple fuel types on a certain State pair, has	In this case State pairs have to be reported		

	an appropriate number of State pairs been reported?	corresponding to the amount of different types of fuels. Aggregation is not possible. In case of uncertainties get back to aeroplane operator.		
35.	Is classification of State pairs in regard to offsetting requirements correct?	In general, the reporting template generates the classification automatically. However, checking is recommended.		
36.	State pairs with equal type of fuel listed multiple times?	In this case only one State pair has to be reported. The amounts have to be summed up. Get back to aeroplane operator if necessary.		
37.	Departure and destination in the same State?	If yes, get back to aeroplane operator to reinsure.		
38.	Are there State pairs with more than 250 tonnes average fuel consumption per flight?	Calculation is: fuel consumption of respective State pair divided by number of flights. In case of fuel consumption greater than 250 tonnes per flight get back to aeroplane operator. This refers to all reported State pairs.		
39.	Are there State pairs with less than 2.5 tonnes of fuel consumption per flight?	Calculation is: fuel consumption of respective State pair divided by amount of flights. In case of fuel consumption below 2.5 tonnes per flight get back to aeroplane operator. This refers to all reported State pairs.		
40.	Random calculation of average fuel consumption per flight (per State pair) and comparison with	The ICAO CORSIA CERT should be consulted for cross-checks. Typically used aeroplane type can be obtained from public flight		

	typical average consumption from the ICAO CORSIA CERT.	tracking data bases or official flight plans of the aeroplane operator.		
41.	Other defects/comments?			
OPTION 2 Aerodrome pairs				
42.	Are the data sets complete?	Incomplete data sets have to be clarified by aeroplane operator.		
43.	Is the given information regarding number of flights plausible?	Does aeroplane operator report a noticeable small number of flights on typical destinations of the airline?		
44.	Are the types of fuel reported plausible and contained in Emissions Monitoring Plan?	Since emissions factor is fuel type-specific, deviation might lead to implausible amount of calculated emissions.		
45.	Have outbound and inbound flights between two aerodromes been reported separately?	Outbound and inbound flights have to be reported separately. Aggregation is not possible. In case of uncertainty get back to aeroplane operator.		
46.	In case of usage of multiple fuel types on a certain aerodrome pair, has an appropriate number of State pairs been reported?	In this case aerodrome pairs have to be reported corresponding to the amount of different type of fuels. Aggregation is not possible. In case of uncertainties get back to aeroplane operator.		
47.	Is the classification of aerodrome pairs as regards offsetting requirements correct?	In general, the reporting template generates the classification automatically. However, checking is recommended.		
48.	Have aerodrome pairs with equal type of fuel listed multiple times?	In this case only one aerodrome pair has to be reported. The amounts		

		have to be summed up. Get back to aeroplane operator if necessary.		
49.	Plausibility check: departure and destination in the same State?	If yes, plausibility check and get back to aeroplane operator to clarify if aeroplane operator's intention was to report another aerodrome pair.		
50.	Does the aeroplane operator report more than 3,500 flights on an aerodrome pair?	If so, get back to aeroplane operator to check plausibility.		
51.	Are there aerodrome pairs with more than 250 tonnes fuel consumption per flight?	Calculation is: fuel consumption of respective aerodrome pair divided by amount of flights. In case of fuel consumption greater than 250 tonnes per flight contact aeroplane operator. This refers to all reported aerodrome pairs.		
52.	Are there aerodrome pairs with a fuel consumption of less than 2.5 tonnes per flight?	Calculation is: fuel consumption of respective aerodrome pair divided by amount of flights. In case of fuel consumption less than 2.5 tonnes per flight get back to aeroplane operator. This refers to all reported aerodrome pairs.		
53.	Random calculation of average fuel consumption per flight (per aerodrome pair) and comparison with typical average consumption from the ICAO CORSIA CERT.	The ICAO CORSIA CERT should be consulted for cross-checks. Typically used aeroplane type can be obtained from public flight tracking data bases or official flight plans of the aeroplane operator.		
54.	Other defects/comments?			

IV.	**Data gaps**			
55.	Did data gaps occur during the reporting year?	If yes, detailed assessment of CAAN required.		
56.	Is the applicable threshold of 5 per cent for significant data gaps exceeded?	If yes, which explanations have been provided by the verification body and the aeroplane operator?		
57.	Has the operator closed/completed data gaps according to the Emissions Monitoring Plan?	A comparison with the method described in the Emissions Monitoring Plan must be carried out.		
58.	Have data gaps been closed even though secondary data were available?	If secondary data is available, this data has to be used to close data gaps.		
59.	Is the estimated fuel consumption plausible?	The ICAO CORSIA CERT can be used to perform random checks.		
60.	Did the operator indicate that data gaps occurred during the reporting year, but did not report data gaps?	If so, get back to aeroplane operator.		
61.	Other defects/comments?			
V.	**Verification body**			
62.	Does the verification body have a valid accreditation?	A comparison with the published list of ICAO must be carried out. The verification body will be accredited. Otherwise, the Emissions Report does not meet the requirements of CAAN CORSIA Requirements.		
63.	Have all the indications and notes of the verification body been considered?	It is important to pay close attention to the details given in the Verification Report.		

64.	Are there any negative assessments from the verification body?	If so, check whether the issues identified affect the amount of reported emissions.		
65.	Has the verification body not issued a statement, or issued a negative verification statement? Is the report verified as “not satisfactory”?	The reasons must be examined in depth. Contact the aeroplane operator.		
66.	Was the verification statement issued during the underlying reporting period already?	If so, the reasons have to be clarified with the verification body. It is necessary to check whether the verification body verified the entire reporting year.		
67.	Has the verification body issued a satisfactory verification opinion with comments?	The verification comments must be examined in depth.		
68.	Is the content provided in the Verification Report sufficient? Size of data sample and verification programme sufficient?	It is necessary to determine whether the verification body carried out a proper and complete verification.		
69.	Is there any evidence that the verification body violated the principle of independence? e.g. has the verification body supported with the Emissions Monitoring Plan?	Has the verification body provided support in drafting the Emissions Report? It is important to inform the responsible accreditation body.		
70.	How is the quality of the verification body assessed?	A rating (good, medium, poor) is useful. Contact with verification body if necessary. It is important to provide feedback to the responsible accreditation body about the performance of verification bodies.		
71.	Other defects/comments?			

VI.	**Change of data by CAAN**			
72.	Change of data necessary?			
73.	Changing of general data?	If so, this must be documented. The aeroplane operator should be informed.		
74.	Have emissions-relevant data been changed?	If so, these must be documented. The aeroplane operator is to be informed in any case.		
75.	Other defects/comments?			
VII.	**Communication with aeroplane operator**			
76.	Hearing necessary?			
77.	Content of hearing			
78.	Has hearing been sent?			
79.	Date of hearing, date of sending			
80.	Deadline for reply			
81.	Hearing conclusions			
VIII.	**Communication with verification body**			
82.	Hearing necessary?			
83.	Content of hearing			
84.	Has hearing been sent?			
85.	Date of hearing, date of sending			
86.	Deadline for reply			
87.	Hearing conclusions			

Remarks

Checked and verified by

Name	Designation	Signature	Date