

INTERNATIONAL CIVIL AVIATION ORGANIZATION

ICAO document

CORSIA Eligibility Framework and Requirements for Sustainability Certification Schemes



March 2024



This ICAO document is referenced in Annex 16 — *Environmental Protection*, Volume IV — *Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA)*. This ICAO document is material approved by the ICAO Council for publication by ICAO to support Annex 16, Volume IV and is essential for the implementation of the CORSIA. This ICAO document is available on the ICAO CORSIA website and may only be amended by the Council.

Table A shows the origin of amendments to this ICAO document over time, together with a list of the principal subjects involved and the dates on which the amendments were approved by the Council.

Table A. Amendments to the ICAO document "CORSIA Eligibility Framework and Requirements for Sustainability Certification Schemes"

Amendment	Source(s)	Subject(s)	Approved
1 st Edition	Eleventh Meeting of the Committee on Aviation Environmental Protection	First edition of the document.	25 Nov 2019
2 nd Edition	Twelfth Meeting of the Committee on Aviation Environmental Protection	 a) Inclusion of requirement for SCSs to record information related to the baseline and underlying assumptions used for the calculation of any emission reduction credit. 	3 Jun 2022
		b) Inclusion of requirement for SCS to have a CORSIA certification programme with certification limited to the currently approved CORSIA sustainability criteria and SCS eligibility requirements.	
		c) Inclusion of requirement for economic operators to apply the relevant GHG life cycle assessment (LCA) default value based on the associated feedstock, conversion process, ILUC region if applicable, and pathway specifications as specified in the ICAO document "CORSIA Default Life Cycle Emissions Values for CORSIA Eligible Fuels";	
		 d) Inclusion of new requirement for certification bodies to perform subsequent audits on an annual basis after the initial audit. 	
		e) Editorial amendments on terminology consistency and numbering	

Amendment	Source(s)		Subject(s)	Approved
3 rd Edition	2023 Steering Group meeting of the	a)	Clarification on changes of CORSIA requirements that trigger an SCS CORSIA programme review.	11 March 2024
	Committee on Aviation Environmental Protection	b)	Clarification on the materials related to CORSIA eligible fuels that accreditation bodies and auditors have to know.	
		c)	Clarifications on the provision of information requested by national authorities related to GHG reporting and accounting.	
		d)	Inclusion of requirement on the use of conversion factors in the case of chemical conversion	
		e)	Editorial changes	

CORSIA ELIGIBILITY FRAMEWORK AND REQUIREMENTS FOR SUSTAINABILITY CERTIFICATION SCHEMES

1. **DEFINITIONS**

Accreditation. A third-party attestation related to a certification body conveying formal demonstration of its competence to carry out specific conformity assessment tasks (adapted from ISO 17011).

Accreditation bodies. Authoritative bodies that perform accreditation (ISO 17011).

Assurance system. A system of accreditation, certification, auditing processes and procedures maintained by a Sustainability Certification Scheme.

Auditors. Auditors plan, conduct and complete audits on behalf of the certification body. Responsibilities include designing risk-based audit and evidence-gathering plans, designing sampling procedures, evaluating the adequacy and sufficiency of evidence of compliance, identifying nonconformities, issuing a recommendation for or against certification and preparing an audit report.

Audits. Systematic, independent and documented processes for obtaining audit evidence and evaluating it objectively to determine the extent to which the audit criteria are fulfilled (adapted from ISO 19011:2011).

Certification bodies. Third-party conformity assessment bodies (ISO 17065:2012) making certification decisions and issuing certificates.

Economic operator. Economic operators include feedstock producers, processing facilities, and traders.

Stakeholder. Individual or group that has an interest in any decision or activity of an organization (adapted from ISO 26000).

Sustainability Certification Schemes (SCS). Organizations that certify economic operators against the sustainability criteria, and ensure that economic operators calculate actual life cycle emissions values (if default values are not applied) using the agreed methodology. SCS define sustainability certification requirements, set requirements for certification bodies, auditors and accreditation bodies, and monitor effectiveness of the assurance system.

2. ELIGIBILITY REQUIREMENTS

SCS meets the requirements specified in Table 1.

Table 1. Requirements for SCS

THEME	REQUIREMENTS
1. Documentation management	 1.1 SCS has a documentation management system that addresses each of the following elements: a) General management system documentation for the SCS CORSIA certification programme (e.g. policies, roles/responsibilities within SCS, etc.) b) Control of documents. c) Control of records. d) Management review of management system. 1.2 SCS keeps records for a minimum of 10 years.
2. Audit competencies	2.1 The SCS documentation describes in sufficient detail the specific audit competencies requirements and how it is ensured that the requirements concerning auditors' competencies (see Table 5, Requirement 6) are met.
3.SCS Group auditing requirements (where applicable)	 3.1 Where the SCS permits group auditing, SCS establishes requirements and provides guidance to certification bodies on: a) Risk-based sampling of units within a group audit, including minimum sample size (see Table 5, Requirement 5) and the threshold for non-compliance. b) Group management. c) Process and conditions to join a group.
4. Non-compliance with certification requirements	 4.1 SCS has documented procedures for addressing when a certified economic operator is found to not comply with the certification requirements. This includes: a) Procedures for withdrawing or suspending certificates and the circumstances under which this occurs. b) Procedures to ensure that any non-conformities that do not lead to immediate withdrawal or suspension of the certificate are corrected. 4.2 SCS makes these procedures available to economic operators.
5. Monitoring and system review	5.1 SCS has procedures and timelines for reviewing its CORSIA certification programme, including compliance of economic operators, certification bodies and accreditation bodies with the provisions of the programme, to ensure its continuing integrity, adequacy, and effectiveness. 5.2 Review of the CORSIA certification programme occurs at planned intervals and after significant changes to the CORSIA requirements that change the scope of certification as specified by ICAO, as well as in response to complaints received, where necessary. 5.3 SCS uses the results of the review to improve its assurance system where indicated and maintains records of any corrective actions taken.

Table 1 (continued). Requirements for SCS

THEME	REQUIREMENTS
6. Transparency	 6.1 SCS ensures that the following information is made publicly available on a website: a) The list of economic operators that are certified under its CORSIA certification programme, including the start and expiry dates of each certificate, and those who no longer participate. Information on the withdrawal or suspension of certificates must be published immediately after the decision has been made. b) The latest version of SCS CORSIA certification programme requirements. c) The list of certification bodies that are permitted to conduct audits within the CORSIA certification programme, as well as any certification bodies that are no longer permitted to conduct audits within the programme and those that are temporarily suspended. d) Publication of contact details for the SCS CORSIA certification programme e.g. telephone number, email address and correspondence address. e) The names of any other eligible SCS that the subject SCS recognizes within its CORSIA certification programme. f) For each certified economic operator claiming CORSIA emission credits as part of its actual life cycle emissions value calculation, the baseline and assumptions used.
7. Annual reports	 7.1 CORSIA Approved SCS submits annually a report to ICAO that includes relevant information. 7.2 SCS has a procedure in place to collect the information required to fulfil
	this reporting obligation. 7.3 SCS records detailed information about the calculation of actual values within their system in particular information related to the baseline and underlying assumptions used for the calculation of any emission reduction credit and provide this information to ICAO on request, in line with the ICAO document entitled, "CORSIA Methodology for Calculating Actual Life Cycle Emissions Values".

Table 1 (continued). Requirements for SCS

THEME	REQUIREMENTS
8.Risk Management Plan	8.1 SCS has a documented plan for addressing the risks to the integrity of the assurance system.
9. Accreditation of certification bodies	 9.1 SCS uses an accreditation body complying with ISO 17011 to ensure that certification body requirements listed herein are implemented by the certification bodies. 9.2 SCS periodically assesses the effectiveness of the accreditation mechanism as part of their system review. 9.3 SCS has procedures in place that ensure that the accreditation body has the following competencies: a) Knowledge of the ICAO documents and materials¹ related to CORSIA eligible fuels and the SCS CORSIA certification programme requirements. b) Competence to review sampling protocols and practice, where this is undertaken by the Certification Body. c) Competence to review assessment of groups under group auditing procedures, where this is permitted by the SCS and undertaken by the Certification Body.
10. Stakeholder Engagement	10.1 SCS has a process for incorporating stakeholder input relevant to the CORSIA sustainability criteria and adequate to the scope and scale of the operation.
11. Complaint procedure	 11.1 SCS has a documented complaints procedure to respond to complaints received from clients, the public and other stakeholders about its CORSIA certification programme and fraud or potential fraud. 11.2 SCS has procedures in place for: a) Investigating and responding to relevant complaints, including reporting relevant information, to the oversight body or certification body, as appropriate and in a timely manner. b) Reviewing the assurance system and taking corrective actions where necessary (see Table 1, Requirement 5). c) Documenting all complaints received and actions taken for consideration in the system review. 11.3 SCS has procedures in place for responding to requests for information from the Committee on Aviation Environmental Protection (CAEP) Sustainability Certification Schemes Evaluation Group (SCSEG).

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¹ These ICAO documents related to CORSIA eligible fuels are: CORSIA Eligibility Framework and Requirements for Sustainability Certification Schemes; CORSIA Approved Sustainability Certification Schemes; CORSIA Sustainability Criteria for CORSIA Eligible Fuels; CORSIA Default Life Cycle Emissions Values for CORSIA Eligible Fuels; and CORSIA Methodology for Calculating Actual Life Cycle Emissions Values. Other materials related to CORSIA CEF certification that SCS can use for guidance include the CORSIA Supporting Document "CORSIA Eligible Fuels - Life Cycle Assessment Methodology"; and the "Guidance to Sustainability Certification Schemes (SCS) for application of CORSIA Sustainability Criteria, Themes 4 to 8, for CORSIA Sustainable Aviation Fuel produced on or after 1 January 2024".

Table 1 (continued). Requirements for SCS

THEME	REQUIREMENTS
12. Transparency on Greenhouse Gas (GHG) reporting and accounting	12.1 SCS will provide any information required by the relevant national authority related to GHG reporting and accounting. In responding to any requests under this requirement, confidential business information and personally identifiable information will not be provided by the SCS, unless this is part of existing reporting for the national authority to verify compliance with CORSIA.
13. Application of sustainability criteria	13.1 SCS will have a CORSIA certification programme with certification limited to the currently approved CORSIA sustainability criteria and SCS eligibility requirements. 13.2 If an SCS chooses to offer an additional, more stringent or comprehensive certification programme that applies at least the CORSIA sustainability criteria as well as other principles/criteria, this certification programme will be clearly named and described to indicate that it includes components beyond the minimum required by ICAO. 13.3 The different approaches will be presented equally without prejudice to the selection of the certification programme by the economic operator.

SCS ensures that economic operators meet the general requirements specified in Table 2.

 Table 2. General requirements set by SCS on Economic Operators

ТНЕМЕ	REQUIREMENTS
Documentation management	 1.1 SCS requires that economic operators: a) have an auditable documentation management system for the evidence related to the claims they make or rely on for certification; b) keep records for a minimum of 5 years; and c) accept responsibility for preparing any information related to the auditing of such evidence.
2. Transparency on other SCS participation by economic operators	2.1 SCS requires all economic operators to declare the names of all SCS under which they are and/or were certified and make available to the auditors all information relevant to those certifications.

Table 2 (continued). General requirements set by SCS on Economic Operators

THEME	REQUIREMENTS
3. CORSIA	3.1 SCS requires the economic operator to demonstrate and document that it
certification requirements	satisfies all CORSIA requirements specific to the economic operator stated herein, including the following which form the basis for audit objectives:
	 a) The fuel under review satisfies the CORSIA sustainability criteria specified [ICAO document "CORSIA Sustainability Criteria for CORSIA Eligible Fuels"];
	b) (where applicable) The economic operator applies the relevant CORSIA default life cycle emissions value based on the associated feedstock, conversion process (pathway), ILUC region if applicable, and pathway specifications as specified in the ICAO document "CORSIA Default Life Cycle Emissions Values for CORSIA Eligible Fuels";
	c) (where applicable) The system of the economic operator to calculate CORSIA actual life cycle emissions value ensures that:
	 i. The methodology specified in the ICAO document "CORSIA Methodology for Calculating Actual Life Cycle Emissions Values" is accurately followed to calculate its actual life cycle emissions value. ii. The actual life cycle emissions value calculation is complete,
	accurate and transparent. d) (where applicable) The actual life cycle emissions value calculated by the economic operator is accurate and has been calculated in accordance with the methodology specified in the ICAO document "CORSIA Methodology for Calculating Actual Life Cycle Emissions Values" using the most recent data available.
	e) (where applicable) The emissions credits used to calculate the actual life cycle emissions value by the economic operator are accurate, have been calculated in accordance with the relevant CORSIA emissions credit methodology or methodologies, and satisfy all other requirements for emissions crediting, as specified in the ICAO document "CORSIA Methodology for Calculating Actual Life Cycle Emissions Values", Section 6.
	f) In the case of waste or residue feedstocks, the material meets the definition for waste or residues specified by ICAO for CORSIA and can be traced back to the first gathering point [ICAO document "CORSIA Methodology for Calculating Actual Life Cycle Emissions Values", Section 4].
	g) In the case of by-products, the material meets the definition for by-products specified by ICAO for CORSIA and can be traced back to the point of origin [ICAO document "CORSIA Methodology for Calculating Actual Life Cycle Emissions Values", Section 4].
	h) In the case of low land use change risk feedstocks, the feedstocks and / or land use practices meet the criteria specified by ICAO for CORSIA [ICAO document "CORSIA Methodology for Calculating Actual Life Cycle Emissions Values", Section 5].

SCS ensures that economic operators meet the traceability requirements specified in Table 3.

Table 3. Traceability requirements set by SCS on Economic Operators

THEME	REQUIREMENTS
1. Traceability: Mass balance	 1.1 SCS requires economic operators to use a mass balance system that: a) Allows batches of sustainable materials with differing sustainability characteristics to be mixed. b) Requires information about the sustainability characteristics and sizes of the physical quantity (batches) referred to in point (a) to remain assigned to the mixture. c) Provides for the sum of all consignments withdrawn from the mixture to be described as having the same sustainability characteristics, in the same quantities, as the sum of all consignments added to the mixture, using correct conversion factors in the case of chemical conversion. d) Demonstrates that the product claims are linked correctly to the feedstock quantities claimed, using correct conversion factors in the case of chemical conversion.
2. Traceability: Mass balance system documentation	2.1 SCS requires each economic operator to include, as part of its documentation management system (see Table 2, Requirement 1), a system for documenting the mass balance. 2.2 SCS requires the economic operator to assign a unique reference/identification number to each batch of certified product sold (also known as batch number).
3. Traceability: Mass balance level of operation	 3.1 SCS requires economic operators to operate the mass balance system at a site level. 3.2 SCS requires that if more than one legal entity operates on a site then each legal entity that is an economic operator is required to operate its own mass balance.
4. Traceability: Mass balance timeframe	 4.1 SCS requires the economic operator to monitor the balance of material withdrawn from and added to the mass balance system. 4.2 SCS requires economic operators to specify a timeframe over which they will ensure that the mass balance is respected. a) The operator ensures that the balance is achieved over an appropriate period of time no longer than three months. A deficit is not allowed at the end of the period. 4.3 At the end of the reporting period, a positive balance can be forwarded to the next reporting period as long as an equivalent physical stock is available.

SCS ensures that economic operators meet the information transmission requirements specific in Table 4.

Table 4. Information Transmission requirements set by SCS on Economic Operators

ТНЕМЕ	REQUIREMENT
	1.1 SCS requires the economic operator to transmit relevant information necessary to demonstrate compliance with the CORSIA sustainability criteria throughout the supply chain. The information transmitted includes all of the relevant reporting elements listed in Annex 16, Volume IV, Part II, Appendix 5, Table A5-2 for which the economic operator has information. The information is related to a specific physical quantity of material.

SCS ensures that certification bodies meet the requirements specified in Table 5.

Table 5. Requirements set by SCS on Certification Bodies

THEME	REQUIREMENTS
Accreditation and Auditing Standards	1.1 SCS requires certification bodies to be accredited to ISO standard 17065 by an accreditation body operating in compliance with ISO 17011.
	1.2 SCS requires that certification bodies are accredited in accordance with Table 1, Requirement 9.
	1.3 SCS requires certification bodies to inform the SCS immediately if the accreditation is suspended, withdrawn or terminated by the accreditation body.
	1.4 SCS requires that certification bodies conduct assessments of life cycle emissions values in line with ISO 14064-3.
	1.5 SCS requires that certification bodies conduct audits in line with ISO 19011.

Table 5 (continued). Requirements set by SCS on Certification Bodies

2. Audits	2.1 The SCS requires that certification bodies being recognized within its CORSIA certification programme apply the audit objectives to meet CORSIA certification requirements (Table 2, Requirement 3).	
	2.2 Initial audits should be performed on-site.	
	2.3 Subsequent audits should be performed on an annual basis.	
	2.4 SCS may permit remote audits by the certification body under the following conditions:	
	 a) The audit risk as assessed by the certification body is low. b) The same level of assurance can be achieved with remote audits as with on-site audits. c) Sufficient traceability (mass balance) records, greenhouse gas data and other forms of appropriate evidence are available. d) The systems in place for collecting and processing traceability and greenhouse gas data and ensuring data quality are reliable. e) It is the responsibility of the certification body to define the size of the sample of mass balance or GHG data to audit in consideration of the audit risk and the required level of assurance (see Table 5, Requirement 7). 	
3. Transfer from one SCS to another	3.1 Prior to re-certification of an economic operator that was previously found to be in major non-conformity with any other SCS, the certification body will be required to bring this to the attention of the SCS.	
4. Certificate Issuance	4.1 The SCS requires that certification bodies issue a certificate to an economic operator only after a positive certification decision is reached confirming that the requirements of the SCS CORSIA certification programme have been satisfied.	

Table 5 (continued). Requirements set by SCS on Certification Bodies

5. Group auditing 5.1 Group auditing of economic operators by the certification body is (where permitted under the following conditions: applicable) a) For the following economic operators: producers of raw material, points of origin in the case of waste and residue supply chains, and warehouses or storage facilities under common management. b) When confirming compliance with the CORSIA sustainability criteria when the areas concerned are near each other and have similar characteristics. c) For the purpose of assessing the accuracy of the claimed life cycle emissions value when the units have similar production systems and d) A sample of at least the square root of the number of group members is audited individually annually or, for wastes and residues, using a riskbased sampling approach providing the same level of assurance. e) Self-declarations from economic operators are not accepted by the certification body as sufficient evidence to replace audits supporting a group claim. 5.2 A group value for actual life cycle emissions would be permitted as long as the SCS sets the guidelines for how this should be determined. If the conditions for group auditing are not fulfilled, economic operators are audited individually. 6. Auditor SCS requires that certification bodies appoint competent auditor(s), in competencies accordance with the process set out in ISO 19011. 6.2 The auditor(s) as a whole, and the independent reviewer, demonstrates knowledge and appropriate necessary skills to conduct audits under the CORSIA eligible fuels framework, in accordance with the audit scope, including: a) Knowledge of the requirements of the SCS CORSIA certification programme and the ICAO documents and materials² related to CORSIA eligible fuels. b) Knowledge of and experience with CORSIA or similar sustainability criteria, mass balance systems, traceability, life cycle emissions values

calculations, and data collection and handling.

engineering, petroleum extraction and refining, etc.).

c) Knowledge of and experience with appropriate sectors (e.g., agriculture,

² These ICAO documents related to CORSIA eligible fuels are: CORSIA Eligibility Framework and Requirements for Sustainability Certification Schemes; CORSIA Approved Sustainability Certification Schemes; CORSIA Sustainability Criteria for CORSIA Eligible Fuels; CORSIA Default Life Cycle Emissions Values for CORSIA Eligible Fuels; and CORSIA Methodology for Calculating Actual Life Cycle Emissions Values. Other materials related to CORSIA CEF certification that SCS can use for guidance include the CORSIA Supporting Document "CORSIA Eligible Fuels - Life Cycle Assessment Methodology"; and the "Guidance to Sustainability Certification Schemes (SCS) for application of CORSIA Sustainability Criteria, Themes 4 to 8, for CORSIA Sustainable Aviation Fuel produced on or after 1 January 2024".

Table 5 (continued). Requirements set by SCS on Certification Bodies

7. Establishment of a level of assurance	 7.1 SCS requires the certification body to conduct all audits to a reasonable assurance level. 7.2 SCS requires the certification body to apply a materiality threshold of 5% for traceability (volume of sustainable material sold as compliant) and actual life cycle emissions values calculations.
8. Transparency	8.1 SCS will ensure that certification bodies provide any information required by the relevant national authority related to GHG reporting and accounting. In responding to any requests under this requirement, confidential business information and personally identifiable information will not be provided by the Certification Body, unless this is part of existing reporting for the national authority to verify compliance with CORSIA.

Referenced ISO standards:

ISO/IEC 17065 Conformity assessment — Requirements for bodies certifying products, processes and services

ISO 19011 Guidelines for auditing management systems

ISO 14064-3 Greenhouse gases – Part 3: Specification with guidance for the verification and validation of greenhouse gas statements

ISO/IEC 17011 Conformity assessment — Requirements for accreditation bodies accrediting conformity assessment bodies

Note.— The most recent version of the standards apply.

3. ELIGIBILITY FRAMEWORK

The approval of SCS will be exclusively carried out centrally by the ICAO Council with the technical assistance of CAEP, which will assess the compliance of the SCS with the eligibility requirements listed in this ICAO document. Only the SCS that meet all the eligibility requirements will be included in the list of approved SCS provided in the ICAO document "CORSIA Approved Sustainability Certification Schemes".

In case the scope of the SCS CORSIA certification programme is limited to part of the CORSIA eligible fuel supply chain (or specific feedstocks or conversion processes), the assessment mechanism and potential approval will only apply to the scope of the SCS CORSIA certification programme.

-END-