

International Civil Aviation Organization (ICAO) Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA)

Programme Application Form, Appendix A

Supplementary Information for Assessment of Emissions Unit Programmes

1. About this Appendix

This Appendix contains the *CORSIA Emissions Unit Criteria and Guidelines for Criteria interpretation*, including amendments to the *Guidelines* adopted by the ICAO Council in March 2024.

2. CORSIA Emissions Unit Eligibility Criteria

Programme Design Elements. At the programme level, ICAO should ensure that eligible offset credit programmes meet the following design elements:

- 2.1 Clear Methodologies and Protocols, and their Development Process—Programmes should have qualification and quantification methodologies and protocols in place and available for use as well as a process for developing further methodologies and protocols. The existing methodologies and protocols as well as the process for developing further methodologies and protocols should be publicly disclosed.
- 2.2 Scope Considerations—Programmes should define and publicly disclose the level at which activities are allowed under the programme (e.g., project based, programme of activities, etc.) as well as the eligibility criteria for each type of offset activity (e.g., which sectors, project types, or geographic locations are covered).
- 2.3 Offset Credit Issuance and Retirement Procedures—Programmes should have in place procedures for how offset credits are: (a) issued; (b) retired or cancelled; (c) subject to any discounting; and, (d) the length of the crediting period and whether that period is renewable. These procedures should be publicly disclosed.
 - 2.3.1 Guidelines for interpretation of the “Offset Credit Issuance and Retirement Procedures” criterion
 - 2.3.2 The programme-designated registry’s public-facing elements and reports should provide for all consolidated identified information for cancelled emissions units required in Field 5 of Table A5-7 of the Appendix 5 of the CORSIA Standards and Recommended Practices to be made publicly available at no cost and with no credentials required, and in a format that is machine-readable, and standardized to every possible extent.
- 2.4 Identification and Tracking—Programmes should have in place procedures that ensure that: (a) units are tracked; (b) units are individually identified through serial numbers; (c) the registry is secure (i.e., robust security provisions are in place); and (d) units have clearly identified owners or holders (e.g., identification requirements of a registry). The programme should also stipulate (e) to which, if any, other registries it is linked; and, (f) whether and

which international data exchange standards the registry conforms with¹. All of the above should be publicly disclosed information.

2.4.1 Guidelines for interpretation of the “Identification and Tracking” criterion

2.4.2 *Registry use*: The programme should utilize an electronic registry (or registries) in order to comply with the criterion for emissions unit identification and tracking.

2.4.3 *Unit identification*: The programme registry (or registries) should be capable of transparently identifying emissions units that are deemed ICAO-eligible, in all account types.

2.4.4 *Unit transfer and tracking*: The programme registry (or registries) should facilitate the transfer of unit ownership and/or holding; and transparently identify unit status, including issuance, cancellation, and issuance status (see also paragraph 3.3.5: *Identification of units issued ex ante*).

2.4.5 *Unique serialization*: The programme should have policies² in place requiring the programme registry (or registries) to assign to each emissions unit a unique serial number; identify units’ country and sector of origin, vintage, and original (and, if relevant, revised) project registration date.

2.4.6 *Registry administrator conflicts of interest*: Programmes should avoid administrator conflicts of interest and should have policies in place that prevent programme registry administrators from having financial, commercial or fiduciary conflicts of interest in the governance or provision of registry services.³ Where such conflicts arise, and are appropriately declared, programmes should have robust procedures in place to address and isolate the conflict⁴.

2.4.7 *Registry account screening*: The programme should have provisions in place ensuring the screening of requests for registry accounts; and restricting programme registry (or registries) accounts to registered businesses and individuals.

2.4.8 *Registry security review*: The programme should have provisions in place ensuring the periodic audit or evaluation of registry compliance with security provisions.

2.5 Legal Nature and Transfer of Units—The programme should define and ensure the underlying attributes and property aspects of a unit, and publicly disclose the process by which it does so.

2.6 Validation and Verification procedures—Programmes should have in place validation and verification standards and procedures, as well as requirements and procedures for the accreditation of validators and verifiers. All of the above-mentioned standards, procedures, and requirements should be publicly disclosed.

¹ Requirements (e) and (f) are only applicable to programmes that are technically linked to any other registry(ies) or equivalent tracking systems.

² E.g., Programme registry requirements for internal or third-party registry administration.

³ Fees-for-service (e.g., account administration fees) do not constitute a conflict of interest.

⁴ For programmes staffed solely by government officials and employees who are subject to domestic laws and regulations governing conflicts of interest, the TAB will assess these laws and regulations as if they are incorporated as part of the “programme procedures”.

2.7 Programme Governance—Programmes should publicly disclose who is responsible for administration of the programme and how decisions are made.

2.7.1 Guidelines for interpretation of the “Programme Governance” criterion

2.7.2 *Programme longevity*: The programme should demonstrate that it has been continuously governed and operational for at least the last two years; and that it has in place a plan for the long-term administration of multi-decadal programme elements which includes possible responses to the dissolution of the programme in its current form;

2.7.2.1. A programme will be considered “operational” if it meets the following parameters:

- At the minimum, a programme must provide evidence that methodologies are in place and available for use (i.e., finalized and not in “draft” form);
- The methodologies do not need to have been in place for the last two years; and
- A programme must have been continuously governed for at least the last two years.

2.7.3 *Programme administrator and staff conflicts of interest*: Programmes should avoid administrator and staff conflicts of interest and should have policies in place that prevent programme staff, board members, and management from having financial, commercial or fiduciary conflicts of interest in the governance or provision of programme services. Where such conflicts arise, and are appropriately declared, programmes should have procedures in place to address and isolate the conflict⁵.

2.7.4 *Liability coverage*: If the programme is not directly and currently administered by a public agency, the independent administrator should demonstrate up-to-date professional liability insurance coverage of at least USD\$5M.

2.8 Transparency and Public Participation Provisions—Programmes should publicly disclose (a) what information is captured and made available to different stakeholders; and (b) its local stakeholder consultation requirements (if applicable) and (c) its public comments provisions and requirements, and how they are considered (if applicable). Conduct public comment periods and transparently disclose all approved quantification methodologies.

2.9 Safeguards System—Programmes should have in place safeguards to address environmental and social risks. These safeguards should be publicly disclosed.

2.10 Sustainable Development Criteria—Programmes should publicly disclose the sustainable development criteria used, for example, how this contributes to achieving a country’s stated sustainable development priorities, and any provisions for monitoring, reporting and verification.

⁵ For programmes staffed solely by government officials and employees who are subject to domestic laws and regulations governing conflicts of interest, the TAB will assess these laws and regulations as if they are incorporated as part of the “programme procedures”.

2.10.1 Guidelines for interpretation of the “Sustainable Development Criteria” criterion

2.10.2 Programme procedures should clearly state that only units that have been or will be issued to activities that report their sustainable development contributions or co-benefits according to criteria identified by the programme, as a list or menu or potential indicators that may, for example, enumerate relevant sustainable development goals (SDG) and, as appropriate, additionally include indicators that are publicly specified by a host country, can be identified as CORSIA Eligible Emissions Units.

2.11 Avoidance of Double Counting, Issuance and Claiming—Programmes should provide information on how they address double counting, issuance and claiming in the context of evolving national and international regimes for carbon markets and emissions trading⁶.

3. Carbon Offset Credit Integrity Assessment Criteria

There are a number of generally agreed principles that have been broadly applied across both regulatory and voluntary offset credit programmes to address environmental and social integrity. These principles hold that offset credit programmes should deliver credits that represent emissions reductions, avoidance, or sequestration that:

- Are additional.
- Are based on a realistic and credible baseline.
- Are quantified, monitored, reported, and verified.
- Have a clear and transparent chain of custody.
- Represent permanent emissions reductions.
- Assess and mitigate against potential increase in emissions elsewhere.
- Are only counted once towards a mitigation obligation.
- Do no net harm.

Eligibility criteria should apply at the programme level, as the expertise and resources needed to develop and implement ICAO emissions criteria at a methodology and project level is likely to be considerable.

3.1 Eligibility Criterion: Carbon offset programmes must generate units that represent emissions reductions, avoidance, or removals that are additional—Additionality means that the carbon offset credits represent greenhouse gas emissions reductions or carbon sequestration or removals that exceed any greenhouse gas reduction or removals required by law, regulation, or legally binding mandate, and that exceed any greenhouse gas reductions or removals that would otherwise occur in a conservative, business-as-usual scenario. Eligible offset credit programmes should clearly demonstrate that the programme has procedures in place to assess/test for additionality and that those procedures provide a reasonable assurance that the

⁶ This program design element assesses a programme’s transparency procedures for addressing double-counting, -issuance, and -claiming. The substantive contents of a programme’s procedures to address double-counting, -issuance, and -claiming, are assessed under the criterion “Are only counted once towards a mitigation obligation”.

emissions reductions would not have occurred in the absence of the offset programme. If programmes pre-define certain activities as automatically additional (e.g., through a “positive list” of eligible project types), then they have to provide clear evidence on how the activity was determined to be additional. The criteria for such positive lists should be publicly disclosed and conservative. If programmes do not use positive lists, then project’s additionality and baseline setting should be assessed by an accredited and independent third-party verification entity and reviewed by the programme.

- 3.1.1 Guidelines for interpretation of the “Additionality” criterion
- 3.1.2 *Additionality analyses/tests*: The programme should have procedures in place to ensure — and to support activities to analyze and demonstrate — that credited mitigation is additional, on the basis of one or more of the following methods, in addition to legal or regulatory additionality as defined in paragraph 3.1, which can be applied at the project- and/or programme- level : (A) Barrier analysis; (B) Common practice / market penetration analysis; (C) Investment, cost, or other financial analysis; (D) Performance standards / benchmarks
- 3.1.3 *Non-traditional or new analyses/tests*: If programme procedures provide for the use of method(s) not listed above, the Technical Advisory Body (TAB) should evaluate and make a recommendation regarding the sufficiency of the approach prior to any final determination of the programme’s eligibility.

- 3.2 *Eligibility Criterion: Carbon offset credits must be based on a realistic and credible baseline*—Carbon offset credits should be issued against a realistic, defensible, and conservative baseline estimation of emissions. The baseline is the level of emissions that would have occurred assuming a conservative “business as usual” emissions trajectory i.e., emissions without the emissions reduction activity or offset project. Baselines and underlying assumptions must be publicly disclosed.

 - 3.2.1 Guidelines for interpretation of the “Realistic and credible baselines” criterion
 - 3.2.2 *Conservative baseline estimation*: The programme should have procedures in place to ensure that methods of developing baselines, including modeling, benchmarking or the use of historical data, use assumptions, methodologies, and values that do not over-estimate mitigation from an activity.
 - 3.2.3 *Baseline revision*: The programme should have procedures in place for the activities it supports to respond, as appropriate, to changing baseline conditions that were not expected at the time of registration.
 - 3.2.4 The programme should have procedures in place requiring activities to ensure and demonstrate that emissions baselines are set in a conservative way and below business-as-usual emission projections; programme procedures that support non-traditional baselines should require equivalent outcomes and their demonstration.

- 3.3 *Eligibility Criterion: Carbon offset credits must be quantified, monitored, reported, and verified*—Emissions reductions should be calculated in a manner that is conservative and transparent. Offset credits should be based on accurate measurements and quantification

methods/protocols. Monitoring, measuring, and reporting of both the emissions reduction activity and the actual emissions reduction from the project should, at a minimum, be conducted at specified intervals throughout the duration of the crediting period. Emissions reductions should be measured and verified by an accredited and independent third-party verification entity. *Ex-post* verification of the project's emissions must be required in advance of issuance of offset credits; Programmes that conduct *ex-ante* issuance (e.g., issuance of offset units before the emissions reductions and/or carbon sequestration have occurred and been third-party verified) should not be eligible. Transparent measurement and reporting is essential, and units from offsetting programmes/projects eligible in a global MBM should only come from those that require independent, *ex-post* verification.

- 3.3.1 Guidelines for interpretation of the “Quantified, monitored, reported and verified” criterion
- 3.3.2 *Validation provisions*: The programme should have provisions in place requiring validation, prior to or in tandem with verification, to assess and publicly document the likely result of the mitigation from proposed activities supported by the programme.
- 3.3.3 *Auditor conflicts of interest*: Programmes should have provisions in place to manage and/or prevent conflicts of interest between accredited third-party(ies) performing the validation and/or verification procedures, and the programme and the activities it supports.⁷ The provisions should require such accredited third parties to disclose whether they or any of their family members are dealing in, promoting, or otherwise have a fiduciary relationship with anyone promoting or dealing in, the offset credits being evaluated. The programme should have provisions in place to address and isolate such a conflict should it be identified.
- 3.3.4 *Re-evaluation of assumptions*: The programme should have procedures in place requiring that the renewal of any activity at the end of its crediting period includes a reevaluation of its baselines, and procedures and assumptions for quantifying, monitoring, and verifying mitigation, including the baseline scenario; the same procedures should apply to activities that wish to undergo verification but have not done so within the programme's allowable number of years between verification events.
- 3.3.5 *Identification of units issued ex ante*: Programmes that support both the *ex ante* and *ex post* issuance of emissions units should have procedures in place to transparently identify units which are issued *ex ante* and thus ineligible for use in the CORSIA.

- 3.4 *Eligibility Criterion: Carbon offset credits must have a clear and transparent chain of custody within the offset programme*—Offset credits should be assigned an identification number that can be tracked from when the unit is issued through to its transfer or use (cancellation or retirement) via a registry system(s).
- 3.5 *Eligibility Criterion: Permanence*—Carbon offset credits must represent emissions reductions, avoidance, or carbon sequestration that are permanent. If there is risk of reductions or removals being reversed, then either (a) such credits are not eligible or (b)

⁷ Fees-for-service (e.g., account administration fees) do not constitute a conflict of interest.

mitigation measures are in place to monitor, mitigate, and compensate any material incidence of non-permanence.

- 3.5.1 Guidelines for interpretation of the “Permanence” criterion
- 3.5.2 *Risk assessment:* The programme should have provisions in place to require and support activities operating within any sectors/activity types that present a potential risk of reversal to undertake a risk assessment that accounts for, *inter alia*, any potential causes, relative scale, and relative likelihood of reversals.
- 3.5.3 *Reversal risk monitoring and mitigation:* The programme should have provisions in place to require and support activities operating within any sectors/activity types that present a potential risk of reversal to (A) monitor identified risks of reversals; and (B) mitigate identified risks of reversals.
- 3.5.4 *Extent of compensation provisions:* The programme should have provisions in place to ensure full compensation for material reversals of mitigation issued as emissions units and used toward offsetting obligations under the CORSIA. Procedures must provide for reversal monitoring and compensation requirements to be applied by an activity that generates CORSIA-eligible units for, at the very least, twenty (20) years from the start of their first crediting period, and at least forty (40) years from the start of their first crediting period for activities that start after 31 December 2026; procedures for jurisdiction-scale activities must alternatively ensure that the volume of emissions units contributed by a given activity to a reversal risk pool will, at a minimum, fully compensate for the activity’s reversal risk for the same timeframe.
- 3.5.5 *Reversal notification and liability:* The programme should have provisions in place which confer liability to the activity proponent to monitor, mitigate, and respond to reversals in a manner mandated in programme procedures; require activity proponents, upon being made aware of a material reversal event, to notify the programme within a specified number of days; and confer responsibility to the programme to, upon such notification, ensure and confirm that such reversals are fully compensated in a manner mandated in programme procedures.
- 3.5.6 *Replacement unit eligibility:* The programme should have the capability to ensure that any emissions units which compensate for the material reversal of mitigation issued as emissions units and used toward offsetting obligations under the CORSIA are fully eligible for use under the CORSIA.
- 3.5.7 *Review of compensation measure performance:* In the case that ICAO designates the programme as eligible, including activity type(s) supported by the programme which require that a compensation measure is in place, the programme should be willing and able to demonstrate to ICAO that the measure can fully compensate for the reversal of mitigation issued as emissions units and used under the CORSIA as of the date of review.

3.6 *Eligibility Criterion:* A system must have measures in place to assess and mitigate incidences of material leakage—Offset credits should be generated from projects that do not cause emissions to materially increase elsewhere (this concept is also known as leakage). Offset

credit programmes should have an established process for assessing and mitigating leakage of emissions that may result from the implementation of an offset project or programme.

- 3.6.1 Guidelines for interpretation of the “Assess and mitigate material leakage” criterion
- 3.6.2 *Scope and leakage prevention:* Programmes should have provisions in place requiring that activities that pose a risk of leakage when implemented at the project-level should be implemented at a national level, or on an interim basis on a subnational level, in order to mitigate the risk of leakage.
- 3.6.3 *Leakage monitoring:* The programme should have procedures in place requiring and supporting activities to monitor identified leakage.
- 3.6.4 *Leakage compensation:* The programme should have procedures in place for the activities it supports to deduct from their accounting emissions from any identified leakage that reduces the mitigation benefits of the activities. Programmes should have procedures in place ensuring that, where an activity involves replacing equipment or other physical systems such that these comprise the activity’s baseline, the baseline equipment is demonstrably decommissioned, destroyed, or scrapped, or otherwise demonstrated to no longer be in use, and emissions from its disposal are discretely assessed, mitigated where possible, and deducted from the verified results of the activity; where procedures enable the baseline equipment to potentially be re-sold or otherwise remain in use, equivalent procedures for assessment, mitigation, and accounting deductions should also apply to emissions resulting from its continued use.

3.7 *Eligibility Criterion: Are only counted once towards a mitigation obligation*—Measures must be in place to avoid:

- 3.7.1 *Double issuance* (which occurs if more than one unit is issued for the same emissions or emissions reduction).
- 3.7.2 *Double use* (which occurs when the same issued unit is used twice, for example, if a unit is duplicated in registries).
- 3.7.3 *Double claiming* (which occurs if the same emissions reduction is counted twice by both the buyer and the seller (i.e., counted towards the climate change mitigation effort of both an airline and the host country of the emissions reduction activity)). In order to prevent double claiming, eligible programmes should require and demonstrate that host countries of emissions reduction activities agree to account for any offset units issued as a result of those activities such that double claiming does not occur between the airline and the host country of the emissions reduction activity.
- 3.7.4 Guidelines for interpretation of the “Only counted once towards a mitigation obligation” criterion
- 3.7.5 *Double-issuance:* The programme should have procedures in place for programme and/or registry administrator monitoring of programme registry(ies) to ensure the transparent transfer of units between registries; and that only one unit is issued for one tonne of mitigation.

3.7.6 *Double-use*: The programme should have procedures in place for programme and/or registry administrator monitoring of programme registry(ies) to ensure that one unit is issued or transferred to, or owned or cancelled by, only one entity at any given time.

3.7.7 *Double-selling*: Programmes should have procedures in place to discourage and prohibit the double-selling of units. Double selling occurs when one or more entities sell the same unit more than once.

3.7.8 *Host country attestation to the avoidance of double-claiming*: Only emissions units originating in countries that have attested to their intention to properly account for the use of the units toward offsetting obligations under the CORSIA, as specified in paragraph (and sub-paragraphs of) 3.7.9, should be eligible for use in the CORSIA. The programme should obtain, or require activity proponents to obtain and provide to the programme, written attestation from the host country's national focal point or focal point's designee. The attestation should specify, and describe any steps taken, to prevent mitigation associated with units used by operators under CORSIA from also being claimed toward a host country's nationally determined contribution (NDC) communicated by each Party to the Paris Agreement. Host country attestations should be obtained and made publicly available prior to the use of units from the host country in the CORSIA⁸.

3.7.9 *Host country attestation specifications*: Programmes should have in place procedures that guide the contents of host country attestation that, at a minimum, facilitate countries to identify the national point of contact, authorized unit vintages, authorized activity types if applicable, the compliance cycle for which the units are authorized, and the expected timing and processes for applying and reporting adjustments that are informed by the host country's specified definition of "first transfer" and its chosen accounting method, consistent with the relevant provision of 2/CMA.3 Annex I "Guidance on cooperative approaches referred to in Article 6, paragraph 2, of the Paris Agreement".

3.7.10 *Double-claiming procedures*: The programme should have procedures in place requiring that activities take approach(es) described in these sub-paragraphs to prevent double-claiming, which attestations should confirm:

3.7.10.1 Mitigation from emissions units used by operators under the CORSIA is appropriately accounted for by the host country when claiming achievement of its target(s) / pledges(s) / mitigation contributions / mitigation commitments, in line with the relevant and applicable international provisions.

3.7.10.2 If programme procedures provide for the use of method(s) to avoid double-claiming which are not listed above, the Technical Advisory Body (TAB) should evaluate and make a recommendation regarding the

⁸ For the purpose of this criterion, the terms "agree to account for" and "written attestation" have the same meaning as the terms "authorize" and "the authorization" in Decision 2/CMA.3 Annex I "Guidance on cooperative approaches referred to in Article 6, paragraph 2, of the Paris Agreement".

sufficiency of the approach prior to any final determination of the programme's eligibility.

- 3.7.11 *Transparent communications:* The programme should make publicly available any national government decisions related to accounting for units used in ICAO, including the contents of host country attestations described in paragraph 3.7.8; and update information pertaining to host country attestation as often as necessary to avoid double-claiming.
- 3.7.12 *Comparing unit use against national reporting:* The programme should have procedures in place to compare countries' accounting for emissions units in national emissions reports against the volumes of eligible units issued by the programme and used under the CORSIA which the host country's national reporting focal point or designee otherwise attested to its intention to not double-claim. Such procedures should specify the relevant national reports that contain a given host country's accounting for emissions units, including each report submitted by the host country in accordance with Section IV (Reporting) of Decision 2/CMA.3 Annex I "Guidance on cooperative approaches referred to in Article 6, paragraph 2, of the Paris Agreement" and any additional reports specified in relevant future decisions. Procedures should also describe the expected timing and processes by which the programme will compare the host country's reported information on authorizations in its national reports with the information provided by the country in its attestation, and include publication of all country attestations and related documentation generated by the emissions unit programme.
- 3.7.13 *Programme reporting on performance:* The programme should be prepared to report to ICAO's relevant bodies, as requested, performance information related to, *inter alia*, any material instances of and programme responses to country-level double-claiming; the nature of, and any changes to, the number, scale, and/or scope of host country attestations; any relevant changes to related programme measures.
- 3.7.14 *Reconciliation of double-claimed mitigation:* The programme should have procedures in place for the programme, or proponents of the activities it supports, to compensate for, replace, or otherwise reconcile double-claimed mitigation associated with units used under the CORSIA which the host country's national accounting focal point or designee otherwise attested to its intention to not double-claim, including in the instance that the attestation is withdrawn.

3.8 *Eligibility Criterion:* Carbon offset credits must represent emissions reductions, avoidance, or carbon sequestration from projects that do no net harm—Offset projects should not violate local, State/provincial, national or international regulations or obligations. Offset programmes should show how they comply with social and environmental safeguards and should publicly disclose which institutions, processes, and procedures are used to implement, monitor, and enforce safeguards to identify, assess and manage environmental and social risks.

— END —