# Checklist to ISO 14065:2013, ISO 14066:2011 and ICAO SARPs Volume IV Annex 16

Note 1 : This checklist is to be used for the accreditation assessment of greenhouse gas validation/verification bodies providing validation/verification against the requirements of ISO/IEC 14065 (e.g. GHG, CORSIA etc.)

Note 2 : The column "Manual/Procedure Reference" is to be filled by the Validation/Verification Body (VB), whereas the “Findings/Remarks" column is to be filled by the assessor.

Validation/Verification Body :

Accreditation Programme : CORSIA

Type of Assessment : \*Application (for Documentation Review) / Re-assessment / others (please state): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\*delete if not applicable

I hereby declare that the following parts are applicable (Please (√) where necessary):

√

Part 1: Checklist to requirements of ISO 14065:2013

√

Part 2: Checklist to requirements of ISO 14066:2011

√

*Part 3: Checklist to requirements of ICAO SARPs Volume IV Annex 16 (italic)*

√

Part 4: Checklist to IAF MD 6:2014 (underline)

Prepared by (Validation/Verification Body)

Name :

Date :

#### PART 1: CHECKLIST TO REQUIREMENTS OF ISO 14065:2013 & PART 3: CHECKLIST TO REQUIREMENTS OF CORSIA

**Key (Y – Addressed, N – Not Addressed, O – To be verified during compliance/ witnessing, N/A – Not applicable)**

| **Clause** | **Requirement** | **Manual / Procedures reference**  **(To be filled by VB during application)** | **Findings (Note: fill in Key)** | **Remarks**  **(To be filled by Assessor during Documentation Review)** |
| --- | --- | --- | --- | --- |
| **5** | **General requirements** |  |  |  |
| **5.1** | **Legal status** |  |  |  |
|  | The validation or verification body shall have a description of its legal status, including, if applicable, the names of its owners and, if different, the names of the persons who control it.  NOTE: A governmental validation or verification body is deemed to be a legal entity on the basis of its government status. |  |  |  |
| **5.2** | **Legal and contractual matters** |  |  |  |
|  | The validation or verification body shall be a legal entity, or a defined part of a legal entity, such that it can be held legally responsible for all its validation or verification activities. |  |  |  |
|  | The validation or verification body shall have a legally enforceable agreement with each client for the provision of validation or verification services. |  |  |  |
|  | The validation or verification body retains authority and responsibility for its validation or verification activities, decisions, and validation or verification statements. |  |  |  |
| IAF MD 6:2014 | A.5.2.2. The legally enforceable agreement shall include a policy governing statement(s) taken from the validated or verified GHG assertion that the V/VB allows a client to use, including time limits and language (refer to A.1.2). The legally enforceable agreements shall also include requirements related to the use of the V/VB mark that may “endorse” the statement(s) made by the client. |  |  |  |
| **5.3** | **Governance and management commitment** |  |  |  |
|  | The validation or verification body shall identify top management (e.g. individual, group, board) having overall authority and responsibility for |  |  |  |
| a) | Development of operational policies, |  |  |  |
| b) | Supervision of the implementation of policies and procedures, |  |  |  |
| c) | Supervision of finances, |  |  |  |
| d) | The adequacy of validation or verification activities, |  |  |  |
| e) | The resolution of appeals and complaints, |  |  |  |
| f) | Validation or verification statements, |  |  |  |
| g) | Delegation of authority to committees or individuals to undertake, as required, defined activities on its behalf, |  |  |  |
| h) | Contractual arrangements, and |  |  |  |
| i) | Providing adequate, competent resources for validation or verification activities. |  |  |  |
|  | The validation or verification body shall document its organizational structure and relevant mechanisms showing duties, responsibilities, and authorities of management, and other validation or verification personnel. If the validation or verification body is a defined part of a legal entity, the structure includes the line of authority and relationship to other parts of the same legal entity. |  |  |  |
| IAF MD 6:2014 | A.5.3.1 The V/VB shall ensure it carries out validation or verification processes consistent with the requirements of ISO 14065. In addition, the V/VB shall ensure that its systems are sufficiently documented to ensure the consistent application of any specific validation or verification criteria (reference A.1.1), which they choose to offer. |  |  |  |
| A.5.3.2 | The V/VB shall establish a development process for each new validation or verification criteria (refer to A.1.1.) in which it wishes to operate. This development process shall provide outputs related to the following:   * Identification of key stakeholders, and their expectations and requirements as applicable to the outcome of validation or verification activities; * Review and understanding of the applicable validation of verification criteria requirements, involving the criteria owner where necessary; * Consideration of V/VB strategic and business risks; * Identification of the competence requirements for validators or verifiers, independent reviewers and support personnel, as relevant to each validation or verification criteria (refer to A.1.1.); * Validation or verification criteria (refer to A.1.1.) specific validation or verification requirements; * Confirmation that the proposed validation or verification arrangements will meet the validation or verification criteria (refer to A.1.1.) requirements; and * Confirmation that the validation or verification criteria satisfy A.1.1. |  |  |  |
| **5.4** | **Impartiality** |  |  |  |
| **5.4.1** | **Commitment to impartiality** |  |  |  |
|  | The validation or verification body shall act impartially and shall avoid unacceptable conflicts of interest. |  |  |  |
|  | The validation or verification body |  |  |  |
| a) | Shall have commitment by top management to act impartially in validation or verification activities, |  |  |  |
| b) | Shall make publicly available a statement that describes its understanding of the importance of impartiality in validation or verification activities, how it manages conflict of interest, and how it ensures the objectivity of validation or verification activities, |  |  |  |
| c) | Shall have formal rules and/or contractual conditions to ensure that each team member acts in an impartial manner, and |  |  |  |
| d) | Shall document how it manages potential conflict of interest situations and risks to impartiality from within the validation or verification body or any relationships by   1. identifying and analysing potential conflict of interest situations from validation or verification activities, including potential conflicts arising from any relationships, 2. evaluating finances and sources of income to demonstrate that commercial, financial, or other factors do not compromise impartiality, and 3. requiring personnel relevant to the validation or verification to reveal any situation that presents them or the validation or verification body with a potential conflict of interest. |  |  |  |
| **5.4.2** | **Avoidance of conflict of interest** |  |  |  |
|  | The validation or verification body |  |  |  |
|  | Shall not use personnel with an actual or potential conflict of interest, |  |  |  |
|  | Shall not validate and verify GHG assertions from the same GHG project unless allowed by the applicable GHG programme, |  |  |  |
|  | Shall not validate or verify a GHG assertion where its GHG consultancy services provided support to the responsible party’s GHG assertion, |  |  |  |
|  | Shall not validate or verify a GHG assertion where a relationship with those who provided GHG consultancy services to the responsible party that support the GHG assertion poses an unacceptable risk to impartiality, |  |  |  |
|  | Shall not validate or verify a GHG assertion using personnel who were engaged by those who provided GHG consultancy services to the responsible party in support of the GHG assertion, |  |  |  |
|  | Shall not outsource the review and issuance of the validation or verification statement (see 8.5), |  |  |  |
|  | Shall not offer products or services that pose an unacceptable risk to impartiality, and |  |  |  |
|  | Shall not state or imply that validation or verification of a GHG assertion would be simpler, easier, faster, or less expensive if a specified GHG consultancy service were used. |  |  |  |
| NOTE 1 | A relationship such as that described in d) could be based on ownership, governance, management, personnel, shared resources, finances, contracts, marketing, and payment of a sales commission or other inducement for the referral of new clients. |  |  |  |
| NOTE 2 | Arranging training and participating as a trainer is not considered a GHG consultancy service, provided that (where the training relates to GHG quantification, GHG data monitoring or recording, GHG information system or internal auditing services) it is confined to the provision of generic information that is freely available in the public domain (i.e. the trainer should not provide organization-specific or project-specific advice or solutions). |  |  |  |
| **ICAO SARPs Annex 16 Volume 4** | **Appendix 6. Verification**  **2.2 Avoidance of conflict of interest (ISO 14065:2013 section 5.4.2)** |  |  |  |
| *2.2.1* | *The VB has procedures in place that whereby, if the leader of the verification team undertakes six annual verifications for one aeroplane operator, then the leader of the verification team shall take a three consecutive year break from providing verification services to that same aeroplane operator. The six year maximum period includes any greenhouse gas verifications performed for the aeroplane operator prior to it requiring verification services under the ICAO SARPs Annex 16, Volume 4.* |  |  |  |
| *2.2.2* | *The verification body, and any part of the same legal entity, shall not be an aeroplane operator, the owner of an aeroplane operator or owned by an aeroplane operator.* |  |  |  |
| *2.2.3* | *The verification body, and any part of the same legal entity, shall not be a body that trades emissions units, the owner of a body that trades emissions units or owned by a body that trades emissions units.* |  |  |  |
| *2.2.4* | *The relationship between the verification body and the aeroplane operator shall not be based on common ownership, common governance, common management or personnel, shared resources, common finances and common contracts or marketing.* |  |  |  |
| *2.2.5* | *The verification body shall not take over any delegated activities from the aeroplane operator with regard to the preparation of the Emissions Monitoring Plan, the Emissions Report (including monitoring of fuel use and calculation of CO2 emissions) and the Emissions Unit Cancellation Report.* |  |  |  |
| *2.2.6* | *To enable an assessment of impartiality and independence by the national accreditation body, the verification body shall document how it relates to other parts of the same legal entity.* |  |  |  |
| **5.4.3** | **Mechanism for oversight of impartiality** |  |  |  |
|  | The validation or verification body shall ensure through a mechanism independent of operations of the validation or verification body that impartiality is being achieved.  NOTE: An independent mechanism that might be used to safeguard impartiality where conflict of interest, business, and operational issues could compromise the integrity of the validation or verification could involve   * an independent committee, * a GHG programme that includes an impartiality monitoring function, or * non-executive directors. |  |  |  |
| **5.5** | **Liability and financing** |  |  |  |
|  | The validation or verification body shall demonstrate that it has evaluated risks associated with its activities and has arrangements (e.g. insurance, reserves) sufficient to cover liabilities arising from the activities and areas in which it operates. |  |  |  |
| **6** | **Competencies** |  |  |  |
| **6.1** | **Management and personnel** |  |  |  |
|  | The validation or verification body shall establish and maintain a procedure |  |  |  |
|  | To determine required competencies for each sector in which it operates, |  |  |  |
|  | To demonstrate that management and support personnel have appropriate competencies in activities associated with the validation or verification, |  |  |  |
|  | To demonstrate that validators, verifiers, and technical experts have appropriate competencies, and |  |  |  |
|  | To have access to relevant internal or external expertise for advice on specific matters relating to validation or verification activities, sectors, or areas within the scope of their work. |  |  |  |
|  | The validation or verification body shall document fulfilment of the above procedure in identifying and demonstrating management and personnel competencies. |  |  |  |
| ***ICAO SARPs Annex 16 Volume 4*** | ***Appendix 6 Verification***  ***2.3 Management and personnel (ISO 14065:2013 section 6.1)*** |  |  |  |
| *2.3.1* | *The verification body shall establish, implement and document a method for evaluating the competence of the verification team personnel against the competence requirements outlined in ISO 14065:2013, ISO 14066:2011 and paragraphs 2.4, 2.5 and 2.6 of the Appendix 6, ICAO SARPs Annex 16 Volume 4.* |  |  |  |
| *2.3.2* | *The verification body shall maintain records to demonstrate the competency of the verification team and personnel in accordance with paragraph 2.4 of Appendix 6, ICAO SARPs Annex 16 Volume IV.* |  |  |  |
| **6.2** | **Competencies of personnel** |  |  |  |
|  | The validation or verification body |  |  |  |
| a) | Shall employ personnel having sufficient competence for managing the type and range of its validation or verification activities, |  |  |  |
| b) | Shall employ, or have access to, a sufficient number of validation or verification team leaders, validators or verifiers, and technical experts to cover the scope, extent, and volume of its validation or verification activities, |  |  |  |
| c) | Shall use validators, verifiers, and technical experts only for specific validation or verification activities where they have demonstrated competence, |  |  |  |
| d) | Shall make clear to appropriate personnel relevant duties, responsibilities, and authorities, |  |  |  |
| e) | Shall have defined processes for selecting, training, formally authorizing, and monitoring validators or verifiers, and for selecting technical experts used in the validation or verification process, |  |  |  |
| f) | Shall ensure that validators and verifiers and, where required, technical experts have access to up-to-date information on, and have demonstrated knowledge of, GHG validation or verification processes, requirements, methodologies, activities, other relevant GHG programme provisions, and applicable legal requirements, |  |  |  |
| g) | Shall ensure that the group or individual who prepares and writes the validation or verification statement has the competence to evaluate validation or verification processes and related findings and recommendations of the team, |  |  |  |
| h) | Shall periodically monitor the performance of all persons involved in the validation or verification (including a combination of on-site observation, review of validation or verification findings, reports and feedback from clients or the market), taking into account their level of activity and the risk associated with their activities, and |  |  |  |
| i) | Shall identifies training needs and provide, as necessary, training on GHG validation or verification processes, requirements, methodologies, activities, and other relevant GHG programme requirements. |  |  |  |
| IAF MD6:2014 | A.6.2.1. The V/VB shall have personnel evaluated by a competent evaluator. |  |  |  |
| A.6.2.2. | The V/VB shall demonstrate how personnel have been evaluated and found to satisfy the following competence requirements as applicable:   * Competence related to management of an engagement; * Generic validation competencies as per ISO 14065 Clause 6 and ISO 14066, plus any specific and/or sector specific competence, validation or project specific validation criteria (refer to A.1.1); and * Generic verification competencies as per ISO 14065 Clause 6 and ISO 14066, plus any specific and/or sector specific competence verification criteria (refer A.1.1). |  |  |  |
| ***ICAO SARPs Annex 16 Volume 4*** | ***Appendix 6 Verification***  ***2.4 Competencies of personnel (ISO 14065:2013 section 6.2)*** |  |  |  |
|  | *The verification body shall:* |  |  |  |
| *a)* | *identify and select competent team personnel for each engagement;* |  |  |  |
| *b)* | *ensure appropriate verification team composition for the aviation engagement;* |  |  |  |
| *c)* | *ensure the verification team, at a minimum, includes a team leader who is responsible for the engagement planning and management of the team;* |  |  |  |
| *d)* | *ensure continuous competence of all personnel conducting verification activities, including continual professional development and training for verifiers to maintain and/or develop competencies; and* |  |  |  |
| *e)* | *conduct regular evaluations of the competence assessment process to ensure that it continues to be relevant for ICAO SARPs Annex 16 Volume 4.* |  |  |  |
| **6.3** | **Deployment of personnel** |  |  |  |
| **6.3.1** | **General** |  |  |  |
|  | The validation or verification body shall establish competent validation or verification teams and shall provides appropriate management and support services.  If one individual fulfills all the requirements for either a validation or verification team, then that person may be considered as a validation or verification team.  Further competence requirements for greenhouse gas validation teams and verification teams are contained in ISO 14066. |  |  |  |
| **6.3.2** | **Validation or verification team knowledge** |  |  |  |
|  | The validation or verification team shall have detailed knowledge of the applicable GHG programme, including its |  |  |  |
|  | eligibility requirements, |  |  |  |
|  | implementation in different jurisdictions as applicable, and |  |  |  |
|  | validation or verification requirements and guidelines. |  |  |  |
|  | The validation or verification team shall be able to communicate effectively in appropriate languages on matters relevant to the validation or verification. |  |  |  |
| ***ICAO SARPs Annex 16 Volume*** | ***2.5 Validation or verification team knowledge (ISO 14065:2013 section 6.3.2)*** |  |  |  |
| *2.5.1* | *The verification team as a whole, and the independent reviewer, shall demonstrate knowledge of* |  |  |  |
| *a)* | *the requirements as outlined in ICAO SARPs Annex 16 Volume 4, the Assembly Resolution A39-3, the Environmental Technical Manual (Doc 9501), Volume IV – Procedures for demonstrating compliance with the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), and any public ICAO explanatory material;* |  |  |  |
| *b)* | *the verification requirements as outlined in ICAO SARPs Annex 16 Volume 4,, and Environmental Technical Manual (Doc 9501), Volume IV – Procedures for demonstrating compliance with the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), including materiality threshold, verification criteria, verification scope and objectives and the Verification Report preparation and submission requirements;* |  |  |  |
| *c)* | *the eligibility criteria for technical exemptions, scope of applicability, State pair phase-in rules, and State pair coverage as outlined in ICAO SARPs Annex 16 Volume 4 and the Assembly Resolution A39-3* |  |  |  |
| *d)* | *the monitoring requirements as outlined in the ICAO SARPs Annex 16 Volume 4; and* |  |  |  |
| *e)* | *the national requirements in addition to the provisions set out in the ICAO SARPs Annex 16 Volume 4.* |  |  |  |
| *2.5.2* | *When conducting the verification of an Emissions Unit Cancellation Report, only 2.5.1 (a), (b) and (e) shall be applicable.* |  |  |  |
| **6.3.3** | **Validation or verification team technical expertise** |  |  |  |
|  | The validation or verification team shall have sufficient technical expertise to assess the GHG project’s or organization’s |  |  |  |
|  | specific GHG activity and technology, |  |  |  |
|  | identification and selection of GHG sources, sinks, or reservoirs, |  |  |  |
|  | quantification, monitoring, and reporting, including relevant technical and sector issues, and |  |  |  |
|  | situations that may affect the materiality of the GHG assertion, including typical and atypical operating conditions. |  |  |  |
|  | The validation or verification team shall have expertise to evaluate the implications of financial, operational, contractual, or other agreements that may affect GHG project or organization boundaries, including any legal requirements related to the GHG assertion. |  |  |  |
| ***ICAO SARPs Annex 16 Volume IV*** | ***Appendix 6 Verification***  ***2.6 Validation or verification team technical expertise (ISO 14065:2013 section 6.3.3)*** |  |  |  |
| *2.6.1* | *The verification team as a whole, and the independent reviewer, shall demonstrate knowledge in the following technical competencies:* |  |  |  |
| *a)* | *general technical processes in the field of civil aviation* |  |  |  |
| *b)* | *aviation fuels and their characteristics, including CORSIA eligible fuel;* |  |  |  |
| *c)* | *fuel related processes including flight planning and fuel calculation* |  |  |  |
| *d)* | *relevant aviation sector trends or situations that may impact the CO2 emissions estimate;* |  |  |  |
| *e)* | *CO2 emissions quantification methodologies as outlined in ICAO SARPs Annex 16 Volume 4, including assessment of Emissions Monitoring Plans;* |  |  |  |
| *f)* | *fuel use monitoring and measurement devices, and related procedures for monitoring of fuel use*  *related to greenhouse gas emissions, including procedures and practices for operation, maintenance and calibration of such measurement devices;* |  |  |  |
| *g)* | *greenhouse gas information and data management systems and controls, including quality management systems and quality assurance / quality control techniques;* |  |  |  |
| *h)* | *aviation related IT systems such as flight planning software or operational management systems;* |  |  |  |
| *i)* | *knowledge of approved CORSIA Sustainability Certification Schemes relevant for CORSIA eligible fuels under this Volume, including certification scopes; and* |  |  |  |
| *j)* | *basic knowledge of greenhouse gas markets and emissions units programme registries.* |  |  |  |
| *2.6.2* | *Evidence of the above competencies shall include proof of relevant professional experience, complemented by appropriate training and education credentials.* |  |  |  |
| *2.6.3* | *When conducting the verification of an Emissions Report, 2.6.1 (a) to (i) shall be applicable* |  |  |  |
| *2.6.4* | *When conducting the verification of an Emissions Unit Cancellation Report, only 2.6.1 (g) and (j) shall be applicable* |  |  |  |
| **6.3.4** | **Validation or verification team data and information auditing expertise** |  |  |  |
|  | The validation or verification team shall have data and information auditing expertise to assess the GHG assertion of the GHG project or organization, including the ability |  |  |  |
|  | to assess the GHG information system to determine whether the project proponent or organization has effectively identified, collected, analysed, and reported on the data necessary to establish a credible GHG assertion, and has systematically taken corrective actions to address any nonconformities related to requirements of the relevant GHG programme or standards, |  |  |  |
|  | to design a sampling plan based on an appropriate, agreed level of assurance, |  |  |  |
|  | to analyse risks associated with the use of data and data systems, |  |  |  |
|  | to identify failures in data and data systems, and |  |  |  |
|  | to assess the impact of the various streams of data on the materiality of the GHG assertion. |  |  |  |
| ***ICAO SARPs Annex 16 Volume 4*** | ***Appendix 6 Verification***  ***2.7 Validation or verification team data and information auditing (ISO 14065:2013 section 6.3.4)*** |  |  |  |
| *2.7.1* | *The verification team as a whole shall demonstrate detailed knowledge of ISO 14064-3:2006, including demonstrated ability to develop a risk-based verification approach, perform verification procedures including assessing data and information systems and controls, collect sufficient and appropriate evidence and draw conclusions based on that evidence.* |  |  |  |
| *2.7.2* | *Evidence of data and information auditing expertise and competencies has included previous professional experience in auditing and assurance activities, complemented by appropriate training and education credentials.* |  |  |  |
| **6.3.7** | **Specific validation or verification team leader competencies** |  |  |  |
|  | The validation or verification team leader shall have |  |  |  |
|  | sufficient knowledge and expertise of the competencies detailed in 6.3.2, 6.3.3, 6.3.4, 6.3.5, and 6.3.6 (as appropriate) to manage the validation or verification team in order to meet the validation or verification objectives, |  |  |  |
|  | the demonstrated ability to perform a validation or verification, and |  |  |  |
|  | the demonstrated ability to manage audit teams. |  |  |  |
| **6.4** | **Use of contracted validators or verifiers** |  |  |  |
|  | The validation or verification body shall have procedures or policies that demonstrate that it takes full responsibility for validation or verification activities performed by contracted validators or verifiers. |  |  |  |
|  | The validation or verification body shall require contracted validators or verifiers to sign a written agreement by which they commit themselves to comply with applicable policies and procedures of the validation or verification body. The agreement addresses confidentiality and independence from commercial and other interests, and shall require the contracted validator or verifier to notify the validation or verification body of any existing or prior relationship to the client, responsible party, or both.  NOTE Contracted external validators or verifiers operate as part of the validation or verification team and under the supervision of the validation and verification body on specific validation or verification activities. The use of contracted validators or verifiers under such agreements does not constitute outsourcing as described under 6.6. |  |  |  |
| ***ICAO SARPs Annex 16 Volume 4*** | ***Appendix 6 Verification***  ***2.8 Use of contracted validators and verifiers (ISO 14065:2013 section 6.4)*** |  |  |  |
|  | *The verification body shall document roles and responsibilities of the verification personnel, including contracted persons involved in the verification activity.* |  |  |  |
| **6.5** | **Personnel records** |  |  |  |
|  | The validation or verification body shall maintain up-to-date records of competencies, including relevant education, training, experience, performance monitoring, affiliations, and professional status, of each person involved in the validation or verification process. |  |  |  |
| **6.6** | **Outsourcing** |  |  |  |
|  | In the absence of GHG programme prohibitions on outsourcing, the validation or verification body may outsource but |  |  |  |
|  | Shall retain full responsibility for the validation or verification, |  |  |  |
|  | Shall require the outsourced body to provide independent evidence that demonstrates conformity with ISO 14065:2013 and with ISO 14064-3, |  |  |  |
|  | Shall obtain consent from the client and responsible party to use the outsourced body, and |  |  |  |
|  | Shall have a properly documented agreement. |  |  |  |
| NOTE | Outsourcing refers to contract arrangements with another organization, including other validation or verification bodies, to provide validation or verification services to the validation or verification body. |  |  |  |
| ***ICAO SARPs Volume 16 Annex 4*** | ***Appendix 6 Verification***  ***2.9 Outsourcing (ISO 14065:2013 section 6.6)*** |  |  |  |
| *2.9.1* | *The verification body shall not outsource the final decision on the verification and the issuance of the verification statement* |  |  |  |
| *2.9.2* | *The independent review shall only be outsourced as long as the outsourced service is appropriate, competent, and covered by the accreditation* |  |  |  |
| **7** | **Communication and records** |  |  |  |
| **7.1** | **Information provided to a client or responsible party** |  |  |  |
|  | The validation or verification body shall provide the following to its client or responsible party: |  |  |  |
|  | a detailed description of the validation or verification process;  NOTE The description of the validation or verification process includes how the validation or verification body considers results of previous validation or verification results, where appropriate and if available. |  |  |  |
|  | changes to the validation or verification requirements and the relevant GHG programme that may affect the objectives of the client; |  |  |  |
|  | a schedule of validation or verification activities and tasks; |  |  |  |
|  | relevant information on validation or verification team members; |  |  |  |
|  | information about validation or verification fees; |  |  |  |
|  | its policy governing any statement that the client is authorized to use making reference to its validation or verification; |  |  |  |
|  | information on procedures for handling complaints and appeals. |  |  |  |
| **7.2** | **Communication of responsibilities to a client or responsible party** |  |  |  |
|  | The validation or verification body shall inform the prospective client or responsible party of its responsibility |  |  |  |
|  | to comply with validation or verification requirements, |  |  |  |
|  | to make all necessary arrangements for the conduct of the validation or verification, including provisions for examining documentation and access to all relevant processes, areas, records, and personnel, and |  |  |  |
|  | to make provisions, where applicable, to accommodate observers. |  |  |  |
| **7.3** | **Confidentiality** |  |  |  |
|  | The validation or verification body shall have a policy and mechanisms to safeguard the confidentiality of information obtained or created during the validation or verification. The policy shall meet all legal requirements necessary to be enforceable and shall include the personnel and activities of the validation or verification body and outsourced bodies. |  |  |  |
|  | The validation or verification body, its personnel and outsourced bodies shall treat as confidential validation or verification information obtained or created during the validation or verification or obtained from sources other than the client or responsible party. |  |  |  |
|  | The validation or verification body shall not disclose information that is not public about a client or responsible party to a third party without the express consent of that client or responsible party. |  |  |  |
|  | The validation or verification body shall inform the client and, as appropriate, the responsible party before placing any information in the public domain where required by disclosure provisions of a relevant GHG programme. |  |  |  |
|  | The validation or verification body shall have available and shall use equipment and facilities that ensure the secure handling of confidential information. |  |  |  |
| ***ICAO SARPs Annex 16 Volume 4*** | ***Appendix 6 Verification***  ***2.10 Confidentiality (ISO 14065:2013 section 7.3)*** |  |  |  |
|  | *The verification body shall ensure it has the express consent of the aeroplane operator prior to submission of the verified Emissions Report, the Emissions Unit Cancellation Report where applicable, and the Verification Report to the State. The mechanism for authorizing this consent shall be specified in the contract between the verification body and aeroplane operator* |  |  |  |
| **7.4** | **Publicly accessible information** |  |  |  |
|  | The validation or verification body shall maintain and, upon request, provides clear, traceable, and accurate information about its activities and the sectors in which it operates**.** |  |  |  |
| **7.5** | **Records** |  |  |  |
|  | The validation or verification body shall maintain and manages records of its validation or verification activities including |  |  |  |
|  | 1. application information and validation or verification scopes, |  |  |  |
|  | 1. justification for how validation or verification time is determined, |  |  |  |
|  | 1. confirmation of the completion of validation or verification activities, including findings and information on material or non-material discrepancies, |  |  |  |
|  | 1. validation or verification statements, and |  |  |  |
|  | 1. records of complaints and appeals, and any subsequent correction or corrective actions. |  |  |  |
|  | The validation or verification body shall maintain validation or verification records securely and confidentially, including during their transport, transmission, or transfer. |  |  |  |
|  | The validation or verification body shall retain validation or verification records in accordance with GHG programme, contractual, legal, or other management system requirements.  NOTE ISO 15489-1 provides guidance on the establishment, operation, and management of a records management system. |  |  |  |
| ***ICAO SARPs Annex 16 Volume 4*** | ***Appendix 6 Verification***  ***2.11 Records (ISO 14065:2013 section 7.5)*** |  |  |  |
|  | *The verification body shall keep records on the verification process for a minimum of ten years, including:* |  |  |  |
| ***a)*** | *client’s Emissions Monitoring Plan, Emissions Report and Emissions Unit Cancellation Report where applicable;* |  |  |  |
| ***b)*** | *Verification Report and related internal documentation;* |  |  |  |
| ***c)*** | *identification of team members and criteria for selection of team; and* |  |  |  |
| ***d)*** | *working papers with data and information reviewed by the team in order to allow for an independent party to assess the quality of the verification activities and conformance with verification requirements* |  |  |  |
| **8** | **Validation or verification process** |  |  |  |
| **8.1** | **General** |  |  |  |
|  | The validation or verification process shall include the following validation or verification process phases: |  |  |  |
|  | 1. pre-engagement; |  |  |  |
|  | 1. approach; |  |  |  |
|  | 1. validation or verification; |  |  |  |
|  | 1. validation or verification statement. |  |  |  |
| **8.2** | **Pre-engagement** |  |  |  |
| **8.2.1** | **Impartiality** |  |  |  |
|  | The validation or verification body shall review information received from prospective clients to determine potential risks to impartiality in accordance with the requirements of 5.4. |  |  |  |
| **8.2.2** | **Competence** |  |  |  |
|  | The validation or verification body shall review information received from prospective clients to determine if the validation or verification body has the competence, personnel, and resources necessary to successfully complete the prospective assignment in accordance with the requirements of Clause 6. |  |  |  |
| **8.2.3** | **Agreement** |  |  |  |
|  | The validation or verification body shall have a legally enforceable agreement with the client in accordance with the requirements of 5.2. |  |  |  |
|  | The validation or verification body shall ensure that objectives, scope, criteria, and level of assurance are agreed with the client (see ISO 14064-3:2006, 4.3). |  |  |  |
| **IAF MD 6:2014** | **A8.8.2.3.1** The V/VB shall have a documented management system (as per Clause 12) for responding to requests for validation and/or verification. The V/VB procedures shall ensure that prior to any quotation or agreement, sufficient information is obtained regarding the scope, objective, criteria, level of assurance and materiality of the validation or verification. The quotation shall be developed based on the information obtained taking into account the key issues applicable to the GHG assertion and the objectives of the validation or verification consistent with the validation or verification criteria, (refer to A.1.1) and the intended user as applicable to the GHG assertion. |  |  |  |
| **A.8.2.3.2** | When considering quoting for validation or verification of a GHG assertion, the V/VB shall consider the key issues related to developing a quote, as applicable, including the:   * Proposed level of assurance, materiality, criteria, objectives and scope; * Complexity of the GHG assertion; * Complexity of the project or organisation and its measurement/monitoring processes; * Organisational environment including the structure of the organisation that develops and manages the GHG assertion; * Baseline scenario for project validation and verification, including selection and quantification of GHG sources, sinks and reservoirs applicable to the baseline scenario; * Identified GHG sources, sinks and reservoirs, and their monitoring for organisation verification; * Processes that deliver the information and data in the GHG assertion; * Organisational links and interactions between stakeholders, responsible parties, client, and intended users (for definition refer to ISO 14064-3); and   Validation or verification criteria (refer to A.1.1) requirements. |  |  |  |
| **A.8.2.3.3** | The time needed to carry out the validation or verification shall be determined by the V/VB. The time allocation shall be justified based on the review of the above information and recorded by the V/VB. Each engagement has unique aspects, and the validation or verification process shall be customized accordingly. |  |  |  |
| **A.8.2.3.8** | The V/VB agreement (including any schedules or attachments) shall identify the proposed level of assurance, materiality, criteria, objectives and scope, including the agreed validation or verification criteria (refer to A.1.1.) as applicable, as well as the proposed validation or verification duration, and time frame for the proposed validation or verification. |  |  |  |
| ***ICAO SARPs Annex 16 Volume 4*** | ***Appendix 6 Verification***  ***2.12 Agreement (ISO 14065:2013 section 8.2.3)*** |  |  |  |
|  | *The contract between verification body and aeroplane operator shall specify the conditions for verification by stating:* |  |  |  |
| ***a)*** | *scope of verification, verification objectives, level of assurance, materiality threshold and relevant verification standards (ISO 14065, ISO 14064-3, this Volume and the Environmental Technical Manual, Volume IV);* |  |  |  |
| ***b)*** | *amount of time allocated for verification;* |  |  |  |
| ***c)*** | *flexibility to change time allocation if this proves necessary because of findings during the verification;* |  |  |  |
| ***d)*** | *conditions which have to be fulfilled to conduct the verification such as access to all relevant*  *documentation, personnel and premises;* |  |  |  |
| ***e)*** | *requirement of the aeroplane operator to accept the audit as a potential witness audit by national accreditation body’s assessors;* |  |  |  |
| ***f)*** | *requirement of the aeroplane operator to authorize the release of the Emissions Report, the Emissions Unit Cancellation Report, where applicable, and the Verification Report by the verification body to the State; and* |  |  |  |
| ***g)*** | *liability coverage* |  |  |  |
| ***ICAO SARPs Annex 16 Volume 4*** | ***Appendix 6 Verification***  ***3.1 Level of assurance (ISO 14064-3:2006 section 4.3.1)*** |  |  |  |
|  | *A reasonable level of assurance shall be required for all verifications under ICAO SARPs Annex 16 Volume 4.* |  |  |  |
| ***ICAO SARPs Annex 16 Volume 4*** | ***Appendix 6 Verification***  ***3.2 Objectives (ISO 14064-3:2006 section 4.3.2)*** |  |  |  |
| ***3.2.1*** | *When conducting the verification of an Emissions Report, the verification body shall perform sufficient procedures to conclude whether:* |  |  |  |
| ***a)*** | *the greenhouse gas assertion is materially fair and an accurate representation of emissions over the period of the Emissions Report and is supported by sufficient and appropriate evidence;* |  |  |  |
| ***b)*** | *the aeroplane operator has monitored, quantified and reported its emissions over the period of the Emissions Report in accordance with ICAO SARPs Annex 16 Volume 4 and the approved Emissions Monitoring Plan;* |  |  |  |
| ***c)*** | *the aeroplane operator has correctly applied the method of flight attribution documented in the approved Emissions Monitoring Plan and in accordance with Part II, Chapter 1 of ICAO SARPs Annex 16 Volume 4, to ensure a correct attribution of leased aeroplane and international flights, as defined in Part II, Chapter 1, 1.1.2, operated by other aeroplane operators under the same corporate structure;* |  |  |  |
| ***d)*** | *the stated amount of emissions reductions from the use of CORSIA eligible fuels is materially fair and an accurate representation of emissions reductions over the reporting period, and is supported by sufficient and appropriate internal and external evidence;* |  |  |  |
| ***e)*** | *the claimed batches of CORSIA eligible fuels have not also been claimed by the aeroplane operator under any other voluntary or mandatory schemes it has participated in (where the emissions reductions from CORSIA eligible fuels may be claimed), during the current compliance period, as well as the compliance period immediately preceding it; and* |  |  |  |
| ***f)*** | *the aeroplane operator has monitored, calculated and reported its emissions reductions associated from the use of CORSIA eligible fuels over the period of the reporting period in accordance with ICAO SARPs Annex 16 Volume 4,.* |  |  |  |
| ***3.2.2*** | *When conducting the verification of an Emissions Unit Cancellation Report, the verification body shall perform sufficient procedures to conclude whether:* |  |  |  |
| ***a)*** | *the aeroplane operator has accurately reported cancellations of its CORSIA Eligible Emissions Units in accordance with ICAO SARPs Annex 16 Volume 4,;* |  |  |  |
| ***b)*** | *the stated number of cancelled CORSIA Eligible Emissions Units is sufficient for meeting the aeroplane operator’s total final offsetting requirements associated with the relevant compliance period, after accounting for any claimed emissions reductions from the use of CORSIA eligible fuels, and the aeroplane operator can demonstrate sole right of use to such cancelled CORSIA Eligible Emissions Units; and* |  |  |  |
| ***c)*** | *the eligible emissions units cancelled by the aeroplane operator to meet its offsetting requirements under ICAO SARPs Annex 16 Volume 4, have not been used by the aeroplane operator to offset any other emissions.* |  |  |  |
| ***ICAO SARPs Annex 16 Volume 4*** | ***Appendix 6 Verification***  ***3.3 Scope (ISO 14064-3:2006 section 4.3.4)*** |  |  |  |
| ***3.3.1*** | *When conducting the verification of an Emissions Report, the scope of the verification shall reflect the period of time and information covered by the report and the CORSIA eligible fuels claim(s) where applicable. This includes:* |  |  |  |
| ***a)*** | *CO2 emissions from aeroplane fuel monitoring methods, calculated in accordance with Part II, Chapter 2, 2.2; and* |  |  |  |
| ***b)*** | *Emissions reductions from the use of CORSIA eligible fuel(s).* |  |  |  |
| ***3.3.2*** | *The scope of the verification of the CORSIA eligible fuel claim(s) in the Emissions Report shall include the following:* |  |  |  |
| ***a)*** | *Any internal aeroplane operator procedures for CORSIA eligible fuels, including aeroplane operator controls to ensure the claimed CORSIA eligible fuels satisfies the CORSIA Sustainability Criteria;* |  |  |  |
| ***b)*** | *Checks for double claiming are limited to the specific aeroplane operator. Any findings outside of this scope are not relevant for the verification statement, however they should still be included in the Verification Report for further consideration by the State;* |  |  |  |
| ***c)*** | *Assessment of verification risk with appropriate changes to the verification plan; and* |  |  |  |
| ***d)*** | *Assessment of whether there is sufficient access to relevant internal and external information to obtain sufficient confidence in each CORSIA eligible fuel claim. Where evidence of the sustainability or the size of the CORSIA eligible fuels claim is considered either inappropriate or insufficient, further information should be sought directly from the fuel producer with direct access facilitated through the aeroplane operator.* |  |  |  |
| ***3.3.3*** | *When conducting the verification of an Emissions Unit Cancellation Report, the scope of the verification shall reflect the period of time and information covered by the report and the verification body shall confirm that the cancelled eligible emissions units used to meet the aeroplane operator’s offsetting requirements under this Volume have not been used to offset any other emissions.* |  |  |  |
| ***ICAO SARPs Annex 16 Volume 4*** | ***Appendix 6 Verification***  ***3.4 Materiality (ISO 14064-3:2006 section 4.3.5)*** |  |  |  |
| ***3.4.1*** | *When conducting the verification of an Emissions Report, the verification body shall apply the following materiality thresholds.* |  |  |  |
| ***a)*** | *of 2 per cent for aeroplane operators with annual emissions on international flights, as defined in Part II, Chapter 1, 1.1.2 and Part II, Chapter 2, 2.1, above 500 000 tonnes; and* |  |  |  |
| ***b)*** | *of 5 per cent for aeroplane operators with annual emissions on international flights, as defined in Part II, Chapter 1, 1.1.2 and Part II, Chapter 2, 2.1, equal or less than 500 000 tonnes of CO2.* |  |  |  |
| ***3.4.2*** | *When conducting the verification of an Emissions Report, the over and understatements in 3.4.1 shall be allowed to balance out in both cases.* |  |  |  |
| **8.2.4** | **Appointing the team leader** |  |  |  |
|  | The validation or verification body shall appoint the validation or verification team leader in accordance with the requirements of 6.3.7. |  |  |  |
| **8.3** | **Approach** |  |  |  |
| **8.3.1** | **Selecting the validation or verification team** |  |  |  |
|  | The validation or verification body shall appoint the validation or verification team in accordance with the requirements of Clause 6. |  |  |  |
| **8.3.2** | **Communicating with the client and responsible party** |  |  |  |
|  | The validation or verification body shall communicate with the client or responsible party or both in accordance with the requirements of 7.1 and 7.2. |  |  |  |
|  | The validation or verification body shall inform the client or responsible party of the names of the members of the verification or validation team with sufficient notice for any objections to the appointment of a team member to be made. |  |  |  |
|  | The validation or verification body shall consider reconfiguring the validation or verification team in response to any objection from the client or responsible party. |  |  |  |
| **8.3.3** | **Planning** |  |  |  |
|  | The validation or verification body shall conduct a review of the responsible party’s GHG information in developing a validation or verification plan to conform to the requirements of ISO 14064-3:2006, 4.4. |  |  |  |
|  | The validation or verification body shall develop a validation or verification plan to conform to the requirements of ISO 14064-3:2006, 4.4.2. |  |  |  |
|  | The validation or verification body shall develop a sampling plan to conform to the requirements of ISO 14064-3:2006, 4.4.3. |  |  |  |
|  | The validation or verification body’s team leader shall approve the validation or verification plan and sampling plan. |  |  |  |
|  | The validation or verification body shall detail specific activities and times required to complete the validation or verification based on the validation or verification plan and sampling plan. |  |  |  |
|  | The verification plan and the sampling plan may be developed in parallel. |  |  |  |
| **IAF MD 6:2014** | **A.8.3.3.1** The agreed validation or verification criteria shall include one of the options from A.1.1. |  |  |  |
| **A.8.3.3.2** | The principles of the agreed criteria for validation or verification shall be used during the validation or verification process. The validation and verification criteria shall meet requirements as set down in A.1.1. |  |  |  |
| **A.8.3.3.3** | The principles as applicable to the agreed validation or verification criteria, (refer to A.1.1.), shall be used by the V/VB and the validation or verification team to guide the validation or verification process, including evaluation of findings, conclusions, opinions and decisions reached regarding the GHG assertion. |  |  |  |
| **A.8.3.3.9** | The development of the validation and verification approach shall be based on the agreed criteria, scope, objectives, level of assurance and materiality; not just the quoted validation or verification duration. The validation or verification duration shall be increased or decreased as necessary throughout the planning process. The team competencies shall be reviewed as a result of the outcome of the planning process. |  |  |  |
| **A.8.3.3.10** | The V/VB shall obtain sufficient information using a systematic, interactive, and where necessary, iterative process to input to the planning process. |  |  |  |
| **A.8.3.3.11** | The V/VB shall review the outcome of the planning process in light of evidence and information gathered during the validation or verification process and amend the plans accordingly. |  |  |  |
| **A.8.3.3.12** | The output from the strategic analysis shall be used as an input to the assessment of risks, sampling plan and validation or verification plan. |  |  |  |
| **Note 1** | Assessment of risks takes into account the level of assurance, materiality, criteria, scope and objective of the validation or verification; changes in these will affect the depth and detail of the assessment of risks. |  |  |  |
| **Note 2** | Refer to Annex B for issues to be considered in developing the validation or verification plan for a GHG assertion covering either a grouped project or that includes more than one facility in the GHG inventory. |  |  |  |
| **A.8.3.3.13** | The V/VB shall ensure that the planned man-days are appropriate to meet the sampling plan and validation or verification plan developed as the outcome of the strategic analysis and assessment of risks. |  |  |  |
| **A.8.3.3.14** | The V/VB shall ensure that any conflict between the man-days quoted and the man-days needed to deliver the engagement, based on the outcome of the strategic analysis and assessment of risks, is resolved. |  |  |  |
| **A.8.3.3.15** | The V/VB shall revise the validation or verification plan and sampling plan where the V/VB has identified or agreed to changes with the client related to validation or verification criteria, scope, materiality, level of assurance or objectives, or findings emerge that affect the conclusion of the strategic analysis and/or the assessment of risks. |  |  |  |
| **A.8.3.3.16** | The specific data and information to be sampled shall be determined as part of the validation or verification planning and not on a spur of the moment during the data and information validation or verification. The sampling plan shall be detailed and documented before the commencement of the data and information validation or verification and shall be revised as necessary during the validation or verification. The development of the sampling plan shall determine the amount of information, evidence and data necessary to achieve the agreed scope, criteria, objectives, level of assurance and materiality. |  |  |  |
| **A.8.3.3.17** | In approving the validation or verification plan, the validation or verification team leader shall ensure that it is complete and that all sub-elements of the plan provide for a complete integrated validation or verification process consistent with the agreed criteria, scope, objectives, level of assurance and materiality of the engagement. |  |  |  |
| **A.8.3.3.18** | In approving the validation or verification plan, the validation or verification team leader shall confirm that the validation or verification duration, team competencies and team member assignments are adequate and fit the needs of the validation or verification. |  |  |  |
| **A.8.3.3.19** | The validation and verification team shall ensure that there is consistency between the validation or verification plan and the contractually agreed objectives, scope, criteria, level of assurance and materiality. The validation or verification documentation shall clearly identify any approved variations to the agreement. |  |  |  |
| ***ICAO SARPs Annex 16 Volume 4*** | ***Appendix 6 Verification***  ***3.5 General (ISO 14064-3:2006 section 4.4.1)*** |  |  |  |
|  | *Prior to the development of the verification approach, the verification body shall assess the risk of misstatements and non- conformities and their likelihood of a material effect on the basis of a strategic analysis of the aeroplane operator’s greenhouse gas emissions information1. Depending on the information obtained during the verification, the verification body shall revise the risk assessment and modify or repeat the verification activities to be performed.* |  |  |  |
| ***ICAO SARPs Annex 16 Volume 4*** | ***Appendix 6 Verification***  ***3.6 Validation or verification plan (ISO 14064-3:2006 section 4.4.2)*** |  |  |  |
| ***3.6.1*** | *The verification team shall prepare the verification plan on the basis of the strategic analysis and assessment of risks. The verification plan shall include a description of the verification activities for each variable that has a potential impact on the reported emissions. The verification team shall consider the assessment of risk, and the requirement to deliver a verification opinion with reasonable assurance, when determining sample size.* |  |  |  |
| *3.6.2* | *The verification plan shall include the following:* |  |  |  |
| ***a)*** | *verification team members, roles, responsibilities and qualifications;* |  |  |  |
| ***b)*** | *any external resources required;* |  |  |  |
| ***c)*** | *schedule of verification activities; and* |  |  |  |
| ***d)*** | *sampling plan, including the processes, controls and information to be verified and details of the risk assessment conducted to identify these.* |  |  |  |
| ***ICAO SARPs Annex 16 Volume 4*** | ***Appendix 6 Verification***  ***3.7 Sampling plan (ISO 14064-3:2006 section 4.4.3)*** |  |  |  |
| ***3.7.1*** | *The Emissions Report sampling plan shall include the following:* |  |  |  |
| ***a)*** | *number and type of records and evidence to be examined;* |  |  |  |
| ***b)*** | *methodology used to determine a representative sample; and* |  |  |  |
| ***c)*** | *justification for the selected methodology.* |  |  |  |
| ***3.7.2*** | *When conducting the verification of an Emissions Unit Cancellation Report, the verification body shall not rely on sampling.* |  |  |  |
| **8.4** | **Validation or verification** |  |  |  |
|  | The validation or verification body shall assess the GHG assertion in conformity with the requirements of ISO 14064-3:2006, 4.5, 4.6, and 4.7, taking account of the information review, validation or verification plan, and data sampling plan decided in ISO 14064-3:2006, 4.4.1, 4.4.2, and 4.4.3, and in 8.3 of ISO 14065:2013. |  |  |  |
|  | The validation or verification body shall evaluate whether the validation or verification evidence collected supports the GHG assertion, in conformity with ISO 14064-3:2006, 4.8. |  |  |  |
| **IAF MD 6:2014** | **A.8.4.1** The validation or verification shall be conducted with an attitude of professional scepticism, which assumes that the presented information and data may be wrong until proven differently, and take account of relevant stakeholder or market concerns and the applicable validation or verification criteria and associated principles. |  |  |  |
| **A.8.4.4** | The level of risk mitigation provided by the GHG information systems and controls shall impact the detail and level of validation or verification sampling.  Note - ISO 14064-3 does not impose a formal requirement on an organisation or project to have GHG information systems or controls or for such GHG information system or controls to meet ISO 14064-3, Clause 4.5. |  |  |  |
| **A.8.4.6** | In cases where errors, omissions or misstatements are identified in the GHG data and information, the validation and verification team shall require that these are corrected by the client, and increase the sampling. Where non-material errors, omissions or misstatements cannot be corrected, the V/VB shall qualify the validation or verification statement. Where statements cannot be qualified, e.g. materiality or other program requirements are not met, the V/VB shall issue an adverse validation or verification statement.  Note - For an understanding of what qualification of a validation and verification statement means see ISO 14064-3, A.2.9.2. |  |  |  |
| **A.8.4.7** | A.8.4.7. The assessment of GHG data and information includes confirmation of the operability of the software and hardware used to process or generate the GHG data and information.  Note - Consideration should be given to controls of such hardware and software including issues such as validation of software, where relevant, backup of data, calibration of monitoring equipment, reliability of external data, etc. |  |  |  |
| **A.8.4.9** | Input into the assessment of the GHG assertion shall include:   * Contract requirements related to scope, criteria, objectives, level of assurance and materiality as well as any validation or verification criteria (refer to A.1.1) specific requirements; * GHG assertion; * Output from the strategic analysis and assessment of risks; * Output from the assessment of GHG information system and controls; * Output from the assessment of GHG data and information; and * Output from the assessment against validation or verification criteria. |  |  |  |
| **A.8.4.10** | In evaluating the risk of material discrepancies related to the GHG assertion, the V/VB shall consider:   * Views of the intended user; * Relevance and relative contribution of the various GHG emissions from all GHG sources, sinks and reservoirs; * Adequacy of the GHG information system and controls; * Complexity of organisation or GHG project operations; * Monitoring process applicable to the GHG project or organisation; and * Relevant evidence from previous validations or verifications, as applicable. |  |  |  |
| **A.8.4.11** | The output from the assessment of the GHG assertion shall confirm that:   * Evidence gathered is sufficient to validate or verify the GHG assertion in line with the scope, criteria, objectives, materiality and level of assurance as agreed in the contract; * The validation and verification process, as carried out, has delivered the level of assurance as agreed; * Sampling and its results support, or not, a conclusion that there are no material discrepancies in the GHG assertion; * The GHG assertion is free from material discrepancy based on the evidence and findings from the validation or verification process and the agreed scope, objective, criteria, materiality and level of assurance. If the evidence and findings are not sufficient to reach this conclusion then; either: * The level of assurance and / or materiality of the engagement shall be amended; OR * One of the following types of opinion may be formed: o “adverse”; o “qualified”; o “a disclaimer of opinion”.     Note 1 - For support in developing a “qualified” and “adverse” validation or verification statement, refer to ISO 14064-3, A.2.9.2 and A.2.9.3.  Note 2 - “qualified” or “adverse” validation or verification statements should not be confused with the terminology associated with limited level of assurance or reasonable level of assurance; refer to ISO 14064-3, A.2.3.2. |  |  |  |
| **A.8.4.12** | The validation or verification team shall submit to the V/VB, evidence and findings to substantiate and support its recommendations related to the GHG assertion (the proposed V/V statement). The evidence and findings shall link to the agreed validation or verification plan and sampling plan and be sufficient for the V/VB to carry out an effective independent review (refer to ISO 14065, Clause 8.5). |  |  |  |
| **A.8.4.14** | The validation or verification team shall ensure that all material discrepancies are reported to the client including explaining their potential impact on the validation or verification statement. |  |  |  |
| ***ICAO SARPs Annex 16 Volume 4*** | ***Appendix 6 Verification***  ***3.8 Assessment of GHG data and information (ISO 14064-3:2006 section 4.6)*** |  |  |  |
| ***3.8.1*** | *The verification team shall confirm that the Emissions Report data has been collected in accordance with the approved Emissions Monitoring Plan and monitoring requirements specified in ICAO SARPs Annex 16 Volume 4.* |  |  |  |
| ***3.8.2*** | *In accordance with the Emissions Report sampling plan, the verification body shall carry out substantive data testing consisting of analytical procedures and data verification to assess the plausibility and completeness of data. The verification team shall, as a minimum, assess the plausibility of fluctuations and trends over time or between comparable data items as well as identify and assess immediate outliers, unexpected data, anomalies, and data gaps.* |  |  |  |
| ***3.8.3*** | *Depending on the outcome of Emissions Report data testing and assessment, the assessment of risk, verification and sampling plans shall be amended, where necessary.* |  |  |  |
| ***ICAO SARPs Annex 16 Volume 4*** | ***Appendix 6 Verification***  ***3.9 Evaluation of the GHG assertion (ISO 14064-3:2006 section 4.8)*** |  |  |  |
| ***3.9.1*** | *The verification body shall use an independent reviewer not involved in the verification activities to assess the internal verification documentation, and the Verification Report, prior to its submission to the aeroplane operator and State.* |  |  |  |
| ***3.9.2*** | *The independent review, whose scope includes the complete verification process, shall be recorded in the internal verification documentation.* |  |  |  |
| ***3.9.3*** | *The independent review shall be performed to ensure that the verification process has been conducted in accordance with ISO 14065:2013, ISO 14064-3:2006 and ICAO SARPs Annex 16 Volume 4, and that the evidence gathered is appropriate and sufficient to enable the verification body to issue a Verification Report with reasonable assurance.* |  |  |  |
| **8.5** | **Review and issuance of validation or verification statement** |  |  |  |
|  | The validation and verification body shall ensure that competent personnel, different from the validation or verification team, |  |  |  |
|  | 1. confirm that all validation or verification activities have been completed, and |  |  |  |
|  | 1. conclude whether or not the GHG assertion is free from material discrepancy, and whether the verification or validation activities provide the level of assurance agreed to at the beginning of the validation or verification process in conformity with ISO 14064-3:2006, 4.8. |  |  |  |
|  | The validation and verification body shall issue a validation or verification statement based on the conclusion of validation or verification findings in conformity with ISO 14064-3:2006, 4.9. |  |  |  |
| ***ICAO SARPs Annex 16 Volume 4*** | ***Appendix 6 Verification***  ***Validation and verification statement (ISO 14064-3:2006 section 4.9)*** |  |  |  |
| ***3.10.1*** | *The verification body shall submit a copy of the Verification Report to the aeroplane operator. Upon authorization by the aeroplane operator, the verification body shall forward a copy of the Verification Report together with the Emissions Report, the Emissions Unit Cancellation Report, or both, to the State. The Verification Report shall include:* |  |  |  |
| ***a)*** | *names of the verification body and verification team members;* |  |  |  |
| ***b)*** | *time allocation (including any revisions and dates);* |  |  |  |
| ***c)*** | *scope of the verification;* |  |  |  |
| ***d)*** | *main results of impartiality and avoidance of conflict of interest assessment;* |  |  |  |
| ***e)*** | *criteria against which the Emissions Report was verified;* |  |  |  |
| ***f)*** | *aeroplane operator information and data used by the verification body to cross-check data and carry out other verification activities;* |  |  |  |
| ***g)*** | *main results of the strategic analysis and assessment of risk;* |  |  |  |
| ***h)*** | *description of verification activities undertaken, where each was undertaken (on-site vs off-site) and results of checks made on the CO2 emissions information system and controls;* |  |  |  |
| ***i)*** | *description of data sampling and testing conducted, including records or evidence sampled, sample size, and sampling method(s) used;* |  |  |  |
| ***j)*** | *the results of all data sampling and testing, including cross-checks;* |  |  |  |
| ***k)*** | *compliance with the Emissions Monitoring Plan;* |  |  |  |
| ***l)*** | *any non-compliances of the Emissions Monitoring Plan with this Volume;* |  |  |  |
| ***m)*** | *non-conformities and misstatements identified (including a description of how these have been resolved);* |  |  |  |
| ***n)*** | *conclusions on data quality and materiality;* |  |  |  |
| ***o)*** | *conclusions on the verification of the Emissions Report;* |  |  |  |
| ***p)*** | *conclusions on the verification of the Emissions Unit Cancellation Report;* |  |  |  |
| ***q)*** | *justifications for the verification opinion made by the verification body;* |  |  |  |
| ***r)*** | *results of the independent review and the name of the independent reviewer; and* |  |  |  |
| ***s)*** | *concluding verification statement.* |  |  |  |
| ***3.10.2*** | *When conducting the verification of an Emissions Unit Cancellation Report, only 3.10.1 (a), (b), (c), (d), (f), (g), (h), (m), (p), (q), (r) and (s) shall be applicable.* |  |  |  |
| ***3.10.3*** | *The verification body shall provide a conclusion on each of the verification objectives listed in 3.2, as applicable, in the concluding verification statement.* |  |  |  |
| ***3.10.4*** | *When conducting the verification of an Emissions Report or an Emissions Unit Cancellation Report, the verification body shall choose between two types of verification opinion statements, either ‘verified as satisfactory’ or ‘verified as not satisfactory’. If the report includes non-material misstatements and / or non-material non-conformities, the report shall be ‘verified as satisfactory with comments’, specifying the misstatements and non-conformities. If the report contains material misstatements and / or material non-conformities, or if the scope of the verification is too limited or the verification body is not able to obtain sufficient confidence in the data, then the report shall be ‘verified as not satisfactory’.* |  |  |  |
| **IAF MD 6:2014** | **A.8.5.1** In concluding (refer to ISO 14065, Clause 8.5) the independent reviewer shall take into account the evidence resulting from the following:   * Whether the validation or verification plan, sampling plan and validation or verification process and its stated conclusions and opinions are consistent with the agreement related to level of assurance, materiality, criteria, objectives and scope; * Findings from the strategic analysis and the assessment of risks; * Whether the design of the validation and verification process and its stated * conclusions and opinions are consistent with the requirements in the contract; * Changes to the validation or verification plan or the sampling plan; * The conclusion reached on GHG data and information; and   The recommendation related to GHG assertion. |  |  |  |
| **A.8.5.2** | The independent reviewer shall determine whether the validation or verification statement is consistent with findings from the validation or verification activities and that its stated conclusions and opinions are consistent with findings from the validation or verification and that nothing material has been omitted. |  |  |  |
| **A.8.5.3** | The independent reviewer shall determine whether the validation or verification statement meets the requirements in validation or verification statements set out in the validation or verification criteria (refer to A.1.1.). Where there is no validation or verification statement requirement(s) set out in the validation or verification criteria, the validation or verification statement shall meet ISO 14064-3, Clause 4.9. |  |  |  |
| **A.8.5.4** | An accredited validation and/or verification statement related to a GHG assertion that does not include quantified GHG emissions data related to an organisation or GHG project shall only be issued if:   * There is a legal agreement between the V/VB and the client that any new GHG report, GHG project plan or GHG assertion released by the client subsequent to the initial validation or verification statement is validated or verified; * For an organisation, a (internal) GHG verification report conforming to ISO 14064-1, Clause 7.3, is part of the scope of the verification; * ISO 14064-1 or ISO 14064-2 is part of the validation or verification criteria and the requirements are not reduced; and * The validation or verification statement is clear about what has been validated or verified and does not use language associated with management system certificates or conformity statements. |  |  |  |
| **A.8.5.5** | The validation and verification statement shall:   * Conform with ISO 14064-3, Clause 4.9, except in cases where regulated requirements overrule this; * Be consistent with the outcome of the V/VB review; and * Contain a validation/verification opinion and conclusion that reflects material discrepancies that remain after the conclusion of the validation or verification, and be issued to the responsible party. |  |  |  |
| **8.6** | **Records** |  |  |  |
|  | The validation or verification body shall maintain validation or verification records in conformity with 7.5 and the requirements of ISO 14064-3:2006, 4.10. |  |  |  |
| ***ICAO SARPs Annex 16 Volume 4*** | ***Appendix 6 Verification***  ***Validation or verification records (ISO 14064-3:2006 section 4.10)*** |  |  |  |
| ***3.11.1*** | *On request of the State, the verification body shall disclose the internal verification documentation on a confidential basis to the State.* |  |  |  |
| ***3.11.2*** | *Where issues that may render a previously issued verification statement invalid or inaccurate are brought to the attention of the verification body, then it shall notify the State.* |  |  |  |
| **8.7** | **Facts discovered after the validation or verification statement** |  |  |  |
|  | The validation or verification body shall consider appropriate action if facts that could materially affect the validation or verification statement are discovered by the client, responsible party, or GHG programme after the issuance of the validation or verification statement, including the following: |  |  |  |
|  | 1. determining if the facts have been adequately disclosed in the GHG assertion; |  |  |  |
|  | 1. considering if the validation or verification statement requires revision; |  |  |  |
|  | 1. discussing the matter with the client, responsible party, or GHG programme (as appropriate). |  |  |  |
|  | If the validation or verification statement requires revision, the validation or verification body shall implement processes to issue a revised validation or verification report and issue a revised validation or verification statement which specifically addresses the reason for the revision. |  |  |  |
| **9** | **Appeals** |  |  |  |
|  | The validation or verification body |  |  |  |
|  | 1. shall have a documented process to manage, evaluate, take necessary corrective action, and make decisions on appeals, |  |  |  |
|  | 1. shall make publicly available a description of the appeals-handling process upon request, |  |  |  |
|  | 1. shall be responsible for all decisions at all levels of the appeals-handling process, |  |  |  |
|  | 1. shall ensure that the persons engaged in appeals-handling processes are different from those who carried out the validation or verification and prepared statements on the GHG assertion, |  |  |  |
|  | 1. shall advise the appellant of receipt of the appeal, the appeals-handling process, the persons engaged in the process, and provides reports and formal notice of the outcome, and |  |  |  |
|  | 1. shall ensure that decisions on appeals do not result in any discriminatory actions against the appellant. |  |  |  |
| **10** | **Complaints** |  |  |  |
|  | The validation or verification body |  |  |  |
|  | 1. shall have a documented process to manage, evaluate, take necessary corrective action, and make decisions on complaints, |  |  |  |
|  | 1. shall make publicly available a description of the complaints-handling process upon request, |  |  |  |
|  | 1. shall be responsible for all decisions at all levels of the complaints-handling process, |  |  |  |
|  | 1. shall safeguard the confidentiality of the complainant and subject of the complaint, |  |  |  |
|  | 1. shall, upon receipt of a complaint, confirms whether the complaint relates to validation or verification activities that the validation or verification body is responsible for, |  |  |  |
|  | 1. shall use persons different from those related to the complaint in the complaint-handling process, and |  |  |  |
|  | 1. shall advise the complainant of receipt of the complaint, the complaint-handling process, the persons engaged in the process, and shall provide reports and, wherever possible, formal notice of the outcome. |  |  |  |
| **11** | **Special validations or verifications** |  |  |  |
|  | In cases where it is necessary for the validation or verification body to conduct, at short notice, a validation or verification of a previously validated or verified GHG assertion in response to complaints or facts discovered after the validation or verification statement, the validation or verification body |  |  |  |
|  | 1. shall notify, in advance, the client, the responsible party, or both, of the conditions under which the special validation or verification is to be conducted, and |  |  |  |
|  | 1. shall use additional care in assigning validation or verification team members if there is a lack of opportunity for the responsible party to object. |  |  |  |
| **12** | **Management system** |  |  |  |
|  | The validation or verification body shall establish, implements, and maintain a documented management system that is capable of supporting and demonstrating the consistent achievement of the requirements of ISO 14065:2013 and also includes the following elements: |  |  |  |
|  | 1. management system policy; |  |  |  |
|  | 1. control of documents; |  |  |  |
|  | 1. control of records; |  |  |  |
|  | 1. internal audits; |  |  |  |
|  | 1. corrective actions; |  |  |  |
|  | 1. preventive actions; |  |  |  |
|  | 1. management review. |  |  |  |
|  | The documented management system shall include the maintenance of associated records. |  |  |  |
| **IAF MD 6:2014** | **A.12.1** The management system should be sufficiently documented to ensure the consistent application of these standards and relevant operational requirements. |  |  |  |

#### PART 2: CHECKLIST TO REQUIREMENTS OF ISO 14066:2011 & PART 3: CHECKLIST TO REQUIREMENTS OF CORSIA

**Key (Y – Addressed, N – Not Addressed, O – To be verified during compliance/ witnessing, N/A – Not applicable)**

| **Clause** | **Requirement** | **Manual / Procedures reference**  **(To be filled by VB during application)** | **Findings**  **(Note: fill in key)** | **Remarks** |
| --- | --- | --- | --- | --- |
| **5** | **Team competence** |  |  |  |
| **5.1** | **General** |  |  |  |
|  | A validation team or a verification team collectively shall have the required competence (3.1.4) to perform validation or verification activities. |  |  |  |
| **5.2** | **Knowledge** |  |  |  |
| **5.2.1** | **General** |  |  |  |
|  | A validation team or a verification team shall possess the following: |  |  |  |
|  | GHG programme knowledge, |  |  |  |
|  | technical knowledge (see Clause 6 of this ISO 14066), |  |  |  |
|  | data and information auditing knowledge, and |  |  |  |
|  | team leader knowledge |  |  |  |
| **5.2.2** | **GHG programme knowledge** |  |  |  |
| **5.2.2.1** | **Generic GHG programme knowledge** |  |  |  |
|  | A validation team or a verification team collectively shall have GHG programme knowledge, including the following: |  |  |  |
|  | eligibility requirements, |  |  |  |
|  | applicable legal requirements, |  |  |  |
|  | implementation in different jurisdictions as applicable, |  |  |  |
|  | restrictions associated with geographic locations, |  |  |  |
|  | validation or verification requirements and guidelines, and |  |  |  |
|  | scope of the GHG emissions subject to reporting (see ISO 14064-3:2006, A.2.3.7, for guidance on validation or verification scope). |  |  |  |
| **5.2.2.2** | **Additional GHG programme knowledge for organization level verification** |  |  |  |
|  | A verification team shall have additional GHG programme knowledge for organization level verification, including, as applicable, eligible processes and sectors. |  |  |  |
| **5.2.2.3** | **Additional GHG programme knowledge for project validation or verification** |  |  |  |
|  | A project validation team or a project verification team collectively shall have additional GHG programme knowledge for project validation or verification, including the following: |  |  |  |
|  | established project boundaries and project types, including industry sectors and technology areas, |  |  |  |
|  | applicable project methodologies, and |  |  |  |
|  | eligible emission reductions or removal enhancements |  |  |  |
| **5.2.3** | **Technical Knowledge** |  |  |  |
| **5.2.3.1** | **Generic technical knowledge** |  |  |  |
|  | A validation team or a verification team collectively shall have technical knowledge, including (as applicable) the following: |  |  |  |
|  | GHGs, global warming potentials, activity data and emission factors, |  |  |  |
|  | application of materiality and material discrepancy, |  |  |  |
|  | application of quantification and reporting principles (e.g. completeness, consistency, accuracy, transparency and relevance), |  |  |  |
|  | relevant **sector** (3.1.1) GHG sources, sinks and reservoirs (SSRs), and |  |  |  |
|  | relevant sector quantification methodologies, monitoring techniques and calibration procedures and their consequences for data quality. |  |  |  |
| **5.2.3.2** | **Additional technical knowledge for organization level verification** |  |  |  |
|  | A verification team collectively shall have additional technical knowledge for organization level verification, including (as applicable) criteria, processes, procedures and/or methodologies for setting: |  |  |  |
| a) | organizational boundaries, and |  |  |  |
| b) | operational boundaries. |  |  |  |
| **5.2.3.4** | **Additional technical knowledge for the verification of other GHG assertions** |  |  |  |
|  | A verification team collectively shall have additional technical knowledge for the verification of other GHG assertions, including as applicable criteria, processes, procedures and/or methodologies for the following: |  |  |  |
|  | life cycle assessment for the purposes of carbon footprint declarations (see ISO 14040, ISO 14044, ISO/TR 14047, ISO/TS 14048, ISO/TR 14049 and the future ISO 14045 and ISO 14067), |  |  |  |
|  | environmental declarations and labels (see ISO 14020, ISO 14021, ISO 14024 and ISO 14025), and |  |  |  |
|  | statements of carbon neutrality and other related assertions. |  |  |  |
| **5.2.4** | **Data and information auditing knowledge** |  |  |  |
|  | A validation team or a verification team collectively shall have data and information auditing knowledge, including the following: |  |  |  |
|  | data and information auditing methodologies, |  |  |  |
|  | risk assessment methodologies, |  |  |  |
|  | data and information sampling techniques, |  |  |  |
|  | GHG data and information control systems, and |  |  |  |
|  | typical internal control systems. |  |  |  |
| **5.2.5** | **Team leader knowledge** |  |  |  |
|  | A team leader shall have sufficient validation or verification knowledge (applicable to the engagement), including the following: |  |  |  |
| a) | the scope, criteria, objective, materiality and level of assurance of the validation or verification, |  |  |  |
| b) | the competence of team members, |  |  |  |
| c) | validation or verification of related risks, and |  |  |  |
| d) | project, resource, and team management. |  |  |  |
| **5.3** | **Skills** |  |  |  |
|  | A validation team or a verification team collectively shall have the necessary skills to perform validation or verification activities. Examples of applicable skills include the ability to:   1. retrieve relevant information and apply the knowledge in a manner appropriate for the work, 2. understand the meaning, translation, and interpretation of information, 3. think critically and analyse multiple inputs, 4. distinguish between facts and inferences and exercise professional scepticism, 5. carry out independent research to challenge assumptions and evidence asserted by a responsible party 6. or client, 7. strike a balance between attention to detail and a high-level assessment of the anticipated outcome 8. during the validation or verification process, 9. manage detail, particularly at the level of ensuring that required checks are performed (e.g. between a 10. GHG project plan and the GHG project report, and between a GHG inventory and its corresponding 11. report), 12. evaluate the information, data, and assumptions and make professional judgements, |  |  |  |
|  | 1. apply validation and verification methods in expected and unanticipated situations, and 2. communicate the validation or verification process and results.   NOTE Annex B outlines methods that can be used to evaluate the skills of validation team and verification team members. |  |  |  |
| **6** | **Sector competence** |  |  |  |
|  | A validation team or a verification team collectively shall have applicable sector (3.1.1) knowledge and skills. Sector knowledge is covered in 5.2.3.  NOTE 1 Annex C provides examples of sector competence. |  |  |  |
|  | For each sector, the validation team or verification team's collective technical competence shall include (as applicable) the capability to: |  |  |  |
|  | identify GHG SSRs from process flow diagrams, site plans, site inspections, process and instrumentation drawings, approvals and permits or other data sources, |  |  |  |
|  | identify GHG SSRs relative to the **sector** (3.1.1), |  |  |  |
|  | identify sources of leakage, |  |  |  |
|  | identify project baselines associated with a specific project type, |  |  |  |
|  | identify situations that could affect the materiality of the GHG assertion, including typical and atypical operating conditions, |  |  |  |
|  | demonstrate equivalence between the type and level of activities, goods or services of the baseline scenario and GHG project, and |  |  |  |
|  | apply industry knowledge in assessing the project and baseline scenarios. |  |  |  |
| NOTE 2 | Annex B outlines methods that can be used to evaluate the sector competence and capability of validation team and verification team members. |  |  |  |
| **7** | **Competence for the review of GHG validation or verification statements** |  |  |  |
|  | Personnel carrying out the review of the validation or verification statement shall be competent to carry out the functions or activities set out in ISO 14065  NOTE As long as personnel conducting a review have not participated in validation or verification activities under the direction of the team leader, they are not considered members of the validation team or verification team (even if they observed all or a portion of the validation team or verification team's activities). |  |  |  |
| **8** | **Development and maintenance of validation and verififcation knowledge and skills** |  |  |  |
| **8.1** | **General** |  |  |  |
|  | A validation team or a verification team is competent on the basis of the team's collective knowledge, skills, and abilities.  NOTE Annex D shows the relationship between the validation and verification competence requirements in ISO 14065 and the skills and abilities needed by validation teams and verification teams. |  |  |  |
| **8.2** | **Demonstration of knowledge and skills** |  |  |  |
|  | For the purposes of achieving initial or supplemental qualifications to undertake validation or verification activities for given sectors, a validator or verifier shall demonstrate his/her knowledge and skills through a variety of methods, including, but not limited to:education,training,work experience relevant to the competence required for the activity, andtutoring or mentoring by more experienced staff (e.g. other members of the GHG validation team or verification team). |  |  |  |
|  | NOTE 1 This clause is intended to encourage the development of professionals.  NOTE 2 Examples of work experience can include employment, consulting, project development or professional auditing in the technical area.  NOTE 3 Practical experience, especially in an environment in which teamwork is encouraged, helps less experienced team members to develop attitudes of professional scepticism and make sounder judgements concerning the assessment  of risk and the sufficiency and appropriateness of evidence.  NOTE 4 Annex E provides examples of prerequisite entry-level awareness for individuals starting training as a team member. NOTE 5 Annex F outlines personal behaviour for validators and verifiers. |  |  |  |
| **8.3** | **Maintenance of knowledge and skills** |  |  |  |
|  | A validator or a verifier should maintain knowledge and skills through ongoing awareness of developments in GHG management, including relevant national and international GHG programmes, climate science and relevant legal requirements. |  |  |  |
|  | A validator or a verifier should also undertake a programme of continuing professional development, including training, consistent with emerging trends in GHG management. |  |  |  |
|  | NOTE 1 Requirements for maintenance of team members' personnel records are given in ISO 14065  NOTE 2 As specified in ISO 14065, 6.2, team member performance (e.g. the demonstration of knowledge and skills) is periodically monitored.  NOTE 3 Annex B provides methods that can be used to evaluate the knowledge and skills of team members. |  |  |  |

**General**

**a) Documents reviewed**

The review is based on the following documents submitted by the VB:

i) VB xx Quality Manual

ii) VB xx Procedures

iii) other…

**b) Overall comments**

1. The VB has conducted an internal audit on its management systems and the top management has met to conduct a management review on the overall performance of the management systems
2. On the whole the VB Management System documentation has adequately addressed the requirements of Standards Malaysia accreditation criteria and requirements.

## Conclusion

Based on the result of the documentation review, the assessment team recommended that the next compliance assessment \* be proceed as planned / be proceed subject to satisfy fully the accreditation criteria.

Reviewed by (Standards Malaysia assessor)

Name of assessor : Date :

Verified by (Standards Malaysia Accreditation Officer) \*To be only filled in during Documentation Review

Name of AO : Date