



1. Scope

1.1 This document elaborates on the requirements specified in the Drone Rules (and its subsequent amendments, if any) and to the ISO/IEC 17065:2012, as applicable to TQ Cert Services Private Limited for UAS (also referred as the ‘Scheme’) and also specifies UAS Scheme specific additional requirements

1.2 For the purpose of clarity, TQ Cert is “Authorised Testing Entity” (ATE) mentioned in the Drone Rules 2021. TQ Cert Services Private Limited authorised testing entity means an entity authorised by the Director General of Quality Council of India (QCI) for the purpose of testing unmanned aircraft system for Type Certificate

2. Objectives

2.1 The additional requirements described in this document shall form the necessary adjunct to the requirements prescribed in ISO/IEC 17065:2012 and will also need to be complied with by TQ Cert Services Private Limited, in addition to the generic requirements prescribed in ISO/IEC 17065:2012 and the certification process requirements prescribed in Certification Scheme for UAS Certification Process” to be approved under the scheme.

3. Alignment of Clauses to ISO 17065 Requirements

The clause numbers in this document are aligned to the main clause numbers of ISO/IEC 17065:2012 (hereinafter may also be called as ISO 17065 or ISO 17065: 2012) for the purpose of ease of usage.

4. General Requirements

4.1 Legal and Contractual Matters

4.1.1 Legal Responsibility

4.1.1.1 In addition to the requirements specified in clause 4.1.1 of ISO/IEC 17065:2012 the following requirements shall also apply.

4.1.1.2 TQ Cert shall be deemed to be legal entity. The status and structure of TQ Cert shall be formally documented, and TQ Cert shall comply with all the requirements of this document.

4.1.1.3 The accreditation shall be granted to a legal entity, who can be legally held responsible for its work irrespective of whether the entire organization or a part of it performs the certification functions

4.1.1.4 TQ Cert shall be responsible for and shall retain authority for its decisions relating to certification. This includes the granting, maintaining, renewing, extending, reducing, suspending and withdrawing of certification

4.1.2 Certification Agreement

4.1.2.1 TQ Cert shall have a legally enforceable agreement for the provision of certification activities to its client organizations. Certification agreements shall take into account the responsibilities of TQ Cert and its client organization.



4.1.2.2 TQ Cert shall ensure that its certification agreement requires that the client comply with the following requirements in addition to those specified in ISO 17065:2012.

- i. Always fulfil the certification requirements including product specific requirement as specified in the document “Guidelines for Certification Criteria”, the certification process described in the document “Unmanned Aircraft Systems (UAS) Scheme Certification Process”, the applicable regulatory requirements, the requirements specified in this document, as applicable and the changes in them as communicated by TQ Cert from time to time.
- ii. The liability on account of non-conforming product shall rest with the certified entity;
- iii. The client makes all necessary arrangements for the conduct of evaluation including provision for examining documentation and access to records of initial certification, renewal if sought and resolution of complaints by assessors, scheme owner (QCI), NABCB, technical experts for assessments and regulator(s);
- iv. Make provisions, where applicable, to accommodate the presence of observers (e.g. accreditation body assessors. Regulators or trainee evaluators);
- v. Makes claims regarding certification only in respect of the scope for which certification has been granted;
- vi. Does not use its certification in such a manner as to bring TQ Cert into disrepute and does not make any statement regarding its certification which TQ Cert may consider misleading or unauthorized;
- vii. Upon suspension or cancellation/withdrawal of certification, discontinues its use of all advertising matter that contains any reference thereto and returns as required by the certification scheme any certification documents and takes any other measure;
- viii. Endeavours to ensure that no certificate or report nor any part thereof is used in a misleading manner;
- ix. If the client provides copies of the certification documents to others, the documents shall be reproduced in their entirety
- x. In making reference to its UAS Certification Scheme in communication media such as documents, brochures or advertising, complies with the requirements of TQ Cert if applicable;
- xi. Applies a Certification Mark to each certified UAS, or to product packaging, or on information accompanying each product, if applicable (cross reference Part 6 clause 4 and 5);
- xii. Keeps a record of all complaints and adverse incident reporting made known to the client relating to the compliance with certification requirement and to make these records available to TQ Cert when requested, and
 - Takes appropriate action with respect to such complaints and any deficiencies found in products and services that affect compliance with the requirements for certification;
 - Records the actions taken.
- xiii. The client shall inform TQ Cert, without delay, of matters that may affect ability to conform to the certification requirements. These shall include changes in:
 - The legal, commercial, organizational status or ownership,
 - organization and management (e.g. key managerial, decision-making or technical staff),
 - Contact address and production sites/premises,
 - Modifications to the major inputs or other materials with potential to affect the product quality and safety; framing practices or the technology and in the internal control measures which are significant in nature.



- Any other information indicating that the product may no longer comply with the requirements of the UAS Certification Scheme and certification criteria.

4.1.2.3 In the event of changes affecting the capability to comply with the requirements of the UAS Certification Scheme as mentioned above, or in the event of changes in the criteria, the statement of conformity shall be processed for cancellation and the client shall agree for the same and apply afresh.

4.1.2.4 Clients shall maintain records of complaints received and their resolution and inform TQ Cert of the same.

4.1.2.5 In addition to the requirements as specified above, the requirements specified vide clauses 4.1.3 and 4.5 shall also be part of the agreement with the client.

4.1.3 Use of Certificates and Certification Mark of Conformity

4.1.3.1 The following requirements are additional to those stated in clause 4.1.3 of ISO/IEC 17065:2012.

4.1.3.2 TQ Cert shall ensure that the Certification Mark is affixed only on transaction documents and products that are covered under the scope of the certification. TQ Cert should not allow the accreditation mark to be used on certified products.

4.1.3.3 TQ Cert shall document clear instructions regarding appropriate use of Certification Mark and for providing information about certification status by its clients. It shall also identify the aspects that would be considered as misleading and unauthorized as relevant to the UAS Certification Scheme. The certification agreement shall make appropriate cross references to the above document, so as to make it legally binding.

4.1.3.4 TQ Cert shall ensure that the applicants are not applying the Certification Mark on documents prior to grant of certification.

4.1.3.5 TQ Cert shall have procedures to ensure that its UAS Certification Mark are not used in a way that may be likely to confuse or mislead the market. In case, as per the requirements of the UAS Certification Scheme, the certified UAS is allowed to include the Mark in off-site products, then TQ Cert shall have clear procedures to ensure that the advertisement and other claims made by the manufacturer does not create an incorrect impression regarding the certification status of the other product not covered under the scope of certification.

4.1.3.6 TQ Cert should have documented procedures to ensure a traceable link from its Certification Mark to the relevant certification requirements.

4.1.3.7 TQ Cert shall have documented procedures for the use of its Certification Mark (see also ISO/IEC 17030), and the measures to be adopted in case of non-compliances to specified requirements with respect to use of Certification Mark, misuse, including false claims as to certification and false use of TQ Cert and accreditation body marks and these shall be part of its agreement with the UAS manufacturer. The procedure shall include the process steps and the actions (including penal actions as relevant), TQ Cert intends to take in the event of observing misuse/misleading use of UAS product certificates and Certification Marks. The above aspects shall be part of its agreement with the certified clients.



4.1.3.8 In case TQ Cert runs more than one product certification schemes, then it may have a procedure specifying generic requirements common to all schemes and in line with the requirements of ISO/IEC 17065:2012 and the specific requirements as specified for UAS Certification Scheme.

4.1.3.9 If TQ Cert incorrectly claims accredited status for statement of conformity's issued before appropriate accreditation has been granted, the accreditation body shall subsequently withdraw them and also impose any other sanctions as deemed appropriate

4.1.4 Responsibility for Certification Decisions

4.1.4.1 TQ Cert shall be responsible for and shall retain authority for its decisions relating to certification. This includes the granting, maintaining, renewal, extending, reducing, suspending and withdrawing of certification.

4.1.4.2 TQ Cert shall only grant authority to make a certification decision, or any decision in the handling of complaints and appeals, to an individual or group that is impartial with respect to the product.

4.2 Management of Impartiality

In addition to the requirements as specified in clauses 4.2 ISO 17065:2012, the following requirements shall also apply

4.2.1 The top management's commitment to impartiality shall be demonstrated through:

- i. Documenting the TQ Cert's policy on safeguarding impartiality and ensuring that it is understood at all levels of the organization. Implementing good practices like establishing "Code of conduct" and requiring internal and external personnel to abide by it.
- ii. Having a defined institutional structure and impartiality policy and procedures, appropriate implementation of these policy and procedures and operation and conduct of its activities and personnel.
- iii. Having a system that ensures appropriate management of conflict of interest for ensuring objectivity of its certification functions.
- iv. Taking action to respond to any threats to its impartiality arising from the actions of other parts of the organization, persons outside of the organization, subcontractors, related bodies or other bodies or organizations.
- v. Maintaining a professional environment and culture in the organization that supports a behaviour of all personnel that is consistent with impartiality.
- vi. Making available to the public through its website, its policy on impartiality

4.2.2 TQ Cert shall establish and implement a documented procedure for analyzing threats against impartiality of TQ Cert. The analysis shall cover all existing potential sources of conflict of interests, arising TQ Cert's activities (its own activities, activities of the related bodies and activities of personnel it employs) and from its relationship (organizational as well as individual's)

TQ Cert shall ensure that a conflict of interest analysis is carried out at least once annually and whenever a significant change occur in TQ Cert's activities, such as change in the organizational structure and business activities or of the legal status and mergers with, or acquisitions of other organizations.



Note 1: A relationship that threatens the impartiality of TQ Cert can 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, etc.

Note 2: While carrying out the conflict of interest analysis the following risks, but not limited to them, shall be considered:

- i. Self-interest threats: threats that arise from a person or body acting in their own interest. A concern related to certification, as a threat to impartiality, is financial self-interest
- ii. Self-review threats: threats that arise from a person or body reviewing the work done by themselves. The certification of a client, whose product was designed or who was provided service regarding internal evaluation by TQ Cert or the personnel it employs would be a self-review threat.
- iii. Familiarity (or trust) threats: threats that arise from a person or body being too familiar with or trusting of another person instead of seeking evaluation evidence. Repeat evaluation of a client by the same evaluator/auditor, over and over again may also present a familiarity threat.
- iv. Intimidation threats: threats that arise from a person or body having a perception of being coerced openly or secretly, such a threat to be replaced or reported to a supervisor.

4.2.3 When a relationship poses an unacceptable threat to impartiality then certification shall not be provided. Some of these situations requiring prohibitions as mitigation measures have been described vide clause 4.2.6 of ISO 17065:2012. These shall be implemented together with the additional ones provided in this document

4.2.4 Further, where risks to impartiality have been identified as a result of risk analysis (clause 4.2.3), TQ Cert shall establish and implement a documented procedure for mitigation of threats against impartiality. These shall be through any of the following mitigation means:

- i. Not provide certification, since the situation poses unacceptable threat to impartiality prohibition;
- ii. Carry out the certification in a restricted manner based on disclosures;
- iii. Minimize the risks on the basis of clearly defined control points to ensure mitigation. The impartiality risk analysis together with mitigation strategies should be documented

4.2.5 In addition to those prescribed in clause 4.2.6 of ISO 17065 the other type of product related consultancy services that shall be considered are barriers to certification would be participation in an active creative manner in the ongoing development and monitoring/improvement of the product, process, or service, for example;

- i. Providing specific support/advise on elements of the design. The manufacturer should have a design process that takes into account the following
 - Customer requirement
 - All applicable regulatory requirements
 - Functional /performance requirements
 - Electrical safety requirements
 - Applicable EMC requirements
 - Hazardous chemicals requirements
 - Software validation requirements
 - Packaging requirements



- ii. Preparing or producing manual, handbooks or procedures
- iii. Involvement in the supplier's monitoring, review and decision-making process applicable to the product.

4.2.6 In addition to the requirement specified in ISO 17065 clause 4.2.6, the following shall also apply:

- i. TQ Cert shall not have any relationship with the client except third party conformity assessment. There shall be a minimum separation of 2 years before application can be entertained, in case TQ Cert has had relationship which is generic (not UAS Certification Scheme) in nature, for example, internal audit training, etc. then TQ Cert shall carry out impartiality risk analysis before entertaining the application. The purpose of risk analysis shall be to ascertain if, longer separation than two years is required from the last date of end of relationship as stated above or that the risk is of such unacceptable level so as to prohibit certification by TQ Cert. Based on the risk analysis appropriate decisions shall be taken and the justification for the same shall be recorded.
- ii. In case the related body is engaged in any of the activities as specified in clause 4.2.6 of ISO 17065:2012 or activities like management system consultancy, internal auditing or training, then certification shall not be provided to the relevant client to whom these services may have been provided by the related body. There shall be a minimum separation of 2 years, in case the related body has had a relationship which is generic (not UAS Certification Scheme) in nature, for example, internal audit training, etc. then TQ Cert shall carry out impartiality risk analysis before entertaining the application. Purpose of risk analysis shall be to ascertain if, longer separation than two years is required from the last date of end of relationship as stated above or that the risk is of such unacceptable level so as to prohibit certification by TQ Cert. Based on the risk analysis appropriate decisions shall be taken and the justification for the same shall be recorded.
- iii. If TQ Cert and its client are both part of the government, the two bodies shall not directly report to a person or group having operational responsibility for both. TQ Cert shall, in view of the impartiality requirement, be able to demonstrate how it deals with a case where both itself and its client are part of the government. TQ Cert shall demonstrate that the applicant receives no advantage and that impartiality is assured.
- iv. TQ Cert shall not certify a product on which a client has received consultancy or internal evaluations, where the relationship between the consultancy organization and TQ Cert poses an unacceptable threat to the impartiality of TQ Cert. Allowing a minimum period of two years to elapse following the end of the product consultancy is one way of reducing the threat to impartiality to an acceptable level.
- v. TQ Cert shall not outsource/subcontract any part of the certification work, evaluation, etc. to a legal entity that is engaged in designing, manufacture, installation, distribution or maintenance of the certified/to be certified, product, process and service. It shall also not be outsourced to organizations who are likely to provide consultancy / internal auditing services to clients / prospective clients of TQ Cert.
- vi. TQ Cert shall not use external assessors/auditors for the purpose of assessment of any client, if they or the organization that employs them, have been engaged in any activities as stated in "d" above
- vii. TQ Cert shall not use personnel who have been involved in, or have had relationships with the product certification client in any way within the last two years as a minimum, to take part in assessment/auditing. The period of separation shall be determined by the nature of association. In case the individual concerned has worked for the organization concerned



or provided any manufacturing unit related consultancy on product then TQ Cert shall not use such person at all.

- 4.2.7 TQ Cert's activities shall not be marketed or offered as linked with the activities of an organization that provides product, manufacturing related consultancy. TQ Cert shall take action to correct inappropriate claims by any consultancy organization stating or implying that certification would be simpler, easier, faster or less expensive if TQ Cert were used. TQ Cert shall not state or imply that certification would be simpler, easier, faster or less expensive if a specified consultancy organization were used.
- 4.2.8 TQ Cert's Personnel involved in certification activities shall be bound by TQ Cert's impartiality policy and act impartially in their work through contractual or employment conditions and assignment conditions for each evaluation activity
- 4.2.9 TQ Cert shall also have a system for self-disclosure and documentation of the types of activities carried out by its internal and external personnel and subcontractors and the organizations that employ them, in general and in particular regarding the designing of relevant product/process/service, consultation, internal assessment/auditing, training, etc.
- 4.2.10 TQ Cert shall also take an undertaking with respect to freedom from conflict of interest for every evaluation assignment allotted to the individuals. Based on the revelations made, if any, TQ Cert shall use this information as input to identifying threats to impartiality raised by the activities of such personnel or by the organizations that employ them, and shall not use such personnel, internal or external, unless any potential conflict of interests has been addressed and the measures taken to address these potential conflicts have been documented and implemented.
- 4.2.11 TQ Cert shall require its personnel, internal and external, to report any situation of influence or pressure from the client that may threaten their independence in the course of certification activities. Based on such a report, TQ Cert shall take appropriate actions to ensure its independence in its certification work
- 4.2.12 TQ Cert's personnel involved in certification activities shall not provide, while carrying out assessment/ audit, any advice, consultancy or recommendation to the client on how to address any deficiencies that may be identified during the assessment/audit.
- 4.2.13 TQ Cert should be responsible for ensuring that neither related bodies, nor sub-contractors, nor external assessors/auditors operate in breach of the undertakings that they have given. It should also be responsible for implementing appropriate corrective action in the event that such a breach is identified.

4.3 Liability and Financing

In addition to the requirements as specified in clause 4.3 of ISO 17065:2012, following requirements shall apply.

- 4.3.1 TQ Cert shall also be able to demonstrate that it has evaluated the risks arising from its certification activities and that it has adequate arrangements (e.g. insurance or reserves) to cover liabilities arising from its operations in each of its fields of activities and the geographic areas in which it operates.



4.3.2 TQ Cert shall be able to demonstrate that it has a reasonable expectation of being able to provide and to continue to provide the service in accordance with its contractual obligations. TQ Cert shall also be able to provide sufficient evidence to demonstrate its viability, e.g. management reports or minutes, annual reports, financial audit reports, financial plans, etc.

4.3.3 The means by which the TQ Cert obtains financial support should be such as to allow the TQ Cert to retain its impartiality.

4.3.4 In addition to the above the TQ Cert shall also demonstrate, that initially, and on an ongoing basis, commercial, financial or other pressures do not compromise its impartiality.

4.4 Non-Discriminatory Conditions

4.4.1 TQ Cert shall have means of demonstrating compliance to this requirement of ISO 17065:2012 (clause 4.4), through its policies and procedures as well as actual practice

4.4.2 TQ Cert's policies and procedures should ensure that it does not practice any form of hidden discrimination by speeding up or delaying the processing of applications.

4.4.3 Certification Fees

4.4.3.1 TQ Cert shall charge fees to the applicant UAS manufacturer for the various activities of UAS Certification Scheme, without any discrimination between units, geographical location, size of the unit. Any additional requirements as may be imposed by the UAS Scheme Owner, time to time shall also be adhered to.

4.4.3.2 Available on its website. The fee structure available on website may be generic in nature. On request from a specific applicant/client, based on the specific conditions concerning the applicant, TQ Cert shall inform the applicable fees, which shall essentially be derived from the fee structure made publicly available. It shall not substantially defer from the one available publicly, unless some plausible justifications are recorded.

4.4.3.3 TQ Cert shall notify and obtain consent to its fee structure from the UAS manufacturer prior to grant of certification. As and when the fee undergoes a change, the same shall be communicated to all including applicants and the manufacturing units certified under UAS Certification Scheme for their acceptance

4.5 Confidentiality

In addition to the requirements specified in ISO 17065:2012 (clause 4.5) following shall apply:

4.5.1 TQ Cert shall have a documented policy and mechanism to safeguard the confidentiality of information obtained or created during the course of certification activities. It shall also be part of the certification agreement.

4.5.2 Personnel, including any committee members, contractors, personnel of external bodies or individuals acting on the TQ Cert's behalf, shall keep confidential all information obtained or created during the performance of the TQ Cert's activities. There shall be a mechanism such as obtaining signed confidentiality agreements, etc. for ensuring the same.



- 4.5.3 TQ Cert shall have available and use equipment and facilities that ensure the secure handling of confidential information (e.g. documents, records).
- 4.5.4 When confidential information is made available to other bodies (e.g. accreditation body, agreement group of a peer assessment scheme), TQ Cert shall inform its client of this action, in advance, through agreements, etc.
- 4.5.5 Information about the client obtained from sources other than the client (e.g. from the complainant or from regulators) through the evaluation process, if used for certification decision by TQ Cert shall be made known to the client.
- 4.5.6 In case of transfer of certificate or application, when the client decides to move from one Certification Body to another Certification Body, TQ Cert Services Pvt Ltd to which the client is now moving may ask the previous Certification Body for information on the reasons for such movement or the performance of the client with respect to the certification requirements. The previous Certification Body shall be obliged to share this information within a reasonable time, not exceeding 10 days from the date of receipt of the request. Such information shall not be considered as confidential and TQ Cert Services Pvt Ltd shall inform its client of this requirement, in advance, through agreements, etc.
- 4.6 Publicly Available Information**
- 4.6.1 Making the information publicly available through TQ Cert's website shall be the only means of meeting this requirement.
- 4.6.2 The following information with respect to UAS Certification Scheme shall be made publicly available on the TQ Cert's website. The information provided shall be accurate, non-misleading and where relevant detailed enough for the reader to clearly understand
- i. The certification process, from application stage to the grant of certification, including the evaluation process; the system for maintenance of certification, renewal, scope extension and reduction, suspension and withdrawal. The information shall also cover the terms and conditions of certification and the use of Certification Mark, as contained in the Certification Agreement.
 - ii. The UAS Certification Scheme specific rules and conditions for granting, for maintaining, for extending or reducing the scope of, for suspending, for withdrawing or for refusing certification.
 - iii. Requirements of UAS Certification Scheme, including the UAS certification criteria and application form shall be available to the applicant. TQ Cert may also provide any other guidance documents on the certification criteria for the benefit of the applicant, as long as they are not advisory/consultative in nature.
 - iv. TQ Cert shall make publicly available on its website, the information about applications registered and certifications granted, suspended or withdrawn.
 - v. On request from any party, TQ Cert shall provide the means to confirm the validity of a given certification and the provision for the same shall be made available on the website
 - vi. TQ Cert shall maintain and make publicly available on its website, a directory of valid certifications. Please also see additional requirements given in the document "UAS Scheme Certification Process"



vii. A description of the rights and duties of applicants and clients, including requirements, restrictions or limitations on the use of the TQ Cert's name and Certification Mark and on the ways of referring to the certification granted.

4.6.3 TQ Cert shall have procedure for frequent updating of the information on its website.

4.6.4 The responsibilities for ensuring accuracy of the information made available on the website, ensuring frequent updates, etc. shall be documented.

4.6.5 TQ Cert shall list out the sources of its finances.

4.6.6 To the public, without the public having to go through layers of cross linkages.

4.6.7 Modalities of the information exchange between a TQ Cert and its clients is as under:

4.6.7.1 TQ Cert shall receive application form as notified in Drone Rules 2021 which shall contain following as minimum, scope of certification sought by the applicant with details as mandated in Form D-1 (Application for Type Certificate). An applicant needs to apply through the Digital Sky Platform giving details about the model as per the Form D-1.

4.6.7.2 TQ Cert shall communicate to the manufacturer about the progress and findings of through the Digital Sky Platform. Alternately, in the unlikely event of any technical issues in the DSP TQ Cert shall communicate with the manufacturer electronically and shall update the DSP as soon as the services are restored.

4.6.7.3 Information on the certification activity and requirements- TQ Cert shall provide and update clients on the following:

- i. A detailed description of the initial and continuing certification activity, including the application, initial evaluation, and the process for granting, maintaining, reducing, extending, suspending, withdrawing certification and renewal;
- ii. The certification criteria for UAS Certification Scheme;
- iii. Information about the fees for application, initial certification and continuing certification;
- iv. TQ Cert's requirements for prospective clients;
- v. Documents describing the rights and duties of certified clients as well as obligations on part of TQ Cert including the changes within UAS manufacturer that need to be informed to TQ Cert (see clause 4.1.2.1.1h) of this document];
- vi. Information on procedures for handling complaints (both by TQ Cert as well by the UAS manufacturer, in respect of complaints against certified products) and appeals

4.6.7.4 Based on the changes affecting certification, including those initiated by the client TQ Cert shall decide upon the appropriate actions in accordance with its documented procedure, which shall be based on the requirements described in "UAS Scheme Certification Process" as well as cause 7.10.3 of ISO 17065. Responsibility for deciding about the course of actions to be taken shall also be documented

5. Structural Requirements

5.1 Organizational Structure and Top Management



- 5.1.1 The organization structure shall include structure of the parent body (legal entity) if separate from the department/division that offers certification. It shall also include structure of the related departments in relation to the department offering certification services.
- 5.1.2 TQ Cert shall identify and document all related bodies (separate legal entities) as well as other departments of the same legal entity and their activities and functions and their relationships with TQ Cert, when describing its organizational structure. This shall cover all relationships, such as those described in Clause A.4.2.2 of this document. The activities of all related bodies shall also be documented for the purpose of identifying any potential conflict of interest. The above information shall also be used for identification of actual/potential risks to impartiality (see clause A.4.2.2).
- 5.1.3 An organization chart(s) shall be used for showing the structure, supported by the documented responsibilities and authorities for the functions described in the organization chart.
- 5.1.4 The identification of responsibilities, however done, shall clearly and unambiguously reflect the responsibilities for activities/functions as described vide clause 5.1.3 a) to n) of ISO/IEC 17065:2012.
- 5.1.5 The requirement specified vide clause 5.1.4 of ISO/IEC 17065:2012 shall cover the any committee set up by TQ Cert, if established by TQ Cert for establishment of systems for UAS Certification Scheme, planning for certification evaluation (sampling and determination), certification review and decision making, appeals process, etc.

6. Resource Requirements

6.1 TQ Cert Personnel

In addition to the generic requirement as specified in clause 6 of ISO 17065:2012, the UAS Certification Scheme requirements as specified in this document shall apply.

6.1.1 General

6.1.1.1 TQ Cert shall have, as part of its own organization, personnel having sufficient competence for managing the UAS Certification Scheme that it operates

6.1.1.2 While determining sufficiency of resources TQ Cert shall also take in to consideration the requirements with respect to technical personnel competent for the development and establishment of TQ Cert's internal systems in accordance with the UAS certification scheme requirement and for operational functions like application review, Evaluation (all stages like initial, renewal), review and decision making.

6.1.1.3 TQ Cert shall employ, or have access to, a sufficient number of evaluators, including evaluation team leaders, and technical experts to cover all of its activities with respect to UAS Certification Scheme and to handle the volume of evaluation work performed.

6.1.1.4 TQ Cert shall determine competency requirements (knowledge and skills required for different education, qualification, experience, knowledge and skills, training, etc. and those described in



clause 6.1.4.2 (of this document) that shall cover management as well as certification process related functions. These shall include the following

- i. Development and establishment of TQ Cert's internal systems in accordance with UAS Certification scheme requirements
- ii. Management of the certification activities;
- iii. Application review;
- iv. Undertaking Evaluation (all stages like initial, renewal, etc.) These shall cover assessors/auditors, team leaders and technical experts as well as evaluation teams as whole;
- v. Review and decision making.
- vi. Individuals assigned to perform certification functions as stated above need not necessarily each have all the required competencies, providing TQ Cert can demonstrate that it has the collective competence to perform those functions and that in individual cases an individual or a group of individuals having the required competence has performed the individual function. For example, the certification decision maker may not have the required competence, but if the report has been reviewed by an independent technical expert the collective competence may be evident

6.1.1.5 TQ Cert shall also have processes for assessing to determine if the designated persons have the necessary competence as described. Records shall show which personnel are designated as competent, the date of assessment and the details of evidence based on which competence is adjudged

6.1.2 Competence of Management and Personnel

6.1.2.1 TQ Cert shall have processes to ensure that personnel have appropriate knowledge of product certification, UAS Certification Scheme requirements and any other related requirements like regulatory requirements etc.

6.1.2.2 The functions described shall cover at least those listed in clause 6.1.1.3 of this document.

6.1.2.3 TQ Cert shall have access to the necessary technical expertise for advice on matters directly relating to UAS Certification Scheme. Such advice may be provided externally or by TQ Cert personnel.

6.1.3 Competence Requirements for Personnel Involved in Certification Activities

6.1.3.1 Application Review Function - The personnel performing the application review shall be qualified for their understanding of the UAS Scheme, the certification criteria and process requirements, sufficient for carrying out the application review function effectively in accordance with the certification process requirements. The application reviewer shall be qualified on the basis of competence to carry out the review function based on experience of having performed a technical review under the UAS Certification Scheme or any other comparable scheme.

6.1.3.2 Technical Review Function The technical review shall consist of an independent and structured assessment to verify if all the UAS Scheme related requirements have been fulfilled. It shall fulfil the following requirements.

- i. The technical review function shall be independent of assessment and evaluation functions.



- ii. The personnel (or group of personnel) performing the certification decision shall be qualified for their understanding of the certification criteria, certification scheme and certification process requirements and their ability to correctly grant or expand the scope of certification on the basis that the evaluation activities, information and results are a demonstration of fulfilment of requirements of the certification criteria in accordance with the UAS Certification Scheme.
- iii. For the purpose of initial evaluation, the technical reviewer(s) or committee will have at least one person who has experience of design, development and operation of unmanned aircrafts, or related knowledge/expertise to be equal to or more than 3 years.
- iv. Technical reviewer shall be qualified on the basis of demonstrated competence to carry out the review function based on experience of having performed technical review under the UAS Certification Scheme or other comparable schemes

6.1.3.3 Decision making

This function involves decision on granting, maintaining, renewing, extending, reducing, suspending or withdrawing certification. The decision-making functionary shall fulfil the following requirements

- i. The person(s) or committee, who take(s) the decision on granting certification under the UAS Certification Scheme shall be duly authorised by TQ Cert for the task and shall have knowledge and experience sufficient to evaluate the information obtained from the evaluation process and the review.
- ii. The technical review and the decision may be completed concurrently by the same person(s) or committee, provided they fulfil the necessary requirements as specified in clause 6.1.3.3 above. In case of a committee, it shall have the combined competence of technical reviewer and decision maker.
- iii. Impartiality and absence of conflict of interest shall be ensured before entrusting the task of certification decision making

6.1.3.4 Competence of Evaluators

6.1.3.4.1 In addition to the requirement given above, every person undertaking evaluations shall have the appropriate qualification, training, experience and skills to perform it. They shall have the ability to make professional judgments as to the conformity with general requirements using examination results and to report thereon. They shall understand the significance of deviations found and their effect on the safety and security of UAS.

a) Education

- i. TQ Cert shall ensure that the evaluators have at least a graduation degree in Aeronautical, Electronics, Electrical, Computer Science, IT, Mechanical, Metallurgical engineering or equivalent. For any exemption from these requirements TQ Certs shall approach the scheme owner

b) Work Experience:

- i. Evaluators involved in evaluation of all requirements except software: The evaluators shall have at least 3 years of full-time post qualification experience in manufacturing, assembling, operations, inspection or enforcement, or the equivalent industry.
- ii. Software evaluators - The evaluators shall have at least 3 years of full-time post qualification experience in software and IT System testing work experience in one



or more of the following: Telecom software/Protocol, Embedded systems, Mobile Device and Mobile Applications, IOT Block chain| Artificial Intelligence, UAS software systems, applications or IT system or Software product test & evaluation as per regulatory framework/ guidelines

- c) Training
 - i. TQ Cert shall ensure that evaluators have successfully completed training in evaluation techniques and training in applicable 17065 standard or equivalent.
 - ii. Software evaluators: Minimum 3 years of on the job training in developing software/firmware related to UAS or automotive or IoT products or other aviation industry products under the supervision of a qualified personnel with 10 years of experience in the Information Technology (IT) same field.
- d) Evaluation Experience
 - i. TQ Cert shall ensure that within the last three years, the evaluators has performed at least 10 man- days of evaluation in at least 2 organizations for an equivalent standard, under the leadership of a qualified evaluators, and this demonstration has met with acceptance of the qualified evaluators. The time spent by the observer/trainee shall not count towards time spent on evaluation.
 - ii. Software Evaluators: TQ Cert shall ensure that software evaluators have a minimum 2 years of IT work experience related to software. For maintaining the qualification of the evaluator, TQ Cert shall ensure that evaluator has performed a minimum of 5 man-days of evaluation per year. TQ Cert shall define competence for other personal involved in certification systems other than evaluation function.

6.1.3.5 Selection of Evaluation Team - The evaluation team may consist of one or more members. TQ Cert shall ensure the competence of the evaluation team as stated below:

- i. As part of the evaluation TQ Cert may use evaluator who do not have the requisite qualifications as prescribed above provided, they are supported by technical experts (TEs) who meet the qualifications stated at 6.1.3.4 a) and b) above. The time spent by the TE on an evaluation shall be in addition to the evaluation time as prescribed under the 'Certification Process' which TQ Cert is expected to spend
- ii. In case of an evaluation team, one of the evaluators shall be designated as team leader

6.1.4 Management of Personnel Involved in the Certification Process

6.1.4.1 TQ Cert shall ensure that evaluator (and, where needed, technical experts) are knowledgeable of its evaluation processes, certification requirements (including UAS Certification Scheme requirements) and other relevant requirements. TQ Cert shall ensure that the evaluator and technical experts have access to an up-to-date set of documented procedures giving instructions for conducting evaluations and all relevant information on the certification activities.

6.1.4.2 TQ Cert shall use evaluator and technical experts only for those certification activities, where they comply with the competence requirements defined in this scheme and have been formally authorized to perform the same.

6.1.4.3 TQ Cert shall identify training needs and shall offer or provide access to specific training to ensure its evaluator, technical experts and other personnel involved in certification activities are competent



for the functions they perform. TQ Cert shall also have a process to achieve and demonstrate effective evaluation of the training process.

6.1.4.4 TQ Cert shall ensure the satisfactory performance of all personnel involved in the evaluation and certification activities. There shall be documented procedures and criteria for monitoring and measurement of the performance of all persons involved, based on the frequency of their usage and the level of risk linked to their activities. In particular, TQ Cert shall review the competence of its personnel in the light of their performance in order to identify training needs.

6.1.4.5 The documented monitoring procedures for evaluator shall include a combination of on-site observation, review of evaluation reports and feedback from clients or from the market.

6.1.4.6 TQ Cert shall periodically observe the performance of each evaluator on-site. The frequency of on-site observations shall be based on need determined from all monitoring information available, but should not be greater than once a year.

6.1.4.7 TQ Cert shall make clear to each person concerned their duties, responsibilities and authorities.

6.1.4.8 The personnel records shall also include up-to-date information about their affiliations and any relevant consultancy that may have been provided, which may be considered as potential source of conflict of interest, while assigning evaluation and other jobs to them. This is most relevant in respect of the external resources.

6.1.5 Use of Individual External evaluator and External Technical Experts

6.1.5.1 The external evaluator and external technical experts, used as a resource by TQ Cert shall have the same competence and qualification process as for internal personnel.

6.1.5.2 TQ Cert shall require external evaluator and external technical experts to have a written agreement by which they commit themselves to comply with applicable policies and procedures as defined by TQ Cert. The agreement shall address aspects relating to confidentiality and to independence from commercial and other interests, and shall require the external evaluator and external technical experts to notify TQ Cert of any existing or prior association with any organization they may be assigned to evaluate.

Note: Use of individual assessors/auditors and technical experts under such agreements does not constitute outsourcing as described under A.6.2.

6.1.5.3 The contract shall also require the personnel to proactively declare about affiliations (personal and professional) and other jobs/associations like consultancy, etc. which may have potential for presenting conflict of interest. It shall also include information about any other association that the individual feels have the potential for threat to impartiality.

6.2 Outsourcing/ Subcontracting

6.2.1 This clause Corresponds to the requirements specified in clause 6.2.2 of ISO 17065:2012.

6.2.2 In case if the Scheme requires testing to be carried out then NABL, Govt. approved laboratory shall be used.



6.2.3 TQ Cert operating the UAS Certification Scheme shall not outsource any activity other than testing and inspection. Sending of samples to TQ Cert's own laboratory shall also be considered as subcontracting

6.3 Test Laboratory

6.3.1 TQ Cert needs to have a formal agreement with a testing laboratory for carrying out tests as prescribed in the certification criteria (Part 3) of this UAS Scheme. The samples of semi-finished or manufactured product drawn for independent evaluation shall be either submitted directly to the laboratory identified by TQ Cert or that TQ Cert may forward the components or the entire equipment to the laboratory.

6.3.2 The laboratory shall be accredited to ISO/IEC 17025 by Indian accreditation body like National Accreditation Board for Testing and Calibration Laboratories (NABL) or by any other foreign accreditation body working in accordance with ISO/IEC 17011 having relevant scope of accreditation, for ascertaining conformance to the tests results or the laboratory has implemented ISO 17025 in respect of clauses pertaining to technical competence aspects competence of testing personnel, test facilities, use of validated test methods, traceability/calibration of equipment, sampling, sample handling, Internal quality assurance aspects, etc.

Note: Some of the mentioned tests in the certification criteria may be out of scope of accreditation for the laboratory. The test reports from a laboratory that has established systems as per 17025 may be accepted by TQ Cert for giving a decision for approval.

6.3.3 TQ Cert shall maintain a directory of laboratories to which it intends to sub-contract for testing of UAS. It shall have a formal contract with the sub-contracted laboratories for provision of competent services and also for ensuring aspects like impartiality and confidentiality as relevant.

6.3.4 If TQ Cert uses an in-house laboratory (part of the same legal entity), it shall be ensured that there exists an adequate separation, in terms of organization structure and reporting and defined responsibilities. It shall also ensure through above means and policies and procedures, that there is no possibility of compromising the independence of the testing laboratory personnel by bringing undue pressure over them.

6.3.5 The certification criteria against which UAS is to be tested or if in case of complaint shall be clearly mentioned and communicated to the testing laboratory. The sample(s) shall be so dispatched that they do not get damaged and or contaminated, undergo deterioration, and the product integrity is maintained. TQ Cert shall have a documented procedure for drawing of samples and their subsequent handling and dispatch to the laboratories. The procedure shall also include aspects like receipt of test reports and their evaluation

7 Process Requirements

7.1 TQ Cert shall establish appropriate operational systems (internal processes and procedures) for carrying out certification activities as per the requirements specified in the document "UAS Scheme Certification Process" and meeting the generic certification Process requirement as stated in respective standards – clause 7 of IAO 17065: 2012



7.2 TQ Cert may also develop and document any additional guidance documents considered essential for uniform application of the certification criteria and certification/scheme requirements by its personnel and for the purpose of knowledge sharing.

8. Management System Requirements

In addition to the requirements as specified in the respective accreditation standards (clauses 7.12, 8 of ISO 17065:2012) following requirements shall also apply:

8.1 Documentation Requirements

8.1.1 TQ Cert shall document its “Certification Scheme for UAS” scheme specific documentation in accordance with the requirement specified in the document “Certification Scheme for UAS – Certification Process” and this document, in order to ensure that the certified clients comply with the requirement specified in “Certification Scheme for UAS – Certification Criteria”, as applicable

8.1.2 All applicable requirements of the above document shall be addressed either in a manual or in a combination of manual and associated operational procedures.

8.2 Requirements with respect to Records

8.2.1 Records of Applicant and Clients The certification (applicants and clients) related records shall include records for all Organizations, including all organizations that submitted applications, and all organizations evaluated, UAS certified or with certification suspended or withdrawn/cancelled. Specifically, the records shall include the following:

- i. Application information, documents and records submitted by the applicant and results of application review and man-days estimation and team competence records;
- ii. Evaluation planning including decision on site visits and preparation records, evaluation plans and other related records;
- iii. Justification for evaluation time determination/man-day estimation;
- iv. Records of initial/ and renewal evaluation reports and related records;
- v. Records of technical review and certification decisions; committee deliberations and decisions, if applicable;
- vi. Certification Agreement;
- vii. Certification Documentation including scope of certification;
- viii. Records of complaints and appeals, and any subsequent correction or corrective actions;

8.2.2 Other Records - TQ Cert shall also maintain the following records;

- i. Related records necessary to establish the credibility of the certification of UAS Certification Scheme, such as evidence of the competence of evaluators, technical experts, technical review personnel and decision makers, etc. as relevant;
- ii. Provide confidence that the scheme requirements were complied with.

8.3 Internal Audit

The following additional requirements shall be applicable



- 8.3.1 The objective of the internal audit shall also include verification of fulfilment of requirements of the additional UAS scheme specific requirement as specified in UAS Certification Scheme “Certification Process” and this document.
- 8.3.2 The audit program shall cover all applicable elements of ISO 17065:2012 and those specified in UAS Certification Scheme “Certification Process” and this document.
- 8.3.3 The internal audit shall be conducted by personnel knowledgeable in certification, auditing and the requirements of ISO 17065: 2012 and the Scheme specific requirement as specified in UAS Certification Scheme “Certification Process” and this document.
- 8.3.4 The internal audit report shall clearly report both the compliance (to the requirements specified vide clause 8.4.1 above and the TQ Cert’s own systems) aspects as well as the observed gaps (non-conformities), areas for improvement, along with the objective evidences to support the conclusions drawn.