

Democratic Socialist Republic of Sri Lanka



**Civil Aviation Authority of Sri Lanka
Implementing Standards**

(Issued under Section 120, Civil Aviation Act No. 14 of 2010)

Title: Requirements for the Operation of Unmanned Aircraft Systems
(Unmanned Aerial Vehicles/Remotely Piloted Aircraft)

IS Reference Code. : UAS-IS-2025

Date of Issue: 01.03.2025

Pursuant to Section 120 of the Civil Aviation Act No.14 of 2010 which is hereinafter referred to as the CA Act, Director General of Civil Aviation (hereinafter referred to as DGCA) has the power to issue, whenever he considers it necessary or appropriate to do so, such Implementing Standards for the purpose of giving effect to any provision in the CA Act, Regulations or Rules made thereunder including the Articles of the Convention on International Civil Aviation specified in the Schedule to the CA Act.

Accordingly I, being the Director General of Civil Aviation do hereby issue the Implementing Standards on Requirements for the Operation of Unmanned Aircraft Systems as mentioned in the Attachment hereto (Ref: UAS-IS-2025Att.), that shall be complied with when operating unmanned aircraft under the provision of Section 80 of the CA Act, Article 8 of its Schedule and the applicable International Standards and Recommended Practices specified in the Convention.

This Implementing Standard shall be applicable to any person, including UAS operators, pilots, instructors and/or any organization, involved in Registration, Operation, Manufacturing/Assembling, Importing, selling and Training of Unmanned Aircraft Systems. The entry into force and the applicability of this Implementing Standard are given in the Page 01 of the Attachment No. UAS-IS-2025Att.

Attention is also drawn to Section 103 of the CA Act, which states inter alia that failure to comply with Implementing Standard is an offence. Further, if any standard stipulated in this Implementing Standard is not complied with or violated, an appropriate enforcement action will be taken as per the Aviation Enforcement Policy and Procedures Manual, 0005 by the Director General of Civil Aviation under the Section 102 of the Civil Aviation Act No. 14 of 2010.

Civil Aviation Authority of Sri Lanka
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Enclosure: Attachment No. UAS-IS-2025Att.

AVM Sagara Kotakadeniya (Retd.)
Director General of Civil Aviation and
Chief Executive Officer

ENTRY INTO FORCE AND APPLICABILITY

1. Paragraph 03, 07, 09 & 29 of Implementing Standard SLCAIS 053 First Edition Rev.03 issued on 06th of January 2022 shall be superseded/ replaced by paragraph 03 & 04 of this Implementing Standard and shall come into force from 01st May 2025 and remain in force until revised or revoked.
2. Paragraph 08 of Implementing Standard SLCAIS 053 First Edition Rev.03 issued on 06th of January 2022 shall be superseded/ replaced by paragraph 05 of this Implementing Standard and shall come into force from 01st July 2025 and remain in force until revised or revoked.
3. Paragraph 04, 10, 11, 12, 15, 18, 19, 20, 21, 22, 23 & 24 of Implementing Standard SLCAIS 053 First Edition Rev.03 issued on 06th of January 2022 shall be superseded/ replaced by paragraph 06, 07, 08, 09 & 10 of this Implementing Standard and shall come into force from 01st September 2025 and remain in force until revised or revoked.
4. Paragraph 05, 16, 17 & 31 of Implementing Standard SLCAIS 053 First Edition Rev.03 issued on 06th of January 2022 shall be superseded/ replaced by paragraph 11 of this Implementing Standard and shall come into force from 01st April 2025 and remain in force until revised or revoked.
5. Paragraph 06 of Implementing Standard SLCAIS 053 First Edition Rev.03 issued on 06th of January 2022 shall be superseded/ replaced by paragraph 13, 14 & 15 of this Implementing Standard and shall come into force from 01st March 2025 and remain in force until revised or revoked.
6. Paragraph 16 & 17 of this Implementing Standard shall come into force from 01st March 2025 and remain in force until revised or revoked.
7. The rest of the Paragraphs of the Implementing Standard 053 First Edition Rev.03 issued on 06th of January 2022 shall be superseded/ replaced by this Implementing Standard and shall come into force with immediate effect (01st March 2025) and remain in force until revised or revoked.

RECORD OF REVISION

[illegible]

LIST OF EFFECTIVE PAGES

[illegible]

HISTORY OF REVISION

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1. DEFINITIONS

For the purposes of this Implementing Standard, the following definitions apply:

- 1.1 ‘Assemblies of People’ means gatherings where persons are unable to move away due to the density of the people present;
- 1.2 ‘Autonomous Operation’ means an operation during which an unmanned aircraft operates without the remote pilot being able to intervene;
- 1.3 ‘Beyond Visual Line Of Sight Operation’ (‘BVLOS’) means a type of UAS operation which is not conducted in VLOS;
- 1.4 ‘CAASL’ means Civil Aviation Authority of Sri Lanka.
- 1.5 ‘Controlled ground area’ means the ground area where the UAS is operated and within which the UAS operator can ensure that only involved persons are present;
- 1.6 ‘Dangerous goods’ means articles or substances, which are capable of posing a hazard to health, safety, property or the environment in the case of an incident or accident, that the unmanned aircraft is carrying as its payload, including in particular:
 - I. corrosive substances;
 - II. explosives (mass explosion hazard, blast projection hazard, minor blast hazard, major fire hazard, blasting agents, extremely insensitive explosives);
 - III. flammable liquids (flammable liquids; combustible, fuel oil, gasoline);
 - IV. flammable solids (flammable solids, spontaneously combustible solids, dangerous when wet);
 - V. gases (flammable gas, non-flammable gas, poisonous gas, oxygen, inhalation hazard);
 - VI. oxidising agents and organic peroxides;
 - VII. radioactive substances;
 - VIII. toxic and infectious substances (poison, biohazard);
- 1.7 ‘DGCA’ means Director General of Civil Aviation.
- 1.8 ‘Direct Remote Identification’ means a system that ensures the local broadcast of information about a unmanned aircraft in operation, including the marking of the unmanned aircraft, so that this information can be obtained without physical access to the unmanned aircraft;
- 1.9 ‘Follow-me mode’ means a mode of operation of a UAS where the unmanned aircraft constantly follows the remote pilot within a predetermined radius;
- 1.10 ‘Geo-awareness’ means a function that, based on the data provided by the State, detects a potential breach of airspace limitations and alerts the UAs operators so that they can take immediate and effective action to prevent that breach;

- 1.11 ‘Light UAS operator certificate’ (‘LUC’) means a certificate issued to a UAS operator by CAASL as set out in Part C of the Annex 1 of this Implementing Standard;
- 1.12 ‘Making available on the market’ means any supply of a product for distribution, consumption or use on the market in the course of a commercial activity, whether in exchange of payment or free of charge;
- 1.13 ‘Maximum Take-Off Mass’ (‘MTOM’) means the maximum Unmanned Aircraft mass, including payload and fuel, as defined by the manufacturer or the builder, at which the Unmanned Aircraft can be operated;
- 1.14 ‘Model Aircraft Club or Association’ means an organization duly registered with the CAASL for the purpose of conducting leisure flights, air displays, sporting activities or competition activities using UAS;
- 1.15 ‘Model Aircraft’ means unmanned aircraft as specified in Part A of Annex 1 of this Implementing Standard.
- 1.16 ‘Payload’ means instrument, mechanism, equipment, part, apparatus, appurtenance, or accessory, including communications equipment, that is installed in or attached to the unmanned aircraft and is not used or intended to be used in operating or controlling an aircraft in flight, and is not part of an airframe, engine, or propeller;
- 1.17 ‘Placing on the market’ means the first making available of a product on the market;
- 1.18 ‘Privately built UAS’ means a UAS assembled or manufactured for the builder's own use, not including UAS assembled from sets of parts placed on the market as a single ready-to-assemble kit;
- 1.19 ‘Robustness’ means the property of mitigation measures resulting from combining the safety gain provided by the mitigation measures and the level of assurance and integrity that the safety gain has been achieved;
- 1.20 ‘Standard scenario’ means a type of UAS operation in the ‘specific’ category, as defined by CAASL for which a precise list of mitigating measures has been identified in such a way that the CAASL can be satisfied with declarations in which operators declare that they will apply the mitigating measures when executing this type of operation;
- 1.21 ‘UAS geographical zone’ means a portion of airspace established by the CAASL that facilitates, restricts or excludes UAS operations in order to address risks pertaining to safety, privacy, protection of personal data, security or the environment, arising from UAS operations;
- 1.22 ‘Uninvolved Persons’ means persons who are not participating in the UAS operation or who are not aware of the instructions and safety precautions given by the UAS operator;
- 1.23 ‘Unmanned Aircraft System Operator’ (‘UAS operator’) means any legal or natural person operating or intending to operate one or more UAS;
- 1.24 ‘Unmanned Aircraft System’ (‘UAS’) means an unmanned aircraft and the equipment to control it remotely;

- 1.25 ‘Unmanned Aircraft’ (‘UA’) means any aircraft operating or designed to operate autonomously or to be piloted remotely without a pilot on board.
- 1.26 ‘Unmanned Sailplane’ means an unmanned aircraft that is supported in flight by the dynamic reaction of the air against its fixed lifting surfaces, the free flight of which does not depend on an engine. It may be equipped with an engine to be used in case of emergency.
- 1.27 ‘Visual Line Of Sight Operation’ (‘VLOS’) means a type of UAS operation in which, the remote pilot is able to maintain continuous unaided visual contact with the unmanned aircraft, allowing the remote pilot to control the flight path of the unmanned aircraft in relation to other aircraft, people and obstacles for the purpose of avoiding collisions.
- 1.28 A ‘Toy’ means any UAS that is considered to be suitable for use by a person who is under the age of 14 years. Therefore, if the UAS is not marked as such within its packaging, then it cannot be considered to be a toy.

2. APPLICABILITY

This Implementing Standard shall be applicable to any person, including UAS operators, pilots, instructors and/or any organization, involved in Registration, Operation, Manufacturing/Assembling, Importing, selling and Training of unmanned aircraft systems.

Nothing in this implementing Standard on the requirement to obtain approval from the Director General of Civil Aviation for operation, shall apply to any person operating unmanned aircraft indoors at a building or private residence for any purpose.

3. MASS CATEGORIES OF UNMANNED AIRCRAFT

For the purpose of this Implementing Standard, Unmanned Aircraft Systems are grouped into six categories based on mass and specifications.

All the specifications in relation to the categories of UAS are mentioned in Part A of Annex 1 to this Implementing Standard.

4. REGISTRATION OF UNMANNED AIRCRAFT SYSTEMS.

- 4.1 Any UAS (excluding Model Aircraft and Toys) falling within Category C1, C2, C3 and C25+ shall be registered with the CAASL on the payment of a prescribed fee.
- 4.2 Any UAS falling within Category C0 and C4 fitted or equipped with a sensor which can capture data shall be registered with CAASL on the payment of a prescribed fee.
- 4.3 Any privately build UAS with MTOM 250g or below, which is fitted or equipped with a sensor which capture data and any privately build UAS above MTOM 250g shall be registered with CAASL on the payment of a prescribed fee.
- 4.4 Registration of an unmanned aircraft shall be valid for a period of five (05) years and renewable thereafter.
- 4.5 The Owner of UAS shall ensure that the person remotely operating the UAS shall at all times be in possession of proof of Registration when the UAS is engaged in any kind of operation.
- 4.6 In the event that the Registered Owner of unmanned aircraft transfers ownership to another person, the new owner shall register the Change of Ownership with CAASL prior to any operation. Transferor shall also inform CAASL that he/she had transferred the ownership of the particular unit furnishing the details of the Transferee.
- 4.7 The owner shall inform the Director General of Civil Aviation in a prescribed form if/when the registered unmanned aircraft becomes permanently unserviceable, or ceases operations within Sri Lanka.
- 4.8 Identification stamp
- I. No Unmanned Aircraft which qualify for the registration, shall be operated in any part of Sri Lanka, unless it carries an Identification Stamp issued by the Director General of Civil Aviation or a person or organization duly authorized by him.
 - II. An identification stamp on an unmanned aircraft shall indicate as minimum its Registration Number and a QR code shall indicate as minimum its Registration Number, owner's National Identity Card number, his/her emergency contact numbers, date of registration and the expiry date of registration.
- 4.9 Insurance Cover
- I. Any UAS with MTOM of 250g or above, excluding model aircraft, shall require to have a valid public liability insurance cover.

5. REGISTRATION OF PERSONS WHO OPERATE UNMANNED AIRCRAFT

- 5.1 A person who intends to operate an unmanned aircraft of any mass category (except toys) shall be registered with CAASL.
- 5.2 A person who operates in Open category described in Paragraph 6.1, shall complete online training and theory exam to obtain Remote Pilot Competency Certificate (Flyer ID) on the payment of a prescribed fee which shall conduct by CAASL or any other designated person or organization by CAASL.
- 5.3 A person who operates in Specific or Certified category described in Paragraph 6.2 and 6.3, shall complete a theory exam, practical flying test and a medical test to obtain Remote Pilot Competency Certificate on the payment of a prescribed fee which shall conduct by CAASL or any other designated person or organization by CAASL.
- 5.4 The minimum age for remote pilots operating a UAS in all categories (except Category C4) defined in this Implementing Standard shall be over 16 years, unless otherwise authorized by the Director General of Civil Aviation in writing.
- 5.5 No minimum age for remote pilots shall be required when operate in subcategory A3 in Open Category:
- I. with a UAS mass category C0 & C1 or privately-built UAS with a maximum take-off mass of less than 900 g;
 - II. when operate under the direct supervision of a competent remote pilot.
- 5.6 Non-residence of Sri Lanka who intend to operate an unmanned aircraft shall require to follow the conditions mentioned in 5.1, 5.2 and 5.3 above depending on their operation category.
- 5.7 Any person who already in possession of UAS license/ operator competency issued by any other competent authority, CAASL may in its discretion recognize the same as valid for specific or certified category of operations in Sri Lanka. However, theory exam & medical exams shall not be excluded.

6. OPERATION CATEGORIES OF UNMANNED AIRCRAFT SYSTEMS

UAS operations shall be performed in the ‘open’, ‘specific’ and “certified” category defined respectively in 6.1, 6.2 and 6.3 below subject to the following conditions:

- (a) UAS operations in the ‘open’ category shall require an operational authorization from DGCA and operator shall require to strictly adhere to the rules stipulated by this Implementing Standard and any other related laws.
- (b) UAS operations in the ‘specific’ category shall require an operational authorization issued by DGCA pursuant to Paragraph 8 or an authorization received in accordance with Paragraph 10 by a UAS operator.

- (c) UAS operations in “certified” category shall require the certification of the UAS pursuant to Paragraph 6.3 and the certification of the operator and, where applicable, the licensing of the remote pilot.
- (d) UAS with high performance operation, race or competition and drone swarms and any other mode of operation which is not specifically mentioned in this Implementing Standards shall be in accordance to the published procedures by CAASL.
- (e) For all operation categories, necessary prior approvals shall be obtained from the respective local governing authorities of the locations or geographical zones as described in Paragraph 11 of this Implementing Standard.

6.1 UAS OPERATIONS IN ‘OPEN’ CATEGORY.

- I. Operations shall be classified as UAS operations in the ‘open’ category only where the following requirements are met:
 - a) the UAS belongs to one of the categories set out in Annex 1 excluding Category C25+.
 - b) the unmanned aircraft has a maximum take-off mass of less than 25 kg;
 - c) the remote pilot ensures that the unmanned aircraft is kept at a safe distance from people and that it is not flown over assemblies of people;
 - d) the remote pilot keeps the unmanned aircraft in VLOS at all times except when flying in follow-me mode or when using an unmanned aircraft observer as specified in Paragraph 1.6 of Part B of the Annex 1; however fly using First Person View (FPV), operation shall conduct under subcategory A3 only.
 - e) during flight, the unmanned aircraft is maintained within 120 meters (400ft) from the closest point of the surface of the earth, except when overflying an obstacle, as specified in Paragraph 1.1 of Part B of the Annex 1.
 - f) during flight, the unmanned aircraft does not carry any cargo, dangerous goods and does not drop any material;
 - g) shall not be operated before and after civil twilight unless the operation is a shielded operation with adequate illumination.
- II. UAS operations in the ‘open’ category shall be divided in three sub-categories in accordance with the requirements set out in Part B of the Annex 1.

6.2 UAS OPERATIONS IN ‘SPECIFIC’ CATEGORY.

- I. Where one of the requirements laid down in Paragraph 6.1 above or in Paragraph 1 of Part B of Annex 1 is not met, a UAS operator shall be required to obtain an operational authorization pursuant to Paragraph 8 from the DGCA.

- II. When applying to CAASL for an operational authorization pursuant to Paragraph 8, the operator shall perform a risk assessment in accordance with Paragraph 7 and submit it together with the application, including adequate mitigating measures.
- III. In accordance with Paragraph 2.4 of Part B of the Annex 1, CAASL shall issue an operational authorization, if it considers that the operational risks are adequately mitigated in accordance with Paragraph 8.
- IV. CAASL shall specify whether the operational authorization concerns:
 - a) the approval of a single operation or a number of operations specified in time or location(s) or both. The operational authorization shall include the associated precise list of mitigating measures;
 - b) the approval of an LUC, in accordance with Part C of the Annex 1.
- V. An operational authorization shall not be required for:
 - a) UAS operators holding an LUC with appropriate privileges in accordance with Paragraph 1.6 of Part C of Annex 1;
 - b) Operations conducted in the framework of model aircraft clubs and associations that have received an authorization in accordance with Paragraph 10.

6.3 UAS OPERATIONS IN 'CERTIFIED' CATEGORY.

- I. Operations shall be classified as UAS operations in the 'certified' category only where the following requirements are met:
 - a) the UAS is certified pursuant to sub paragraph (a), (b) and (c) of Paragraph 9 and
 - b) the operation is conducted in any of the following conditions:
 - i. over assemblies of people;
 - ii. involves the transport of people;
 - iii. involves the carriage of dangerous goods, that may result in high risk for third parties in case of accident.
- II. In addition, UAS operations shall be classified as UAS operations in the 'certified' category where CAASL, based on the risk assessment provided for in Paragraph 7, considers that the risk of the operation cannot be adequately mitigated without the certification of the UAS and of the UAS operator and, where applicable, without the licensing of the remote pilot.

7. RULES FOR CONDUCTING AN OPERATIONAL RISK ASSESSMENT

7.1 An operational risk assessment shall:

- I. describe the characteristics of the UAS operation;
- II. propose adequate operational safety objectives;
- III. identify the risks of the operation on the ground and in the air considering all of the below:
 - a) the extent to which third parties or property on the ground could be endangered by the activity;
 - b) the complexity, performance and operational characteristics of the unmanned aircraft involved;
 - c) the purpose of the flight, the type of UAS, the probability of collision with other aircraft and class of airspace used;
 - d) the type, scale, and complexity of the UAS operation or activity, including, where relevant, the size and type of the traffic handled by the responsible organization or person;
 - e) the extent to which the persons affected by the risks involved in the UAS operation are able to assess and exercise control over those risks.
- IV. identify a range of possible risk mitigating measures;
- V. determine the necessary level of robustness of the selected mitigating measures in such a way that the operation can be conducted safely.

7.2 The description of the UAS operation shall include at least the following:

- I. the nature of the activities performed;
- II. the operational environment and geographical area for the intended operation, in particular overflowed population, orography, types of airspace, airspace volume where the operation will take place and which airspace volume is kept as necessary risk buffers, including the operational requirements for geographical zones;
- III. the complexity of the operation, in particular which planning and execution, personnel competencies, experience and composition, required technical means are planned to conduct the operation;
- IV. the technical features of the UAS, including its performance in view of the conditions of the planned operation and, where applicable, its registration number;
- V. the competence of the personnel for conducting the operation including their composition, role, responsibilities, training and recent experience.

7.3 The assessment shall propose a target level of safety, which shall be equivalent to the safety level in manned aviation, in view of the specific characteristics of UAS operation.

7.4 The identification of the risks shall include the determination of all of the below:

- I. the unmitigated ground risk of the operation taking into account the type of operation and the conditions under which the operation takes place, including at least the following criteria:
 - a) VLOS or BVLOS;
 - b) population density of the overflown areas;
 - c) flying over an assembly of people;
 - d) the dimension characteristics of the unmanned aircraft;
- II. the unmitigated air risk of the operation taking into account all of the below:
 - e) the exact airspace volume where the operation will take place, extended by a volume of airspace necessary for contingency procedures;
 - f) the class of the airspace;
 - g) the impact on other air traffic and air traffic management (ATM) and in particular:
 - i. the altitude of the operation;
 - ii. controlled versus uncontrolled airspace;
 - iii. aerodrome versus non-aerodrome environment;
 - iv. airspace over urban versus rural environment;
 - v. separation from other traffic.

7.5 The identification of the possible mitigation measures necessary to meet the proposed target level of safety shall consider the following possibilities:

- I. containment measures for people on the ground;
- II. strategic operational limitations to the UAS operation, in particular:
 - a) restricting the geographical volumes where the operation takes place;
 - b) restricting the duration or schedule of the time slot in which the operation takes place;
- III. strategic mitigation by common flight rules or common airspace structure and services;
- IV. capability to cope with possible adverse operating conditions;
- V. organization factors such as operational and maintenance procedures elaborated by the UAS operator and maintenance procedures compliant with the manufacturer's user manual;
- VI. the level of competency and expertise of the personnel involved in the safety of the flight;
- VII. the risk of human error in the application of the operational procedures;
- VIII. the design features and performance of the UAS in particular:
 - a) the availability of means to mitigate risks of collision;
 - b) the availability of systems limiting the energy at impact or the frangibility of the unmanned aircraft;
 - c) the design of the UAS to recognized standards and the fail-safe design.

7.6 The robustness of the proposed mitigating measures shall be assessed in order to determine whether they are commensurate with the safety objectives and risks of the intended operation, particularly to make sure that every stage of the operation is safe.

8. AUTHORIZING OPERATIONS IN THE ‘SPECIFIC’ CATEGORY

8.1 The CAASL shall evaluate the risk assessment and the robustness of the mitigating measures that the UAS operator proposes to keep the UAS operation safe in all phases of flight.

8.2 The DGCA shall grant an operational authorization when the evaluation concludes that:

- I. the operational safety objectives take account of the risks of the operation;
- II. the combination of mitigation measures concerning the operational conditions to perform the operations, the competence of the personnel involved and the technical features of the unmanned aircraft, are adequate and sufficiently robust to keep the operation safe in view of the identified ground and air risks;
- III. the UAS operator has provided a statement confirming that the intended operation complies with any applicable laws relating to it, in particular, with regard to privacy, data protection, insurance liability, security and environmental protection.

8.3 When the operation is not deemed sufficiently safe, CAASL may not issue the authorization.

8.4 The operational authorization granted by the DGCA shall detail:

- I. the scope of the authorization;
- II. the ‘specific’ conditions that shall apply:
 - a) to the UAS operation and the operational limitations;
 - b) to the required competency of the UAS operator and, where applicable, of the remote pilots;
 - c) to the technical features of the UAS, including the certification of the UAS, if applicable;
- III. the following information:
 - a) the registration number of the UAS operator and the technical features of the UAS;
 - b) a reference to the operational risk assessment developed by the UAS operator;
 - c) the operational limitations and conditions of the operation;
 - d) the mitigation measures that the UAS operator has to apply;
 - e) the location(s) where the operation is authorized to take place;
 - f) all documents and records relevant for the type of operation and the type of events that should be reported.

9. REQUIREMENTS FOR UAS OPERATES IN THE ‘CERTIFIED’ AND ‘SPECIFIC’ CATEGORIES

9.1 The design, production and maintenance of UAS shall be certified if the UAS meets any of the following conditions:

- I. it has a characteristic dimension of 3 m or more, and is designed to be operated over assemblies of people;
- II. Above 25kg;
- III. it is designed for transporting people;
- IV. it is designed for the purpose of transporting dangerous goods and requiring a high level of robustness to mitigate the risks for third parties in case of accident;
- V. it is used in the ‘specific’ category of operations defined in Paragraph 6.2 and the operational authorization issued by the CAASL, following a risk assessment provided for in Paragraph 7, considers that the risk of the operation cannot be adequately mitigated without the certification of the UAS.

9.2 Unless it needs to be certified in accordance with Paragraph 9.1 above, a UAS used in the ‘specific’ category shall feature the technical capabilities set out in the operational authorization issued by CAASL or in the standard scenario defined by CAASL or as defined by the Light UAS Operator Certificate (LUC) pursuant to Part C of the Annex.

10. MODEL AIRCRAFT FLYING.

Model Aircraft can be flown under three types,

- 1) Framework of Model Aircraft Clubs and Associations in a location with an approval from CAASL.
- 2) Model Aircraft Flying Sites designated by CAASL.
- 3) Under UAS Open Category A3.

10.1 MODEL AIRCRAFT CLUBS AND ASSOCIATIONS

- I. Upon request by a model aircraft operator, club or association, CAASL may issue an authorization for UAS operations in the framework of model aircraft clubs and associations.
- II. The authorization referred to in above I shall be issued in accordance with any of the following:
 - a) relevant rules;
 - b) established procedures, organizational structure and management system of the model aircraft club or association, ensuring that:

- i. Remote pilots operating in the framework of model aircraft clubs or associations are informed of the conditions and limitations defined in the authorization issued by CAASL;
 - ii. Remote pilots operating in the framework of model aircraft clubs or associations are assisted in achieving the minimum competency required to operate the UAS safely and in accordance with the conditions and limitations defined in the authorization;
 - iii. the model aircraft club or association takes appropriate action when informed that a remote pilot operating in the framework of model aircraft clubs or associations does not comply with the conditions and limitations defined in the authorization, and, if necessary, inform the CAASL;
 - iv. the model aircraft club or association provides, upon request from the CAASL, documentation required for oversight and monitoring purposes.
- III. The authorization referred to in above I shall specify the conditions under which operations in the framework of the model aircraft clubs or associations may be conducted and shall be limited to the territory of Sri Lanka.
- IV. CAASL may enable model aircraft clubs and associations to register their members into the registration systems established in accordance with Paragraph 5.2 on their behalf. If this is not the case, the members of model aircraft clubs and associations shall register themselves in accordance with Paragraph 5.2.

10.2 CAASL DESIGNATED MODEL AIRCRAFT FLYING SITES

- I. Remote pilots shall be registered themselves with CAASL after completing competency test as described in Paragraph 5.2.
- II. Remote pilots may fly in areas designated by CAASL for the purpose of model aircraft flying without any prior approvals, but under the specified conditions laid down by CAASL.

10.3 MODEL AIRCRAFT FLYING UNDER UAS OPEN CATEGORY A3

- I. Only model aircraft under MTOM 4kg are permitted to fly.
- II. Remote pilots shall be registered themselves with CAASL after completing competency test as described in Paragraph 5.2.
- III. Model aircraft flying under UAS Open category A3 shall comply with the conditions laid down in Paragraph 1.4 of Part B in Annex 1.

11. OPERATIONAL CONDITIONS FOR UAS GEOGRAPHICAL ZONES

- 11.1 When defining UAS geographical zones for safety, security, privacy or environmental reasons, CAASL shall:
- I. prohibit certain or all UAS operations, request particular conditions for certain or all UAS operations or request a prior operational authorization/permit for certain or all UAS operations;
 - II. subject UAS operations to specified environmental standards;
 - III. allow access to certain UAS classes only;
 - IV. allow access only to UAS equipped with certain technical features, in particular remote identification systems or geo awareness systems.
- 11.2 On the basis of a risk assessment CAASL may designate certain geographical zones in which UAS operations are exempt from one or more of the 'open' category requirements.
- 11.3 When pursuant to above Paragraph 11.1 or 11.2 CAASL shall define UAS geographical zones, for geo awareness purposes and shall ensure that the information on the UAS geographical zones, including their period of validity, is made publicly available in a common unique digital format.
- 11.4 An unmanned aircraft shall not be operated above 400ft. (AGL) over or near any aerodrome, beyond the horizontal limits specified in the Geo Zone Map, within Class C, D, or E airspace, without prior approval from the relevant Air Traffic Control (ATC) unit.
- 11.5 An unmanned aircraft shall not be operated on or within the horizontal limits specified in the Geo Zone Map of any aerodrome without prior approval from the Air Traffic Control (ATC) unit of that aerodrome.
- 11.6 An unmanned aircraft shall not be operated over any UAS geographical zone without approval from the controlling authority of such zone.

12. APPROVED PERSON OR ORGANIZATION

- 12.1 Director General of Civil Aviation may approve a person or an organization having appropriate expertise in the design, manufacture, assemble, modify, repair, overhaul or maintain, operation of unmanned aircraft and training, who is hereinafter referred to as an approved person or approved organization as the case may be, to perform one or more of the following functions for and on behalf of Director General of Civil Aviation.
- I. issuing a remote pilot qualification for operating unmanned aircraft; or
 - II. appointing persons to give instruction to remote pilots of unmanned aircraft or
 - III. authorizing a person to notify the aeronautical information service provider, for the issue of a NOTAM (A notice to airmen) of unmanned aircraft operations; or
 - IV. design, manufacture, assemble, modify, repair, overhaul of unmanned aircraft; or authorizing such functions; or
 - V. inspecting and approving the construction of a unmanned aircraft; or

- VI. inspecting of unmanned aircraft;
- VII. Authorizing the operation of an unmanned aircraft.

12.2A person or organization intending to receive status of Approved Person or Approved Organization for the purposes of this Implementing Standard may apply to Director General of Civil Aviation in the prescribed form, giving his/her qualifications and experience in the construction, operation, maintenance and training of pilots of unmanned aircraft.

13. IMPORTERS

13.1 Obligations of Importers

- I. When importing an UAS other than UAS under definition of a toy as per this Implementing Standard, for any purpose into the country shall require to comply with the rules and procedures stipulated under this Implementing Standard and prior permission shall be obtained from the relevant organizations.
- II. Importers shall obtain a permit form CAASL on the payment of a prescribed fee and only place products compliant with the requirements set out in this Implementing Standard on the market.
- III. Before placing a product on the market, importers shall ensure that:
 - a) the appropriate conformity assessment procedure referred by the government has been carried out by the manufacturer;
 - b) the manufacturer has drawn up the technical documentation referred to in Paragraph 7 Part A of Annex 1 of this Implementing Standard ;
 - c) the product is accompanied by the documents referred to in subparagraph VII and VIII of Paragraph 14;
 - d) the manufacturer shall complied with the requirements set out in subparagraph V and VI of Paragraph 14;
- IV. Where an importer considers or has reason to believe that a product is not in conformity with the requirements set out in Paragraph 1 to 7 of Part A of Annex 1, he shall not place the product on the market until it has been brought into conformity. Furthermore, where the product presents a risk for the health and safety of consumers and third parties, the importer shall inform the manufacturer and CAASL to that effect.
- V. Importers shall indicate on the product their name, registered trade name or registered trademark, website and the postal address at which they can be contacted or, where that is not possible, on its packaging or in a document accompanying the product. The contact details shall be preferably in Sinhala, Tamil or English language.
- VI. Importers shall ensure that the product is accompanied by the manual and information notice in Sinhala, Tamil or English language which can be understood by consumers and

other end-users. The manual and information notice, as well as any labelling, shall be clear, understandable and legible.

- VII. When deemed appropriate with regard to the risks presented by a product, importers shall, in order to protect the health and safety of end-users and third parties, carry out sample testing of products made available on the market, investigate, and, if necessary, keep a register of complaints, of non-conforming of products and product recalls, and shall keep distributors informed of any such monitoring.
- VIII. Importers shall, for 10 years after the product has been placed on the market, keep a copy of the declaration of conformity at the disposal of the market surveillance authorities of Sri Lanka and ensure that the technical documentation can be made available to those authorities, upon request.
- IX. Importers shall, further to a reasoned request from CAASL, provide it with all the information and documentation in paper or electronic form necessary to demonstrate the conformity of the product. They shall cooperate with CAASL, at its request, on any action taken to eliminate the risks posed by the product which they have placed on the market.
- X. Importers shall, maintains an updated record of details of each unmanned aircraft being imported and if such aircraft is made available to the market following requirements are complied.
 - a) Name of the purchaser, address, emergency contact information (email and mobile number) and National Identity Card number
 - b) Product type/model and Serial Number and any other identification of the unmanned aircraft
 - c) Product serial numbers of accessory units that may be provided with the unmanned aircraft such as cameras, remote control, other sensors etc.

14. MANUFACTURERS, ASSEMBLERS AND REPAIRERS

14.1 Obligation of Manufacturers, Assemblers and Repairers

- I. When placing the product on the market manufacturers, assemblers & repairers shall obtain a permit from CAASL on the payment of a prescribed fee and ensure that it has been designed, manufactured and repaired in compliance with the requirements set out in Part A of Annex 1 to this Implementing Standard.
- II. Manufacturer, assembler and repairer shall draw up the technical documentation provided for in Paragraph 7 of Part A of Annex 1 and carry out the relevant conformity assessment.
- III. Manufacturer, Assemblers shall keep the technical documentation and the declaration of conformity for 10 years after the product has been placed on the market.

- IV. Manufacturers & Assemblers shall ensure that procedures are in place for series production to remain in conformity with this Implementing Standard. Changes in product design, characteristics or software, and changes in the harmonized standards or in technical specifications by reference to which conformity of a product is declared shall be adequately taken into account.

When deemed appropriate with regard to the risks presented by a product, manufacturers shall, to protect the health and safety of consumers, carry out sample testing of marketed products, investigate, and, if necessary, keep a register of complaints, of non-conforming products and product recalls and shall keep distributors informed of any such monitoring.

- V. Manufacturers & Assemblers of UAS shall ensure that the UA bears a category and a unique serial number allowing for its identification, and if applicable, compliant with the requirements defined in the corresponding Part A of Annex 1 of this Implementing Standard. Manufacturers of remote identification add-ons shall ensure that the remote identification add-on bears a type and a unique serial number allowing for their identification and compliant with the requirements defined in Part A of the Annex 1. In both cases, manufacturers shall ensure that a unique serial number is also affixed to the declaration of conformity.
- VI. Manufacturers & Assemblers shall indicate on the product their name, registered trade name or registered trademark, website address and the postal address at which they can be contacted or, where that is not possible, on its packaging, or in a document accompanying it. The address shall indicate a single point at which the manufacturer can be contacted. The contact details shall be indicated in Sinhala, Tamil or English.
- VII. Manufacturers & Assemblers shall ensure that the product is accompanied by the manual and information notice required by Paragraph 1 to 7 in Part A of the Annex 1 in Sinhala, Tamil or English language. Such manual and information notice, as well as any labelling, shall be clear, understandable and legible.
- VIII. Manufacturers and Assemblers who consider or have reason to believe that products which they have placed on the market are not in conformity with this Implementing Standard shall immediately take the corrective measures necessary to bring that product into conformity, to withdraw it or recall it, if appropriate. Where the product presents a risk, manufacturers shall immediately inform the market surveillance authorities of Sri Lanka to that effect, giving details, in particular, of the non-compliance of any corrective measures taken and of the results thereof.
- IX. Manufacturers and Assemblers shall, further to a reasoned request from CAASL, provide it with all the information and documentation in paper or electronic form necessary to demonstrate the conformity of the product with these Implementing Standard. They shall cooperate with CAASL, at their requests, on any action taken to eliminate the risks posed by the product which they have placed on the market.
- XI. Sellers shall, maintains an updated record of details of each unmanned aircraft being sold and following requirements are complied.

- a) Name of the purchaser, address, emergency contact information (email and mobile number) and National Identity Card number
- b) Product type/model and Serial Number and any other identification of the unmanned aircraft
- c) Product serial numbers of accessory units that may be provided with the unmanned aircraft such as cameras, remote control, other sensors etc.

15. SELLER/ DISTRIBUTOR

15.1 Obligations of Seller /Distributor

- I. Seller shall register with CAASL on the payment of a prescribed fee and when making a product available on the market, sellers shall act with due care in relation to the requirements set out in this Paragraph.
- II. Before making a product available on the market, seller shall verify that the product is accompanied by the documents referred to in subparagraphs VI and VII of Paragraph 14 and that the manufacturer and the importer have complied with the requirements set out in subparagraphs V and VI of Paragraph 13.
- III. Seller shall ensure that the product is accompanied by the manual and information notice required by Part A of Annex 1 to this IS in Sinhala, Tamil or English language which can be understood by consumers and other end-users. The manual and information notice, as well as any labelling, shall be clear, understandable and legible.
- IV. Where a seller considers or has reason to believe that a product is not in conformity with the requirements set out in this IS , he shall not make the product available on the market until it has been brought into conformity. Furthermore, where the product presents a risk, the seller shall inform the manufacturer or the importer to that effect, as well as the competent market surveillance authorities.
- V. Sellers who consider or have reasons to believe that a product which they have made available on the market is not in conformity with the applicable legislation shall make sure that the corrective measures necessary to bring that product into conformity, to withdraw it or recall it, if appropriate, are taken. Furthermore, where the product presents a risk, sellers shall immediately inform the market surveillance authorities of Sri Lanka giving details, in particular, of the non-compliance and of any corrective measures taken.
- VI. Sellers shall, further to a reasoned request from CAASL, provide it with all the information and documentation in paper or electronic form necessary to demonstrate the conformity of the product. They shall cooperate with the authority, at its request, on any action taken to eliminate the risks posed by the product which they have made available on the market.

VII. Manufacturers and Assemblers shall, further to a reasoned request from CAASL, provide it with all the information and documentation in paper or electronic form necessary to demonstrate the conformity of the product with these Implementing Standard. They shall cooperate with CAASL, at their requests, on any action taken to eliminate the risks posed by the product which they have placed on the market.

15.2 Cases in which obligations of Manufacturers apply to Importers, Sellers, Distributors and Repairer

An importer, seller, distributor, Repairer shall be considered as a manufacturer for the purposes of these Implementing Standard and shall be subjected to the obligations of manufacturers pursuant to Paragraph 14, where they place a product on the market under their name or trademark or modify the product already placed on the market in such a way that compliance with this Implementing Standard may be affected.

16. CONFORMITY OF THE PRODUCT

16.1 Presumption of conformity

- I. A product which is in conformity with harmonized standards or parts thereof, the references of which have been published in the Rules applicable to Sri Lanka , shall be presumed to be in conformity with the requirements covered by those standards or parts thereof set out in Part A of the Annex 1 of this Implementing Standard.

17. TECHNICAL DOCUMENTATION

- I. The technical documentation shall contain all relevant data and details of the means used by the manufacturer to ensure that the product complies with the requirements set out in Part A of the Annex 1. It shall, at least, contain the elements set out in Paragraph 7 of Part A of Annex 1.
- II. The technical documentation shall be drawn up before the product is placed on the market and shall be continuously updated.
- III. The technical documentation and the assessment of the quality system of the manufacturer shall be drawn up in Sinhala, Tamil or English language.
- IV. Where the technical documentation does not comply with above subparagraphs I, II or III of this Paragraph, the market surveillance authority may ask the manufacturer or the importer to have a test performed by a body acceptable to the market surveillance authority at the expense of the manufacturer or the importer within a specified period in order to verify compliance of the product with the requirements set out in Part A of Annex 1 of this IS which applies to it.

18. GENERAL PROVISIONS / PROHIBITIONS

- 18.1 No person shall operate a UAS in such a manner that is reckless or negligent as to endanger or will be likely to endanger the safety of any person, property, and specifically no UAS operation will be carried that will endanger or will be likely to endanger general aviation safety.
- 18.2 When operating a UAS fitted with telemetry devices, the operator shall ensure that at all times observe that he captures the planned and intended objects only and shall ensure that privacy, civil rights and civil liberties of third parties are not undermined at any time.
- 18.3 An unmanned aircraft shall not be operated to cause interference to radio communication, navigation or surveillance of aircraft and/or Air Traffic Management system.
- 18.4 Unmanned aircraft of any mass category shall not be operated unless its method of propulsion, source of power, means of controls, command and control links are checked and verified for normal operations prior to the intended flight ensuring safe operations without endangering persons or property.
- 18.5 Ensure that external devices such as telemetric devices attached to unmanned aircraft are secured and do not adversely affect the flight characteristics or controllability of the aircraft.
- 18.6 The person remotely operating an unmanned aircraft at all times shall maintain awareness of the location of operation and expected flight path, be aware of other aircraft, persons, and property in the vicinity of the operating area, and shall maneuver the unmanned aircraft to avoid a collision, as well as to prevent other aircraft from having to take action to avoid the unmanned aircraft.
- 18.7 Unmanned aircraft shall not be operated under the conditions of gusty winds, rain, thunder, lightning or any other adverse weather conditions, or when visibility is low.
- 18.8 The person who remotely operate unmanned aircraft shall not engage in operating multiple unmanned aircraft simultaneously at any given time.
- 18.9 In an event of an in-flight emergency, an unexpected and unforeseen serious occurrence or situation that requires urgent prompt action, emergency action should be taken in such a way as to minimize injury to persons or damage to property.
- 18.10 While abiding by this Implementing Standard on unmanned aircraft operations, person who remotely operates unmanned aircraft shall comply with all other applicable public laws that govern such operations.
- 18.11 An unmanned aircraft shall not be operated by any person if the person;
- I. Is not familiar with operations and maneuvering of the aircraft safely.
 - II. Is not in good physical and mental health condition;
 - III. Is under the influence of alcohol or psychoactive substance;
 - IV. Does not have sound sense of social responsibility.

19. ACCIDENT / INCIDENT REPORTING

19.1 The person remotely operating the unmanned aircraft or the owner shall immediately report any occurrence of an accident or incident involving with manned aircraft or destruction of private or public property and any injury or death caused to the third party by any operation of pilotless aircraft to the nearest police station of the location of occurrence.

19.2 Report on the accident and incident shall be immediately submitted to CAASL by the owner or the person remotely operated the unmanned aircraft at the earliest but not later than 24 hours of its occurrence, using the form prescribed for the purpose.

20. OFFENCES AND PENALTIES

As per the Section 103 of Civil Aviation Act No. 14 of 2010, any person who violates any provision of this Implementing Standard shall be guilty of an offence. Penalties shall apply pursuant to Section 104 of Civil Aviation Act No. 14 of 2010.

ANNEX 1 - PART A: CATEGORIES OF UAS

1. CATEGORY 'C0'

Category 'C0' UAS shall comply with the following:

- 1.1 have an MTOM of 250 g or less, including payload;
- 1.2 have a maximum speed in level flight of 19 m/s;
- 1.3 have a maximum attainable height above the take-off point limited to 120 m.; or be equipped with a system that limits the height above the surface or above the take-off point to 120 m. or to a value selectable by the remote pilot. If the value is selectable, clear information about the height of the UA above the surface or take-off point during flight shall be provided to the remote pilot.;
- 1.4 be safely controllable with regards to stability, maneuverability and data link performance, by a remote pilot following the manufacturer's instructions, as necessary under all anticipated operating conditions including following the failure of one or, if appropriate, more systems;
- 1.5 be designed and constructed in such a way as to minimize injury to people during operation, sharp edges shall be avoided, unless technically unavoidable under good design and manufacturing practice. If equipped with propellers, it shall be designed in such a way as to limit any injury that may be inflicted by the propeller blades;
- 1.6 be powered by electricity and have a nominal voltage not exceeding 24 V direct current (DC) or the equivalent alternating current (AC) voltage; its accessible parts shall not exceed 24 V DC or the equivalent AC voltage; internal voltages shall not exceed 24 V DC or the equivalent AC voltage unless it is ensured that the voltage and current combination generated does not lead to any risk or harmful electric shock even when the UAS is damaged;
- 1.7 Remote controller of the unit shall
 - I. Be within the frequency range 2400.00MHz – 2483.50MHz (2.4GHz), 5470.00MHz – 5725.00MHz and 5724.00 MHz – 5875.00MHz (5.8GHz).
 - II. Maximum transmitting output power of 200mW 23(dBm)
- 1.8 if equipped with a follow-me mode and when this function is on, be in a range not exceeding 50m from the remote pilot, and make it possible for the remote pilot to regain control of the UA;
- 1.9 have a unique physical serial number
- 1.10 be placed on the market with a user's manual providing:
 - I. the characteristics of the UA including but not limited to the:
 - a) UA category

- b) UA mass (with a description of the reference configuration) and the maximum take-off mass (MTOM);
 - c) general characteristics of allowed payloads in terms of mass dimensions, interfaces with the UA and other possible restrictions;
 - d) equipment and software to control the UA remotely;
 - e) and a description of the behavior of the UA in case of a loss of data link;
 - II. clear operational instructions;
 - III. operational limitations (including but not limited to meteorological conditions and day/night operations).
 - IV. Appropriate description of all the risk related to UAS operations adapted for the age of the user.
- 1.11 It shall include an information notice published by CAASL with applicable limitations and obligations under prevailing law of Sri Lanka.

2. CATEGORY 'C1'

Category 'C1' UAS shall comply with the following:

- 2.1 be made of materials and have performance and physical characteristics such as to ensure that in the event of an impact at terminal velocity with a human head, the energy transmitted to the human head is less than 80 J, or, as an alternative, shall have an MTOM of 900g or less, including payload;
- 2.2 have a maximum speed in level flight of 19 m/s;
- 2.3 have a maximum attainable height above the take-off point limited to 120 m. or be equipped with a system that limits the height above the surface or above the take-off point to 120 m. or to a value selectable by the remote pilot. If the value is selectable, clear information about the height of the UA above the surface or take-off point during flight shall be provided to the remote pilot.
- 2.4 be safely controllable with regards to stability, maneuverability and data link performance, by a remote pilot following the manufacturer's instructions, as necessary under all anticipated operating conditions including following the failure of one or, if appropriate, more systems;
- 2.5 have the requisite mechanical strength, including any necessary safety factor, and, where appropriate, stability to withstand any stress to which it is subjected to during use without any breakage or deformation that might interfere with its safe flight;
- 2.6 be designed and constructed in such a way as to minimize injury to people during operation, sharp edges shall be avoided, unless technically unavoidable under good design and manufacturing practice. If equipped with propellers, it shall be designed in such a way as to limit any injury that may be inflicted by the propeller blades;

- 2.7 in case of a loss of data link, have a reliable and predictable method for the UA to recover the data link or terminate the flight in a way that reduces the effect on third parties in the air or on the ground;
- 2.8 be powered by electricity and have a nominal voltage not exceeding 24 V DC or the equivalent AC voltage; its accessible parts shall not exceed 24 V DC or the equivalent AC voltage; internal voltages shall not exceed 24 V DC or the equivalent AC voltage unless it is ensured that the voltage and current combination generated does not lead to any risk or harmful electric shock even when the UAS is damaged;
- 2.9 have a unique physical serial number
- 2.10 have a direct remote identification that:
- I. allows the upload of the UAS operator registration number.
 - II. ensures, in real time during the whole duration of the flight, the direct periodic broadcast from the UA using an open and documented transmission protocol, of the following data, in a way that they can be received directly by existing mobile devices within the broadcasting range:
 - a) the UAS operator registration number;
 - b) the unique physical serial number of the UA;
 - c) the geographical position of the UA and its height above the surface or take off point;
 - d) the route course measured clockwise from true north and ground speed of the UA; and
 - e) the geographical position of the remote pilot or, if not available, the take-off point;
 - III. ensures that the user cannot modify the data mentioned under b), c), d) and e) of sub paragraph (II) above.
- 2.11 be equipped with a geo-awareness system that provides:
- I. an interface to load and update data containing information on airspace limitations related to UA position and altitude imposed by the geographical zones, as defined by Paragraph 11, which ensures that the process of loading or updating such data does not degrade its integrity and validity;
 - II. a warning alert to the remote pilot when a potential breach of airspace limitations is detected; and
 - III. information to the remote pilot on the UA's status as well as a warning alert when its positioning or navigation systems cannot ensure the proper functioning of the geo-awareness system;
- 2.12 If the UA has a function that limits its access to certain airspace areas or volumes, this function shall operate in such a manner that it interacts smoothly with the flight control system of the UA without adversely affecting flight safety; in addition, clear information shall be provided to the remote pilot when this function prevents the UA from entering these airspace areas or volume;
- 2.13 provide the remote pilot with clear warning when the battery of the UA or its control station reaches a low level so that the remote pilot has sufficient time to safely land the UA;

2.14 be equipped with lights for the purpose of:

- I. the controllability of the UA,
- II. the conspicuity of the UA at night, the design of the lights shall allow a person on the ground, to distinguish the UA from a manned aircraft;

2.15 if equipped with a follow-me mode and when this function is on, be in a range not exceeding 50 m from the remote pilot, and make it possible for the remote pilot to regain control of the UA;

2.16 Remote controller of the unit shall

- I. Be within the frequency range 2400.00MHz – 2483.50MHz (2.4GHz), 5470.00MHz – 5725.00MHz and 5724.00 MHz – 5875.00MHz (5.8GHz).
- II. Maximum transmitting output power of 200mW 23(dBm)

2.17 have a unique physical serial number

2.18 be placed on the market with a user's manual providing:

- I. the characteristics of the UA including but not limited to the:
 - a) category of the UA;
 - b) UA mass (with a description of the reference configuration) and the maximum take-off mass (MTOM);
 - c) general characteristics of allowed payloads in terms of mass dimensions, interfaces of with the UA and other possible restrictions;
 - d) equipment and software to control the UA remotely;
 - e) reference of the transmission protocol used for the direct remote identification emission;
 - f) sound power level;
 - g) and a description of the behavior of the UA in case of a loss of data link;
- II. clear operational instructions;
- III. procedure to upload the airspace limitations;
- IV. maintenance instructions;
- V. troubleshooting procedures;
- VI. operational limitations (including but not limited to meteorological conditions and day/night operations); and
- VII. appropriate description of all the risks related to UAS operations;

2.19 It shall include an information notice published by CAASL with applicable limitations and obligations under prevailing law of Sri Lanka.

3. CATEGORY 'C2'

Category 'C2' UAS shall comply with the following:

3.1 have an MTOM of 4 kg or less, including payload;

3.2 have a maximum attainable height above the take-off point limited to 120 m. or be equipped with a system that limits the height above the surface or above the take-off point to 120 m.

or to a value selectable by the remote pilot. If the value is selectable, clear information about the height of the UA above the surface or take-off point during flight shall be provided to the remote pilot.;

- 3.3 be safely controllable with regards to stability, maneuverability and data link performance, by a remote pilot with adequate competency as defined in Implementing Standard and following the manufacturer's instructions, as necessary under all anticipated operating conditions including following the failure of one or, if appropriate, more systems;
- 3.4 have the requisite mechanical strength including any necessary safety factor and, where appropriate, stability to withstand any stress to which it is subjected to during use without any breakage or deformation that might interfere with its safe flight;
- 3.5 in the case of a tethered UA, have a tensile length of the tether that is less than 50 m and a mechanical strength that is no less than:
 - I. for heavier-than-air aircraft, 10 times the weight of the aerodyne at maximum mass;
 - II. for lighter-than-air aircraft, 4 times the force exerted by the combination of the maximum static thrust and the aerodynamic force of the maximum allowed wind speed in flight;
- 3.6 be designed and constructed in such a way as to minimize injury to people during operation, sharp edges shall be avoided, unless technically unavoidable under good design and manufacturing practice. If equipped with propellers, it shall be designed in such a way as to limit any injury that may be inflicted by the propeller blades;
- 3.7 unless tethered, in case of a loss of data link, have a reliable and predictable method for the UA to recover the data link or terminate the flight in a way that reduces the effect on third parties in the air or on the ground;
- 3.8 unless tethered, be equipped with a data link protected against unauthorized access to the command and control functions;
- 3.9 unless it is a fixed-wing UA, be equipped with a low-speed mode selectable by the remote pilot and limiting the maximum cruising speed to no more than 3 m/s.
- 3.10 be powered by electricity and have a nominal voltage not exceeding 48 V DC or the equivalent AC voltage; its accessible parts shall not exceed 48 V DC or the equivalent AC voltage; internal voltages shall not exceed 48 V DC or the equivalent AC voltage unless it is ensured that the voltage and current combination generated does not lead to any risk or harmful electric shock even when the UAS is damaged;
- 3.11 have a unique physical serial number;
- 3.12 unless tethered, have a direct remote identification that:
 - I. allows the upload of the UAS operator registration number;
 - II. ensures, in real time during the whole duration of the flight, the direct periodic broadcast from the UA using an open and documented transmission protocol, of the following data, in a way that they can be received directly by existing mobile devices within the broadcasting range:

- a) the UAS operator registration number;
 - b) the unique physical serial number of the UA;
 - c) the geographical position of the UA and its height above the surface or take-off point;
 - d) the route course measured clockwise from true north and ground speed of the UA; and
 - e) the geographical position of the remote pilot;
- III. ensures that the user cannot modify the data mentioned under b), c), d) and e) of sub paragraph (II) above;
- 3.13 be equipped with a geo-awareness function that provides:
- I. an interface to load and update data containing information on airspace limitations related to UA position and altitude imposed by the geographical zones, as defined by Paragraph 11, which ensures that the process of loading or updating of this data does not degrade its integrity and validity;
 - II. a warning alert to the remote pilot when a potential breach of airspace limitations is detected; and
 - III. information to the remote pilot on the UA's status as well as a warning alert when its positioning or navigation cannot ensure the proper functioning of the geo-awareness system;
- 3.14 if the UA has a function that limits its access to certain airspace areas or volumes, this function shall operate in such a manner that it interacts smoothly with the flight control system of the UA without adversely affecting flight safety; in addition, clear information shall be provided to the remote pilot when this function prevents the UA from entering these airspace areas or volumes;
- 3.15 provide the remote pilot with clear warning when the battery of the UA or its control station reaches a low level such that the remote pilot has sufficient time to safely land the UA;
- 3.16 Remote controller of the unit shall
- I. Be within the frequency range 2400.00MHz – 2483.50MHz (2.4GHz), 5470.00MHz – 5725.00MHz and 5724.00 MHz – 5875.00MHz (5.8GHz).
 - II. Maximum transmitting output power of 200mW 23(dBm)
- 3.17 be equipped with lights for the purpose of:
- I. controllability of the UA;
 - II. conspicuity of the UA at night, the design of the lights shall allow a person on the ground to distinguish the UA from manned aircraft;
- 3.18 be placed on the market with a user's manual providing:
- I. the characteristics of the UA including but not limited to the:
 - a) category of the UA;
 - b) UA mass (with a description of the reference configuration) and the maximum take-off mass (MTOM);
 - c) general characteristics of allowed payloads in terms of mass dimensions, interfaces with the UA and other possible restrictions;

- d) equipment and software to control the UA remotely;
 - e) reference of the transmission protocol used for the direct remote identification emission;
 - f) sound power level;
 - g) and a description of the behavior of the UA in case of a loss of data link;
 - II. clear operational instructions;
 - III. procedure to upload the airspace limitations;
 - IV. maintenance instructions;
 - V. troubleshooting procedures;
 - VI. operational limitations (including but not limited to meteorological conditions and day/night operations); and
 - VII. appropriate description of all the risks related to UAS operations;
- 3.19 It shall include an information notice published by CAASL with applicable limitations and obligations under prevailing law of Sri Lanka.

4. CATEGORY 'C3'

Category 'C3' UAS shall comply with the following:

- 4.1 have an MTOM of 25 kg or less, including payload, and have a maximum characteristic dimension of less than 3 m;
- 4.2 have a maximum attainable height above the take-off point limited to 120 m. or be equipped with a system that limits the height above the surface or above the take-off point to 120 m. or to a value selectable by the remote pilot. If the value is selectable, clear information about the height of the UA above the surface or take-off point during flight shall be provided to the remote pilot;
- 4.3 be safely controllable with regards to stability, maneuverability and data link performance, by a pilot with adequate competency as defined in the Implementing Standard and following the manufacturer's instructions, as necessary under all anticipated operating conditions including following the failure of one or, if appropriate, more systems
- 4.4 in the case of a tethered UA, have a tensile length of the tether that is less than 50 m and a mechanical strength of no less than:
 - I. for heavier-than-air aircraft, 10 times the weight of the aerodyne at maximum mass;
 - II. for lighter-than-air aircraft, 4 times the force exerted by the combination of the maximum static thrust and the aerodynamic force of the maximum allowed wind speed in flight;
- 4.5 unless tethered, in case of a loss of data link, have a reliable and predictable method for the UA to recover the data link or terminate the flight in a way that reduces the effect on third parties in the air or on the ground;
- 4.6 be powered by electricity and have a nominal voltage not exceeding 48 V DC or the equivalent AC voltage; its accessible parts shall not exceed 48 V DC or the equivalent AC voltage; internal voltages shall not exceed 48 V DC or the equivalent AC voltage unless it is ensured that the

voltage and current combination generated does not lead to any risk or harmful electric shock even when the UAS is damaged;

4.7 Remote controller of the unit shall

I. Be within the frequency range 2400.00MHz – 2483.50MHz (2.4GHz), 5470.00MHz – 5725.00MHz and 5724.00 MHz – 5875.00MHz (5.8GHz).

II. Maximum transmitting output power of 200mW 23(dBm)

4.8 have a unique physical serial number;

4.9 unless tethered, have a direct remote identification that:

I. allows the upload of the UAS operator registration number;

II. ensures, in real time during the whole duration of the flight, the direct periodic broadcast from the UA using an open and documented transmission protocol, of the following data, in a way that they can be received directly by existing mobile devices within the broadcasting range:

a) the UAS operator registration number;

b) the unique physical serial number of the UA;

c) the geographical position of the UA and its height above the surface or take-off point;

d) the route course measured clockwise from true north and ground speed of the UA; and

e) the geographical position of the remote pilot;

III. ensures that the user cannot modify the data mentioned under b), c), d) and e) of sub paragraph (II) above.

4.10 be equipped with a geo-awareness function that provides:

I. an interface to load and update data containing information on airspace limitations related to UA position and altitude imposed by the geographical zones, as defined in Paragraph 11, which ensures that the process of loading or updating of this data does not degrade its integrity and validity;

II. a warning alert to the remote pilot when a potential breach of airspace limitations is detected; and

III. information to the remote pilot on the UA's status as well as a warning alert when its positioning or navigation cannot ensure the proper functioning of the geo-awareness system;

4.11 if the UA has a function that limits its access to certain airspace areas or volumes, this function shall operate in such a manner that it interacts smoothly with the flight control system of the UA without adversely affecting flight safety; in addition, clear information shall be provided to the remote pilot when this function prevents the UA from entering these airspace areas or volumes;

4.12 unless tethered, be equipped with a data link protected against unauthorized access to the command and control functions;

4.13 provide the remote pilot with clear warning when the battery of the UA or its control station reaches a low level such that the remote pilot has sufficient time to safely land the UA;

4.14 be equipped with lights for the purpose of:

I. controllability of the UA;

II. conspicuity of the UA at night, the design of the lights shall allow a person on the ground to distinguish the UA from a manned aircraft;

- 4.15 have a unique physical serial number.
- 4.16 be placed on the market with a user's manual providing:
- I. the characteristics of the UA including but not limited to the:
 - a) category of the UA;
 - b) UA mass (with a description of the reference configuration) and the maximum take-off mass (MTOM);
 - c) general characteristics of allowed payloads in terms of mass dimensions, interfaces with the UA and other possible restrictions;
 - d) equipment and software to control the UA remotely;
 - e) reference of the transmission protocol used for the direct remote identification emission;
 - f) sound power level;
 - g) and a description of the behavior of the UA in case of a loss of data link);
 - II. clear operational instructions;
 - III. procedure to upload the airspace limitations;
 - IV. maintenance instructions;
 - V. troubleshooting procedures
 - VI. operational limitations (including but not limited to meteorological conditions and day/night operations); and
 - VII. appropriate description of all the risks related to UAS operations;
- 4.17 It shall include an information notice published by CAASL with applicable limitations and obligations under prevailing law of Sri Lanka.

5. CATEGORY 'C4' (MODEL AIRCRAFT)

Category 'C4' UAS shall comply with the following:

- 5.1 have an MTOM of 25 kg or less, including payload;
- 5.2 be safely controllable and maneuverable by a remote pilot following the manufacturer's instructions, as necessary under all anticipated operating conditions including following the failure of one or, if appropriate, more systems.
- 5.3 Not be capable of automatic control modes except for flight stabilization assistance with no direct effect on the trajectory and lost link assistance provided that a pre-determined fixed position of the flight controls in case of lost link is available.
- 5.4 be placed on the market with a user's manual providing:
- I. the characteristics of the UA including but not limited to the:
 - a) class of the UA
 - b) UA mass (with a description of the reference configuration) and the maximum take-off mass (MTOM);
 - c) general characteristics of allowed payloads in terms of mass dimensions, interfaces with the UA and other possible restrictions;
 - d) equipment and software to control the UA remotely;
 - e) and a description of the behavior of the UA in case of a loss of data link;

- II. clear operational instructions;
- III. maintenance instructions;
- IV. troubleshooting procedures;
- V. operational limitations (including but not limited to meteorological conditions and day/night operations); and
- VI. appropriate description of all the risks related to UAS operations;

5.5 Remote controller of the unit shall

- I. Be within the frequency range 2400.00MHz – 2483.50MHz (2.4GHz), 5470.00MHz – 5725.00MHz and 5724.00 MHz – 5875.00MHz (5.8GHz).
- II. Maximum transmitting output power of 200mW 23(dBm)

5.6 It shall include an information notice published by CAASL with applicable limitations and obligations under prevailing law of Sri Lanka.

6. CATEGORY ‘C25+’

Any UAS with a MTOM exceeding 25 kg shall fall under this category and, if determined by the CAASL, shall be required to obtain certification from CAASL or any person or organization designated by CAASL.

7. CONTENTS OF THE TECHNICAL DOCUMENTATION.

The manufacturer or assembler shall establish the technical documentation. The documentation shall make it possible to assess the product's conformity to the applicable requirements.

The technical documentation shall, wherever applicable, contain at least the following elements,

7.1 a complete description of the product including:

- I. photographs or illustrations showing its external features, markings and internal layout;
- II. the versions of any software or firmware involved in compliance with the requirements set by this Implementing Standard;
- III. user's manual and installation instructions;

7.2 conceptual design and manufacturing drawings and schemes of components, sub-assemblies, circuits and other relevant similar elements;

7.3 descriptions and explanations necessary for the understanding of those drawings and schemes and the operation of the product;

7.4 copy of the declaration of conformity;

7.5 results of design calculations made, examinations carried out, and other relevant similar elements;

- 7.6 test reports;
- 7.7 copies of the documents that the manufacturer has submitted to the notified body if any involved;
- 7.8 the supporting evidence for the adequacy of the technical design solution. This supporting evidence shall mention any documents that have been used, in particular where the relevant harmonised standards and/or technical specifications have not been applied in full. The supporting evidence shall include, where necessary, the results of tests carried out by the appropriate laboratory of the manufacturer, or by another testing laboratory on his behalf and under his responsibility;
- 7.9 addresses of places of manufacture and storage.

ANNEX 1 - PART B: UAS OPERATIONS IN THE ‘OPEN’ AND ‘SPECIFIC’ CATEGORIES

1. UAS OPERATIONS IN THE ‘OPEN’ CATEGORY

1.1 UAS.OPEN- General Provisions

- I. The category of UAS ‘open’ operations is divided into three subcategories A1, A2 and A3, on the basis of operational limitations, requirements for the remote pilot and technical requirements for UAS.
- II. Where the UAS operation involves the flight of the unmanned aircraft starting from a natural elevation in the terrain or over terrain with natural elevations, the unmanned aircraft shall be maintained within 120 meters (400 ft.) from the closest point of the surface of the earth. The measurement of distances shall be adapted accordingly to the geographical characteristics of the terrain, such as plains, hills, mountains.
- III. When flying an unmanned aircraft within a horizontal distance of 50m from an artificial obstacle taller than 105m, the maximum height of the UAS operation may be increased up to 15m above the height of the obstacle at the request of the entity responsible for the obstacle.

1.2 UAS.OPEN - UAS Operations In Subcategory A1

UAS operations in subcategory A1 shall comply with all of the following conditions:

- I. For unmanned aircraft referred to in (c) of sub paragraph (V) below, be conducted in such a way that a remote pilot of the unmanned aircraft does not overfly assemblies of people and reasonably expects that no uninvolved person will be overflown. In the event of unexpected overflight of uninvolved persons, the remote pilot shall reduce as much as possible the time during which the unmanned aircraft overflies those persons;
- II. in the case of an unmanned aircraft referred to in (a) and (b) of sub paragraph (V) below, be conducted in such a way that the remote pilot of the unmanned aircraft may overfly uninvolved persons but shall never overfly assemblies of people;
- III. by way of derogation from sub paragraph I (d) of Paragraph 6.1 of this Implementing Standard, be conducted, when the follow-me mode is active, up to a distance of 45 meters from the remote pilot;
- IV. be performed by a remote pilot:
 - a) familiarized with the user's manual provided by the manufacturer of the UAS;
 - b) be performed by a remote pilot who has completed an online training course and passed an online theoretical knowledge examination as defined in part D of the Annex 1.
- V. be performed with an unmanned aircraft that:

- a) has an MTOM, including payload, of less than 250 g and a maximum operating speed of less than 19 m/s, in the case of a privately built UAS; or
- b) is marked as class C0 and complies with the requirements of that class, as defined in Part A of the Annex or
- c) is marked as class C1 and complies with the requirements of that class, as defined in Part A of the Annex and is operated with active and updated direct remote identification and geo-awareness systems.

1.3 UAS.OPEN- UAS Operations In Subcategory A2

UAS operations in subcategory A2 shall comply with all of the following conditions:

- I. be conducted in such a way that the unmanned aircraft does not overfly uninvolved persons and the UAS operations take place at a safe horizontal distance of at least 30 meters from them; the remote pilot may reduce the horizontal safety distance down to a minimum of 5 meters from uninvolved persons when operating an unmanned aircraft with an active low speed mode function (3m/s or below) and after evaluation of the situation regarding:
 - a) weather conditions,
 - b) performance of the unmanned aircraft,
 - c) Segregation of the overflown area.
 - d) be performed by a remote pilot who is familiar with the user's manual provided by the manufacturer of the UAS and complete an online training course and passed an online theoretical knowledge examination as defined in part D of the Annex 1.
- II. be performed with an unmanned aircraft which is marked as category C2 and complies with the requirements of that category, as defined in Part A of the Annex 1, and is operated with active and updated direct remote identification and geo-awareness system.

1.4 UAS.OPEN- UAS Operations In Subcategory A3

UAS operations in subcategory A3 shall comply with all of the following conditions:

- I. be conducted in an area where the remote pilot reasonably expects that no uninvolved person will be endangered within the range where the unmanned aircraft is flown during the entire time of the UAS operation;
- II. be conducted at a safe horizontal distance of at least 150 meters from residential, commercial, industrial or recreational areas;
- III. be performed by a remote pilot who has completed an online training course and passed an online theoretical knowledge examination as defined in part D of the Annex 1.
- IV. be performed with an unmanned aircraft that:
 - a) has an MTOM, including payload, of 25kg or less, in the case of a privately built UAS, or

- b) is marked as class C0, C1, C2, C3, or C4 and complies with the requirements of that class, as defined in Part A of the Annex 1 and is operated with active and updated direct remote identification and geo-awareness systems or;
- c) Fall under the definition of Toy.

1.5 UAS.OPEN- Responsibilities of the UAS Operator

The UAS operator shall comply with all of the following:

- I. develop operational procedures adapted to the type of operation and the risk involved;
- II. ensure that all operations effectively use and support the efficient use of radio spectrum in order to avoid harmful interference;
- III. designate a remote pilot for each UAS operation;
- IV. ensure that the remote pilots and all other personnel performing a task in support of the operations are familiar with the user's manual provided by the manufacturer of the UAS, and:
 - a) have appropriate competency in the subcategory of the intended UAS operations in accordance with part D of the Annex 1 to perform their tasks or, for personnel other than the remote pilot, have completed an on-the-job-training course developed by the operator;
 - b) are fully familiar with the UAS operator's procedures;
 - c) are provided with the information relevant to the intended UAS operation concerning any geographical zones published by the CAASL in accordance with Paragraph 11;
- V. update the information into the geo-awareness system when applicable according to the intended location of operation;
- VI. Ensure in the case of an UAS operation in subcategory A2 or A3, that all involved persons present in the area of the operation have been informed of the risks and have explicitly agreed to participate.

1.6 UAS.OPEN- Responsibilities of the Remote Pilot

- I. Before starting an UAS operation, the remote pilot shall:
 - a) have the appropriate competency in the subcategory of the intended UAS operations in accordance with part D of the Annex 1 to perform its task and carry a proof of competency while operating the UAS;
 - b) obtain updated information relevant to the intended UAS operation about any geographical zones published by the CAASL in accordance with Paragraph 11;
 - c) observe the operating environment, check the presence of obstacles and, unless operating in subcategory A1 with an unmanned aircraft referred to in (a) and (b) of sub paragraph (V) of paragraph 1.2 -UAS.OPEN, check the presence of any uninvolved person;
 - d) ensure that the UAS is in a condition to safely complete the intended flight, and if applicable, check if the direct remote identification works properly;

- e) if the UAS is fitted with an additional payload, verify that its mass does not exceed the MTOM defined by the manufacturer or the MTOM limit of its class.
- II. During the flight, the remote pilot shall:
- a) not perform duties under the influence of psychoactive substances or alcohol or when it is unfit to perform its tasks due to injury, fatigue, medication, sickness or other causes;
 - b) Keep the unmanned aircraft in VLOS and maintain a thorough visual scan of the airspace surrounding the unmanned aircraft in order to avoid any risk of collision with any manned aircraft. The remote pilot shall discontinue the flight if the operation poses a risk to other aircraft, people, animals, environment or property;
 - c) Comply with the operational limitations in geographical zones defined in accordance with Paragraph 11;
 - d) Have the ability to maintain control of the unmanned aircraft, except in the case of a lost link or when operating a free-flight unmanned aircraft;
 - e) Operate the UAS in accordance with the user's manual provided by the manufacturer, including any applicable limitations;
 - f) Comply with the operator's procedures when available.
- III. During the flight, remote pilots and UAS operators shall not fly close to or inside areas where an emergency response effort is ongoing unless they have permission to do so from the responsible emergency response services.
- IV. For the purposes of (b) of above (II), remote pilots may be assisted by an unmanned aircraft observer, situated alongside them, who, by unaided visual observation of the unmanned aircraft, assists the remote pilot in safely conducting the flight. Clear and effective communication shall be established between the remote pilot and the unmanned aircraft observer.

2. UAS OPERATIONS IN THE 'SPECIFIC' CATEGORY

2.1 UAS.SPEC- General Provisions

The UAS operator shall provide CAASL with an operational risk assessment for the intended operation in accordance with Paragraph 7 of this Implementing Standard, unless the operator holds a light UAS operator certificate (LUC) with the appropriate privileges, in accordance with Part C of this Annex. The UAS operator shall regularly evaluate the adequacy of the mitigation measures taken and update them where necessary.

2.2 UAS.SPEC- Access

For the purpose of demonstrating compliance with this Implementing Standard, an UAS operator shall grant to any person, who is duly authorised by CAASL, an access to any facility, UAS, document, records, data, procedures or to any other material relevant to its activity, which is subject to operational authorisation regardless of whether or not its activity is contracted or subcontracted to another organization.

2.3 UAS.SPEC - Application for an Operational Authorization

- I. Before starting an UAS operation in the ‘specific’ category the UAS operator shall obtain an operational authorization from CAASL, except:
 - a) the UAS operator holds an LUC with the appropriate privileges, in accordance with Part C of the Annex 1.
- II. The UAS operator shall submit an application for an updated operational authorisation if there are any significant changes to the operation or to the mitigation measures listed in the operational authorisation.
- III. The application for an operational authorisation shall be based on the risk assessment referred to in Paragraph 7 of this Implementing Standard and shall include in addition the following information:
 - a) the registration number of the UAS operator/ remote pilot;
 - b) the name of the accountable manager or the name of the UAS operator in the case of a natural person;
 - c) the operational risk assessment;
 - d) the list of mitigation measures proposed by the UAS operator, with sufficient information for CAASL to assess the adequacy of the mitigation means to address the risks;
 - e) an operations manual when required by the risk and complexity of the operation;
 - f) a confirmation that an appropriate insurance cover will be in place at the start of the UAS operation.

2.4 UAS.SPEC- Issuing of an Operational Authorization

- I. When receiving an application in accordance with sub paragraph 2.3 -UAS.SPEC., CAASL shall issue an operational authorisation in accordance with Paragraph 8 when it concludes that the operation meets the following conditions:
 - a) all information in accordance with (III) of paragraph 2.3 -UAS.SPEC is provided;
 - b) a procedure is in place for coordination with the relevant service provider for the airspace if the entire operation, or part of it, is to be conducted in controlled airspace.
- II. The CAASL shall specify in the operational authorisation the exact scope of the authorisation in accordance with Paragraph 8.

2.5 UAS.SPEC- Responsibilities of the UAS Operator

- I. The UAS operator shall comply with all of the following:
 - a) establish procedures and limitations adapted to the type of the intended operation and the risk involved, including:
 - i. operational procedures to ensure the safety of the operations;
 - ii. procedures to ensure that security requirements applicable to the area of operations are complied with in the intended operation;

- iii. measures to protect against unlawful interference and unauthorised access;
 - iv. procedures to ensure that all operations are in respect of the protection of natural persons with regard to the processing of personal data and on the free movement of such data. In particular it shall carry out a data protection impact assessment, when required by the relevant Authority.
 - v. guidelines for its remote pilots to plan UAS operations in a manner that minimizes nuisances, including noise and other emissions-related nuisances, to people and animals.
- b) designate a remote pilot for each operation or, in the case of autonomous operations, ensure that during all phases of the operation, responsibilities and tasks especially those defined in (II) and (III) of sub paragraph 2.6- UAS.SPEC., are properly allocated in accordance with the procedures established pursuant to (a) above;
- c) ensure that all operations effectively use and support the efficient use of radio spectrum in order to avoid harmful interference;
- d) ensure that before conducting operations, remote pilots comply with all of the following conditions:
- i. have the competency to perform their tasks in line with the applicable training identified by the operational authorisation or, by the conditions and limitations defined in the appropriate standard scenario defined by CAASL or as defined by the LUC;
 - ii. follow remote pilot training which shall be competency based and include the competencies set out in part D of the Annex 1:
 - iii. follow remote pilot training, as defined in the operational authorisation, for operations requiring such authorisation, it shall be conducted in cooperation with an entity recognized by CAASL;
 - iv. follow remote pilot training for operations that shall be conducted in accordance with the mitigation measures defined by the standard scenario;
 - v. have been informed about the UAS operator's operations manual, if required by the risk assessment and procedures established in accordance with above (a);
 - vi. obtain updated information relevant to the intended operation about any geographical zones defined in accordance with Paragraph 11 of this Implementing Standard;
- e) ensure that personnel in charge of duties essential to the UAS operation, other than the remote pilot itself, comply with all of the following conditions:
- i. have completed the on-the-job-training developed by the operator;
 - ii. have been informed about the UAS operator's operations manual, if required by the risk assessment, and about the procedures established in accordance with above (a);
 - vii. have obtained updated information relevant to the intended operation about any geographical zones defined in accordance with Paragraph 11 of this Implementing Standard;

- f) carry out each operation within the limitations, conditions, and mitigation measures specified in the operational authorization;
- g) keep a record of the information on UAS operations as required by the operational authorization;
- h) Use UAS which, as a minimum, are designed in such a manner that a possible failure will not lead the UAS to fly outside the operation volume or to cause a fatality. In addition, Man Machine interfaces shall be such to minimize the risk of pilot error and shall not cause unreasonable fatigue;
- i) maintain the UAS in a suitable condition for safe operation by:
 - i. as a minimum, defining maintenance instructions and employing an adequately trained and qualified maintenance staff; and
 - ii. complying with 2.9 UAS.SPEC- Use of Certified Equipment and Certified Unmanned Aircraft, if required;
 - iii. using an unmanned aircraft which is designed to minimize noise and other emissions, taking into account the type of the intended operations and geographical areas where the aircraft noise and other emissions are of concern.

2.6 UAS.SPEC- Responsibilities of the Remote Pilot

- I. The remote pilot shall:
 - a) not perform duties under the influence of psychoactive substances or alcohol or when it is unfit to perform its tasks due to injury, fatigue, medication, sickness or other causes;
 - b) have the appropriate remote pilot competency as defined in the operational authorisation, in the standard scenario defined by CAASL or as defined by the LUC and carry a proof of competency while operating the UAS.
- II. Before starting an UAS operation, the remote pilot shall comply with all of the following:
 - a) obtain updated information relevant to the intended operation about any geographical zones defined in accordance with Paragraph 11 of this Implementing Standard;
 - b) ensure that the operating environment is compatible with the authorised limitations and conditions;
 - c) ensure that the UAS is in a safe condition to complete the intended flight safely, and if applicable, check if the direct remote identification works properly;
 - d) ensure that the information about the operation has been made available to the relevant air traffic service (ATS) unit, other airspace users and relevant stakeholders, as required by the operational authorisation or by the conditions published by CAASL for the geographical zone of operation in accordance with Paragraph 11.
- III. During the flight, the remote pilot shall:
 - a) comply with the authorised limitations and conditions;

- b) avoid any risk of collision with any manned aircraft and discontinue a flight when continuing it may pose a risk to other aircraft, people, animals, environment or property;
- c) comply with the operational limitations in geographical zones defined in accordance with Paragraph 11;
- d) comply with the operator's procedures;
- e) not fly close to or inside areas where an emergency response effort is ongoing unless they have permission to do so from the responsible emergency response services.

2.7 UAS.SPEC- Transferability of an Operational Authorization

An operational authorization is not transferable.

2.8 UAS.SPEC- Duration and Validity of an Operational Authorization

- I. The CAASL shall specify the duration of the operational authorization in the authorization itself.
- II. Upon suspension or revocation of the operational authorization issued by DGCA the UAS operator shall surrender the authorization to DGCA with immediate effect.

2.9 UAS.SPEC- Use of Certified Equipment and Certified Unmanned Aircraft

- I. If the UAS operation is using an unmanned aircraft for which a certificate of airworthiness or a restricted certificate of airworthiness have been issued, or using certified equipment, the UAS operator shall record the operation or service time in accordance either with the instructions and procedures applicable to the certified equipment, or with the organizational approval or authorization.
- II. The UAS operator shall follow the instructions referred to in the unmanned aircraft certificate or equipment certificate, and comply with any airworthiness or operational directives issued by CAASL.
- III. Any certified equipment or certified unmanned aircraft shall not be modified without approval from the DGCA for the modification.

ANNEX 1 - PART C: LIGHT UAS OPERATOR CERTIFICATE (LUC)

1. LIGHT UAS OPERATOR CERTIFICATE (LUC)

1.1. UAS.LUC- General Requirements for an LUC

- I. A legal person is eligible to apply for an LUC under this Part.
- II. An application for an LUC or for an amendment to an existing LUC shall be submitted to the CAASL and shall contain all of the following information:
 - a) A list of registered UAS
 - b) a description of the UAS operator's management system, including its organizational structure and safety management system;
 - c) the name(s) of the responsible UAS operator's personnel, including the person responsible for authorizing operations with UASs;
 - d) a statement that all the documentation submitted to CAASL has been verified by the applicant and found to comply with the applicable requirements.
- III. If the requirements of this Part are met, an LUC holder may be granted the privileges, in accordance with sub paragraph 1.6- UAS.LUC.

1.2. UAS.LUC- Responsibilities of the LUC holder

The LUC holder shall:

- I. comply with the requirements of sub paragraphs 2.5 - UAS.SPEC and 2.6 - UAS.SPEC;
- II. comply with the scope and privileges defined in the terms of approval;
- III. establish and maintain a system for exercising operational control over any operation conducted under the terms of its LUC;
- IV. carry out an operational risk assessment of the intended operation in accordance with Paragraph 07 of this Implementing Standard;
- V. keep records of the following items in a manner that ensures protection from damage, alteration and theft for a period at least 3 years for operations conducted using the privileges specified under sub paragraph 1.6-UAS.LUC:
 - a) the operational risk assessment, when required according to (IV), and its supporting documentation;
 - b) mitigation measures taken; and
 - c) the qualifications and experience of personnel involved in the UAS operation, compliance monitoring and safety management;
- VI. Keep personnel records referred to in (V)(c) as long as the person works for the organization and shall be retained until 3 years after the person has left the organization.

1.3. UAS.LUC- Safety Management System

- I. An UAS operator who applies for an LUC shall establish, implement and maintain a safety management system corresponding to the size of the organization, to the nature and complexity of its activities, taking into account the hazards and associated risks inherent in these activities.
- II. The UAS operator shall comply with all of the following:
 - a) nominate an accountable manager with authority for ensuring that within the organization all activities are performed in accordance with the applicable standards and that the organization is continuously in compliance with the requirements of the management system and the procedures identified in the LUC manual referred to in 1.4 - UAS.LUC.;
 - b) define clear lines of responsibility and accountability throughout the organization;
 - c) establish and maintain a safety policy and related corresponding safety objectives;
 - d) appoint key safety personnel to execute the safety policy;
 - e) establish and maintain a safety risk management process including the identification of safety hazards associated with the activities of the UAS operator, as well as their evaluation and the management of associated risks, including taking action to mitigate those risks and verify the effectiveness of the action;
 - f) promote safety in the organization through:
 - i. training and education;
 - ii. communication;
- III. document all safety management system key processes for making personnel aware of their responsibilities and of the procedure for amending this documentation; key processes include:
 - a) safety reporting and internal investigations;
 - b) operational control;
 - c) communication on safety;
 - d) training and safety promotion;
 - e) compliance monitoring;
 - f) safety risk management;
 - g) management of change;
 - h) interface between organizations;
 - i) use of sub-contractors and partners;
- IV. include an independent function to monitor the compliance and adequacy of the fulfilment of the relevant requirements of this Implementing Standard, including a system to provide feedback of findings to the accountable manager to ensure effective implementation of corrective measures as necessary;
- V. include a function to ensure that safety risks inherent to a service or product delivered through subcontractors are assessed and mitigated under the operator's safety management system.

1.4. UAS.LUC- LUC Manual

- I. An LUC holder shall provide CAASL with an LUC manual describing directly or by cross reference its organization, the relevant procedures and the activities carried out.
- II. The manual shall contain a statement signed by the accountable manager that confirms that the organization will at all times work in accordance with this Implementing Standard and with the approved LUC manual. When the accountable Manager is not the Chief Executive Officer of the organization, the Chief Executive Officer shall countersign the statement.
- III. If any activity is carried out by partner organizations or subcontractors, the UAS operator shall include in the LUC manual procedures on how the LUC holder shall manage the relationship with those partner organizations or subcontractors.
- IV. The LUC manual shall be amended as necessary to retain an up-to-date description of the LUC holder's organization, and copies of amendments shall be provided to CAASL.
- V. The UAS operator shall distribute the relevant parts of the LUC manual to all its personnel in accordance with their functions and duties.

1.5. UAS.LUC- Terms of Approval of the LUC Holder

- I. CAASL shall issue an LUC after it is satisfied that the UAS operator complies with paragraphs 1.2 -UAS.LUC, 1.3-UAS.LUC and 1.4 -UAS.LUC.
- II. The LUC shall include:
 - a) the UAS operator identification;
 - b) the UAS operator's privileges;
 - c) authorised type(s) of operation;
 - d) the authorised area, zone or class of airspace for operations, if applicable;
 - e) any special limitations or conditions, if applicable;

1.6. UAS.LUC- Privileges of the LUC Holder

When satisfied with the documentation provided, CAASL shall:

- I. specify the terms and conditions of the privilege granted to the UAS operator in the LUC; and
- II. within the terms of approval, grant to a LUC holder the privilege to authorize its own operations without applying for an operational authorization.

1.7. UAS.LUC- Changes in the LUC Management System

After an LUC is issued, the following changes require prior approval by CAASL:

- I. any change in the terms of approval of the UAS operator;
- II. any significant change to the elements of the LUC holder's safety management system as required by above 1.3 -UAS.LUC.

1.8. UAS.LUC- Transferability of an LUC

Except for the change to the ownership of the organization, approved by CAASL in accordance with paragraph 1.7 -UAS.LUC, an LUC is not transferable.

1.9. UAS.LUC- Duration and Validity of an LUC

- I. An LUC shall be issued for one year duration. It shall remain valid subject to:
 - a) the LUC holder's continuous compliance with the relevant requirements of this Implementing Standard and
 - b) it not being surrendered or revoked.
- II. Upon suspension or revocation of an LUC, the LUC holder shall surrender the LUC to DGCA with immediate effect.

1.10. UAS.LUC- Access

For the purpose of demonstrating compliance with this Implementing Standard, the LUC holder shall grant any person, who is duly authorized by CAASL, an access to any facility, UAS, document, records, data, procedures or to any other material relevant to its activity, which is subject to certification, operational authorization regardless of whether or not its activity is contracted or subcontracted to another organization.

ANNEX 1 - PART D: RULES AND PROCEDURES FOR THE COMPETENCY OF REMOTE PILOTS

1. RULES AND PROCEDURES FOR THE COMPETENCY OF REMOTE PILOTS.

1.1. Open Category

- I. Remote pilots operating UAS in the ‘open’ category shall complete the online training and online competency exam.
- II. The examination shall comprise of multiple-choice questions distributed appropriately across the following subjects:
 - a) UAS Safety and Operating Principles;
 - b) Aviation Regulation;
 - c) Meteorology;
 - d) UAS Flight Performance;

1.2. Specific and Certified Category

- I. Remote pilots in Specific and certified categories shall complete the written exam, practical competency test and medical exam conducted by CAASL or any other entity designated by CAASL.
- II. All remote pilots shall be subjected to security screening and shall obtain Security Clearance.

1.3. Duration and Validity of the Remote Pilot Competency.

- I. The remote pilot (open category) online theoretical competency shall be valid for five years.
- II. The remote pilot (Specific and Certified categories) theoretical and practical competency shall be valid for five years.