

Democratic Socialist Republic of Sri Lanka



Civil Aviation Authority of Sri Lanka

Implementing Standards

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

Title: Requirements to be satisfied for the Certification of Air Navigation Service Providers

Reference No. : CA-IS-2018-ANS-087

SLCAIS : 087

Date: 04th May 2018

Pursuant to Sec.120 of the Civil Aviation Act No.14 of 2010 which is hereinafter referred to as the CA Act, Director General of Civil Aviation shall have 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 to be satisfied for the Certification of Air Navigation Service Providers as mentioned in the Attachment hereto (Ref: CA-IS-2018-ANS-087-Att.01] in compliance with Aeronautical Service Provider Licensing Regulations No.01 of 2018 and related provisions in the Annex-3, Annex-4, Annex-5, Annex-10, Annex-11, Annex-12 and Annex-15 to the Convention and guidance material issued thereunder.

This Implementing Standard shall come in to force with immediate effect and remain in force unless revoked.

Attention is also drawn to Sec. 103 of the Act, which states inter alia that failure to comply with Implementing Standard is an offence.

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Enclosure: Attachment No. CA-IS-2018-ANS-087-Att.01

Implementing Standards

SLCAIS - : Requirements to be satisfied for the Certification of Air Navigation Service Providers:

1 CHAPTER 1 - GENERAL

1.1 Introduction

- A. The requirements contained in this document are applicable to Air Navigation Services Providers and Organizations responsible to establish RCC/RSCs in Sri Lanka.
- B. This document supersedes the Aviation Safety Notice 108 dated on 4th October 2010 and ASN 125 dated 23rd Aug 2010 issued by the Director General of Civil Aviation and ASN 108 and ASN 125 shall be treated as null and void.
- C. It may be amended from time to time and the amendments will be reflected with a vertical line on the right side of the text.

1.2 Definitions and Abbreviations

When the following terms/abbreviations are used in this document, they have the following meanings. The meanings of the terms/abbreviations given here are limited to this document only.

Definitions

Aerodrome Control Service – Air traffic control service for aerodrome traffic.

Aeronautical Information Service (AIS) – A service established within the defined area of coverage responsible for the provision of aeronautical information/data necessary for the safety, regularity and efficiency of air navigation.

Aeronautical information – Information resulting from the assembly, analysis and formatting of aeronautical data.

Aeronautical telecommunication service – A telecommunication service provided for any aeronautical purpose.

Air Navigation Services – Services provided under following services;

- 1) Air Traffic Services
- 2) Aeronautical Communication Services
- 3) Aeronautical Information Services
- 4) Aeronautical Aids for Communication, Navigation and Surveillance

Air traffic advisory service – A service provided within advisory airspace to ensure separation, in so far as practical, between aircraft which are operating on IFR flight plans.

Air traffic control service – A service provided for the purpose of:

- a) Preventing collisions:
 - 1) between aircraft, and
 - 2) on the manoeuvring area between aircraft and obstructions; and
- b) expediting and maintaining an orderly flow of air traffic.

Air traffic service – A generic term meaning variously, flight information service, alerting service, air traffic advisory service, air traffic control service (area control service, approach control service or aerodrome control service).

Alerting service – A service provided to notify appropriate organizations regarding aircraft in need of search and rescue aid, and assist such organizations as required.

Approach control service – Air traffic control service for arriving or departing controlled flights.

Area control service - Air traffic control service for controlled flights in control areas.

Radio navigation service – means an aeronautical radio navigation service within the meaning given in Volume II of Annex 10 to the Chicago Convention.

Flight information service – A service provided for the purpose of giving advice and information useful for the safe and efficient conduct of flights.

Manoeuvring area – That part of an aerodrome to be used for the take-off, landing and taxiing of aircraft, excluding aprons.

1.3 Abbreviations

ACAS – Airborne Collision Avoidance Systems

AIS – Aeronautical Information Service

ANS – Air Navigation services

ATS – Air Traffic Services

CAA – Civil Aviation Authority

CNS – Communication, Navigation and Surveillance

DGCA – Director General of Civil Aviation

IS - Implementing Standard

LHD – Large Height Deviation

LLD – Large Lateral Deviation

OCA – Obstacle Clearance Altitude

OCH – Obstacle clearance Height

PANS-ATM – Procedure for Air Navigation Services – Air Traffic Management

PANS-OPS – Procedure for Air Navigation Services – Aircraft Operation

RCC - Rescue Co-ordination Centre

RMA – Regional Monitoring Agency

RSC - Rescue Sub Centre

RVSM –reduced Vertical Separation Minima

SMS – Safety Management System

2 CHAPTER 2 - GENERAL REQUIREMENTS

2.1 Air Traffic Services

- A. A service provider responsible for the provision of Air Traffic Services shall have developed policy and procedure for determining the capacity of the ATS system including the number of staff, equipment, facilities and services required to ensure the provision of an adequate system.
- B. A service provider responsible for the provision of Air Traffic Services shall have for their technical staff engaged in Air Traffic services and PANS-OPS (Construction of visual and instrument flight procedures) Services; policies and procedures for the following:
- a. development of written terms of reference or job descriptions;
 - b. development of a training programme, including refresher training where necessary; and
 - c. maintaining training records or files
 - d. to ensure the continued competency of Air Traffic Controllers on new equipment, procedures and updated communications
 - e. to enable recruitment and retention of adequately qualified and experience ATS staff
 - f. on human factors principles with regard to Human Centre Automation, Situational Awareness and Managing errors as per the guidelines provided on human factors principles in Doc 9758
- C. A service provider responsible for the provision of Air Traffic Services shall establish and implement;
- a. monitoring mechanisms for operation of aircraft under RVSM.
 - b. process to verify that aircraft is approved for operation in RVSM airspace if RVSM is implemented in the airspace.
- D. A service provider responsible for the provision of Air Traffic Services shall implement process and procedures which ensures that The Regional Monitoring Agency (RMA) is reported accordingly on LHDs, LLDs and Coordination Failures occurring in the RVSM Airspace, where applicable.
- E. A service provider responsible for the provision of Air Traffic Services shall ensure that ATC contingency procedures are established for:
1. Radio communication contingencies
 2. Emergency separation
 3. Short-term conflict alert (STCA)
 4. Minimum safe altitude warning (MSAW)
 5. Aircraft equipped with ACAS

2.2 Aeronautical Aids for Communication, Navigation and Surveillance

A service provider responsible for the provision of Aeronautical Aids for Communication, Navigation and Surveillance shall have for their technical staff engaged in the provision of Aeronautical Aids for Communication, Navigation and Surveillance policies and procedures for the following:

- a. development of written terms of reference or job descriptions;
- b. development of a training programme, including refresher training where necessary; and
- c. maintaining training records or files

2.3 Aeronautical Information Service

A service provider responsible for the provision of Aeronautical Information Service shall have for their technical staff engaged in the provision of Aeronautical Information Service including Cartography Service policies and procedures for the following:

- a. development of written terms of reference or job descriptions;
- b. development of a training programme, including refresher training where necessary; and
- c. maintaining training records or files

3 CHAPTER 3 - DOCUMENTATION REQUIREMENTS

3.1 Air Traffic Services

A service provider responsible for the provision of Air Traffic Services shall;

- A. hold copies of the relevant technical manuals, and all other documents, necessary for the provision of the services in each operational centers acceptable to the DGCA.
- B. have operational and administrative manuals for compliance by its personnel acceptable to the DGCA
- C. establish procedures to ensure that a logbook is kept and maintained at each ATS unit acceptable to the DGCA

3.2 Aeronautical Telecommunication Service

A service provider responsible for the provision of Aeronautical telecommunication Service shall

- A. hold copies of the relevant technical manuals, and all other documents, necessary for the provision of the services in each operational centers acceptable to the DGCA.
- B. have operational and administrative manuals for compliance by its personnel acceptable to the DGCA
- C. establish procedures to ensure that a logbook is kept and maintained at each aeronautical telecommunication unit acceptable to the DGCA

3.3 Aeronautical Aids for CNS

A service provider responsible for the provision of Aeronautical Aids for CNS Services shall;

- A. hold copies of the relevant technical manuals, and all other documents, necessary for the provision of the services in each operational centers acceptable to the DGCA.
- B. have operational and administrative manuals for compliance by its personnel acceptable to the DGCA
- C. establish procedures to ensure that a logbook is kept and maintained at each place where Aeronautical Aids for CNS are located, acceptable to the DGCA

3.4 Aeronautical Information Service

A service provider responsible for the provision of Aeronautical Information Service shall;

- A. hold copies of the relevant technical manuals, and all other documents, necessary for the provision of the services in each operational centers acceptable to the DGCA.

- B. have operational and administrative manuals for compliance by its personnel acceptable to the DGCA
- C. establish procedures to ensure that a logbook is kept and maintained at each AIS unit acceptable to the DGCA

4 CHAPTER 4 - OPERATIONAL REQUIREMENTS

4.1 Air Traffic Services

- A. A service provider responsible for the provision of Air Traffic services shall establish systems and procedures to provide those services in accordance with the requirements specified by the DGCA and procedures published in ICAO PANS-ATM (Doc.4444).
- B. Radar Services
A service provider responsible for the provision of Air Traffic services shall establish procedures to ensure that, where radar is used to support the provision of an Air Traffic Services, all radar services are provided in accordance with procedures published in ICAO PANS-ATM (Doc.4444) and procedures issued by Director General of Civil Aviation time to time.
- C. Radio and Telephony Procedures
A service provider responsible for the provision of Air Traffic services shall establish systems and procedures to ensure that the standard radio telephony procedures and Communication procedures used are in accordance with the requirements specified in ICAO Annex 10 to the convention on International Civil Aviation and.
- D. Flight plans
A service provider responsible for the provision of Air Traffic services shall establish procedures for the acceptance and actioning of flight plans in accordance with the requirements specified in the ICAO PANS-ATM (Doc.4444) and any other requirements issued by Director General of Civil Aviation time to time.
- E. Separation Criteria and Minima
A service provider responsible for the provision of Air Traffic services shall establish procedures to ensure that separation between aircraft shall be applied in accordance with ICAO PANS-ATM (Doc.4444) and Regional Supplementary Procedures.
- F. Standard Phraseology
Standard Phraseology used in the provision of Air Traffic Services shall be in accordance with the requirements given in ICAO PANS-ATM (Doc.4444) and ICAO Document 9432.
- G. Meteorological Services
 - a. A service provider responsible for the provision of Air Traffic services shall establish systems and procedures to ensure that all meteorological information is obtained in accordance with the requirements specified in the IS 042 issued by the Director General of Civil Aviation when providing as part of any flight information service.

- b. A service provider responsible for the provision of Air Traffic services shall ensure that the entity responsible for the provision of Aviation Meteorology Service shall;
 - i. have a properly organized quality system established
 - ii. have developed job descriptions for its technical staff
 - iii. have established a training programme for its technical staff
 - iv. Ensure maintaining training records for its technical staff
 - v. site the wind sensors used for local routine reports appropriately to give the best practicable indication of conditions along the runway/touchdown zone
 - vi. establish criteria in coordination with the Air Traffic service Provider for special observations
 - vii. ensure that MET offices are readily accessible to provide briefing, consultation and flight documentation to flight crew members and/or other flight operations personnel.

H. Safety Management System

- a. A service provider responsible for the provision of Air Traffic services shall establish procedures to ensure that a Safety Management System is established in accordance with the requirements specified in “Regulations on Civil Aviation Safety Management No. 01 of 2014” and the other requirements issued by the Director General of Civil Aviation time to time.
- b. A service provider responsible for the provision of Air Traffic Services shall ensure that the appointed Safety Manager who is responsible for the implementation and maintenance of SMS is adequately qualified to fulfill his responsibilities and adequate qualified personnel are available to conduct safety reviews.
- c. A service provider responsible for the provision of Air Traffic services shall establish procedures to ensure that safety reviews are conducted regularly.
- d. A service provider responsible for the provision of Air Traffic Services shall establish and implement a runway safety programme.
- e. A service provider responsible for the provision of Air Traffic Services shall establish procedures to ensure that the safety assessments are carried out, with respect to significant airspace reorganizations,
 - i. for significant changes in the provision of ATS/PANS OPS procedures applicable to an airspace or an aerodrome, and
 - ii. for the introduction of new PANS OPS procedure(s), equipment, systems or facilities.

I. Action after serious incident or accident

A service provider responsible for the provision of Air Traffic services shall establish procedures to follow after a serious incident or accident acceptable to the appropriate authority in charge of aircraft accident investigation.

J. PANS-OPS Procedure Design

- i. A service provider responsible for the provision of Air Traffic Services shall be responsible for the development and maintenance of PANS OPS Visual and Instrumental Flight Procedures which include reviewing of them periodically in accordance with guidance provided in ICAO PANS Aircraft Operations, (Construction of Visual and Instrumental Flight Procedures Manual) Doc 8168.
 - ii. A service provider responsible for the provision of Air Traffic Services shall ensure that flight inspections of instrument flight procedures, including obstacle checks, are carried out.
 - iii. A service provider responsible for the provision of Air Traffic Services shall publish obstacle clearance altitude/height (OCA/H).
 - iv. A service provider responsible for the provision of Air Traffic Services shall retain all procedure design documentation as described in Para 3.1 of Chapter -3 above so as to allow any data anomalies or errors found during the production, maintenance or operational use of the procedure to be corrected.
 - v. A service provider shall use the criteria specified in ICAO Doc.8168, Vol. ii and the Quality Assurance Manual for Flight Procedure Design, ICAO Doc.9906 as the basis for PANS OPS procedure design.
 - vi. The minimum qualifications of procedures specialists who are responsible for the design of flight procedures shall be as follows;
 - a. Successful completion of Pans –Ops basic and advanced courses
 - b. Considerable period of on the job training under a qualified Pans-Ops procedure designer.
- K. A service provider responsible for the provision of Air Traffic Services shall ensure procedures with regard to data link services contained in ICAO PANS-ATM (Doc.4444) and ICAO Document 10037 are established and implemented.

4.2 Aeronautical Telecommunication Service/Aeronautical Aids for CNS

- A. A service provider responsible for the provision of Aeronautical telecommunication Service/ Aeronautical Aids for CNS shall establish systems and procedures to ensure that the provision of Aeronautical Telecommunication Service is in accordance with the requirements specified in the ICAO Annex 10 to the convention on International Civil aviation.
- B. A service provider responsible for the provision of Aeronautical telecommunication Service/ Aeronautical Aids for CNS shall ensure that requirements for flight inspection are established and periodical flight inspections are provided for radio navigation aids.

4.3 Aeronautical Information Service

- A. A service provider responsible for the provision of Aeronautical Information Service shall establish systems and procedures to ensure that the provision of Aeronautical Information Service is in accordance with the requirements specified by the DGCA.

5 Chapter 5 - Requirements for RCCs

Requirements to be satisfied by the entity responsible for the establishment of RCCs

- A. The entity responsible for the establishment of RCCs shall make arrangements to staff each RCC and, as appropriate, RSCs 24 hours a day by trained and qualified personnel proficient in the use of the language used for radiotelephony communications.
- B. The entity responsible for the establishment of RCCs shall make arrangements to employ sufficient workforce skilled in coordination and operational functions at the each RCC and RSC as appropriate.
- C. The entity responsible for the establishment of RCCs shall ensure that each RCC and, if appropriate, RSC develop written job descriptions for each of their technical staff.
- D. The entity responsible for the establishment of RCCs shall ensure that each RCC and, if appropriate, RSC establish a training programme for their staff.
- E. The entity responsible for the establishment of RCCs shall ensure that each RCC and, if appropriate, RSC maintain training records for their technical staff.
- F. The entity responsible for the establishment of RCCs shall ensure that each RCC personnel involved in the conduct of radiotelephony communications are proficient in the use of the English language.
- G. The entity responsible for the establishment of RCCs shall ensure that SAR personnel are regularly trained and that appropriate SAR exercises are arranged.