

KINGDOM OF BAHRAIN  
Ministry of Transportation  
and Telecommunications



مملكة البحرين  
وزارة المواصلات والاتصالات

# CIVIL AVIATION REGULATION 007

## COMMUNICATION, NAVIGATION and SURVEILLANCE SERVICE PROVIDER CERTIFICATION REGULATIONS

29 October 2018

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### Civil Aviation Regulation (CAR) 007

## COMMUNICATION, NAVIGATION and SURVEILLANCE SERVICE PROVIDER CERTIFICATION REGULATIONS

To ensure the Bahrain Civil Aviation Affairs has the most up to date regulatory system and continues to meet its regulatory responsibilities to the highest standard, the above named Regulation has been created in order to reflect ICAO and international standards, in line with the Kingdom's requirements.

The introduction of this CAR will:

1. Enable the certification of Communication, Navigation and Surveillance Service Providers;
2. Require all providers of CNS Services to be certified;
3. Stipulate standards for the operation of CNS Service Providers.

I hereby issue these Regulations, being CAR007, effective the twenty-ninth day of October, 2018.

  
Mohamed Thamer Al-Kaabi

Undersecretary for Civil Aviation

Mohamed Thamer Al Kaabi  
Undersecretary for  
Civil Aviation Affairs

## **PREFACE**

As air traffic continues to increase in Bahrain, and international obligations evolve to assure safe aviation operations, it falls to Bahrain Civil Aviation Affairs (BCAA) to continue to develop its own standards, Regulations and procedures in accordance with its international obligations and the Kingdom's Law.

These Regulations set out the means by which the Kingdom registers Communication, Navigation and Surveillance (CNS) Service Providers and the standards for provision of those services. These Regulations accord with Article 26 of Law 14 of 2013 with respect to the issuance of Civil Aviation Law, ANTR Volume III Part II Air Traffic Services and Part 19 Safety Management, and with Annex 10 to the Convention on International Civil Aviation.

This document specifies the criteria applied by the certifying Authority (BCAA) on any person or organization desiring to operate a CNS service within the Kingdom of Bahrain. The document also provides a reference to the holders of a certification so that they may ensure compliance with the BCAA's requirements as they relate to provision of those services.

If the BCAA determines that an applicant is properly and adequately organized, resourced, equipped and able to conduct a safe operation in accordance with the requirements of these rules, Regulations, and standards prescribed hereunder, the BCAA shall certify the service provider. The BCAA may impose conditions on the operation of certification holders.

Amendments to these Regulations are the responsibility of the Bahrain Civil Aviation Affairs. Suggestions for improvement should be forwarded to the Authority.

Hussain Ahmed Al-Shuail

Asst. Undersecretary Safety and Security

## RECORD OF AMENDMENTS AND CORRIGENDA

Amendment Number	Amendment Date	Incorporated by	Date Incorporated
Original issue	October 2018	Original issue	October 2018

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## INTRODUCTION

### Communication, Navigation and Surveillance (CNS) Service Providers

(1) Civil Aviation Affairs of the Kingdom of Bahrain (the Authority) may make Regulations with respect to aviation and, without restricting the generality of the foregoing, may make Regulations with respect to activities of CNS Services and the location, inspection, certification, registration and operation of CNS Service providers.

(2) Any registered organization or individual desiring to operate a CNS Service Provider that is required by the Authority, by rule, to be certified may file with the Authority an application for a CNS Service Provider certification.

(3) Such application shall include any documentation required by these Regulations for the CNS Service. If the Authority determines that an applicant is properly and adequately equipped and able to conduct a safe operation in accordance with the requirements of these rules, and the Regulations, and standards prescribed hereunder, the Authority shall issue a CNS Service Provider certificate to the applicant.

Each CNS Service Provider certificate shall prescribe such terms, conditions, and limitations as are reasonably necessary to assure acceptability.

(4) The Authority or its representative may

- a) enter any premises named in a registration application for the purposes of making inspections relating to the enforcement of this Regulation;
- b) enter any place in named in a registration application for the purposes of an investigation of matters concerning aviation safety;
- c) seize anything found in any place referred to in paragraph (a) or (b) that the Authority or its representative believes on reasonable grounds will afford evidence with respect to an offence under paragraph (4) or the causes or contributing factors pertaining to an investigation referred to in sub-paragraph (b).

(5) It shall be an offence to provide false information in support of an application for a CNS Service Provider certificate or to otherwise act, or fail to act, so as to endanger the provision of a certified CNS Service. The provider of a CNS Service may be proceeded against if found to have committed an offence in relation to the CNS Service or associated facility for which he is responsible under the terms of the CNS Service Provider certificate. In such eventuality the operator of the CNS Service is liable to the penalty prescribed in Law No. 14 of 2013 with respect to the issuance of the Civil Aviation Law.

## GENERAL

### 1.1 Application

1.1.1 These Regulations apply to CNS Service Providers within the Kingdom of Bahrain that provide those services to, or in support of, any operations by civil aircraft.

1.1.2 These Regulations govern the certification and operation of provision of service to ANS providers and aerodromes serving civil IFR flight, relating to any or all of the following safety related equipment:

1. Communications Facilities:
  - a) HF Air/Ground communication facilities
  - b) VHF Air/Ground communication facilities
  - c) Voice Switching and control facilities (VCCS)
  - d) ATS point to point communication facilities
  - e) Voice and Data Recording facilities
  - f) Controller Pilot Data Link Communication (CPDLC)
2. Flight Information Facilities:
  - a. Electronic briefing and flight plan lodgement service for the use of Pilots
  - b. Aeronautical Databases used in or by the facility
3. Aeronautical Fixed Telecommunication Network (AFTN/CIDIN - AMHS)
4. Dedicated Satellite Communication Network (DSCN)
5. Navigation Facilities:
  - a. Instrument Landing System (ILS)
  - b. Distance Measuring Equipment (DME)
  - c. VHF Omnidirectional Radio Ranging (DVOR)
  - d. Ground Based Augmentation System (GBAS)
  - e. VHF Markers
  - f. GNSS related facilities
6. Surveillance Facilities:
  - a. Primary Surveillance Radar (PSR)
  - b. Secondary Surveillance Radar (SSR) including Mode-S
  - c. Airport Surface Movement Guidance and Control System (A-SMGCS)
  - d. Automatic Dependant Surveillance (ADS)
  - e. Multilateration Systems
7. Human Machine Interface Systems, including Tower Consoles, ATS
8. ATC Automation Systems consisting of:
  - a. Flight Data Processing System and interfaces
  - b. Radar Data Processing System and interfaces
  - c. Repetitive Flight Plan (RPL) System
9. Airport Terminal Information Service (ATIS)
10. Master/Clock System
11. Uninterruptable and Emergency Power Supplies

12. Meteorological Display Systems used by ATS
13. Airport Weather Observation System (AWOS)
14. Meteorological Sensor Systems.

1.1.3 No person or entity shall provide a CNS Service to civil aviation operations except under the authority of, and in accordance with the provisions of, a CNS Service Provider certificate issued under this Regulation.

## 1.2 Interpretation, Definitions and Abbreviations

1.2.1 The terms described in this sub-section shall have the following meaning whenever they appear in these Regulations;

**Accepted/Acceptable;** Means not objected to by the BCAA as suitable for the purpose intended.

**Accountable Manager;** The person within an organisation who has:

- a) Full control of the human resources required for the operations authorized to be conducted under the CNS Service Provider certificate;
- b) Full control of the financial resources required for the operations authorized to be conducted under the CNS Service Provider certificate;
- c) Final authority over operations authorized to be conducted under the CNS Service Provider certificate;
- d) Direct responsibility for the conduct of the CNS Service Provider's affairs; and
- e) Final responsibility for all safety issues related to the CNS Service Provider.

**Accuracy;** A degree of conformance between the estimated or measured value and the true value.

**Aerodrome;** A defined area on land (including any buildings, installations and equipment) intended to be used either wholly or in part for the arrival, departure and surface movement of aircraft.

**Aerodrome manual;** A manual included in an application for an Aerodrome Certificate pursuant to Regulations and incorporating any amendments to the manual accepted by the Authority.

**Aerodrome Meteorological Office;** An office, located at an aerodrome, designated to provide meteorological services for air navigation.

***Aeronautical Meteorological Station;*** A station designated to make observations and meteorological reports for use in air navigation.

***Aircraft;*** Any machine that can derive support in the atmosphere from the reactions of the air other than the reactions of the air against the earth's surface.

***AIM;*** The Aeronautical Information Management section of the CAA.

***Approved by the Authority;*** Means documented by the Authority as suitable for the purpose intended.

***ASSD;*** The Aviation Safety & Security Directorate of the CAA.

***ATMD;*** The Air Traffic Management Directorate of the CAA.

***Authority;*** the Civil Aviation Affairs of the Kingdom of Bahrain (CAA or BCAA)- where oversight of a service provision element of the CAA is referenced, then the Authority is the ASSD.

***BCAA;*** The Civil Aviation Affairs of the Kingdom of Bahrain (The Authority). Also, CAA.

***Certified aerodrome;*** An aerodrome whose operator has been granted an aerodrome certificate.

***CNS;*** Communication, Navigation and Surveillance.

***CNS Service;*** The activity of installing or maintaining equipment used in the provision or support of Air Traffic Services or Aerodrome Services to civil flight.

***Data quality;*** A degree or level of confidence that the data provided meet the requirements of the data user in terms of accuracy, resolution and integrity.

***Helicopter;*** An aircraft whose lift is derived from the aerodynamic forces acting on one or more powered rotors turning about substantially vertical axes.

***ICAO;*** International Civil Aviation Organization.

***International airport;*** Any airport designated by the BCAA as an airport of entry and departure for international air traffic, where the formalities incident to customs, immigration, public health, animal and plant quarantine and similar procedures are carried out.

***Local mean sea level;*** the mean sea level measured at Mina Salman – the location of the Bahrain National Level Datum.

***LSALT;*** Lowest safe altitude.

***MTBO;*** Mean Time Between Outages

***Quality;*** Degree to which a set of inherent characteristics fulfils requirements.

**Quality control;** Part of quality management focused on fulfilling quality requirements.

**Quality management;** Coordinated activities to direct and control an organization with regard to quality.

**Quality management system;** Set of interrelated or interacting elements to establish quality management policy and objectives and to achieve those objectives.

**Safety management system;** A systematic approach to managing safety including the necessary organizational structure, accountabilities, policies and procedures.

**Segregated airspace;** Airspace of specified dimensions allocated for exclusive use to a specific user(s).

**UTC (Coordinated Universal Time);** Time scale which forms the basis of a coordinated radio dissemination of standard frequencies and time signals.

**Unmanned Aerial Vehicle(UAV);** An aircraft which is intended to operate with no pilot on board.

**Visual meteorological conditions (VMC);** an aviation flight category in which visual flight rules (VFR) flight is permitted—that is, conditions in which pilots have sufficient visibility to fly the aircraft maintaining visual separation from terrain and other aircraft.

### 1.3 Reference Systems

1.3.1 Horizontal reference system: WGS–84 shall be used as the horizontal (geodetic) reference system. Reported aeronautical geographical data (indicating latitude and longitude) shall be expressed in terms of the WGS-84 geodetic reference datum.

1.3.2 Vertical reference system: Mean sea level (MSL) datum, which gives the relationship of gravity-related height (elevation) to the geoid shall be used as the vertical reference system.

1.3.3 Temporal reference system: The Gregorian calendar and Coordinated Universal Time (UTC) shall be used as the temporal reference system.

### 1.4 Standards and Recommended Practices

1.4.1 The CNS Service Provider shall comply with the standards and practices contained in the applicable Civil Aviation Regulations, Civil Aviation Advisory Publications and Directives published by the Authority.

1.4.2 The CNS Service Provider shall also comply with any conditions that may be endorsed in the CNS Service Provider Certificate.

1.4.3 The specifications contained herein are based upon the Standards and Recommended Practices of Annex 10, volumes 1 -5, to the Convention on International Civil Aviation insofar as they have been adopted by the Bahrain Authority.

1.4.4 Guidance material applicable to these Regulations is contained in the following ICAO documents:

- a) Manual on Testing Radio Navigation Aids (Doc 8071)
  - i. Volume I – Testing of Ground-Based Radio Navigation Systems
  - ii. Volume II – Testing of Satellite-Based Radio Navigation Systems
  - iii. Volume III – Testing of Surveillance Radar Systems
- b) Manual of Surface Movement Guidance and Control Systems (AMGCS) (Doc 9476)
- c) Advanced Surface Movement Guidance and Control Systems (A-SMGCS) Manual (Doc 9830)

## **Chapter 2 CNS SERVICE PROVIDER CERTIFICATION**

### **2.1 Requirement for CNS Service Provider Certification**

2.1.1 The provider of a CNS Service to civil air navigation or meteorological services requiring certification shall be in possession of a CNS Service Provider certificate.

### **2.2 Application CNS Service Provider Certification**

2.2.1 An applicant for a CNS Service Provider Certification shall submit to the Authority an application in the form prescribed in Appendix A. The application shall include

- a) any fee levied by the Authority for processing of the application,
- b) a Constitutional Document describing the organization and means of compliance with 2.3.2 and Chapter 3,
- c) the CNS Service Provider manual/s.

2.2.2 Only one certificate relating to the provision of a CNS service for the same equipment at the same location shall be current at any time.

### **2.3 Grant of CNS Service Provider Certification**

2.3.1 Subject to the provisions in Regulations 2.3.2 the Authority may approve the application and accept the constitutional document and manual submitted under Regulation 2.2.1 and grant a CNS Service Provider certificate to the applicant in the form prescribed in Appendix B.

2.3.2 Before granting a CNS Service Provider certificate, the Authority shall be satisfied that:

- a) an acceptable safety management system is in place;
- b) the provider's facilities, services and equipment are in accordance with these Regulations;
- c) the provider's operating procedures make satisfactory provision for delivery of the service;
- d) a CNS Service Provider manual that has been prepared for the applicant's service and submitted with the application, contains all the relevant information; and
- e) The applicant has the necessary competence, experience and resources to provide the service adequately, to the satisfaction of the Authority.

2.3.3 The Authority may refuse to grant a CNS Service Provider certificate to an applicant. In such cases, the Authority shall notify the applicant, in writing, of its reason no later than 7 days after making its decision.

### **2.4 Endorsement of Conditions**

2.4.1 After a successful completion of the processing of the application and inspection of the provider's facilities, the Authority, while granting the CNS Service Provider certificate may endorse any conditions or other details as required.

### **2.5 Duration of a CNS Service Provider Certificate**

2.5.1 CNS Service Provider certificate shall be valid for 3 years if no shorter period is endorsed, or until it is suspended or cancelled, whichever is earlier.

2.5.2 The holder of a CNS Service Provider Certificate that expires or is revoked shall surrender the certificate to the Authority immediately.

2.5.3 The holder of a CNS Service Provider Certificate that is suspended shall produce the certificate to the Authority for appropriate endorsement immediately.

## **2.6 Validity of the CNS Service Provider Certificate**

2.6.1 The validity of the Certificate is based upon the continued operation in accordance with Civil Aviation Regulations, Civil Aviation Advisory Publications and Information Bulletins as published by the Authority, to the satisfaction of the Authority.

2.6.2 The CNS Service Provider Certificate shall remain valid subject to periodic surveillance audits conducted at the discretion of the Authority confirming compliance with the Civil Aviation Regulations.

2.6.3 The Authority shall undertake a complete CNS Service Provider Certificate inspection at least once in every three year period prior to the re-issue of an existing CNS Service Provider Certificate.

## **2.7 Amendment of the CNS Service Provider certificate**

2.7.1 The Authority may, provided that the requirements of Regulation 2.2.1 are met, amend a CNS Service Provider certificate where:

- a) there is a change in the use or operation of the CNS Service;
- b) there is a change in the location of the CNS Service; or
- c) the holder of the CNS Service Provider certificate requests the amendment.

2.7.2 If there is a change in ownership or management of the CNS Service Provider, the new owner or manager shall apply for a transfer of the CNS Service Provider certificate in accordance with 2.9.1.

2.7.3 If the CNS Service Provider certificate owner requests an amendment to the CNS Service Provider certificate or the endorsed conditions such request shall be accompanied by:

- a) a detailed account of the proposed amendment including the reasons for the amendment;
- b) an assessment of the safety risks associated with any change in use or operation of the CNS Service Provider certificate including, where appropriate, the findings of any aeronautical study undertaken on behalf of CNS Service Provider certificate holder; and
- c) particulars of any consequential changes to the AIP and CNS Service Provider manual.

2.7.4 The Authority may amend a CNS Service Provider certificate so as to restrict or prohibit specific operations if the CNS Service Provider certificate holder breaches the conditions of the certificate. The Authority shall provide written notice of intention to amend a CNS Service Provider certificate stating the reasons for the proposed amendment.

2.7.5 The holder of the CNS Service Provider Certificate shall:

- a) Ensure that the CNS Service Provider Manual is amended so as to remain a current description of the holder's organisation, service and operational capabilities.

- b) Ensure that any amendments made to the holder's CNS Service Provider Manual meet the applicable requirements of this regulation.
- c) Comply with the amendment procedure contained in the holder's CNS Service Provider Manual
- d) Provide the Authority with a copy of each amendment to its CNS Service Provider Manual prior to its incorporation into the CNS Service Provider Manual
- e) Make such amendments to the CNS Service Provider Manual as the Authority may consider necessary.

2.7.5 Prior notification to, and acceptance by, the Authority is required where the holder of the CNS Service Provider Certificate proposes to make a change to any of the following:

- a) The personnel described at 3.1.1.1, 3.1.1.2 and 3.1.1.3.
- b) The CNS service provided by the Certificate holder.
- c) The holder's Security Programme.
- d) The Operational Service Level described in the certificate.

2.7.6 The Authority may amend a CNS Service Provider Certificate so as to restrict or prohibit specific operations if the CNS Service Provider Certificate holder breaches the conditions of the certificate. The Authority shall provide written notice of intention to amend a CNS Service Provider Certificate stating the reasons for the proposed amendment.

2.7.7 The Authority may prescribe conditions under which a certificate holder may operate during or following any of the changes specified.

2.7.8 Where any changes referred to in this part require an amendment to the certificate, the certificate holder shall forward the certificate to the Authority as soon as practicable.

2.7.9 The Certificate holder shall make such amendments to the CNS Service Provider Manual as the Authority may consider necessary.

## **2.8 Suspension or Withdrawal of a CNS Service Provider certificate**

2.8.1 The Authority may suspend or withdraw a CNS Service Provider certificate if the holder fails to meet the obligations set out in Chapter 4 of these Regulations.

2.8.2 In the event of a serious failure of the CNS Service Provider certificate holder's safety obligations the Authority may require specific operations to be suspended with immediate effect.

## **2.9 Transfer of a CNS Service Provider certificate**

2.9.1 The Authority may give its consent to, and issue an instrument of transfer of a CNS Service Provider certificate to a transferee where:

a) the current holder of the CNS Service Provider certificate notifies the Authority in writing at least 90 days before ceasing to own or operate the CNS Service Provider that the current holder will cease to operate the CNS Service Provider as of the date specified in the notice;

b) the current holder of the CNS Service Provider certificate notifies the Authority in writing, the name of the transferee;

c) the transferee applies in writing to the Authority within 60 days before the current holder of the CNS Service Provider certificate cease to operate the CNS Service, for the CNS Service Provider certificate to be transferred to the transferee.

2.9.2 The holder of the CNS Service Provider Certificate who is the outgoing provider of the CNS Service shall not hinder the preparation and execution of the transitional arrangements required by this Regulation.

2.9.3 The Applicant for a CNS Service Certificate intending to assume responsibility for providing any CNS service from an existing certificate holder, shall include with its application, all details of transitional arrangements endorsed by the Accountable Managers for CNS of both Organisations.

2.9.4 If the Authority does not consent to the transfer of a CNS Service Provider certificate, it shall notify the transferee, in writing, of its reasons within 7 days after making that decision.

## **Chapter 3 CERTIFICATION REQUIREMENTS**

### **3.1 Personnel Requirements**

3.1.1 Each applicant for the grant of a CNS Service Provider certificate shall engage, employ or contract:

3.1.1.1 A person identified as the Accountable Manager who has the authority within the applicant's organisation to ensure that each CNS service listed in their manual can be financed and carried out to

meet the operational requirements, and in accordance with the requirements prescribed by this Regulation; and

3.1.1.2 A person or group of persons who are responsible for ensuring that the applicant's organisation complies with the requirements of this Regulation. Such nominated person or persons shall be ultimately responsible to the Accountable Manager; and

3.1.1.3 A safety manager responsible for the provision of a safety management system according to the requirements of ANTR Volume III Part 19; and

3.1.1.4 A training Manager responsible for ensuring that the organisation complies with the Training requirements of this regulation.

3.1.1.5 A Quality System Manager responsible for ensuring that the organisation complies with the Quality requirements of this regulation.

3.1.1.6 Sufficient personnel, licenses where necessary, to plan, operate, and supervise the CNS offices and facilities and provide the CNS services listed in the applicant's manual whilst maintaining an effective safety management system.

3.1.2 Qualifications and experience details for the persons nominated by the applicant for the positions listed in 3.1.1.1 to 3.1.1.5 inclusive shall be forwarded to the Authority for acceptance prior to the person being named in that position by the applicant.

3.1.3 Each applicant shall establish procedures to:

a) Provide training for CNS personnel in accordance with the requirements of ICAO Doc 7192 Training Manual, Part E - Air Traffic Safety Electronics Personnel (ATSEP) and associated Guidance material.

b) Assess the competence of those personnel who are authorised by the applicant and licensed by the authority to –

i) place facilities and items of equipment listed in the applicant's manual into operational service;

ii) perform the CNS Service Provider work listed in the CNS Service Provider Manual on behalf of the applicant;

iii) Supervise personnel providing CNS Service Provider services.

c) Establish a procedure to maintain and develop the competence of those authorized personnel, maintaining their licensing standard where appropriate; and

d) Provide those authorised personnel with written evidence of the scope of their authorisation.

e) Ensure that no person whose function is critical to the safety of aviation (safety sensitive personnel) shall undertake that function while under the influence of any psychoactive substance, by

reason of which human performance is impaired and that they shall not engage in any problematic use of substances.

### 3.2 Facility Requirements

3.2.1 The CNS service provider shall ensure that the systems, equipment, installations and services required for the CNS service provider or aerodrome operator are commensurate with the level of service and appropriate to meet agreed target levels of safety as determined in the safety management system;

3.2.2 The requirements shall comply with the minimum specifications outlined in ICAO Annex 10 as applicable.

3.2.3 An applicant for a CNS Service Provider Certificate shall establish a procedure to ensure that no aeronautical facility listed in the applicant's manual is placed into operational service unless –

- a) The person placing the aeronautical facility into operational service is assessed as competent and authorized according to the procedures required under this regulation;
- b) Is designed, installed and commissioned to meet the applicable operational specification for that facility;
- c) Conforms with the applicable system characteristics and specification standards prescribed in ICAO Annex 10, Volumes I, III and IV;
- d) Conforms with the applicable specifications and requirements of this regulation; and
- e) Has been allocated an identification code or callsign, if a code or callsign is required by this regulation.
- f) Information on the operational status of each radio navigation aid listed in the applicant's manual, that is essential for the take-off, approach and landing at an aerodrome, is provided to meet the operational requirements of –
  - i. The ATC unit providing an aerodrome control service for that aerodrome while that service is being provided;
  - ii. The ATC unit providing an approach control service for that aerodrome while that service is being provided; and
  - iii. The aerodrome operator where no ATC unit is involved or the ATC unit is no longer on duty.

g) Each aeronautical facility listed in the applicant's manual is installed with suitable power supplies and means to ensure continuity of operation appropriate to the needs of the ATC unit or radio navigation service being supported;

h) Each aeronautical facility listed in the applicant's manual is installed in accordance with the security programme required under this part to minimize any risk of destruction, damage or interference with the operation of the facility;

i) When necessary to ensure the integrity of the signal in space of all radio navigation aids, protected by written agreements with the site owner, aerodrome operator and ATC unit, as appropriate, to ensure that site restrictions are not infringed by buildings, fences, vehicles, machinery or aircraft;

j) Any critical site area of any aeronautical facility listed in the applicant's manual is:

i. Clearly identified on the site drawings for the aeronautical facility;

ii. Physically protected by suitable signposts on the site.

3.2.4 An applicant for a CNS Service Provider Certificate who intends to operate a temporary aeronautical facility to carry out on site tests shall establish a procedure for carrying out these tests.

a) The operation of the temporary facility does not cause any interference with any other operating aeronautical facility; and

b) Appropriate information regarding the operation of the temporary facility is forwarded to the provider of the AIS for the issue of a NOTAM, and if appropriate, the publication of a Supplement to the AIP; and

c) An appropriate NOTAM has been issued.

### **3.3 Identification Codes and Callsigns Requirements**

3.3.1 An applicant for a CNS Service Provider Certificate shall establish procedures to ensure that no person associated with facilities maintained by the applicant's organization shall operate:

a) A CNS system unless it has been allocated the appropriate identification code by the Authority under this Regulation; or

b) A ground based CNS system using an aeronautical frequency unless it has been allocated and authorized by the Telecommunication Regulation Authority (TRA) of the Kingdom of Bahrain.

Note: A NOC shall be obtained from the Authority, through the ASSD prior to applying to the TRA.

3.3.2 The Authority may allocate an identification code for a radio navigation aid or a callsign for a radio communication transmitting aeronautical facility if the Authority is satisfied that the allocation of a code or callsign is not contrary to the interests of aviation safety.

3.3.3 The Authority may allocate codes required by operational systems, such as 24 bit aircraft addresses for ground uses, SAC/SIC etc. Such codes shall be applied for through the ASSD.

3.3.4 Codes and Callsigns in place at the date this Regulation becomes effective, shall remain effective.

### **3.4 Documentation**

3.4.1 The applicant for a CNS Service Provider certificate shall hold copies of the CNS Service Provider Manual, relevant technical manuals and all other documents necessary for the provision and operation of the services listed in its constitutional document.

3.4.2 The applicant shall establish a procedure to control all the documentation required by this regulation, and any other applicable regulation. The procedure shall ensure that –

a) Appropriate arrangements are in place to ensure receipt of amendments to documents held by the unit; and

b) All incoming documentation is reviewed and actioned as required by authorized personnel; and

c) All documentation is reviewed and authorized before issue; and

d) Current issues of all relevant documentation are available to personnel at all locations where they need access to such documentation for the provision and operation of CNS Service Provider services; and

e) All obsolete documentation is promptly removed from all points of issue or use; and

f) Any obsolete documents retained as archives are suitably identified as obsolete; and

g) The current version of each item of documentation can be identified to preclude the use of out of date documents; and

h) A regular document audit is made of the amendment status of controlled documents held on the unit.

### **3.5 Periodic Inspection, Testing and Calibration**

3.5.1 The Authority may, in writing, require the holder of CNS Service Provider Certificate to undergo or carry out such inspections and audits of the holder's offices, facilities, documents and records as the Authority consider necessary in the interests of civil aviation safety and security.

3.5.2 The Authority may require from the holder of a CNS Service Provider Certificate such information as the Authority considers relevant to the inspection or audit.

3.5.3 A CNS Service Provider shall arrange for the issue of permanent security passes to personnel authorized by the Authority to enable access to any part of the unit, tenant company premises, equipment, records, documents and Provider's personnel.

3.5.4 Personnel authorized by the Authority may:

- a) Inspect and carry out tests on the facilities, services and equipment; and
- b) Inspect CNS Service Provider's documents and records and verify the CNS Service Provider's safety management system before the CNS Service Provider Certificate is granted or renewed, and at any other time, for the purpose of ensuring safety at the unit; and
- c) Take photographs of the unit facilities and equipment, for certification, audit and approval purposes.

### **3.6 Notification of CNS Office and Facility Status**

3.6.1 A certificate holder maintaining an aeronautical facility must establish procedures to ensure that:

- a) Information concerning any change in the operational status of the aeronautical facility and information on the operational details of the aeronautical facility is forwarded to the operator of the aeronautical facility;
- b) The Authority is notified if incorrect information has been published.

3.6.2 An applicant for a CNS Service Provider Certificate shall establish a procedure to ensure that the requirements of this part are met for each applicable aeronautical facility listed in the applicant's manual.

3.6.3 Validation and verification procedures required in this regulation shall include a means to confirm that:

- a) Information to be issued as part of the integrated AIP shall be thoroughly checked and coordinated with the appropriate services before it is submitted to the AIM, in order to ensure that all necessary information has been included and that it is correct prior to distribution;
- b) Any change of a temporary nature to the operational status of the aeronautical facility has been promulgated by NOTAM.
- c) Information provided by the CNS Service Provider shall meet the promulgation requirements of the Bahrain AIM.
- d) A CNS Service Provider shall establish procedures to report significant information relating to the operational status of any facility or service that may affect the safety of air navigation to the relevant Air Navigation Service Provider.
- e) Information requiring immediate notification to the Air Navigation Service Provider includes:
  - i) Failure or irregular operation of part or all of the CNS systems; and
  - ii) Failure of the normal or secondary power supply.

### **3.7 CNS Facility Check after Accident or Incident**

3.7.1 An applicant for a CNS Service Provider Certificate must establish a procedure to check and accurately record the operating condition of any aeronautical facility maintained under the authority of the certificate that may have been used by an aircraft, or an air navigation service provider, that is involved in an accident or serious incident (as defined in ICAO Annex 1).

3.7.2 The procedure required by this regulation shall require that:

- a) The check of the aeronautical facility's operating condition is carried out as soon as practicable after notification to the holder of the CNS Service Provider Certificate of the accident or incident; and
- b) The record of that check, and the recorded history of the aeronautical facility is kept secure for possible use by any subsequent accident or incident investigation; and
- c) The records required to be secured in this part are retained for a period of 3 years from the date of the last entry made on that record.

### **3.8 Records**

3.8.1 An applicant for a CNS Service Provider Certificate shall establish procedures to identify, collect, index, store, maintain and dispose of the records that are necessary to record the;

- a) Safe provision of the CNS Services; and

- b) Safe operation of each aeronautical facility listed in the applicant's constitutional document.

3.8.2 The procedures required in this regulation shall require that accurate records of the following are maintained:

- a) For each aeronautical facility, a record –
  - i. Documenting the operating performance of the aeronautical facility; and
  - ii. Providing a history of the Service Provider services and the periodic inspections and tests of the aeronautical facility that are traceable to the person or persons responsible for each of the recorded activities; and
  - iii. Of the establishment of, or change in, the periodic tests required in this regulation; and
- b) For each item of test equipment required in this part that is used for the measurement of an aeronautical facility's critical performance parameters, a record that includes a traceable history of the location, maintenance and the calibration checks for the item of test equipment; and
- c) For each aeronautical facility and item of test equipment, a record of the build and configuration state, updated whenever changes or modifications are made. All modifications shall be accurately documented and cross referenced to modification strikes or numbers on the equipment; and
- d) For each facility malfunction incident a record that includes:
  - i. Details of the nature of the malfunction; and
  - ii. The findings of the investigation; and
  - iii. The corrective actions taken; and
  - iv. A record of each internal audit required in this regulation and of each management review required in this regulation.
- e) For each person who is authorized in accordance this regulation to place aeronautical facility into operational service, a record that includes details of the person's experience, qualifications, training, competency assessments and current authorizations.

3.8.3 The procedures required under this regulation shall stipulate that:

- a) All written records to be legible and of a permanent nature; and
- b) All aeronautical facility records required under this regulation to be retained for a period of at least 3 years unless a longer period is required –
  - i. By the Authority; or

- ii. To establish a performance history for the aeronautical facility.

3.8.4 A CNS Service Provider shall provide statistical information to the Authority to ensure monitoring of SMS performance over time.

### 3.9 Internal Quality Assurance

3.9.1 The applicant for a CNS Service Provider Certificate shall establish an internal quality assurance system (QAS) to ensure compliance with, and the adequacy of, the procedures required by these Regulations. The QAS shall, include;

- a) A quality assurance policy and procedures that are relevant to the applicant's organizational goals and the expectations and needs of its customers;

- b) Procedures to ensure that data at any moment is traceable to its origin so as to allow any data anomalies or errors, detected during maintenance phases or in operational use, to be corrected;

- c) Procedures to ensure quality indicators, including equipment availabilities, malfunctions, faults, and personnel and customer feedback, are monitored to identify existing problems or potential causes of problems within the system;

- d) A procedure for corrective action to ensure existing problems that have been identified within the system are corrected;

- e) A procedure for preventive action to ensure that potential causes of problems that have been identified within the system are remedied;

- f) An internal quality audit programme to audit the applicant's organization for conformity with its quality assurance system;

- g) An external quality programme including letters of agreement with users of systems maintained by the CNS Service Provider, suppliers and adjacent CNS units and a supplier audit programme; and

- h) Management review procedures that may, where appropriate, include the use of statistical analysis, to ensure the continuing suitability and effectiveness of the internal quality assurance system in satisfying the requirements of this Regulation.

3.9.2 The internal quality audit programme shall:

- a) Specify the frequency and location of the audits taking into account the nature of the activity to be audited;

- b) Ensure audits are carried out by trained auditing personnel who are independent of those having direct responsibility for the activity being audited;

- c) Ensure the results of audits are reported to the personnel responsible for the activity being audited and the manager responsible for internal audits;
- d) Require preventive or corrective action to be taken by the personnel responsible for the activity being audited if problems are found by the audit;
- e) Ensure follow up audits to review the effectiveness of any preventive or corrective action taken; and
- f) Ensure all audit findings and observations shall be evidenced and properly recorded.

### **3.10 Safety Management**

3.10.1 Each applicant for the grant of a CNS Service Provider Certificate shall establish a safety management system in accordance with ANTR Volume III Part 19.

3.10.2 The safety management system shall include:

- a) Hazard identification; and
- b) Risk management; and
- c) Safety assurance; and
- d) Safety performance monitoring, auditing and measurement; and
- e) Change management; and
- f) Management Reviews.

3.10.3 A CNS Service Provider shall ensure that any significant change to the aeronautical facility system shall be subject to a safety assessment, indicating that an acceptable level of safety shall be met and prior to implementation. User consultation shall form part of the safety assessment.

3.10.4 The safety assessment shall be presented to, and accepted by, the facility owner prior to implementation of the change.

3.10.5 A CNS Service Provider shall, as part of their SMS, define appropriate safety performance indicators, safety performance targets and alert levels for the following occurrences:

- a) Aeronautical facility reliability
- b) MTBO
- c) Any other required by the Authority.

### **3.11 Security Management**

3.11.1 An applicant for a CNS Service Provider Certificate shall establish a security programme for the facilities listed in the applicant's manual.

3.11.2 The security programme required in this part shall specify the physical security requirements, practices and procedures to be followed to:

a) Minimize the risk of destruction of, damage to, or interference with the operation of any aeronautical facility operated under the authority of the CNS Service Provider Certificate; and

b) Protect personnel on duty.

3.11.3 Where relevant, signs warning of hazardous radiation shall be erected at appropriate locations.

3.11.4 The security programme required under this regulation shall include such physical security requirements, practices and procedures as may be considered necessary by the applicant or the Authority.

### **3.12 ASSET MANAGEMENT SYSTEM (AMS) REQUIREMENTS**

3.12.1 The Applicant shall establish, document, implement, maintain and continually improve an asset management system.

3.12.2 The Applicant's senior management shall authorize an overall asset management policy.

3.12.3 The Applicant shall establish, document, implement and maintain a long term asset management strategy which shall be authorized by senior management.

3.12.4 The Applicant shall establish and maintain asset management objectives.

3.12.5 The Applicant shall establish, document and maintain an asset management plan to achieve the asset management strategy and deliver the asset management objectives across the following life cycle activities:

a) Creation, acquisition or enhancement of assets;

b) Utilization of assets;

c) Maintenance of assets;

d) Decommissioning and/or disposal of assets.

3.12.6 The asset management plan shall be optimized and the actions prioritized. Multiple plans (for example, covering a portfolio of asset systems or assets) shall be jointly optimized and prioritized, taking into account overall value, resource requirements, interdependencies, risks and performance impact.

3.12.7 The asset management plan shall be communicated to all relevant stakeholders to the level of detail appropriate to their participation or business interests in the delivery of the plan.

3.12.8 The asset management plan shall include actions to improve the asset management system.

3.12.9 The asset management plan shall be reviewed periodically by the Applicant to ensure that they remain effective and consistent with asset management strategy and objectives.

3.12.10 The Applicant shall establish, implement, and maintain plans and/or procedures for identifying and responding to incidents and emergency situations, and maintain the continuity of critical asset management activities.

3.12.11 The Applicant shall periodically review, test and where deemed necessary, revise its plans and/or procedures for incident and emergency preparedness and response and continuity of important asset management activities.

3.12.12 Senior management shall provide evidence to the Authority of its commitment to the development and implementation of the asset management system and the continuous improvement of its effectiveness. Where an Applicant chooses to outsource any aspect of asset management that affects conformity with these requirements, the Applicant shall ensure control over such aspects. The Applicant shall determine and document how these parts will be controlled and integrated into the Applicant's asset management system.

3.12.13 The Applicant shall ensure the pertinent asset management information is effectively communicated to and from employees and other stakeholders, including contracted service providers.

3.12.14 The Applicant shall establish, implement and maintain up-to-date documentation to ensure that its asset management system can be adequately understood, communicated and operated. The Applicant shall identify the asset management information it requires to meet the requirements of this specification considering all phases of the asset life cycle. The information shall be of the quality appropriate to the asset management decisions and the activities it supports.

3.12.15 The Applicant shall design, implement, and maintain systems for managing asset management information. Employees and other stakeholder's shall have access to the information relevant to their asset management activities or responsibilities. Where separate asset management information systems exist, the Applicant shall ensure that the information provided by these is consistent.

3.12.16 The Applicant shall establish, implement and maintain procedures for controlling all information required by these specifications.

3.12.17 The Applicant shall establish, implement and maintain documented processes and/or procedures for the ongoing identification and assessment of asset –related and asset management-

related risks, and the identification and implementation of the necessary control measures through the life cycle of the assets.

3.12.18 The Applicant shall keep the results of identification of risks, risk assessments and determined controls up-to-date, and document these where not doing so could affect the delivery of the asset management objectives and the asset management strategy.

3.12.19 The Applicant shall ensure that tools, facilities and equipment are maintained and, where appropriate calibrated. The Applicant shall establish processes and/or procedures to control these maintenance and calibration activities, where such tools, facilities and equipment are essential for:

- a) The implementation of its asset management plans;
- b) Achieving the required functions and performance and/or condition;
- c) The monitoring and measurement of performance and/or condition.

3.12.20 The Applicant shall submit calibration reports of systems to the ATMD. Flight Calibration Service Providers shall be certified by the country of registration of the calibration aircraft.

3.12.21 The Applicant shall establish, implement and maintain processes and/or procedures to monitor and measure the performance of the asset management system and the performance and/or condition of the asset and/or asset systems.

3.12.22 The Applicant shall establish, implement and maintain processes and/or procedures for the handling and investigation of failures, incidents and nonconformities associated with assets, asset systems and the asset management system.

3.12.23 The Applicant shall establish procedures for the reporting of malfunctions, where required by the Authority, via the Q Pulse system.

3.12.24 The Applicant shall ensure audits of the asset management system are conducted.

3.12.25 The Applicant shall establish, implement and maintain processes and/or procedures for instigating:

- a) Corrective actions for eliminating the causes of observed poor performance and nonconformities identified from investigations, evaluations of compliance and audits to avoid their recurrence;

- b) Preventive actions for eliminating the potential causes of nonconformities or poor performance.

3.12.26 The Applicant shall keep records of the corrective and preventive actions taken and communicate these to relevant stakeholders.

3.12.27 The Applicant shall establish, implement and maintain processes and/or procedures for identifying opportunities and assessing, prioritizing and implementing actions to achieve continual improvement in:

- a) The optimal combination of costs, asset related risks and the performance and condition of assets and asset systems across the whole life cycle;
- b) The performance of the asset management system.

3.12.28 The Applicant shall actively seek and acquire knowledge about new asset management related technologies and practices, including tools and techniques, and these shall be evaluated for the potential benefit to the Applicant.

3.12.29 Senior management shall review at intervals that it determines appropriate the Applicant's asset management system to ensure its continuing suitability, adequacy and effectiveness. Reviews shall include assessing the need for changes to the asset management system policy, asset management system strategy and asset management system objectives.

3.12.30 Records of management reviews shall be retained and information relevant to specific employees, contracted service providers or other stakeholders made available for communication purposes.

### **3.13 CNS Licensing, Training and Competency Management System Requirements**

3.13.1 All personnel employed to provide CNS services to ANSP's or air traffic control services shall be LICENSED by the appropriate authority to provide CNS services.

3.13.2 The Applicant for a CNS Service Provider Certificate shall establish procedures and programs for the training and competency assessment of the Air Traffic Safety Electronics Personnel (ATSEP) who provide the CNS service. These procedures and programs shall be informed by ICAO 7192 Training Manual Part E2 Air Traffic Safety Electronics Personnel. These procedures and programs shall support the attainment and retention of Licenses required by the appropriate authority.

3.13.3 The Applicant shall establish, document, implement, maintain and continually improve a Training and Competency Management System.

3.13.4 The Applicant's Senior Management shall authorise an overall Training and Competency management policy.

3.13.5 The Applicant shall establish, document, implement and maintain a long term Training and Competency management strategy which shall be authorised by senior management.

3.13.6 The Applicant shall establish and maintain Training and Competency management objectives.

3.13.7 The Applicant shall establish, document and maintain Training and Competency management plan(s) to achieve the Training and Competency management strategy and deliver the Training and Competency management objectives across the following staff life cycle activities:

- a) Induction.
- b) On the Job.
- c) Off the Job.
- d) Recurrent.
- e) Remedial.
- f) Safety.
- g) Development.

3.13.8 The Training and Competency management plans shall include actions to improve the Training and Competency management system.

3.13.9 The Training and Competency management plans shall be reviewed periodically by the holder to ensure that they remain effective and consistent with Training and Competency management strategy and objectives.

3.13.10 The Applicant shall establish, implement and maintain processes and/or procedures for identifying opportunities and assessing, prioritizing and implementing actions to achieve continual improvement in:

- a) The optimal combination of costs, Training and Competency related risks and the performance of staff.
- b) The performance of the Training and Competency management system.

3.13.11 The Applicant shall actively seek and acquire knowledge about new Training and Competency management related technologies and practices, including tools and techniques, and these shall be evaluated for the potential benefit to the organisation.

3.13.12 Senior Management shall review at intervals that it determines appropriate the Applicant's Training and Competency management system to ensure its continuing suitability, adequacy and effectiveness. Reviews shall include assessing the need for changes to the Training and Competency management system policy, Training and Competency management system strategy and Training and Competency management system objectives.

3.13.13 Records of management reviews shall be retained and information relevant to specific employees, contracted service providers or other stakeholders made available for communication purposes.

3.13.14 Human performance programs, including principles of threat and error management, relevant to CNS service provision shall be implemented and maintained.

### **3.14 OPERATING APPROVALS**

3.14.1 An applicant for a CNS Service Provider Certificate shall establish a procedure to ensure that, in addition to the requirements of this regulation with respect to the SMS, technical approval for changes to equipment and systems is received from the Authority prior to introduction into service.

### **3.15 PROTECTION OF ELECTRONIC AERONAUTICAL DATA**

3.15.1 Electronic data shall be protected as per ANTR Volume II Part 17, Security.

### **3.16 CONTINGENCY PLAN**

3.16.1 The applicant for CNS service provider certificate shall establish a contingency plan in accordance with the requirements of the contingency plans of the services being supported. The plan shall form part of the Service Level Agreement with those entities.

3.16.2 The contingency plan shall include sufficient facilities and equipment to provide for the safe and orderly flow of air navigation services in the event of the following

- a) Loss of power, or
- b) Unserviceable equipment, or
- c) Natural or man-made disaster, or
- d) Loss of a related support service.

3.16.3 Facilities and equipment provided for in the contingency plan shall be in accordance with Annex 10.

3.16.4 The applicant for CNS service provider certificate shall establish procedures to practice contingency plan exercises related to the evacuation of each ATS operational facility at intervals not exceeding 12 months. A full evacuation of the ATS operational facility is not required. Written reports including any shortcomings shall be forwarded to the BCAA within one month of conducting the practice contingency plan exercise.

## **Chapter 4 CNS SERVICE PROVIDER MANUALS**

### **4.1 Preparation of a CNS Service Provider Manual**

4.1.1 The provider of a certified CNS Service shall have, as a minimum, three manuals, to be known as

- a) the CNS Service Provider Manual, and
- b) the CNS Service Provider Procedures Manual, and
- c) the CNS Service Provider Training Manual.

4.1.2 The CNS Service Provider manuals shall:

- a) be type written or printed and signed on behalf of the CNS Service Provider by a duly authorised manager or relevant executive;
- b) be in a format that is easy to revise and insert replacement pages;
- c) have a system for recording the currency of page and amendments thereto;
- d) include a page for logging revisions; and
- e) be organized in a manner that will facilitate the preparation review and approval process.

### **4.2 Location of the CNS Service Provider Manual**

4.2.1 The CNS Service Provider shall provide the Authority with a complete and current copy of the CNS Service Provider manual.

4.2.2 The CNS Service Provider shall keep at least one complete and current copy of the CNS Service Provider manual at each CNS Service Provider operations facility and one copy at the operator's principal place of business if that is other than the CNS Service Provider operations facility.

4.2.3 The CNS Service Provider shall make the CNS Service Provider manual available to all relevant organizations operating at an airport served by the provider, and take all reasonable steps to ensure that all relevant CNS Service Provider personnel, regardless of their employer, are familiar with sections of the CNS Service Provider manual relevant to their activity.

4.2.4 The CNS Service Provider shall make the CNS Service Provider manual available for inspection by the Authority.

### 4.3 Information to be included in the CNS Service Provider Manual

4.3.1 The following information shall be included in the CNS Service Provider Manual:

- a) A statement signed by the Accountable Manager on behalf of the applicant's organization confirming that the manual and any included documents;
  - i. define the organisation and demonstrate its means and methods for ensuring ongoing compliance with these Regulations; and
  - ii. will be complied with at all times;
- b) The titles and names of the person or persons required by 3.1.1.1 to 3.1.1.5; and
- c) The duties and responsibilities of the person or persons specified in 4.3.1 b); and
- d) An organisational chart showing lines of responsibility of the persons specified in 4.3.1 b); and
- e) A summary of the applicant's staffing structure at each CNS office listed under 4.3.1 g); and
- f) A list of the CNS services to be covered by the certificate; and
- g) A list providing:
  - i. the location of each CNS office operated by the applicant; and
  - ii. the location of each facility operated by the applicant that provides CNS services to the users; and
  - iii. the CNS services provided by each of those CNS offices and facilities; and
  - iv. the locations and airspace covered by such CNS services; and
- h) Details of the applicant's Service Level Agreement's; and
- i) Details of the applicant's procedures and systems required by;
  - i. 3.1.2 regarding competence of personnel; and
  - ii. 3.2 regarding site requirements; and
  - iii. 3.3 regarding communication requirements; and
  - iv. 2.3.2 regarding CNS service resourcing requirements; and
  - v. all Service Level Agreements regarding CNS service output requirements; and

- vi. 3.2 regarding data facility requirements; and
  - vii. 3.4 regarding control of documents; and
  - viii. 3.5 regarding verifications, inspections, tests and calibrations; and
  - ix. 3.8 regarding release of CNS information and the placing of facilities into operational service; and
  - x. 3.6 regarding notification of CNS office and facility status; and
  - xi. 3.7 regarding CNS information checks after notification of an accident or incident; and
  - xii. 3.4 regarding identification, collection, indexing, storage, maintenance and disposal of records;  
and
  - xiii. 3.9 regarding internal quality assurance of the organisation; and
  - xiv. 3.10 regarding safety management requirements.
- j) Procedures to control, amend and distribute the manual.

4.3.2 The applicant's manual shall be acceptable to the Authority.

4.3.3 A statement signed by the Accountable Manager on behalf of the applicant confirming that:

- a) The holder has sufficient financial strength to provide the services contained within the holder's constitutional document, and
- b) The holder has sufficient liability and insurance cover to meet any claims that could be made relating to the services contained within the holder's constitutional document.

#### **4.4 Information to be included in the CNS Service Provider Procedures Manual**

4.4.1 The CNS Service Provider Procedures Manual shall contain details of the applicant's procedures;

- a) Regarding competence of personnel
- b) Regarding site requirements
- c) Regarding communication requirements
- d) Regarding CNS service resourcing requirements
- e) Regarding CNS service output requirements

- f) Regarding data facility requirements
- g) Regarding control of documents
- h) Regarding verifications, inspections, tests and calibrations
- i) Regarding release of CNS information and the placing of facilities into operational service
- j) Regarding notification of CNS office and facility status
- k) Regarding CNS information checks after notification of an accident or incident
- l) Regarding identification, collection, indexing, storage, maintenance and disposal of records
- m) Regarding internal quality assurance of the organisation
- n) Regarding safety management requirements

4.4.2 The applicant's manual shall be acceptable to the Authority.

#### **4.5 Information to be included in the CNS Service Provider Training Manual**

4.5.1 The CNS Training Manual shall contain all the pertinent information concerning the CNS Service Provider Training and Competency System.

4.5.2 The CNS Training Manual shall:

- a) Be either an electronic version or printed by the accountable manager responsible for the CNS Service Provider
- b) Be in a format that is easy to revise.
- c) Have a system for recording the currency of pages and amendments and should include a page for logging revisions
- d) Be organised in a manner that will facilitate the preparation, review and acceptance process

4.5.3 The manual must be provided to and be acceptable to the Authority.

#### 4.6 Continued Compliance

4.6.1 Each holder of a CNS Service Provider certificate shall –

4.6.2 Hold at least one complete and current copy of their manual at each CNS office; and

4.6.3 Comply with all procedures and systems detailed in their manual; and

4.6.4 Make each applicable part of their manual available to personnel who require those parts to carry out their duties; and

4.6.5 Continue to meet the standards and comply with the requirements of these Regulations; and

4.6.6 Notify the Authority of any change of address, telephone or facsimile number, or email address required by the BCAA within 28 days of the change.

#### 4.7 Notifying and reporting

4.7.1 A CNS Service Provider certificate holder shall adhere to the requirements to notify and report to the Authority, Aeronautical Information Management (AIM), and air traffic control/ANSP within the specified time limits required by Regulations 4.7.2 to 4.7.5 inclusive.

4.7.2 *Notification of inaccuracies in Aeronautical Information Management (AIM) Publications:* A CNS Service Provider certificate holder shall review the issues of Aeronautical Information Publication (AIP), AIP Supplements, AIP Amendments, Notices to Airmen (NOTAMS), pre-flight Information Bulletins and Aeronautical Information Circulars issued by the AIM on initial receipt thereof, and at regular intervals thereafter in accordance with the AIRAC publication cycle. Immediately after such reviews, a CNS Service Provider certificate holder shall notify AIM of any inaccurate information contained therein that pertains to the CNS Service Provider.

4.7.3 *Notification of changes in CNS Service Provider certificate holder operations:* A CNS Service Provider certificate holder shall notify the Authority and AIM in writing at least 60 days before any change to the CNS Service Provider certificate holder operation that has been planned in advance and that is likely to effect the accuracy of the information contained in any AIM publication referred to in Regulation 4.7.2.

4.7.4 *Issues requiring immediate notification:* subject to the requirements of Regulation 4.7.5, a CNS Service Provider certificate holder shall give to the Authority and AIM, and cause to be received at air traffic management and the flight information centre, immediate notice giving details of any of the following circumstances of which the operator has knowledge:

a) hazards:

i) any projections by an object through an obstacle limitation surface relating to or caused by the CNS Service Provider certificate holder; and

ii) the existence of any obstruction or hazardous condition affecting aviation safety at or near the place of operation of the CNS Service Provider certificate holder;

b) any other condition that could affect aviation safety at and against which precautions are warranted.

4.7.5 *Immediate notification to ANSPs*: when it is not feasible for an CNS Service Provider certificate holder to cause notice of a circumstance referred to in 4.7.4 to be received at the air traffic control or a flight operations unit in accordance with that Regulation, the CNS Service Provider certificate holder shall give immediate notice directly to the unit who may be affected by that circumstance.

4.7.6 The CNS Service Provider certificate holder shall report to the Authority any accident or incident which causes death or injury to a person or persons as soon as is practicable, but not later than one hour after the event.

4.7.7 The CNS Service Provider certificate holder shall report to the Authority any accident or incident which causes loss or damage to persons or property within 24 hours of the event.

## **Chapter 5 SAFETY INSPECTIONS AND AUDITS**

5.1 The Authority may, in writing, require the holder of a CNS Service Provider certificate to undergo or carry out such inspections and audits of the holder's CNS offices, facilities, documents and records as the Authority consider necessary in the interests of civil aviation safety and security.

5.2 The Authority may require from the holder of a CNS Service Provider certificate, and the holder shall provide, such information as the Authority considers relevant to the inspection or audit.

## APPENDIX A

KINGDOM OF BAHRAIN  
Ministry of Transportation  
and Telecommunications



مَمْلَكَةُ الْبَحْرَيْنِ  
وَأَنْزَارَةُ الْمَوَاطِنَاتِ وَالْإِتْصَالَاتِ

### Application for the Certification of a CNS Service Provider

**NAME:**

**ADDRESS:**

**DATE OF APPLICATION:**

**LIST OF SUPPORTING DOCUMENTS:**

**ACCOUNTABLE PERSON:**

On behalf of the applicant named above, I hereby certify that the information contained in this application is true and complete.

-----

Name

Position

Contacts

-----

Date

## APPENDIX B

KINGDOM OF BAHRAIN  
Ministry of Transportation  
and Telecommunications



مَمْلَكَةُ الْبَحْرَيْنِ  
وَأَمْرَةُ الْمَوَاطِنَاتِ وَالْأَتَصَالَاتِ

### CNS Service Provider Certificate

**NAME:**

**REGISTRATION NUMBER:**

**NAME OF THE HOLDER:**

**DATE OF VALIDITY:**

**SPECIAL CONDITIONS:**

This certificate is issued by the Civil Aviation Affairs of the Kingdom of Bahrain (the Authority) in pursuance of its obligations to ensure enforcement of Law No. 14 of 2013 with respect to the issuance of the Civil Aviation Law, and acceptance of international standards in the provision of CNS Services. The Authority hereby certifies that above named holder has registered this CNS Service Provider, and its operation is subject to any Special Conditions attached.

This certification may be amended, suspended or withdrawn at any time by the Authority in the event of failure of the holder to comply with Regulations or the Special Conditions attached.

-----  
Signing authority:

Title:

-----  
Date