

*ANNEX*

**PART-AUR**

**SUBPART ACAS — Airborne collision avoidance system (ACAS) II**

**AUR.ACAS.1005 Scope**

This Subpart establishes the specific requirements for the carriage of ACAS II equipment.

**AUR.ACAS.2005 Performance requirement**

- (1) The following turbine-powered aeroplanes shall be equipped with collision avoidance logic version 7.1 of ACAS II:
  - (a) aeroplanes with a maximum certificated take-off mass exceeding 5 700 kg; or
  - (b) aeroplanes authorised to carry more than 19 passengers.
- (2) Aircraft not referred to in paragraph 1 which are equipped on a voluntary basis with ACAS II shall have collision avoidance logic version 7.1.
- (3) Paragraph 1 shall not apply to remotely piloted aircraft systems.

**AUR.ACAS.2010 Operational procedures and training**

Operators shall establish ACAS II operational procedures and training programmes so that the flight crew is appropriately trained in the avoidance of collisions and becomes competent in the use of ACAS II equipment.

**AUR.ACAS.3005 Continued operations**

- (1) Aeroplanes referred to in AUR.ACAS.2005 that are not equipped with collision avoidance logic version 7.1 of ACAS II may operate in the airspace as defined by Article 1(1) for the purpose of maintenance, delivery or flight testing under the following conditions:
  - (a) The aeroplane is equipped with an operational collision avoidance logic version 7.0 of ACAS II; and
  - (b) The flight crew are trained on the deficiency with collision avoidance logic version 7.0 of ACAS II.
- (2) Aeroplanes may continue to operate in the airspace referred to in Article 1(1) with collision avoidance logic version 7.1 of ACAS II equipment temporarily inoperative for a maximum of 10 consecutive days.

## SUBPART PBN — Performance-based Navigation

### AUR.PBN.1005 Scope

This Subpart establishes the specific requirements for the introduction of performance-based navigation (PBN).

### AUR.PBN.2005 Routes and procedures

- (1) ANSPs or aerodrome operators, responsible for the provision of instrument approach procedures, shall implement approach procedures with vertical guidance (APV) that conform to the requirements of the RNP approach (RNP APCH) specification including the use of the radius to fix (RF) leg as required, at all instrument runway ends which are not served by a precision approach procedure.
- (2) Notwithstanding paragraph (1), where limiting terrain and obstacles or air traffic separation conditions exist, ANSPs or aerodrome operators, responsible for the provision of instrument approach procedures, may implement procedures that conform to the requirements of the RNP authorisation required approach (RNP AR APCH) specification.
- (3) If implementing or modifying PBN standard instrument departures (SIDs) or standard instrument arrival routes (STARs) to meet the performance objectives, ANSPs or aerodrome operators, responsible for the provision of those routes, shall ensure that the routes conform to the RNAV 1 specification.
- (4) Notwithstanding paragraph (3), where higher performance objectives are required, ANSPs or aerodrome operators may implement SIDs and STARs that conform to the requirements of the RNP 1 specification, including the use of the following additional functionalities, as required:
  - (a) operations along a vertical path and between two fixes and with the use of:
    - i. an ‘AT’ altitude constraint; or
    - ii. an ‘AT OR ABOVE’ altitude constraint; or
    - iii. an ‘AT or BELOW’ altitude constraint; or
    - iv. a ‘WINDOW’ constraint; and
  - (b) the use of the RF leg.
- (5) If implementing ATS Routes, SIDs and STARs for rotorcraft operations using PBN, to meet performance objectives, ANSPs or aerodrome operators, responsible for the provision of those routes or procedures, these routes may conform to the requirements of the RNP 0.3 specification.
- (6) If implementing ATS routes using PBN for the purpose of transitioning to or from the en route network, to meet network performance objectives, the Network Manager, as required by Article 3(4)(a) of Regulation (EU) No 677/2011<sup>(1)</sup>, shall ensure the coordinated implementation of these ATS routes, which shall be consistent with the SIDs/STARs served.

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<sup>1</sup> Commission Regulation (EU) No 677/2011 of 7 July 2011 laying down detailed rules for the implementation of air traffic management (ATM) network functions and amending Regulation (EU) No 691/2010 (OJ L 185, 15.7.2011, p. 1).

### **AUR.PBN.2010 Implementation planning**

ANSPs or aerodrome operators, responsible for the provision of SIDs and STARs shall, within 2 years of the date of applicability of this Regulation, develop an implementation plan for PBN operations in accordance with AUR.PBN.2005(3), (4) or (5) and subsequently report annually to the competent authority on the adherence or changes to the plan.

### **AUR.PBN.2015 Surveillance and communications**

ANSPs shall ensure that the surveillance and communications infrastructure has the capabilities needed to support the intended PBN operations.

### **AUR.PBN.2020 Contingency**

ANSPs and aerodrome operators shall ensure that appropriate harmonised contingency procedures are established in case of reported loss of continuity of the navigational capabilities.

## **Section II — Operations**

### **AUR.PBN.3005 Mixed operations**

Subject to operational performance objectives, ANSPs and aerodrome operators may provide:

- (a) operational procedures, or
- (b) instrument approach procedures, SIDs and STARs based on existing PBN not conforming to AUR.PBN.2005(1), (3), (4) or (5) or non-PBN applications

that support a limited operation of aircraft that do not conform to the PBN procedures and routes established by AUR.PBN.2005(1), (3), (4) or (5) to continue to operate. Such limitations shall be published in the AIP.

### **AUR.PBN.3010 Deployment notification**

ANSPs and aerodrome operators shall notify airspace users and the Network Manager of their intent to implement PBN SIDs and STARs as specified in AUR.PBN.2005(3) and AUR.PBN.2005(4), not less than 2 months prior to the implementation date.

### **AUR.PBN.3015 Monitoring and evaluation**

Within 4 years of the date of applicability of this Regulation, based on the implementation planning as per AUR.PBN.2010, the European Aviation Safety Agency shall review the effectiveness of the implementation of PBN operations in accordance with this Regulation and if deemed appropriate, propose amendments to this Regulation in accordance with Article 19(1) of Regulation (EC) No 216/2008.