PERFORMANCE-BASED COMMUNICATION AND SURVEILLANCE (PBCS) IMPLEMENTATION STRATEGY FOR THE ASIA/PACIFIC (APAC) REGIONS

Considering that:

- 1. The ICAO Provisions for PBCS including new Standards and Recommended Practices (SARPS) and related guidance material are applicable from 10 November 2016;
- 2. State policies and procedures enabling aircraft operators to file Required Communication Performance (RCP) and Required Surveillance Performance (RSP) designators in flight plans are not likely to be promulgated and implemented by the applicable date;
- 3. Some Asia/Pacific Region States providing Required Navigation Performance (RNP)-based horizontal separation minima requiring the use of Controller-Pilot Data Link Communications (CPDLC) and Automatic Dependent Surveillance Contract (ADS-C) are not likely to be ready to implement separation minima based on PBCS designators in flight plans by the applicable date;
- 4. Some States outside the APAC Regions may require the filing of PBCS designators in flight plans for the provision of 50 NM and 30 NM longitudinal and 23 NM (formerly 30 NM) lateral separation minima on or soon after the applicability date of the PBCS provisions;
- 5. Area Navigation (RNAV) and Required Navigation Performance (RNP)-based 50 NM and 30NM longitudinal 30NM lateral separation minima are currently being applied in some APAC Region FIRs, normally between a relatively small proportion of eligible aircraft pairs;
- 6. RNAV and RNP-based horizontal separation minima should already be supported by data link performance monitoring in accordance with Annex 11 requirements;
- 7. RASMAG has noted that horizontal PBN separation standards (30NM and 50NM) have consistently met Target Level of Safety for many years; and
- 8. ATM automation systems should, as a minimum, currently be configured to accept without processing PBCS indicators in received flight plans¹-;
- 9. The availability of Operational Authorizations guidance material and the Global PBCS Charter developed by the Operational Data Link Working Group (OPDLWG) of the ICAO Communications Panel, adopted by several States, aircraft operators and other organizations, supported by the Regional Data Link policy outcomes of the Seventh Meeting of the FANS Interoperability Team Asia (FIT-Asia/7, Bangkok, Thailand, 11 to 13 December 2017) and to be referenced in the next version of Doc 9869 PBCS Manual;
- 10. The availability in ICAO Doc 4444 *Procedures for Air Navigation Services Air Traffic Management* (PANS-ATM) of some alternative RNP-based separation minima that do not require specification of RCP or RSP and may be used as suitable transitional arrangements for States yet to implement PBCS:

FIT-Asia/7 Appendix C to the Report

The APAC Regional PBCS Implementation Strategy is as follows:

1. States are urged to take appropriate measures to develop, establish, implement and promulgate, through advisory circular or other relevant State instruments, necessary policies and procedures to enable operators conducting flights in airspace where separations are dependent on Performance-Based Communication and Surveillance (PBCS) to start using required communication performance (RCP) / required surveillance performance (RSP) indicators in the flight plan as soon as possibleⁱⁱ.

This should take into account:

- a. time for the operator to comply with the States' policies; and
- b. the need for the State to distribute data from PBCS monitoring programs, as necessary.

Note: Applicable to ALL States having on their Register any aircraft or aircraft operator that will be separated by performance-based separations requiring PBCS in the area of responsibility of any State.

2. No Asia/Pacific State will implement PBCS-exclusionary airspace. ANSPs will manage the mixed mode environment (PBCS-authorized versus non-authorized aircraft) to ensure, as far as possible, there are no restrictions on flight operations applied to those aircraft that are awaiting State authorization or Statements of Compliance for PBCS.

23 Until 29 March 2018 the The application of existing and planned RNAV and RNP-based 50 NM and 30NM longitudinal and 30NM lateral separation minima that existed before 10 November 2016 should continue, subject to the conditions that:

- a. PBCS monitoring is in place; and
- b. The capability to apply performance-Performance-based horizontal separation using PBCS designators in flight plans is implemented as soon as practically possible;

34 Common implementation dates are applied by States using PBCS indicators to establish performance-based separation in adjacent airspace, supported by joint submission of Proposals for Amendment (PfA) to ICAO Doc 7030 – Regional Supplementary Procedures; and

45 States that apply or plan to apply 30 NM and/or 50 NM longitudinal separation minima and/or 30 NM or 23 NM lateral separation minimum minima are urged to implement the ATM system capability to process and use ICAO PBCS flight plan indicators to determine aircraft eligibility for performance-based horizontal separation by **not later than 29 March 2018**; and

- 6 States that apply or plan to apply performance-based separation minima requiring PBCS, aircraft operators and communication service providers (CSPs) are urged to sign up to the Global PBCS Charter, available on the FANS-CRA website at <u>www.fans-cra.com</u>.
- 57 States applying performance-based horizontal separation minima, whether RNAV/RNP or PBCS based, should report their implementation status to the FANS-Interoperability Team Asia (FIT-Asia) at least once annually, and upon any change of implementation statusⁱⁱⁱ.; and

8 States applying performance-based horizontal separation minima that do not expect to be prepared to implement PBCS by 29 March 2018 may consider the interim use of the separation minima specified in ICAO Doc 4444 – *Procedures for Air Navigation Services – Air Traffic Management* (PANS-ATM) paragraphs 5.4.1.2.1.6(a) 5.4.1.2.1.7 and 5.4.2.6.3 subject to an appropriate safety assessment.

Note: the 50NM longitudinal separation minimum in paragraph 5.4.2.6.3 does not require the use of ADS-C, but does require direct controller pilot communications (DCPC) and distance reports at frequent intervals.

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ⁱⁱⁱ Reporting form to be developed and distributed by the FIT-Asia Secretary.

ⁱ As described in the Asia/Pacific Guidance Material for the Implementation of Amendment 1 to the 15th Edition of the Procedures for Air Navigation Services – Air Traffic Management (PANS-ATM, Doc 4444).

ⁱⁱ Guidance for Operational Authorizations will be available from 1 January 2018 on the ICAO public website dedicated PBCS page at <u>www.icao.int/airnavigation/pbcs</u>.