1. **Introduction**

1.1 Hong Kong Civil Aviation Department issued AIP Supplement A13/13 on 29 October 2013 to notify aircraft operators on the plan to introduce ADS-B Operation on PBN routes L642 and M771 with effect from 12 December 2013 (Phase 1), and in the whole Hong Kong FIR with effect from 11 December 2014 (Phase 2).

1.2 Phase 1 had been implemented in line with the relevant Area Control Centres along the PBN routes L642 and M771, and harmonization of operation on both routes was achieved.

1.3 After reviewing the progress of system upgrade and the scope of changes in ATC operations, an adjustment to the phase 2 implementation date is considered necessary.

1.4 This AIP Supplement is to notify airspace users of the change in the ADS-B implementation plan for Hong Kong FIR.

2. **Implementation Plan**

2.1 The effective date that all aircraft flying within Hong Kong FIR at or above FL290 shall be installed with ADS-B equipage complying with the requirements in paragraph 3.1, 3.2 or 3.3 is now revised from 11 December 2014 to 8 December 2016.

2.2 For all aircraft flying within Hong Kong FIR with ADS-B equipage not complying with paragraph 3.1, 3.2 or 3.3, the ADS-B equipage shall be:

   (a) deactivated; or

   (b) set to transmit only a value of zero for the Navigation Uncertainty Category (NUC) or Navigation Integrity Category (NIC).

3. **Requirements for ADS-B Out Equipage**

3.1 ADS-B equipage comply with ‘RTCA DO-260 Minimum Operational Performance Standards’, which is equivalent to ES Version 0 as specified in ICAO Annex 10, Volume IV, Chapter 3, Paragraph 3.1.2.8.6 and Chapter 2 of ICAO Doc 9871.
3.2 ADS-B equipage comply with ‘RTCA DO-260A Minimum Operational Performance Standards’, which is equivalent to ES Version 1 as specified in ICAO Annex 10, Volume IV, Chapter 3, Paragraph 3.1.2.8.6 and Chapter 3 of ICAO Doc 9871.

3.3 ADS-B equipage comply with ‘RTCA DO-260B Minimum Operational Performance Standards’, which is equivalent to ES Version 2 as specified in Chapter 4 of ICAO Doc 9871.

NOTE: To harmonise the ADS-B equipage, APANPIRG suggested to standardize the equipment requirements. The following are the acceptable means of compliance to paragraphs 3.1, 3.2 or 3.3.

(a) The ADS-B equipage that have been certificated as meeting EASA Acceptable Means of Compliance AMC 20-24 “Certification Considerations for Enhanced ATS in Non-Radar Areas using ADS-B Surveillance (ADS-B-NRA) via 1090 MHz Extended Squitter”, or

(b) The ADS-B equipage that meet the equipment configuration standards of Australian Civil Aviation Order 20.18 Appendix XI, or

(c) The ADS-B equipage that have been certified as meeting FAA Advisory Circular (FAA AC) 20-165 or later changes.

4. Aircraft Operator’s Approval

4.1 The aircraft operator must have the relevant ADS-B operational approval from the State of Registry.

5. Operational Limitations

5.1 Aircraft not complying with paragraph 3 or 4.1 will not be accorded priority to operate in the designated airspace and in the assignment of flight levels therein.

6. Flight Planning Requirements

6.1 Aircraft operator complying with the requirement stipulated in paragraph 3 and 4.1 are to indicate the appropriate ADS-B designator in section 10 of the flight plan.

- B1 ADS-B with dedicated 1090 MHz ADS-B “out” capability
- B2 ADS-B with dedicated 1090 MHz ADS-B “out” and “in” capability

6.2 The aircraft identification (ACID) must be accurately recorded in item 7 of the ICAO Flight Plan form. The Aircraft Identification, not exceeding 7 characters, is to be entered both in item 7 of the flight plan and replicated exactly when set in the aircraft (for transmission as Flight ID) as follows:

a) The ICAO three-letter designator for the aircraft operating agency followed by the flight identification (e.g. KLM511, BAW213, JTR25), or,
b) The registration marking of the aircraft (e.g. EIAKO, 4XBCD, OOTEK), when the aircraft is not equipped with radio.

*Note 1: No zeros, hyphens, dashes or spaces are to be added when the Aircraft Identification consists of less than 7 characters.*

*Note 2: Appendix 2 to PANS-ATM refers. ICAO designators and telephony designators for aircraft operating agencies are contained in ICAO Doc 8585.*

7. **Contingencies**

7.1 When an aircraft is ADS-B equipped but the equipment has become unserviceable during flight, the pilot in command or aircraft operator must inform ATC as soon as possible.

8. **Cancellation**

8.1 AIP Supplement A13/13 is hereby superseded.

8.2 This AIP Supplement will be cancelled when the contents are incorporated into the AIP.

End