AUTOMATIC DEPENDENT SURVEILLANCE BROADCAST (ADS-B) OUT OPERATIONS

1. Introduction

1.1 Automatic Dependent Surveillance Broadcast (ADS-B) Out is a surveillance system that uses Global Navigation Satellite System (GNSS), aircraft avionics, and ground infrastructures to accurately and quickly transmit flight information between aircraft and Air Traffic Services.

1.2 The ICAO Asia-Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG) has decided to use the 1090MHz (Mode S) Extended Squitter (ES) datalink for automated aircraft reports in the Asia-Pacific Region.

1.3 ADS-B based surveillance services will be provided within Hong Kong Flight Information Region (FIR).

2. Airspace Implementation Plan

2.1 With effect from 12 December 2013, all aircraft flying over PBN routes L642 or M771 at or above FL290 within Hong Kong FIR, shall be installed with ADS-B equipages complying with the requirements in paragraph 3.1.

2.2 With effect from 31 December 2014, all aircraft flying within Hong Kong FIR at or above FL290, shall be installed with ADS-B equipages complying with the requirements in paragraph 3.1.

3. Aircraft Equipage for ADS-B Out

3.1 The aircraft must carry serviceable ADS-B transmitting equipment that has 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 meets the equipment configuration standards in Appendix XI of Civil Aviation Order 20.18 of the Civil Aviation Safety Authority of Australia.
3.2 On or after 12 December 2013, if an aircraft carries ADS-B transmitting equipage which does not comply with the requirements of paragraph 3.1, the aircraft shall not fly in Hong Kong FIR unless such equipage is:

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

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 having the relevant operational approval or the aircraft does not carry an ADS-B transmitting equipment that meets requirement specified in paragraph 3.1 or the aircraft does not carry a serviceable ADS-B transmitting equipment will be assigned a flight level below FL290.