**Application & Self-Evaluation for ADS-B out/in Operational Approval**Please complete the form in BLOCK CAPITALS using black or dark blue ink.

This form is designed to obtain all the required information from those operators requiring the ADS-B Out/In Operational Approval. Complete Section I, II and III and submit to the THE CIVIL AVIATION AUTHORITY OF THAILAND, 333/105 Lak Si Plaza, Khamphaeng Phet 6 Road, Talat Bang Khen, Lak Si, Bangkok 10210, THAILAND.

The assessment to the application of the Operational Approval is based on Guidance Material (GM) Acceptable Airworthiness Compliance Standard(s). Applicants are strongly advised to read the GM and ‘Notes for Completion’ at the end of this form.

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| **Section I Operator Details** | |
| Please note that a minimum of 30 days will normally be required to check and confirm the given information. If data is missing or omitted the process may take considerably longer. | |
| **Operator Name:** |  |
| **Applicant Name:** |  |
| **Tel:** |  |
| **Date:** |  |

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| **Section II Aircraft Details (Use continuation sheet if necessary)** | | | | | | | | | | | | | |
| Aircraft Registration | Aircraft Model | GNSS Receiver Model | GNSS Receiver P/N | GNSS Receiver SA Aware  Yes/No | GNSS Receiver FDE  Yes/No | ADS-B Transponder Model | ADS-B Transponder  P/N | ADS-B  In Function (s)  (Specified) | **Airworthiness Compliance Standard** | | | | |
| EASA  AMC  20-24 | EASA  CS  ACNS | FAA  AC20-165(\_) | CASA  CAO 20.18 | Other  (Referred) |
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| **Section III Operational Approval** |
| 1. Airworthiness Compliance Standard(s) Compliance to GM paragraph 2.5.3. The EASA AMC 20-24, EASA CS-ACNS, current version of FAA AC No. 20-165(\_), 14 CFR 91.227 or equipment configuration standards compliance to Appendix XI of CASA CAO 20.18 are acceptable. Submit copies of relevant sections from Aircraft Flight Manual, Pilot’s Operating Handbook or other supporting certification data. |
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| 1. Operations Manuals and Training Give reference of flight operations training programme and operational procedures. Refer to GM paragraph 2.5.4 (g) and 2.5.4 (h). Submit copies of relevant sections from Operations and Training Manuals. |
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| 1. Minimum Equipment List Give reference of relevant MEL. Refer to GM paragraph 2.5.4 (f). Submit copies of the relevant sections from the proposed or actual MEL where the operation is addressed. |
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| 1. Continuing Airworthiness Give details of maintenance programme to ensure the systems meet requirements. Refer to GM paragraph 2.5.4 (d) and 2.5.4 (e). Submit copies of the relevant sections from the proposed or actual Maintenance Schedules on the ADS-B systems. |
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| Note for Completion |
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| **Inspector comment:  Approve  Not Approve**  **Inspector Signature**   |  | | --- | |  |   **Inspector Name:**   |  | | --- | |  |   **Date:**   |  | | --- | |  | |

**Section I & II - Operator and Aircraft Details**

**Section II** is for the details of installed equipment.

As Selective Availability (SA) aware and/or Fault Detection and Exclusion (FDE) functionalities will improve accuracy and integrity to the position source of ADS-B, the forward fitment of these functionalities to new aircraft is highly recommended.

**Section III – Operational Approval**

**Paragraph 1** - The airworthiness compliance standard is generally declared in the Aircraft Flight Manual, AFM supplement, POH or other appropriate airworthiness documentation. If the aircraft does not have the equipment certification installed per EASA AMC20-24, EASA CS-ACNS, FAA AC 20-165(\_), 14 CFR 91.227 or Appendix XI of CASA CAO 20.18, alternatively compliance with specified requirements needs to be demonstrated.

ADS-B equipages compliance requirements can be referred to GM for ADS-B.

**Paragraph 2** -Appropriate flight operations training programme and operational procedures are established to ensure that pilots and flight dispatchers or flight operations officers (FOOs) are knowledgeable about ADS-B operations and their onboard operational equipment.

The Operations Manual, preferably Section B and D respectively, should include a system description, operational and contingency procedures and training elements for use of the ADS-B application.

Aircraft operators should ensure that flight crew and flight dispatcher or flight operations officer are thoroughly familiar with all relevant aspects of ADS-B applications. Flight crew and flight dispatcher/FOO training should address the;

1. General understanding of ADS-B operating procedures;
2. Specific ADS-B associated phraseology applicable to specific regions/areas of operation;
3. General understanding of the ADS-B technique and technology;
4. ADS-B system operation, including normal/abnormal procedures;
5. Characteristics and limitations of the flight deck interface, including an overview of ADS-B environment and system descriptions;
6. Correct entry of the ICAO defined format for entry of the Aircraft Identification (ID) or Registration marking as applicable to the flight;
7. Operational procedures regarding the transmission of the generic emergency flag when the flight crew actually selected a discrete emergency code (if implemented, e.g., 7500, 7600 or 7700) and SPI;
8. Indication of ADS-B transmit and/or receive capability within the ICAO Flight Plan;
9. Handling of navigation data source errors (e.g., GPS anomaly);
10. ADS-B functions and system related MEL application procedures;
11. Incident reporting procedures; and
12. Crew Resources Management (CRM) and associated Human Factors issues.

**Paragraph 3** - The Minimum Equipment List needs to reflect the functional requirements of the ADS-B system, such as GPS/MMR and ATC transponder.

**Paragraph 4** - The continuing airworthiness of ADS-B system must be assured. Existing maintenance programme or a proposed maintenance programme needs to be reviewed to ensure that it meets relevant requirements.

Maintenance tests should include a periodic verification check of aircraft derived data including the ICAO 24-bit aircraft address using suitable ramp test equipment and periodicity for the check of the ADS-B transmitter should be established.