European Aviation Safety Agency

European Technical Standard Order (ETSO)

Subject: SECONDARY SURVEILLANCE RADAR MODE S TRANSPONDER

1 — Applicability
This ETSO gives the requirements which Secondary Surveillance Radar Mode S Transponder Equipment that are manufactured on or after the date of this ETSO must meet in order to be identified with the applicable ETSO marking.

2 — Procedures
2.1 — General
Applicable procedures are detailed in CS-ETSO, Subpart A.
2.2 — Specific
None.

3 — Technical conditions
3.1 — Basic
3.1.1 — Minimum performance standard

3.1.2 — Environmental standard
See CS-ETSO, Subpart A, paragraph 2.1.

3.1.3 — Software
See CS-ETSO, Subpart A, paragraph 2.2.

3.1.4 — Airborne Electronic hardware
See CS-ETSO, Subpart A, paragraph 2.3.
3.2 — Specific

3.2.1 Failure condition classification

Failure of the function defined in paragraph 3.1.1 of this ETSO has been determined to be a major failure condition. The applicant must develop the system to at least the design assurance level commensurate with this failure condition.

4 — Marking

4.1 — General

Marking as detailed in CS-ETSO, Subpart A, paragraph 1.2.

4.2 — Specific

The marking must also include the transponder’s functional level and optional additional features as provided in ED-73E section 1.4.2.2, as well as minimum peak output power identified by the transponder class as defined in ED-73E section 1.4.2.4.

5 — Availability of referenced document

See CS-ETSO, Subpart A, paragraph 3.