

European Aviation Safety Agency

European Technical Standard Order

Subject: TRAFFIC ALERT AND COLLISION AVOIDANCE SYSTEM (TCAS) AIRBORNE EQUIPMENT,
TCAS I.

1 - Applicability

This ETSO provides the requirements which active traffic alert and collision avoidance system airborne equipment that are designed and 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 - General

3.1.1 - Minimum Performance Standard

Standards set forth in Radio Technical Commission for Aeronautics (RTCA) Document DO-197A, Minimum Operational Performance Standards for An Active Traffic Alert and Collision Avoidance System I (Active TCAS 1) Section 2.1 and 2.2, dated September 12, 1994, as modified by Change 1 dated July 29, 1997.

Equipment test procedures set forth in Radio Technical Commission for Aeronautics (RTCA) Document DO-197A, Minimum Operational Performance Standards for An Active Traffic Alert and Collision Avoidance System I (Active TCAS 1) Section 2.4, dated September 12, 1994, as modified by Change 1 dated July 29, 1997.

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 - Electronic Hardware

See CS-ETSO, Subpart A, paragraph 2.3.

3.2 - Specific

3.2.1 Failure Condition Classification

See CS-ETSO, Subpart A, paragraph 2.4.

Failure of the function defined in paragraph 3.1.1 is a major failure condition for malfunctions causing the display or annunciation of hazardously misleading information in airborne aircraft.

Loss of the function defined in paragraph 3.1.1 is a minor failure condition.

4 - Marking

4.1 - General

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

4.2 - Specific

None.

5 - Availability of Referenced Document

See CS-ETSO, Subpart A, paragraph 3.