

European Aviation Safety Agency

European Technical Standard Order

Subject: Permanently Installed Rechargeable Lithium Cells, Batteries, and Battery Systems

1 - Applicability

This ETSO gives the requirements which permanently installed rechargeable lithium cells, batteries, and battery systems 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

For permanently installed rechargeable lithium cells, batteries and lithium battery systems intended to provide power for aircraft equipment Standards set forth in Sections 2 and 3 of Radio Technical Commission for Aeronautics (RTCA) Document DO-311, Minimum Operational Performance Standards for Rechargeable Lithium Battery Systems, dated March 13, 2008. Refer to Table 4-1 of DO-311 for test schedule information.

3.1.2 - Environmental Standard

Test the equipment according to Section 3 of RTCA/DO-311 , *Minimum Operational Performance Standards for Rechargeable Lithium Battery Systems* document dated March 13, 2008.

3.1.3 - Computer Software

See CS-ETSO Subpart A paragraph 2.2.

3.1.4 - Electronic Hardware Qualification

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 of this ETSO has been determined to be a major failure condition.

4 - Marking

4.1 - General

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

4.2 - Specific

Specific marking requirements are detailed in Section 1.9.7 of RTCA/DO-311, *Minimum Operational Performance Standards for Rechargeable Lithium Battery Systems* document, dated March 13, 2008.

5 - Availability of Referenced Document

See CS-ETSO Subpart A paragraph 3.