

European Aviation Safety Agency

European Technical Standard Order (ETSO)

SUBJECT: DATA LINK RECORDER SYSTEMS

1 – Applicability

This ETSO gives the requirements that new models of data link recorder 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

Standards set forth in the applicable sections of EUROCAE document ED-112 “Minimum Operational Performance Specification for Crash Protected Airborne Recorder Systems” dated March 2003 that pertain to the data link recorder types, except that compliance with ED-112 chapters 2-5, 3-4, 5-6, and all ED-112 requirements for installation, flight testing, aircraft maintenance are not required for this ETSO.

The table below lists recorder types and the ED-112 chapter and part containing the Minimum Performance Specification for each:

Recorder MPS Requirements, Excluding Aircraft Level Requirements	
Recorder Type	ED-112 Reference
Single DLR	Section 2 and Part IV
DLR function in a deployable recorder	Section 2, Section 3 and Part IV
DLR function in a combined recorder	Section 2, Section 4 and Part IV

3.1.2 - Environmental Standard

See CS-ETSO Subpart A paragraph 2.1

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

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

Note: The failure classification is driven by the accident investigation need.

4 - Marking

4.1 - General

Marking is detailed in CS-ETSO Subpart A paragraph 1.2

4.2 – Specific

4.2.1 Lettering

ED112-Chapter 2-1 paragraph 2-1.16.3 requires the lettering on the recorder be at least 25 mm in height. Where it is considered impractical to incorporate lettering of this height due to the size of the recorder case, the applicant may propose an alternative height provided that the size is adequate in relation to the size of the unit and allows easy readability.

4.2.2 Marking recommendation

Marking in French: "ENREGISTREUR DE VOL NE PAS OUVRIR" is optional.

5 - Availability of Referenced Document

See CS-ETSO Subpart A paragraph 3