

European Aviation Safety Agency

**Comment Response Document (CRD)
on Consultation paper nr. 12 of 4 August 2003**

**CS-ETSO
Certification Specifications for European Technical Standard Orders**

Foreword to the Comment Response document (CRD)

To give a rapid overview of the CRD, the following keywords were used in responding to comments:

- “Carried”: The proposed amendment is wholly transferred to the revised text.
- “Noted”: The comment is acknowledged and where needed the text has been improved.
- “Deferred”: The comment requires further assessment by the Agency under its future rulemaking programme.
- “Disagreed”: The comment is not shared by the Agency.

CRD - CS - ETSO

General Comments

Para.

35 / DGAC France

Comment

It would seem more appropriate to call these certifications specifications CS-ETSO rather than CS-TSO

Response

Carried.

51 / DGAC France

Comment

These CS based on amendment 3 of JAR 27 and JAR 29, dated 1 April 2002, do not take into account of the last JAA agreed evolutions or the NPA of these JARs. As these agreed evolutions and the content of these NPAs have been also accepted they will be included in the equivalent FAR progressively and that will create regulatory differences between USA and Europe rapidly.

DGAC position is to put in these CS the last JAA agreed evolutions and the NPA in order to avoid regulatory differences as as possible.

Response

Deferred. This comment is misplaced.

58 / CAA UK

Comment

The FAA allows the approval and issue of a TSO authorisation of a component of a complete system, subject to certain conditions specified in the FAA Order 8150.1B. The ETSO requirements do not specifically allow a similar deviation, which lead to problems when validating FAA TSO approvals, and will represent a handicap to European industry. For the purpose of harmonisation and fairness it is proposed that the Applicability section of Subpart A should be written to allow TSO authorisation of incomplete systems, subject to the conditions laid down in Section 17 of FAA Order 8150.1B.

Response

Deferred. The Agency may further review this matter.

58 / CAA UK

Comment

Technical Conditions - Computer software.

- The ETSO states that the applicant must submit a software verification and validation plan for review and approval. This is inconsistent with DO-178B Section 9.0, which requires that the minimum software life cycle data that is submitted to the certification authority is the following :-

Plan for Software Aspects of Certification (PSAC)
Software Configuration Index
Software Accomplishment Summary.

- It should also be noted that the PSAC should be submitted and agreed with the certification authority (Agency) in advance of the ETSO application.

Response

- Noted. New text now addresses the inconsistency.

- Noted. The PSAC submission 'requirement' should be considered only as a recommendation when used in association with 21 requirements.

58 / CAA UK

Comment

The JAR - TSO is now at Amendment 6 as of the 1st June 2003. The CS - TSO document is based on JAR - TSO at Amendment 5. As an urgent task the Agency should consider amending the CS - TSO to the latest JAR - TSO amendment.

Response

Disagreed by virtue of inclusion of JAA NPA TSO-6 which is of equivalent standard.

SUB A- 2

Para.

35 / DGAC France

Comment

Propose to delete paragraph.

This paragraph is much too vague. It is not clear what is meant by "environmental and software standards applicable at the date of application". For example if we look at ETSO-C2d concerning airspeed instruments, reference is made to EUROCAE/RTCA document ED-14D/DO-160D change 3, for environmental standards and EUROCAE/RTCA document ED-12B/DO-178B, for software standards. From a legal point of view, these are the "applicable standards" for an airspeed instrument, even if ED-14D/DO-160D or ED-12B/DO-178B have been amended by Eurocae and RTCA.

According article 14 of Regulation 1592/2002, only the Agency is competent to develop certification specifications and adopt Eurocae/RTCA standards without any control would mean that the Agency has transferred its regulatory power to Eurocae and RTCA which it can not do.

It is acknowledged that there may be a need to take into consideration amendments of Eurocae/RTCA documents before they are formally introduced in the certification specifications, but we consider that the existing text is not appropriate. A more acceptable solution would be either introducing a kind of special conditions requirements in the certification regulation similar to 21A.16B for type certification or rather having a general procedure enabling the Agency to directly amend the certification specifications when introducing amendments to already referenced standards.

Response

Noted.

This might lead to further review by the Agency. In general, ETSO authorisations are detailed airworthiness specifications under Part 21 by the Agency only. In so doing, the Agency may rely on officially recognised standards such as those issued by EUROCAE/RTCA.

After considering several ways forward, the group concluded:

Subpart A will be adapted.

Unless otherwise specified in the particular ETSOs, standard clauses referring to the application of EUROCAE/RTCA documents ED-12B/DO-178B for software standards and ED-14D/DO-160D change 3 for environmental standards will be used.

The appropriate ETSOs will be adapted accordingly to reflect either the standard clause or an alternative statement or none.

Para. Para 2

58 / CAA UK

Comment

"unless an standard" should read "unless a standard"

Response

Carried.

SUB A- 3.2

Para.

35 / DGAC France

Comment

It is mentioned in this article that when reference is made to FAA or FAR, the equivalent EASA or IR/CS references should be substituted. It would be much more appropriate to make this substitution in the text itself. If this is as simple as that, this should not be too difficult with the existing Search and Replace tools of a word processing.

Response

Noted. Delete 3.2 and add after 3.1 the following:

"Where in the associated "FAA" standard, reference is made to "FAA" or "FAR", it should be substituted by the equivalent reference, "Agency" or "Part/CS".

other

Para. 2C112a

64 / CAA < Sweden

Comment

ETSO-2C112a should be renamed ETSO-2C112b.

REASON:

In order for CS ETSO to be in accordance with the proposed changes in NPA TSO-10.

Response

Deferred. The Agency may further review this matter which has been included in the JAA inventory.

CRD - CS - ETSO Index 1

ETSO-C26c

Para.

1 / Dunlop Aerospace Ltd

Comment

Index 1 Lists ETSO-C26c Subject: Aircraft Wheels and Wheel-Brake Assemblies (CS-23, -27 and 29 aircraft). This list d include ETSO-C135 Subject: Transport Aeroplane Wheels and Wheel and Brake Assemblies (CS-25 aircraft).

JTSO-C135 Subject: Transport Aeroplane Wheels and Wheels and Brake Assemblies (JAR-25 aircraft) was issued 01/06/ The FAA TSO-C135 Transport Airplane Wheels and Wheel and Brake Assemblies (FAR-25 aircraft) was issued 5/2/02.

As both the JTSO-C135 and the FAA TSO-C135 are issued we propose that ETSO-C135 should be included into Index 1 Subpart B.

Response

Carried as a result of JAR-25 requirements now included in CS-25.

CRD - CS - ETSO Index 1

ETSO-C26c

Para.

1 / Dunlop Aerospace Ltd

Comment

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Response

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