



European Aviation Safety Agency

EXPLANATORY NOTE

EXECUTIVE SUMMARY

The scope of this Decision is to transpose some FAA TSO standards for parts and appliances into EASA ETSO as outlined in the Terms of Reference (ToR) ETSO.008, Issue 2, of 24 May 2011. In the Rulemaking Programme 2012-2015 the task has been renumbered as RMT.0186.

Notice of Proposed Amendment (NPA) 2011-12, dated 15 July 2011, envisaged amending Decision 2003/10/RM of the Executive Director of 24 October 2003 on certification specifications, including airworthiness codes and acceptable means of compliance, for European Technical Standard Orders (currently published as CS-ETSO).

In principle stakeholders agreed to transpose all the FAA TSOs included in the NPA. 95 detailed comments were received from 17 commentators. The CRD replies individually to each comment. 9 reactions were received on the CRD none implying substantial changes to the activity.

This Decision therefore:

- amends CS-ETSO Subpart A (Environmental standards);
- and deletes/replaces/introduces the ETSO summarised in the table below:

Index	No of deleted ETSOs	No of replaced ETSOs	No of newly introduced ETSOs
1 (ETSO identical to the corresponding FAA TSO)	3	5	14
2 (ETSO with some differences to the corresponding FAA TSO)	1	1	1

Therefore, in total 25 ETSOs are affected.

In addition, the Agency intends:

- to make the ETSOs accessible individually on the EASA website in order to facilitate consultation; and
- to publish a second NPA under the same RMT.0186 (former ETSO.008) for a second batch of transposed TSOs, as listed in Issue 3 of the ToR.

CS-ETSO Amendment 7

1. GENERAL

Executive Director Decision 2012/009/R amends Decision No 2003/10/RM of 24 November 2003 (CS-ETSO Initial Issue) as last amended by Executive Director Decision No 2010/010/R of 21 December 2010 (CS-ETSO Amendment 6). It represents Amendment 7 of CS-ETSO and incorporates the first output from the following EASA rulemaking task:

Rulemaking Task No.	TITLE	NPA No.
RMT.0186 (ETSO.008)	Systematic review and transposition of existing FAA TSO standards for parts and appliances into EASA ETSO.	2011-12

The above Notice of Proposed Amendment (NPA) has been subject to consultation in accordance with Article 52 of the Basic Regulation¹ and Article 15 of the Rulemaking Procedure established by the Management Board². For detailed information on the proposed changes and their justification please consult the above NPA which is available on the Agency's website.

The Agency has addressed and responded to the comments received on the NPA. The responses are contained in the comment-response document (CRD 2011-12³) which was published on 3 May 2012.

2. CRD REACTIONS

- 2.1 In response to CRD 2011-12, the Agency received 9 reactions. Three of them expressed support. Two raised issues of general nature not specifically linked to the text of the affected ETSOs. Two proposed to include reference, in addition to SAE AS documents also to ISO documents.
- 2.2 The proposal to add (in ETSO-C90d and in ETSO-C172) reference to ISO standards (in addition to equivalent SAE AS standards), raised by some comments to the NPA, were not accepted by the Agency and justification for this was published in the CRD. The Agency confirms that referring to ISO standards in mentioned two ETSOs is not necessary because:
 - a) referred SAE AS documents are equivalent;

¹ Regulation (EC) No 216/2008 of the European Parliament and of the Council of 20 February 2008 on common rules in the field of civil aviation and establishing a European Aviation Safety Agency, and repealing Council Directive 91/670/EEC, Regulation (EC) No 1592/2002 and Directive 2004/36/EC. OJ L 79, 19.03.2008, p. 1

² Management Board decision concerning the procedure to be applied by the Agency for the issuing of opinions, certification specifications and guidance material ('Rulemaking Procedure'), EASA MB 08-2007-03, 13.6.2007.

³ See under: <http://easa.europa.eu/rulemaking/r-archives.php#crd>

- b) applicant may in any case request deviations if they would wish to refer to ISO documents;
- c) ETSO-C90d ETSO-C172 are in 'index 1' since fully harmonised with the equivalent FAA-TSOs (TSO-C90c, TSO-C172), which equally does not refer the ISO standards;
- d) inclusion of different technical standards in the ETSOs would cause the inclusion in 'index 2' (i.e. ETSOs different from equivalent FAA TSOs) and so create additional burden for holders of European ETSO Authorisations, when applying for a Letter of Design Approval (LODA) with the FAA.

2.3 The two latter reactions proposed small editorial changes (just change one digit from '0' to '1'), which might have safety implications and for which alignment with ICAO is highly desirable. They were accepted and reproduced below together with the Agency's response.

Comment No.	Commenter	Reaction to CRD	EASA Response
14	EUROCONTROL	<p>The response misinterprets the comment. The referred State letter relates to an Annex 10 change - for definition of equipment performance - not an Annex 14 change. An update to DO-246B has been issued (DO-246D) with the range of legal values for the runway number being 1-36 (see table 2-19 and corresponding definition p.53). This edition is referred to in ETSO-C161a, so the Agency should consider the modification of Appendix 2 at this point in time.</p> <p>It is reminded that the past coding of runway number 0 leads to non-flyable deviation sensitivity as presented to ICAO NSP and IFPP and is thus a greater risk to aviation safety than marking of the approach as unavailable or incorrectly coded by the avionics system.</p> <p>It is also reminded that the publication of FAA TSO161a precedes this ICAO change decision and the change therefore could not be taken into account in the FAA TSO. However, the change is contained in FAA Order 8260.19D Change 1 Appendix</p>	<p>Accepted.</p> <p>Paragraph 5 of appendix 2 to ETSO-C161a (valid range for runway number changed to '1-36'.</p>

		12.	
14	EUROCONTROL	In the meantime ICAO state letter 2012/7 (full reference: AN7/1.1.47-12/7, published 10/04/2012) lists the adopted changes for Amendment 87 of Annex 10 (including the runway number limitation in Table B-66). This change will become applicable on 15 November 2012.	Accepted. Indeed Article 2.2(d) of Basic Regulation 216/2008 mandates Agency to take into account ICAO provisions.

2.4 No other substantive reactions affecting the content of amendment 7 to CS-ETSO were received.

3. CHANGES

Detailed changes incorporated in CS-ETSO are summarised in the following pages for ease of reference.

TITLE: CS-ETSO Amendment 7

Rulemaking Task No.: RMT.0186 (ETSO.008)

Title: Systematic review and transposition of existing FAA TSO standards for parts and appliances into EASA ETSO

NPA No.: NPA 2011-12

CRD No.: CRD 2011-12

LIST OF PARAGRAPHS AFFECTED

In Subpart A – GENERAL, paragraph 2.1 on environmental standards has been updated to make reference also to ED-14G/RTCA-160G dated December 2010.

The following ETSO are deleted from Subpart B Index 1:

Subpart B

Index 1

ETSO-C31d HF Transmitting Equipment

ETSO-C32d HF Receiving Equipment

ETSO-C129a Airborne Supplemental Navigation Equipment Using Global Positioning System (GPS)

The following revised ETSO are replacing ETSO-C55, ETSO-C62d, ETSO-C90c, ETSO-C95, ETSO-C126, ETSO-C161 and ETSO-C166a in Subpart B Index 1 table of content:

Subpart B

Index 1

ETSO-C55a	Fuel and Oil Quantity Instruments
ETSO-C62de	Aircraft Tyres
ETSO-C90ed	Cargo Pallets, Nets and Containers
ETSO-C95a	Mach Meters
ETSO-C126a	406MHz Emergency Locator Transmitter
ETSO-C161a	Ground Based Augmentation System Positioning and Navigation Equipment
ETSO-C166ab	Extended Squitter Automatic Dependent Surveillance - Broadcast (TIS-B) Equipment Operating on the Radio Frequency of 1090 Megahertz (MHz)

The following new ETSO are inserted in Subpart B Index 1 table of content:

Subpart B

Index 1

ETSO-C154c	Universal Access Transceiver (UAT) Automatic Dependent Surveillance - Broadcast (ADS-B) Equipment Operating on the Frequency of 978 MHz
ETSO-C157a	Aircraft Flight Information Services-Broadcast (FIS-B) Data Link Systems and Equipment
ETSO-C158	Aeronautical Mobile High Frequency Data Link (HFDL) Equipment
ETSO-C159a	Avionics Supporting Next Generation Satellite Systems (NGSS) = Airborne Iridium Satellite Transceiver for Voice or Data
ETSO-C162a	Ground Based Augmentation System Very High Frequency Data Broadcast Equipment
ETSO-C170	High Frequency (HF) Radio Communications Transceiver Equipment Operating Within the Radio Frequency 1.5 to 30 Megahertz
ETSO-C172	Cargo Restraint Strap Assemblies
ETSO-C179a	Rechargeable Lithium Cells and Lithium Batteries
ETSO-C184	Galley Equipment
ETSO-C194	Helicopter Terrain Awareness and Warning System (HTAWS)
ETSO-C195a	Avionics Supporting Automatic Dependent Surveillance - Broadcast (ADS-B) Aircraft Surveillance
ETSO-C196a	Airborne Supplemental Navigation Sensors for Global Positioning System Equipment Using Aircraft-Based Augmentation

The following ETSO are deleted from Subpart B Index 2:

Subpart B

Index 2

ETSO-2C126 406MHz Emergency Locator Transmitter (ELT)

The following revised ETSO is replacing ETSO-2C70a in Subpart B Index 2 table of content:

ETSO-2C70b Liferafts (reversible and nonreversible)

The following new ETSO are inserted in Subpart B Index 2 table of content:

Subpart B

Index 2

ETSO-2C197 Information Collection and Monitoring Systems