



TERMS OF REFERENCE

Task Nr: ETSO.007
Issue: 3
Date: 17 October 2009
Regulatory reference: CS-European Technical Standard Order (ETSO)¹
Reference documents: FAA Technical Standard Order (TSO)²

1. Subject:	Systematic review and transposition of existing FAA TSO for parts and appliances into EASA ETSO																									
2. Problem / Statement of issue and justification; reason for regulatory evolution (regulatory tasks):	<p>Approval of parts and appliances that meet the requirements of a TSO, but for which there is no equivalent ETSO can only be approved when they are part of an (Supplemental) Type Certificate ((S)TC). This results in a disadvantage for European parts and appliance producers and installers of these parts and appliances.</p> <p>When these TSO standards have been developed in participation with stakeholders, and are generally accepted, the technical content of these standards can be considered mature. It is for these TSO that the Agency will propose adoption using this rulemaking task.</p> <p>The specific TSO recognised for transposition are specified below.</p>																									
3. Objective:	Incorporate new and updated FAA TSO standards into the EASA ETSO structure.																									
4. Specific tasks and interface issues (Deliverables):	<table><tr><td>Updated</td><td>TSO-C6e</td><td>Direction Instrument, Magnetic (Gyroscopically Stabilized)</td></tr><tr><td>Updated</td><td>TSO-C8e</td><td>Vertical Velocity Instrument (Rate-of-Climb)</td></tr><tr><td>Updated</td><td>TSO-C39c</td><td>Aircraft Seats and Berths</td></tr><tr><td>Updated</td><td>TSO-C112C</td><td>Air Traffic Control Radar Beacon System/Mode Select (ATCRBS/MODE S) Airborne Equipment</td></tr><tr><td>Updated</td><td>TSO-C123b</td><td>Cockpit Voice Recorders Systems</td></tr><tr><td>Updated</td><td>TSO-C124b</td><td>Flight Data Recorder Systems</td></tr><tr><td>New</td><td>TSO-C139</td><td>Aircraft Audio Systems and Equipment</td></tr><tr><td>Updated</td><td>TSO-C144a</td><td>Passive Airborne Global Navigation Satellite System (GNSS) Antenna</td></tr></table>		Updated	TSO-C6e	Direction Instrument, Magnetic (Gyroscopically Stabilized)	Updated	TSO-C8e	Vertical Velocity Instrument (Rate-of-Climb)	Updated	TSO-C39c	Aircraft Seats and Berths	Updated	TSO-C112C	Air Traffic Control Radar Beacon System/Mode Select (ATCRBS/MODE S) Airborne Equipment	Updated	TSO-C123b	Cockpit Voice Recorders Systems	Updated	TSO-C124b	Flight Data Recorder Systems	New	TSO-C139	Aircraft Audio Systems and Equipment	Updated	TSO-C144a	Passive Airborne Global Navigation Satellite System (GNSS) Antenna
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¹ Agency Decision 2003/10/RM of 24 October 2003 on certification specifications, including airworthiness codes and acceptable means of compliance, for European Technical Standard Orders («CS-ETSO»). Decision as last amended by decision 2007/017/R.

² FAA TSO's are available at <http://www.airweb.faa.gov>

Updated	TSO-C145b	Airborne Navigation Sensors Using The Global Positioning System Augmented By The Satellite Based Augmentation System
Updated	TSO-C146b	Stand-Alone Airborne Navigation Equipment Using The Global Positioning System Augmented By The Satellite Based Augmentation System
New	TSO-C155	Recorder Independent Power Supply)
New	TSO-C165	Electronic Map Display Equipment for Graphical Depiction of Aircraft Position
New	TSO-C169a	VHF Radio Communications Transceiver Equipment Operating Within The Radio Frequency Range 117.975 To 137.000 Megahertz
New	TSO-C176	Crash Protected Airborne Recorder Systems - Image Recorder
New	TSO-C177	Crash Protected Airborne Recorder Systems - CNS/ATM Recorder
New	TSO-190	Active Airborne Global Navigation Satellite System (GNSS) Antenna
Update	ETSO-C48	Carbon Monoxide Detector Instruments
Update	ETSO-C135	Transport Aeroplane Wheels and Wheel and Brake Assemblies
SUBPART A		
Paragraph 2 is to be revised to reflect the latest environmental, software standards and complex hardware requirements.		
5. Working Methods (in addition to the applicable Agency procedures): Agency		
6. Time scale, milestones: NPA to be issued 2009/Q4. Decision to be issued in 2010/Q3.		