

# **EASA**

## **TERMS OF REFERENCE**

**ToR Nr:** 22.004

**Issue:** 1

**Date:** 03/01/2007

**Regulatory reference:** CS-22, paragraphs CS 22.561, CS 22.785, CS 22.786, AMC 22.785

**Reference documents:**

- \* Organisation Scientifique et Technique du Vol à Voile (OSTIV) Airworthiness Section 3.75, and Appendix 3.5
- \* "Survivable loads on the pilot and crashworthiness of glider cockpits" a lecture presented at the "MOTORLESS FLIGHT SYMPOSIUM VARESE, ITALY, 8<sup>th</sup> -10<sup>th</sup> October 2004

<b>1. Subject:</b> Cockpit safety
<b>2. Problem / Statement of issue and justification; reason for regulatory evolution (regulatory tasks):</b> <p>Structure requirements for emergency landing conditions in CS 22.561, based on JAR-22, have stayed the same while maximum stall speeds have increased to an upper limit of 80-95 km/h. This is mainly caused by the introduction of powered sailplanes.</p> <p>In addition, several research programs have been initiated to establish the cockpit safety aspects.</p> <p>The Organisation Scientifique et Technique du Vol à Voile (OSTIV) has already increased the applicable emergency landing loads in their OSTIV Airworthiness Standards (OSTIVAS) based on research data. See OSTIVAS: Section 3.75 and Appendix 3.5.</p>
<b>3. Objective:</b> <p>The objective is to improve occupant protection and enhance the survivability chances in case of emergency landing conditions.</p>
<b>4. Specific tasks and interface issues (Deliverables):</b> <ol style="list-style-type: none"><li>1. Review the output from recent research related to crashworthiness structural design</li><li>2. Review the crashworthiness standards contained in CS 22.561, CS 22.785 and CS 22.786 and related AMC material and the referenced OSTIVAS section 3.75 and Appendix 3.5 and determine the specifications appropriate for including into CS-22. Draft an NPA to propose amendment of the applicable CS-22 standards.</li></ol> <p>If new requirements are proposed, a Regulatory Impact Assessment should be part of the process.</p>
<b>5. Working Methods</b> (in addition to the applicable EASA procedures): <p>Agency</p> <p>Instead of the originally anticipated forming of a group to draft the NPA, as mentioned in the rulemaking programme 2007, the Agency has decided to draft the NPA in cooperation with experts from the OSTIV* Sailplane Development Panel. Members of the SDP are representing a global community of sailplane manufacturers, glider pilots/instructors, research institutes and universities and are tasked within OSTIV with the drafting of OSTIVAS, which are used as a basis for this rulemaking task. It is the Agency's opinion that the SDP members will be able to provide the technical expertise and stakeholders' interest required for this task.</p> <p>* More information on OSTIV can be found at: <a href="http://www.ostiv.fai.org">www.ostiv.fai.org</a></p>
<b>6. Time scale, milestones:</b> <p>The draft EASA NPA should be delivered not later than 31 March 2007.</p>