European Aviation Safety Agency
Rulemaking Directorate

EXPLANATORY NOTE to

CS-23 Amendment 1

1. GENERAL

Executive Director Decision 2009/001/R amends Decision No 2003/14/RM of 14 November 2003 (CS-23 Initial Issue). It represents Amendment 1 of CS-23: certification specifications, including airworthiness codes and acceptable means of compliance, for normal, utility, aerobatic and commuter aeroplanes, and incorporates the output from the following EASA rulemaking task:

Rulemaking Task No.	TITLE	NPA No.
23.001	Stall speed greater than 113 km/h (61 knots)	2008-08

The Notice of Proposed Amendment (NPA) has been subject to consultation in accordance with Article 52 of the Basic Regulation[1] and Article 15 of the Rulemaking Procedure established by the Management Board[2]. 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 a comment-response document (CRD) which has been produced for this NPA (CRD 2008-08) and which is also available on the Agency's web-site.

2. CRD REACTIONS

In response to the CRD 2008-08, the Agency received the following substantive reactions, which are reproduced below together with the Agency’s response:

[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] Decision MB/08/2007 of the Management Board of the Agency of 13 June 2007 amending and replacing Decision MB/07/2003 concerning the procedure to be applied by the Agency for the issuing of Opinions, Certification Specifications and Guidance Material (“Rulemaking Procedure”).

Reaction to	Reaction by	Reaction	Response
the response to comment **#12** by **UK CAA** on segment "**(General Comments)**"	UK CAA	**Comment:** The response provided does not address the concerns addressed in the comment, namely that the proposals originate from the FAA's NPRM 91-12, which themselves were based on inadequate justification and therefore they should not now be copied into European requirements, merely in the interests of harmonisation. **Justification:** Comment not addressed in the CRD.	Comment 12 from the UK-CAA questioned the validity of a justification used in FAA NPRM 91-12. This theoretical justification at the time of that NPRM (1991) was however not considered in the justification of the change proposed in EASA NPA 2008-08. The EASA argumentation for the harmonisation with the FAR 23 requirement that was introduced via NPRM 91-12 is based on comparison of accident data from aircraft designed to a higher stall speed and aircraft that meet the lower stall speed limit. Comments regarding this comparison are addressed in the reactions below.
the response to comment **#13** by **UK CAA** on segment "**A. Explanatory Note - IV. Content of the draft opinion/decision**"	UK CAA	**Comment:** The response agrees with the comment that the US environment is not representative of that found in Europe, yet the findings from the US data are nevertheless used to justify the proposals. This is a flawed approach. **Justification:** Self explanatory.	The EASA response to comment 13 does not categorically say that the US environment is not representative for the European environment. It is explained that although the US accidents **may not always** be representative for the European environment, a comparison within the US data between aeroplanes with a stall speed above 61 knots and below is conducted to review possible safety implications.
the response to comment **#13** by **UK CAA** on segment "**A. Explanatory Note - IV. Content of the draft opinion/decision**"	UK CAA	**Comment:** The safety case for third parties is flawed because of the reliance of the safety case on evidence from the US environment. **Justification:** Self explanatory.	The safety case for third parties is supported by the following. First, as mentioned above, the comparison within the US data does not show any significant differences. Secondly, the impact to non-involved third parties for general aviation is known to be statistically insignificant. This is concluded from both Member States and US studies and can be found in the RIA of NPA 14-2006.
the response to comment **#15** by **UK CAA** on segment "**A. Explanatory Note - IV. Content of the draft opinion/decision**"	UK CAA	**Comment:** The response misses the point of the comment, which was to highlight the proposals' flawed logic of also applying the changes to multi-engined aeroplanes with poor one-engine inoperative climb performance as well, i.e. those which cannot meet the minimum climb requirement of CS23.67(a)(1). Whereas single engined aeroplanes have no option but to make a forced landing after engine failure, that is not necessarily the case for twin-engined aeroplanes. EASA should through its certification specifications, be encouraging the development of twin engined aeroplanes with better one-engine inoperative climb performance, rather than the proposed alternative. **Justification:** Self explanatory.	The group of aeroplanes in the current CS-23, which stall speed may not exceed 113 km/h, are single-engined aeroplanes and certain twin-engined aeroplanes. These are considered as one group of aeroplanes in the current requirements for the reason as explained in the response to comment 15. The change to this stall speed limit is introduced for this group of aeroplanes, provided that certain compensating structural requirements are met. The change to the stall speed limit is therefore not also applied to twin-engined aeroplanes, but treated consistently with the current structure of CS-23. The single-engined aeroplanes and twin-engined aeroplanes in CS-23.49(c) have been consistently treated as one group in the current CS-23 and all change proposals. (JAA draft NPA, NPRM 91-12, EASA NPA 10/2006 and EASA NPA 2008-08). A better one-engine inoperative climb performance is not part of this rulemaking task, however will be regarded in a separate rulemaking task that is planned for CS-23.