COMMENT RESPONSE DOCUMENT (CRD) TO NOTICE OF PROPOSED AMENDMENT (NPA) 2008-05

for amending the Executive Director Decision No. 2003/02/RM of 17 October 2003 on certification specifications, including airworthiness codes and acceptable means of compliance, for large aeroplanes (« CS-25 »)

"Flight in Icing Conditions"

Explanatory Note

I. General

1. The purpose of the Notice of Proposed Amendment (NPA) 2008-05, dated 10 April 2008 was to propose an amendment to Decision N° 2003/02/RM[1] of the Executive Director of the European Aviation Safety Agency of 17 October 2003 on certification specifications, including airworthiness codes and acceptable means of compliance, for large aeroplanes (« CS-25 »).

II. Consultation

2. The draft Executive Director Decision amending Decision N° 2003/02/RM was published on the web site (http://www.easa.europa.eu) on 10 April 2008.

   By the closing date of 10 June 2008, the European Aviation Safety Agency (the Agency) had received 9 comments from 8 National Aviation Authorities, professional organisations and private companies.

III. Publication of the CRD

3. All comments received have been acknowledged and incorporated into this Comment Response Document (CRD) with the responses of the Agency.

4. In responding to comments, a standard terminology has been applied to attest the Agency's acceptance of the comment. This terminology is as follows:

   - **Accepted** – The comment is agreed by the Agency and any proposed amendment is wholly transferred to the revised text.
   - **Partially Accepted** – Either the comment is only agreed in part by the Agency, or the comment is agreed by the Agency but any proposed amendment is partially transferred to the revised text.
   - **Noted** – The comment is acknowledged by the Agency but no change to the existing text is considered necessary.
   - **Not Accepted** - The comment or proposed amendment is not shared by the Agency

   The resulting text highlights the changes as compared to the current rule.

5. The Executive Director Decision will be issued at least two months after the publication of this CRD to allow for any possible reactions of stakeholders regarding possible misunderstandings of the comments received and answers provided.

6. Such reactions should be received by the Agency not later than 6 October 2008 and should be submitted using the Comment-Response Tool at http://hub.easa.europa.eu/crt.

[1] As last amended by Executive Director Decision N° 2007/020/R of 20 December 2007 (CS-25 Amdt 4)

IV. CRD table of comments, responses and resulting text

(General Comments)	-

comment	*1* comment by: *AIR SAFETY GROUP* The Air Safety Group agrees in full with this proposal. Capt R Williams FRAeS Chairman, Air Safety Group
response	*Noted*

comment	*2* comment by: *International Air Transport Association (IATA)* This NPA is supported by the International Air Transport Association (IATA). It is especially the efforts to harmonise with the associated Federal Aviation Authority (FAA) rules and provisions that are endorsed.
response	*Noted* The FAA have confirmed their intent to harmonise with the final EASA text (See Comment #7)

comment	*4* comment by: *CAA CZ* The Civil Aviation Authority of the Czech Republic (CAA CZ) supports and agrees with the draft included in **EASA NPA 05/2008**. However, CAA CZ experts recommend to verify the characteristics of the airplane during the stalling, namely in sense of *FAA AC 25.1419-1A, paragraph 9 - Ice-Contaminated Tailplane Stall.*
response	*Not accepted* The issue is already covered. Certification specifications CS 25.143, CS 25.145 and CS 25.201 already require the stalling characteristics to be fully investigated, including the Ice-contaminated tailplane stall (ICTS) phenomenon. With the exception of CS 25.201(c)(2) which covers accelerated stalls, these certification specifications are not exempt under CS 25.21(g). Furthermore AMC 25.21(g) (paragraph 6.9.4) provides an acceptable means of compliance.

comment	*5* comment by: *Luftfahrt-Bundesamt* The LBA has no comments on NPA 2008-05.
response	*Noted*

comment	*7* comment by: *FAA* The FAA agrees that the proposed change to CS 25.21(g)(1) would increase

	safety by ensuring adequate maneuvering capability is provided for icing conditions when in the landing configuration. We support the EASA consultation with stakeholders on this issue and intend to harmonize with the final EASA standards resulting from this rulemaking.
response	*Noted*

comment	*9* comment by: *Airbus* While reviewing, in conjunction with NPA 2008-05, the current CS-25 text resulting from NPA 16/2004, we detected a few typo errors that may be misleading and need to be corrected: 1/ In AMC 25.21(g), subparagraph 6.9.4.3.c.iii has to be renumbered 6.9.4.3.d Reason: the intent of the rule is not to combine 0g maneuver with steady heading sideslips at full rudder authority, with holding ice. Thus subparagraph iii should be clearly separated from the remainder of paragraph c. 2/ In AMC 25.21(g), paragraphs 6.9.5.1 and 6.18.3.1 must refer to paragraph A1.2.3.4.a, instead of A1.2.3.3.a of Appendix 1. 3/ In AMC 25.21(g), paragraphs 6.9.5.2 and 6.18.3.2 must refer to paragraphs A1.2.3.4.b,c,d or e, instead of A1.2.3.3.b,c,d or e of Appendix 1.
response	*Accepted* 1/ The text is amended as proposed. It would also align with FAA AC 25.25. 2&3/ Editorial correction accepted.

resulting text

AMC 25.21(g)
Performance and Handling Characteristics in Icing Conditions Contained in Appendix C, of CS-25

...
~~iii.~~d Conduct steady heading sideslips to full rudder authority, 356 N. (180 lbf) rudder force or full lateral control authority (whichever comes first), with highest lift landing configuration, trim speed 1.23 VSR, and power or thrust for -3° flight path angle.
...
6.9.5.1 Where the ice protection system is activated as described in paragraph A1.2.3.~~3~~4.a of Appendix 1 of this AMC, paragraphs 6.9.1, 6.9.2 and 6.9.4 of this AMC are applicable with the ice accretion prior to normal system operation.

6.9.5.2 Where the ice protection system is activated as described in paragraphs A1.2.3.~~3~~4.b,c,d or e of Appendix 1 of this AMC, it is acceptable to demonstrate adequate controllability with the ice accretion prior to normal system operation, as follows:
...
6.18.3.1 Where the ice protection system is activated as described in paragraph A1.2.3.~~3~~4.a, of Appendix 1 of this AMC, paragraphs 6.18.1 and 6.18.2 of this AMC are applicable with the ice accretion prior to normal system operation.

6.18.3.2 Where the ice protection system is activated as described in paragraphs

A1.2.3.~~3~~4.b,c,d or e of Appendix 1 of this AMC, it is acceptable to demonstrate adequate stall warning with the ice accretion prior to normal system operation, as follows:
...

A. Explanatory Note - IV. Content of the draft decision p. 4-5

comment *6* comment by: *Walter Gessky*

The subject as proposed in the NPA is supported by the Austrian Ministry of Transport, Innovation and Technology.

response *Noted*

B. Draft Decision - CS 25.21 p. 7

comment *3* comment by: *UK CAA*

Commentor:	UK CAA
Paragraph:	Proposed CS 25.21(g)(1)
Page No:	7
Comment:	The proposed change is supported. There may be more than one landing configuration so it must be understood that the phrase "the landing configuration" covers all landing configurations.

response *Noted*

CS 25.207(c) and (d) refer to "*each normal configuration*". No change to the text is therefore necessary.

comment *8* comment by: *Airbus*

CS 25.207(c) and (d) are not directly applicable to Fly-by-wire aircraft fitted with unsurpassable angle of attack protection in nominal mode, and for which stall warning would result from failure case situations. For those aircraft, compliance with a Special condition is used instead, and should be used as well for the landing configuration in icing conditions.

response *Noted*

The NPA proposes an amendment to CS-25. Future applications requiring the use of special conditions in accordance with Part 21A.16B, must ensure that the intent of this amendment is met and that an equivalent level of safety is provided.