



Explanatory Note to Decision 2014/026/R

CS-25 — Amendment 15

RELATED NPA/CRD 2014-06 — RMT.0606 — 21.7.2014

EXECUTIVE SUMMARY

The purpose of this amendment to CS-25 is to:

- upgrade the AMC material for powerplant cooling tests. The current AMC 25.1041 deals with tests in hot climatic conditions and does not really reflect the content of CS 25.1041. Tests aspects are provided in CS 25.1043 but there is currently no AMC material supporting CS 25.1043 on cooling tests. The current AMC 25.1041 is therefore deleted and a new AMC 25.1043 is created. The new AMC better reflects the objectives of CS 25.1041 and CS 25.1043 and current testing practices. It provides clearer guidance in term of lowest maximum ambient temperature, temperature lapse rate and maximum temperature deviation during flight test;
- make some corrections and clarifications to cabin safety-related certification specifications and AMC; and
- correct a few typos.

The changes are expected to contribute to an updated CS-25 reflecting the available state of the art and acceptable means of compliance (complying with the objective of Article 19 of Regulation (EC) No 216/2008), facilitate the certification process, and improve harmonisation with the FAA. It is expected that this amendment will provide a moderate safety benefit, it will create no social or environmental impacts, and it may provide a slight economic benefit by streamlining the certification process.

Applicability		Process map	
Affected regulations and decisions:	CS-25 — ED Decision 2003/002/RM of 17 October 2003	Terms of Reference	27.1.2014
Affected stakeholders:	Large aeroplane manufacturers	Concept Paper:	No
Driver/origin:	Safety; EASA Rulemaking Procedure (EASA MB Decision No 01/2012), Article 3.5 on 'systematic tasks'	Rulemaking group:	No
Reference:	N/A	RIA type:	None
		Technical consultation during NPA drafting:	No
		Publication date of the NPA:	2014/Q1
		Duration of NPA consultation:	2 months
		Review group:	No
		Focussed consultation:	No
		Publication date of the Opinion:	N/A
		Publication date of the Decision:	2014/Q3

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1. Procedural information

1.1. The rule development procedure

The European Aviation Safety Agency (hereinafter referred to as the 'Agency') developed ED Decision 2014/026/R in line with Regulation (EC) No 216/2008¹ (hereinafter referred to as the 'Basic Regulation') and the Rulemaking Procedure².

This rulemaking activity is included in the [Agency's 4-year Rulemaking Programme](#) under RMT.0606 (Regular update of CS-25). The scope and timescale of the task were defined in the related Terms of Reference (see process map on the title page).

The draft text of this Decision has been developed by the Agency. All interested parties were consulted through NPA 2014-06³. Eight comments were received from interested parties, including industry and national aviation authorities.

The Agency has reviewed the comments received on the NPA. The comments received and the Agency's responses are presented in the Comment-Response Document (CRD) 2014-06⁴.

The final text of this Decision with the Certification Specifications (CS)/Acceptable Means of Compliance (AMC) has been developed by the Agency.

The process map on the title page summarises the major milestones of this rulemaking activity.

Additionally, some editorial corrections have been added as described in chapter 2.6 below.

1.2. Structure of the related documents

Chapter 1 contains the procedural information related to this task. Chapter 2 explains the core technical content. The text of the CS/AMC is annexed to the ED Decision.

¹ Regulation (EC) No 216/2008 of the European Parliament and 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, 19.3.2008, p. 1), as last amended by Commission Regulation (EU) No 6/2013 of 8 January 2013 (OJ L 4, 9.1.2013, p. 34).

² The Agency is bound to follow a structured rulemaking process as required by Article 52(1) of the Basic Regulation. Such process has been adopted by the Agency's Management Board and is referred to as the 'Rulemaking Procedure'. See 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 Decision No 01-2012 of 13 March 2012.

³ In accordance with Article 52 of the Basic Regulation and Articles 5(3) and 6 of the Rulemaking Procedure.

⁴ <http://easa.europa.eu/document-library/comment-response-documents>

2. Explanatory Note

2.1. Overview of the issues to be addressed

Powerplant — Cooling tests

CS 25.1041 requires applicants to show that cooling provisions can maintain the temperatures of powerplant components and engine fluids within the temperature limits for which they have been certified, under ground and flight operating conditions, and after normal engine shutdown.

The current AMC 25.1041 deals with tests in hot climatic conditions and does not really reflect the content of CS 25.1041. Tests aspects are provided in CS 25.1043.

There is currently no AMC material supporting CS 25.1043 on cooling tests.

It is, therefore, decided to delete the current AMC 25.1041 and create a new AMC 25.1043.

Furthermore, the content of the existing AMC 25.1041 needs to be upgraded to reflect testing practices and to provide clearer guidance, in harmonisation with the FAA relevant advisory material (i.e. AC 25-7C (Flight Test Guide For Certification Of Transport Category Airplanes), section 5, paragraph 130.b(8)).

The new AMC 25.1043 provides more guidance pertinent to CS 25.1043, and it also maintains the maximum temperature deviation value provided in the current AMC 25.1041.

Cabin safety

- (a) CS 25.801 (Ditching): CS 25.801(a) should reference CS 25.807(i) instead of CS 25.807(e). The paragraph numbering inside CS 25.807 was changed at Amendment 12 but was not reflected in CS 25.801.
- (b) AMC 25.1447(c)(3) (Equipment Standards for Oxygen Dispensing Units): It is decided to replace 'five feet/five seconds' by 'five feet or five seconds' in order to clarify that the '/' should be read as 'or'.
- (c) In CS 25.562(b) (Emergency landing dynamic conditions): Typo correction (missing closing bracket).

2.2. Objectives

The overall objectives of the EASA system are defined in Article 2 of the Basic Regulation. This proposal will contribute to the achievement of the overall objectives by addressing the issues outlined in Chapter 2.1. The specific objective is to propose an amendment to CS-25 based on the selection of non-complex, non-controversial, and mature subjects. The ultimate goal is to increase safety.

2.3. Outcome of the consultation

Based on the comments received, a minor change was made to the proposed AMC 25.1043.

2.4. Summary of the Regulatory Impact Assessment (RIA)

N/A

2.5. Overview of the amendments

Please refer to paragraph 2.1 above.

2.6. Editorial changes

In addition to the changes made in the context of the above-mentioned rulemaking task, the following editorial changes are made.

Book 1:

A typo is corrected in CS 25.143(l) (a closing bracket is missing at the end of '(from VLS to Max speed – 10 kt').

In CS 25.841(b)(1) the following error is corrected: the terms 'value' and 'valve' have been inverted at two locations in this paragraph.

The numbering of the pages of Appendix Q erroneously reflects Appendix N, this is corrected.

3. References

3.1. Related regulations

N/A

3.2. Affected decisions

Executive Director Decision 2003/002/RM of 17 October 2003 as last amended by Executive Director Decision 2013/033/R of 19 December 2013 (CS-25 Amendment 14).

3.3. Reference documents

N/A