



## **European Aviation Safety Agency**

### **EXPLANATORY NOTE**

#### **EXECUTIVE SUMMARY**

The scope of this Decision is to contribute to replacing halon on aircraft, as outlined in the Terms of Reference (ToR) MDM.071, Issue 1, of 18 April 2011. In the Rulemaking Programme 2012-15 the task has been renumbered as RMT.0273.

A different rulemaking task (i.e. RMT.0368, formerly MDM.091) deals with the issue of preventing the use of contaminated halon, through provisions on continuous airworthiness.

The purpose of NPA 2009-14 was in fact to amend CS-23, CS-25 and CS-29 in order to be compliant with legislation of the European Union on the progressive phasing out of halon, which contributes to depleting the ozone layer.

46 comments were received from 17 commentators. In principle stakeholders agreed to amend CS-23, CS-25 and CS-29 in order to be compliant with EU legislation and with the Amendment 103 to ICAO Annex 8.

They also acknowledged that in the future, and through proper consultation, the Agency may issue an ETSO covering hand-held fire extinguishers using agents different from halon.

The EU legislation implies compliance with recent amendments (i.e. applicable in December 2011) to ICAO Annex 6 (i.e. newly produced aircraft based on existing Type Certificates) only in 2020 and 2025. Present Decision does not include any rule in this respect but, following comments by stakeholders, the CRD suggested that the Agency will launch a subsequent rulemaking task in order to ensure compliance well before 2020/25.

Finally, a number of commentators stated that the 'end dates' (i.e. retrofit) established by EU legislation may neither be feasible, nor justified comparing the cost of retrofit with the very small quantities of halon released by aviation in the atmosphere. This requirement is not dictated by the Agency but by other EU legislation and therefore the Agency cannot take action on this. The Agency will however convey to the European Commission a summary of the views expressed by stakeholders. The Agency also understands that the matter will be discussed at the 38<sup>th</sup> ICAO General Assembly in 2013, on the basis of Resolution A37-9.

In conclusion the Agency intends to adopt in 2012 this amendment 3 to CS-23 and, through separate Decisions, similar amendments to CS-25 and CS-29.

### CS-23 Amendment 3

#### 1. GENERAL

Executive Director Decision 2012/012/R amends Decision 2003/14/RM of 14 November 2003 (CS-23 Initial Issue) as last amended by Executive Director Decision 2010/008/R of 28 September 2010 (CS-23 Amendment 2 — corrigendum)<sup>1</sup>. It represents Amendment 3 of CS-23 and incorporates the output from the following EASA rulemaking task:

Rulemaking Task No	TITLE	NPA No
RMT.0273	Halon — Update of CSs in order to comply with EC regulations	2011-14 <sup>2</sup>

The above Notice of Proposed Amendment (NPA) has been subject to consultation in accordance with Article 52 of the Basic Regulation<sup>3</sup> and Article 6 of the Rulemaking Procedure established by the Management Board<sup>4</sup>. 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 the Comment Response Document 2011-14 which was published on 10 February 2012. The CRD<sup>5</sup> is available on the Agency's website.

#### 2. CRD REACTIONS

2.1 In response to CRD 2011-14, the Agency didn't receive any substantive reactions affecting the text of CS-23 (only editorial suggestions which have been accepted).

2.2 However, the Agency received few substantive reactions of a more general nature, concerning the 'cut-off' dates stipulated in Commission Regulation (EU) No 744/2010. One is reproduced below together with the Agency's response:

<sup>1</sup> Decision as last amended by Executive Director Decision 2010/008/R of 28 September 2010 (CS-23 Amendment 2 — corrigendum).

<sup>2</sup> See: <http://easa.europa.eu/rulemaking/r-archives.php>.

<sup>3</sup> 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). Regulation as last amended by Regulation (EC) No 1108/2009 of 21.10.2009 of the European Parliament and of the Council (OJ L 309, 24.11.2009, p. 51).

<sup>4</sup> These CSs were developed in compliance with 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 08-2007, 13.6.2007. However, this Decision has been amended and replaced by EASA MB 01-2012, 13.03.2012.

<sup>5</sup> See: <http://easa.europa.eu/rulemaking/r-archives.php#crd>.

Comment No	Commentator	Reaction to CRD	EASA response
1b	Gulfstream	<p><b>ISSUE:</b> Gulfstream commented on the infeasibility of the published “cutoff” and “end” dates for engine/APU fire extinguishing systems, and the response was that these dates are set by EC 744/2010, not by EASA. It is not clear if the cutoff and end dates in the proposed rules would be changed if the EC Regulations were to be altered. Boeing wishes to know if the proposed EASA rules would still require a cutoff of new Halon applications in the event that EC Regulations are relaxed.</p> <p><b>JUSTIFICATION:</b> In several locations throughout the CRD, objections are referred back to the EC Regulations, but there is no clear path to relax EASA regulations if the EC Regulations are ever changed. Thus, we consider that simply stating “<i>these requirements are set by EC 744/2010</i>” is insufficient. Further, both of the “promising agents” referred to in the document have run into significantly more difficulty satisfying the FAA Minimum Performance Standard (MPS) than had been predicted, and at this point neither is now offered on the original certification platform. Indeed, one agent was re-tested under different atmospheric conditions and failed to extinguish the reference fire. This calls into question the true promise of these agents.</p>	<p>Noted.</p> <p>Nothing in ‘Book 1’ of CS-23 prescribes to use a specific extinguishing agent.</p> <p>Equally use of halon is not prohibited therein.</p> <p>Therefore the reaction (and similar ones, e.g. by the FAA) does not affect the text of CS-23 Book 1.</p> <p>In Book 2 (AMC) only guidance is provided, making reference to EU law and to available Minimum Performance Standards (MPS).</p> <p>Reference to a different version of one MPS would be accepted by the Agency, while the state of the art progresses.</p> <p>Also the text of Book 2 is therefore not affected by this reaction.</p> <p>The Agency is aware that according to some stakeholders the ‘cut-off’ dates in Regulation (EC) 744/2010 appear unfeasible.</p> <p>The Agency will send a letter to the EC to inform them about such concerns.</p>

### 3. CHANGES

NPA 2011-14 proposed changes to:

#### Book 1

**CS 23.851 (hand) fire extinguishers:** only to amend the title and in fact clarify that such rule applies only to hand-held fire extinguishers;

**CS 25.1197 Fire extinguishing agents:** Add reference to new AMC 23.1197, without changing the wording of the rule in Book 1.

## **Book 2**

**AMC 23.851(c) Hand fire extinguishers:** to refer to halon alternatives and to FAA AC 20-42D;

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**Insertion of new AMC 23.1197 Fire extinguishing agents:** to provide information on applicable law and on development of alternatives to halon, including Minimum Performance Standards (MPS) where available.

In principle the proposals were supported by the commentators on the NPA, although with some suggested changes. The resulting text has been published in CRD 2011-14.

One reaction (forwarded by Boeing) suggested to say '... type certification application is submitted ...' in AMC 23.851(c), instead of '... type certification is requested ...'  
This suggestion has been accepted by the Agency.