

### **European Union Aviation Safety Agency**

# **Notice of Proposed Amendment 2023-105**

in accordance with Article 6 of MB Decision 01-2022

# Regular update of Regulations (EU) 2015/640 and (EU) No 748/2012 and associated AMC & GM, as well as of CS-26, to transpose ICAO SARPs

Information on cargo compartment fire protection capabilities

**RMT.0740 (SUBTASK 1)** 

#### **EXECUTIVE SUMMARY**

This NPA puts forward the requirement for design approval holders to make available to operators information on aeroplanes and helicopters cargo compartment fire protection capabilities as certified. This requirement would apply to type-certificate and restricted type-certificate holders, and to supplemental type-certificate holders, when a change affects the cargo compartment fire protection design elements.

The proposed amendments are expected to assist operators in determining the limitations of specific cargo compartment fire protection capabilities established during certification when conducting the risk assessment for the transport of dangerous goods as required by Commission Regulation (EU) No 965/2012.

This proposal transposes the related new ICAO Standards and Recommended Practices (SARPs) in Amendment 109 to Annex 8 'Airworthiness of Aircraft' to the Convention on International Civil Aviation into Commission Regulation (EU) 2015/640 and CS-26 'Additional airworthiness specifications for operations'.

The objective is to ensure the safety of operations of aircraft that transport dangerous goods in the cargo compartment.

REGULATION TO BE AMENDED	ED DECISIONS TO BE AMENDED
Commission Regulation (EU) 2015/640	— <u>ED Decision 2015/013/R</u> 'CS-26 — Issue 1'
	— <u>ED Decision 2012/020/R</u> 'AMC and GM to Part 21 — Issue 2'

#### AFFECTED STAKEHOLDERS

Design organisation approval (DOA) holders; production organisation approval (POA) holders; aircraft operators; Member States' national competent authorities

	WORKING METHOD		
Development	Impact assessment	Consultation	
By EASA	Light Based on ICAO impact assessment	NPA — Focused (Advisory Bodies)	

#### Related documents

- ToR RMT.0740 issued on 11.4.2023
- Annex 8 'Airworthiness of Aircraft' to the Convention on International Civil Aviation, 13th Edition, July 2022
- ICAO State Letter AN 3/5.14-22/23

PLANNING MILESTONES: Refer to the latest edition of the EPAS Volume II<sup>1</sup>. The Opinion is planned for 2023/Q4.

Since RMT.0740 was launched after the latest edition of the EPAS was finalised, the milestones will only be visible as of the next EPAS edition (2024 edition).



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#### 1. **About this NPA**

#### 1.1. How this regulatory material was developed

The European Union Aviation Safety Agency (EASA) developed the regulatory material in question in line with Regulation (EU) 2018/11392 (the Basic Regulation) and the Rulemaking Procedure3, as well as in accordance with the objectives and working methods described in the Terms of Reference (ToR)<sup>4</sup>.

When consulting the ToR, EASA informed its Advisory Bodies (ABs) on the need to transpose into the EU regulatory framework the new ICAO SARPs of Amendment 109 to Annex 8 'Airworthiness of Aircraft' to the Convention on International Civil Aviation ('ICAO Annex 8') that require, or recommend (depending on the aircraft category), the design approval holder to provide to the operator the information on the aircraft design capabilities associated with cargo compartment fire protection.

#### 1.2. How to comment on this NPA

The draft regulatory material is hereby submitted for consultation to the Member States Advisory Body (MAB), the Stakeholder Advisory Body (SAB), the Certification Committee (C.COM) and the Design & Manufacturing Technical Committee (DM.TEC) in accordance with the ToR for this RMT.

Please submit your comments via email to IAConsultation@easa.europa.eu.

The deadline for the submission of comments is 25 July 2023.

### 1.3. The next steps

Following the focused consultation of the draft regulatory material, EASA will review all the comments received and will duly consider them in the subsequent phases of this rulemaking activity.

Considering the above, EASA may:

- issue an Opinion proposing amendments to Commission Regulation (EU) 2015/640; the Opinion will be submitted to the European Commission which shall consider its content and decide whether to issue amendments to the that Regulation;
- following the amendment of that Regulation, issue a Decision amending CS-26 and related guidance material (GM), and create a GM to Annex I (Part 21) to Regulation (EU) No 748/2012.

Regulation (EU) 2018/1139 of the European Parliament and of the Council of 4 July 2018 on common rules in the field of civil aviation and establishing a European Union Aviation Safety Agency, and amending Regulations (EC) No 2111/2005, (EC) No 1008/2008, (EU) No 996/2010, (EU) No 376/2014 and Directives 2014/30/EU and 2014/53/EU of the European Parliament and of the Council, and repealing Regulations (EC) No 552/2004 and (EC) No 216/2008 of the European Parliament and of the Council and Council Regulation (EEC) No 3922/91 (OJ L 212, 22.8.2018, p. 1) (https://eurlex.europa.eu/legal-content/EN/TXT/?qid=1535612134845&uri=CELEX:32018R1139).

EASA is bound to follow a structured rulemaking process as required by Article 115(1) of Regulation (EU) 2018/1139. Such a process has been adopted by the EASA Management Board (MB) and is referred to as the 'Rulemaking Procedure'. See MB Decision No 01-2022 of 2 May 2022 on the procedure to be applied by EASA for the issuing of opinions, certification specifications and other detailed specifications, acceptable means of compliance and guidance material ('Rulemaking Procedure'), and repealing Management Board Decision No 18-2015 (https://www.easa.europa.eu/theagency/management-board/decisions/easa-mb-decision-01-2022-rulemaking-procedure-repealing-mb).

ToR RMT.0740 'Regular update of Regulations (EU) 748/2012 and (EU) 2015/640 and associated AMC&GM and CS-26 to transpose ICAO SARPs' (https://www.easa.europa.eu/en/document-library/terms-of-reference-and-rulemaking-groupcompositions/tor-rmt0740).

#### 2. In summary — why and what

#### 2.1. Why we need to act — issue/rationale

Amendment 109 to ICAO Annex 8, which is applicable since 3 November 2022, introduced new SARPs requiring (for large aeroplanes) and recommending (for helicopters and small aeroplanes) design approval holders to provide to operator information on the elements of the aircraft design associated with cargo compartment fire protection, and a summary of the demonstrated standards that were considered in the certification process.

These SARPs were added to support ICAO Annex 6 Part I Chapter 15 standards for operators to establish policies and procedures for the transport of items in the cargo compartment, including the conduct of a safety risk assessment. One element of the assessment is related to the cargo compartment fire protection capabilities.

The transposition of the ICAO Annex 6 Part I Chapter 15 SARPs introduced with Amendment 44 is carried out under RMT.0392 'Regular update of air operations rules'<sup>5</sup>. The related NPA (NPA 2022-11<sup>6</sup>) was published on 20 December 2022 and the rulemaking process is in progress.

The purpose of this NPA is to propose the transposition of the ICAO Annex 8 SARPs introduced with Amendment 109 into Commission Regulation (EU) 2015/640 and associated CS-26.

The transposition of the new SARPs is important to maintain the safety of operations of aircraft that transport dangerous goods in the cargo compartment and to avoid the filing of differences with ICAO Annex 8.

The below extracts of ICAO Annex 8 are provided for information.

#### New standard in Part IIIB:

#### '4.2 Systems design features

Special consideration shall be given to design features that affect the ability of the flight crew to maintain controlled flight. This shall include at least the following:[...]

- g) Cargo compartment protection.[...]
- 4) For those aeroplanes for which the individual certificate of airworthiness is first issued on or after 1 January 2025, the elements of the aeroplane design associated with cargo compartment fire protection, and a summary of the demonstrated standards that were considered in the process of aeroplane certification shall be included in the required aeroplane documentation and made available to the operator.'

NPA 2022-11 'Regular update of the Air Operations rules: lessons learnt from standardisation inspections, helicopter operation issues, and transposition of several ICAO SARPs' (https://www.easa.europa.eu/en/document-library/noticesof-proposed-amendment/npa-2022-11).



https://www.easa.europa.eu/en/document-library/terms-of-reference-and-rulemaking-group-compositions/tor-rmt0392

#### New standard in Part IVB:

#### '4.2 Systems design features

Special consideration shall be given to design features that affect the ability of the flight crew to maintain controlled flight. This shall include at least the following: [...]

g) **Recommendation.**— Cargo compartment protection. As of 7 March 2025, the elements of the helicopter design associated with cargo compartment fire protection, if applicable, and a summary of the demonstrated standards that were considered in the process of helicopter certification should be included in the required helicopter documentation and made available to the operator.'

#### New standard in Part VB:

#### '4.2 Systems design features

Special consideration shall be given to design features that affect the ability of the flight crew to maintain controlled flight. This shall include at least the following:[...]

- g) Cargo compartment protection.[...]
- 3) **Recommendation.** As of 7 March 2025, the elements of the aeroplane design associated with cargo compartment fire protection, and a summary of the demonstrated standards that were considered in the process of aeroplane certification should be included in the required aeroplane documentation and made available to the operator.'

#### 2.2. Description of the issue

Many stakeholders within the global aviation community expressed their concern on the fact that the risks posed by the transport of some specific items in the cargo compartment are not sufficiently addressed. In particular, the safety capabilities of aircraft systems may not be fully considered for the transport of some dangerous goods such as lithium batteries. The cargo compartments may not be designed to contain the consequences of hazards associated with the carriage of such items.

Council Information Note 12100/1/22 REV 1 of 7 September 2022 on the position to be taken on behalf of the European Union at the International Civil Aviation Organization as regards the notification of differences to Annex 8 to the Convention on International Civil Aviation, regarding ICAO State Letter AN 3/5.14-22/23 on the Adoption of Amendment 109 to Annex 8, indicates that a difference will exist on 3 November 2022 (applicability date of Amendment 109) between the EU regulations and the provisions of ICAO Annex 8 Part IIIB Chapter 4 Section 4.2(g)(4) (see extract in Section 2.1).

#### 2.3. Assessment of the issue

The issue was assessed within the Airworthiness Panel (AIRP) of the ICAO Air Navigation Commission (ANC). See Section 3.

#### 2.4. Who is affected by the issue

The new SARPs in Amendment 109 to ICAO Annex 8 affect aeroplane and helicopter design approval holders. This NPA proposes to apply the new SARPs to type-certificate, restricted type certificate and supplemental type-certificate holders for new-production and new-design aircraft.

See Section 2.7.

#### 2.5. How could the issue evolve

The information on the capabilities of the cargo compartment fire protection is essential for the risk assessment that operators shall conduct when transporting some specific items that can cause hazards.

If no action is taken to transpose the new SARPs, that information may not be provided to operators thus rendering their risk assessment rather inadequate to mitigate the risk of fire associated with the transport of specific items in the aircraft cargo compartment and ensure safe operations.

#### 2.6. What we want to achieve — objectives

The overall objectives of the EASA system are defined in Article 1 of the Basic Regulation. The regulatory material presented here is expected to contribute to achieving these overall objectives by addressing the issues described in Sections 2.1 to 2.3.

The objective of the proposed regulatory material is to ensure that the information on cargo compartment fire protection capabilities is provided to operators. It will assist them with the evaluation and the management of the risks associated with their activities as required by point ORO.GEN.200(a)(3) of Regulation (EU) No 965/2012. It specifically addresses the risk of fire associated with the transport of specific items in the aircraft cargo compartment.

#### 2.7. How we want to achieve it — overview of the proposed amendments

#### a. Scope

The definition of large and small aeroplanes differs between ICAO Annex 8 and Annex 6 and the EU initial airworthiness and air operations regulation (e.g. different criteria for weight and operation categories).

CS-25 applies to turbine-powered large aeroplanes. EASA CS-Definitions (Amdt 2) defines a large aeroplane as having a maximum take-off weight (MTOW) above 5 700 kg and does not include the commuter aeroplane category. This category is within the scope of CS-23.

To ensure that there is no gap in the scope, it is proposed to implement the new standard in Part IIIB of ICAO Annex 8 for aeroplanes that have a MTOW greater than 5 700 kg and that have CS-25 and CS-23 or equivalent in their certification basis.

The implementation of that new Part IIIB standard will prevent Member States from filing a difference to the ICAO SARPs.

This NPA proposes to implement the recommended practices in Part IVB and Part VB of ICAO Annex 8:

- for helicopters that have CS-27 and CS-29 or equivalent in their certification basis;
- for aeroplanes that have CS-23 or equivalent in their certification basis with a MTOW of 5 700 kg or less; and
- that are equipped with cargo compartments that are separated from the flight deck.

#### b. **Proportionality**

Proportionality is automatically addressed since the information to be provided to operators is directly related and proportionate to the certification specifications for cargo compartment fire protection

included in CS-23, CS-25, CS-27 and CS-29 or equivalent, and is already available to design approval holders.

In addition, the recommended practices are proposed to be implemented only in cases of cargo compartments separated from the flight deck. The benefit for operators to receive the information on the fire protection capabilities in case of a cargo compartment located in the flight deck is deemed very small. Indeed, a fire in a cargo compartment located in the flight deck can be easily detected by the pilot(s) that will take immediate action to ensure continued safe flight and landing.

#### c. Applicability date

The standard for large aeroplanes (in Part IIIB of ICAO Annex 8) applies to aeroplanes for which the individual certificate of airworthiness is first issued on or after 1 January 2025. The recommended practices for helicopters and small aeroplanes (in Part IVB and Part VB of ICAO Annex 8) apply to all aircraft as of 7 March 2025 without distinguishing between new-design, new-production or in-service aircraft.

This NPA proposes to transpose the recommended practices using the same applicability date as the standard, i.e. applicability to aircraft for which the individual certificate of airworthiness is first issued on or after 1 January 2025. This implies that the recommended practices are transposed for new-design and new-production aircraft and not for aircraft already in service.

EASA intends to issue the related Opinion by 2023/Q4 the latest to aim for this applicability date or a date as close as possible to this applicability date.

#### d. Design approval holders

This NPA proposes that the new SARPs apply to the following design approval holders:

- type-certificate and restricted type-certificate holders; and
- supplemental type-certificate holders when a change affects the cargo compartment fire protection design elements.

#### e. Regulatory material

The new SARPs relate to a task that the design approval holder shall carry out after the aircraft has been certified, such that these SARPs do not need to be transposed into Regulation (EU) No 748/2012, CS-23, CS-25, CS-27 or CS-29.

Consequently, this NPA proposes to transpose the new SARPs into Regulation (EU) 2015/640 on additional airworthiness specifications for a given type of operations.

The proposal concerns the transposition of the SARPs for small and large aeroplanes and small and large helicopters. Currently, Subpart B of Annex I (Part-26) to Regulation (EU) 2015/640 applies only to large aeroplanes that have CS-25 or equivalent in their certification basis. This NPA proposes to extend the scope of Subpart B to include small aeroplanes that have CS-23 or equivalent in their certification basis, while ensuring that the existing requirements in Subpart B remain applicable only to large aeroplanes as it is the case today.

Table 1 summarises the rationale for the proposed amendments to Regulation (EU) 2015/640, CS-26, and the AMC & GM to Annex I (Part 21) to Regulation (EU) No 748/2012. See Section 1.

Table 1: Rationale for the proposed amendments

Regulation (EU) 2015/640				
Article 2	A definition for 'small aeroplane' is created for the purposes of Regulation (EU) 2015/640 for practical reasons to distinguish between large and small aeroplanes in Subpart B.  The definitions of 'large aeroplane', 'large helicopter' and 'small helicopter' are amended consistently, and do not refer to the titles of the related CSs.			
Point 26.10(b)	Point (b) is amended so that its scope is more generic and to include the demonstration of compliance with any requirement applicable to those design approval holders that need to show compliance with Part-26.			
Subpart B	'large' is deleted from the title to include types of aeroplanes other than large aeroplanes (e.g. the newly defined 'small aeroplanes').			
Points 21.100, 26.156, 26.157, 26.205, 26.300, 26.303 to 26.370	These already adopted points of Part-26 are amended to clarify that they apply to large aeroplanes and to avoid any confusion with regard to the scope.			
Point 26.175	This point is added to include the new standard and recommended practices for aeroplanes and is placed after point 26.170 related to fire extinguishers.			
Point 26.405 This point is added to include the new recommended practices for helicopte placed after point 26.400 related to fire extinguishers.				
CS-26				
Point CS 26.175	This point is added for demonstration of compliance with point 26.175.  It provides the link to the certification specifications related to cargo compartment fire protection in CS-25 and CS-23.			
GM1 26.175	This GM provides examples of information that may be provided to the operator for a valid risk assessment.			
Point CS 26.405	This point is added for demonstration of compliance with point 26.405.  It provides the link to the certification specifications related to cargo compartment fire protection in CS-27 and CS-29.			
GM1 26.405	This GM provides examples of information that may be provided to the operator for a valid risk assessment.			
AMC & GM to Annex I (Part 21) to Regulation (EU) No 748/2012				
This GM is added for the benefit of applicants for certificates to be issued Regulation (EU) No 748/2012 to ensure that they do not overlook the proving Regulation (EU) 2015/640 applicable to them.				

#### 2.8. What are the stakeholders' views

Stakeholders were involved in the development of the new SARPs within the Airworthiness Panel (AIRP) of the ICAO Air Navigation Commission (ANC). The manufacturers involved were mainly those of large aeroplanes. They indicated that the inclusion of the information in the aircraft flight manual would be too stringent, and that they would prefer having the choice of the appropriate documentation.

# 3. What are the expected benefits and drawbacks of the regulatory material

For the transposition of the ICAO Annex 8 SARPs there are no alternative options to rulemaking.

The issue as well as the new SARPs were assessed by ICAO. The impact assessment is summarised in Table 2.

**Table 2: Impacts** 

	Impact	Rationale
Safety	Positive	The transposition of the new SARPs allows operators to conduct a valid risk assessment for the transport of specific items in the cargo compartment and contributes to the safety of operations.
Security	None	
Environment	None	
Efficiency	None	
Cost for the Agency	Negligible	One-off cost for the implementation of the provisions within the EU regulatory framework.
Cost for Member States	None	
Cost for Industry	Negligible	The information on the cargo compartment fire protection capabilities is already developed during the certification process. Minimal cost may be incurred for certificate holders that do not yet provide information to operators, as they will have to generate the required documentation.

The safety benefit of the proposal outweighs the negligible cost impact.

EASA agrees with this conclusion and does not see the need to complement the ICAO impact assessment.

4. Proposed regulatory material5. Monitoring and evaluation6. Proposed actions to support implementation

## 4. Proposed regulatory material

Please refer to the annex to NPA 2023-105.

# 5. Monitoring and evaluation

No specific monitoring or evaluation of the proposed amendments is foreseen.

# 6. Proposed actions to support implementation

No specific action to support the implementation of the proposed amendments is foreseen.

#### 7. References

- Regulation (EU) 2018/1139 of the European Parliament and of the Council of 4 July 2018 on common rules in the field of civil aviation and establishing a European Union Aviation Safety Agency, and amending Regulations (EC) No 2111/2005, (EC) No 1008/2008, (EU) No 996/2010, (EU) No 376/2014 and Directives 2014/30/EU and 2014/53/EU of the European Parliament and of the Council, and repealing Regulations (EC) No 552/2004 and (EC) No 216/2008 of the European Parliament and of the Council and Council Regulation (EEC) No 3922/91
- ICAO Doc 10102 Guidance for Safe Operations Involving Aeroplane Cargo Compartments,
   First Edition, 2020
- Commission Regulation (EU) No 965/2012 of 5 October 2012 laying down technical requirements and administrative procedures related to air operations pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council (OJ L 296, 25.10.2012, p. 1)

### Appendix — Quality of the NPA

To continuously improve the quality of its documents, EASA welcomes your feedback on the quality of this document with regard to the following aspects:

Please provide your feedback on the quality of this document as part of the other comments you have on this NPA. We invite you to also provide a brief justification, especially when you disagree or strongly disagree, so that we consider this for improvement. Your comments will be considered for internal quality assurance and management purposes only and will not be published (e.g. as part of the CRD).

#### 1. The regulatory proposal is of technically good/high quality

Please choose one of the options below and place it as a comment in the Comment Form; if you disagree or strongly disagree, please provide a brief justification.

Fully agree / Agree / Neutral / Disagree / Strongly disagree

#### 2. The text is clear, readable and understandable

Please choose one of the options below and place it as a comment in the Comment Form; if you disagree or strongly disagree, please provide a brief justification.

Fully agree / Agree / Neutral / Disagree / Strongly disagree

#### 3. The regulatory proposal is well substantiated

Please choose one of the options below and place it as a comment in the Comment Form; if you disagree or strongly disagree, please provide a brief justification.

Fully agree / Agree / Neutral / Disagree / Strongly disagree

#### 4. The regulatory proposal is fit for purpose (achieving the objectives set)

Please choose one of the options below and place it as a comment in the Comment Form; if you disagree or strongly disagree, please provide a brief justification.

Fully agree / Agree / Neutral / Disagree / Strongly disagree

#### 5. The regulatory proposal is proportionate to the size of the issue

Please choose one of the options below and place it as a comment in the Comment Form; if you disagree or strongly disagree, please provide a brief justification.

Fully agree / Agree / Neutral / Disagree / Strongly disagree

### 6. The regulatory proposal applies the 'better regulation' principles<sup>[1]</sup>

Please choose one of the options below and place it as a comment in the Comment Form; if you disagree or strongly disagree, please provide a brief justification.

Fully agree / Agree / Neutral / Disagree / Strongly disagree

https://ec.europa.eu/info/law/law-making-process/planning-and-proposing-law/better-regulation-why-and-proposing-law/better-reg how/better-regulation-guidelines-and-toolbox/better-regulation-toolbox en



<sup>[1]</sup> For information and guidance, see:

<sup>-</sup> https://ec.europa.eu/info/law/law-making-process/planning-and-proposing-law/better-regulation-why-andhow en

<sup>-</sup> https://ec.europa.eu/info/law/law-making-process/planning-and-proposing-law/better-regulation-why-andhow/better-regulation-guidelines-and-toolbox en

7. Any other comments on the quality of this document (please specify)