European Union Aviation Safety Agency

Opinion No 05/2024

in accordance with Article 76(1) of Regulation (EU) 2018/1139

Helicopter crash-resistant fuel systems
Information on cargo compartment fire protection capabilities
Runway overrun awareness and alerting systems
Conversion of Class D compartments

RMT.0710 AND RMT.0740 (SUBTASK 1)

EXECUTIVE SUMMARY

This Opinion proposes to amend Regulation (EU) 2015/640 on additional airworthiness specifications for a given type of operations to:

— mandate the installation of a crash-resistant fuel system (CRFS) onto some existing helicopter designs that are still in production and the retrofit of some in-service helicopters;
— require design approval holders to make available information on aeroplanes and helicopters cargo compartment fire protection capabilities as certified to operators. This requirement would apply to type-certificate and restricted type-certificate holders, to supplemental type-certificate and design change approval holders, when the change affects the cargo compartment fire protection design elements. 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 'Additional airworthiness specifications for operations';
— postpone the date, specified in point 26.205 of Annex I (Part-26), from which newly produced large aeroplanes used in commercial air transport shall be equipped with a runway overrun awareness and alerting system;
— exempt operators of certain in-service large aeroplanes used for business operations from the requirement to convert the Class D compartments of these aeroplanes, as introduced by Commission Implementing Regulation (EU) 2020/1159 on the introduction of new additional airworthiness requirements;
— clarify some existing requirements.

The proposed amendments are expected to:

— increase safety and improve the survivability of helicopter occupants by significantly reducing the likelihood of a post-crash fire;
— 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;
— reflect the current industrial capabilities of large aeroplane type-certificate holders in developing, certifying, and introducing into production a runway overrun awareness and alerting system;
— ensure that the requirement, which was introduced with point 26.157, to mitigate the risk of a serious incident or accident caused by a fire that starts in the Class D compartment of a large aeroplane is proportionate and cost-efficient;
— clarify the scope of Regulation (EU) 2015/640 for operators and some existing requirements related to ageing aeroplane structures.

REGULATION TO BE AMENDED Commission Regulation (EU) 2015/640

AFFECTED STAKEHOLDERS

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

WORKING METHODS

Development	Impact assessment(s)	Consultation
By EASA	RMT.0710: Detailed RMT.0740: Light	RMT.0710: NPA and Workshops RMT.0740: NPA — Focused

RELATED DOCUMENTS / INFORMATION

— ToR RMT.0710, issued on 16.12.2021
— RMT.0710: NPA 2022-10
ToR RMT.0740, issued on 11.4.2023
RMT.0740: NPA 2023-105

PLANNING MILESTONES: Refer to the latest edition of EPAS *Volume II*.

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1. About this Opinion

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) 2018/1139[1] (the Basic Regulation) and the Rulemaking Procedure[2], as well as in accordance with the objectives and working methods described in the Terms of Reference (ToR)[3,4].

EASA sought the advice of the Member States' Advisory Body (MAB) before issuing this Opinion to ensure that possible divergent views on the proposal would be addressed in due time before the Opinion publication. EASA assessed the comments received and considered the relevant ones for the final Opinion.

For information, EASA publishes the draft of the amended CS-26 and related guidance material (GM), and GM to Annex I (Part 21) to Regulation (EU) No 748/2012, which are intended to be issued to support the application of the Regulation proposed in this Opinion.

1.1.1. RMT.0710 — crash-resistant fuel systems

The draft regulatory material was publicly consulted in accordance with the ToR for this RMT through NPA 2022-10[5].

EASA reviewed the comments received and duly considered them for the preparation of the regulatory material presented here.

1.1.2. RMT.0740 — information on cargo compartment fire protection capabilities

The draft regulatory material was consulted in accordance with the ToR for this RMT with the ABs through NPA 2023-105[6].

EASA reviewed the comments received and duly considered them for the preparation of the regulatory material presented here.

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1 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) (http://data.europa.eu/eli/reg/2018/1139/oj).

2 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 (EASA MB Decision No 01-2022 on the Rulemaking Procedure, repealing MB Decision 18-2015 (by written procedure) | EASA (europa.eu)).

3 ToR RMT.0710 - Improvement in the survivability of rotorcraft occupants in the event of a crash | EASA (europa.eu)

4 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 | EASA (europa.eu)

5 NPA 2022-10 - Improvement in the survivability of rotorcraft occupants in the event of a crash — Phase 1 – Crash resistant fuel systems | EASA (europa.eu)

6 NPA 2023-105 - 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| EASA (europa.eu)

1.1.3. Runway overrun awareness and alerting systems

EASA received information from some large aeroplane type-certificate holders (TCHs) regarding the issues they are facing with the development and certification of runway overrun awareness and alerting systems in accordance with the requirement of point 26.205 of Annex I (Part-26) to Regulation (EU) 2015/640. This has led to ad hoc meetings and exchange of information with the TCHs concerned. Also, a letter, dated 25 January 2024, was received from the General Aviation Manufacturers Association (GAMA). Other manufacturers were also consulted to check their ability to meet the point 26.205 date. EASA analysed the various concerns and information received and prepared the proposal contained in this Opinion.

1.1.4. Conversion of Class D compartments

EASA further considered feedback received from interested parties (operators and manufacturers of the aeroplanes concerned) on the impact of Commission Implementing Regulation (EU) 2020/1159[7] and Commission Implementing Regulation (EU) 2022/1254[8].

1.1.5. Clarification of existing requirements and editorial improvements

This Opinion considers two comments received during the consultation of NPA 2023-105 that are not related to the proposal under RMT.0740. In response to these comments, this Opinion proposes to clarify the scope of Regulation (EU) 2015/640 for operators and some existing requirements related to the ageing aeroplane structures.

In addition, this Opinion proposes editorial improvements to Regulation (EU) 2015/640.

1.2. The next steps

This Opinion is submitted to the European Commission which, based on the Opinion's content, shall decide whether to adopt the amendments to Regulation (EU) 2015/640 as proposed in the Opinion.

Following the adoption and issuance of the amending regulation, EASA will issue an Executive Director Decision with the related certification specifications (CSs) and guidance material (GM) to support the application of that Regulation. When issuing this Decision, EASA will also provide feedback to the commentators and information to the public on who engaged in the process and/or provided comments on the draft CSs and GM during the consultation, which comments were received, how such engagement and consultation was used in rulemaking, and how the comments were considered.

[7] Commission Implementing Regulation (EU) 2020/1159 of 5 August 2020 amending Regulations (EU) No 1321/2014 and (EU) No 2015/640 as regards the introduction of new additional airworthiness requirements (OJ L 257, 6.8.2020, p. 14) (http://data.europa.eu/eli/reg_impl/2020/1159/oj).

[8] Commission Implementing Regulation (EU) 2022/1254 of 19 July 2022 amending Regulation (EU) 2015/640 as regards the introduction of new additional airworthiness requirements (OJ L 191, 20.7.2022, p. 47) (http://data.europa.eu/eli/reg_impl/2022/1254/oj).

2. In summary — why and what

2.1. Why we need to act

2.1.1. RMT.0710 — crash-resistant fuel systems

In 1994, the Federal Aviation Administration (FAA) and the Joint Aviation Authorities (JAA) introduced certification requirements for crash-resistant fuel systems (CRFSs) for all newly certified helicopters.

In 2003, EASA incorporated those occupant protection certification requirements into the Certification Specifications for Small Rotorcraft (CS-27) and the Certification Specifications for Large Rotorcraft (CS-29) for all newly certified helicopters.

Helicopters that had been designed and certified before 1994 (prior to the establishment of EASA) were not required to meet the improved occupant protection requirements. This resulted in a mixed fleet of helicopters with some helicopters being compliant with the CRFS requirements and some not, depending on the certification year. The helicopters that are not compliant with the CRFS requirements have had an adverse effect on the overall safety of the European helicopter fleet due to the higher likelihood of a post-crash fire with associated fatalities. Moreover, derivative helicopters models that were certified after 1994 have not been required to comply with the latest CRFS requirements due to the 'changed product rule' (as described in point 21.A.101 of Annex I (Part 21) to Regulation (EU) No 748/2012[9] (the 'Initial Airworthiness (IAW) Regulation')) and the grandfather rights that were acquired after the initial type certificate (TC) for a design is issued. Currently, 60 % of the helicopter fleet in service in Europe are compliant with the requirements for occupant protection, mainly with regard to CRFSs.

Since 2011, nine safety recommendations (SRs) have been addressed to EASA on the need to improve the incorporation of CRFSs into newly manufactured helicopters and/or as a retroactive modification that can be installed onto the existing helicopter fleet.

In 2018, the FAA established the Aviation Rulemaking Advisory Committee (ARAC) Rotorcraft Occupant Protection Working Group (ROPWG) (with the participation of EASA) and published a set of recommendations for the application of design improvements for occupant protection including CRFSs.

Due to a decision by the US Senate and a law change as of April 2020, newly manufactured helicopters that are operated or registered in the United States (US) must be fully or partially compliant with the CFRS requirements.

Related safety issues

The following SRs, which were issued by designated safety investigation authorities[10], were considered for this RMT (for each of the SRs, the following information is provided: SR number, summary of the

[9] Commission Regulation (EU) No 748/2012 of 3 August 2012 laying down implementing rules for the airworthiness and environmental certification of aircraft and related products, parts and appliances, as well as for the certification of design and production organisations (recast) (OJ L 224, 21.8.2012, p. 1) (http://data.europa.eu/eli/reg/2012/748/oj).

[10] Regulation (EU) No 996/2010 of the European Parliament and of the Council of 20 October 2010 on the investigation and prevention of accidents and incidents in civil aviation and repealing Directive 94/56/EC (OJ L 295, 12.11.2010, p. 35) (http://data.europa.eu/eli/reg/2010/996/oj).

SR/SR text, accident/incident aircraft type and registration, date and location of the accident/incident):

— Accident Robinson R44 VH-HWQ, 21 March 2013, Australia, (ASTL-2015-029) ATSB AO-2013-055-SR-029: 'The ATSB recommends that the European Aviation Safety Agency take action to increase the number of existing helicopters that are fitted with a crash-resistant fuel system or have an equivalent level of safety in respect of post-impact fire.'

— (ASTL-2015-030) ATSB AO-2013-055-SR-030: 'The ATSB recommends that the European Aviation Safety Agency take action to increase the number of helicopters manufactured in accordance with the 1994 certification requirements for helicopters to include a crash-resistant fuel system.'

— Accidents EC130B4 (N356AM), 6 March 2015, St. Louis, Missouri, and AS350B3e (N390LG) 3 July 2015, Frisco, Colorado, (UNST-2016-001) NTSB (two survivable accidents with serious injuries because of post-crash fires resulting from an impact-related breach in the fuel tank): 'Once Airbus Helicopters completes development of a retrofit kit to incorporate a crash-resistant fuel system into AS350 B3e and similarly designed variants, prioritize its approval to accelerate its availability to operators (A-16-11).'

— On 15 January 2014, the NTSB released the following recommendation (A-14-001): 'Require owners and operators of existing R44 helicopters to comply with the fuel tank retrofit advised in Robinson Helicopter Company Service Bulletin SB-78B to improve the helicopters' resistance to a post-accident fuel tank leak (A-14-001).'

— Loss of control, Robinson Helicopter Company R44 Astro, VH-HFH, on 4 February 2011, report AO-2011-06: No specific safety recommendation was published by the Australian Transport Safety Bureau (ATSB), but the bladder-type fuel tank retrofit was mentioned. Following the VH-HFH accident, on 9 March 2012, the ATSB issued safety advisory notice AO-2012-021-SAN-001 on R44 helicopter all-aluminium fuel tanks.

— Loss of control involving Robinson R44 helicopter, VH-COK, on 4 February 2012, report AO-2012-021, issued on 3 May 2013. The ATSB published recommendation AO-2012-021-SI-01 'Fitment of rubber, bladder-type fuel tanks to R44 helicopters'.

— Collision with terrain involving Robinson R44 helicopter, VH-HWQ. on 21 March 2013. On 5 April 2013, the ATSB published safety recommendation AO-2013-055-SR-001 towards the Civil Aviation Safety Authority (CASA): 'The ATSB recommends that CASA take further action to ensure that owners and operators of Robinson R44 helicopters are aware of the relevant regulatory requirements and comply with the manufacturer's service bulletin SB-78B to replace all-aluminium fuel tanks with bladder-type tanks on Robinson R44 helicopters.'

— Following an accident involving an AS350 Airbus helicopter (CS-HFT) in Portugal on 5 September 2019, the Portuguese Accident Investigation Authority made the following recommendation to EASA (PORT-2020-001): 'It is recommended that EASA follow its Rotorcraft Safety Roadmap publication principles, producing rulemaking documentation requiring retroactive application of the current improvements in fuel tank crash resistance for helicopters certified before the new certification specification for type design entered into force. Helicopters used for Commercial Operations shall be subject to this additional airworthiness requirement for operations.'

— On Saturday, 31 August 2019, an AS350 B3 Airbus helicopter, registered LN-OFU, crashed in the Skoddevarre mountains near Alta (Norway). The Norwegian Safety Investigation Authority (NSIA) recommends (SR No 2022/01T) that EASA requires that all helicopters, new and used, that are delivered in or imported to Europe be equipped with CRFSs in accordance with CS 27.952 or CS 29.952, regardless of their type certification date. In addition, the NSIA recommends EASA to not permit commercial passenger flights with helicopters that are not equipped with CRFSs in accordance with CS 27.952 or CS 29.952, regardless of their type certification date.

In addition, in 2014, EASA performed an evaluation of the post impact fire unsafe condition as regards Robinson R44. Based on that report, EASA concluded that a potential unsafe condition existed considering:

— the abnormal post-crash fire rate taking into account helicopter generational evolution;

— the abnormal R44 post-crash fire rate compared to other helicopters;

— the potential technical susceptibility of R44 to risk of a leak/ignition source compared to R22; and

— the events causing fatalities.

EASA issued Airworthiness Directive (AD) No 2014-070[11] to address this unsafe condition, which in turn addressed some of the SRs above. The remaining SRs, with regard to:

— the installation of a CRFS onto newly produced helicopters; and

— the retrofit of the existing EU helicopter fleet,

are addressed by this Opinion.

2.1.2.RMT.0740 — information on cargo compartment fire protection capabilities

Amendment 109 to ICAO Annex 8, which has been applicable since 3 November 2022, introduced new SARPs requiring (for large aeroplanes) and recommending (for helicopters and small aeroplanes) that the 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 are made available to the operator.

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’[12]. The related NPA (NPA 2022-11[13]) was published on 20 December 2022 and the rulemaking process is in progress.

[11] EASA Safety Publications Tool (europa.eu)

[12] ToR RMT.0392 - Regular update of air operations rules | EASA (europa.eu)

[13] NPA 2022-11 ‘Regular update of the Air Operations rules: lessons learnt from standardisation inspections, helicopter operation issues, and transposition of several ICAO SARPs’ (NPA 2022-11 - Regular update of the Air Operations rules:

The purpose of this Opinion is to propose the transposition of the ICAO Annex 8 SARPs introduced with Amendment 109 into Commission Regulation (EU) 2015/640.

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.'

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*.'

lessons learnt from standardisation inspections, helicopter operation issues, and transposition of several ICAO SARPs | EASA (europa.eu)).

2.1.3. Runway overrun awareness and alerting systems

Point 26.205 of Annex I (Part-26) to Regulation (EU) 2025/640 requires operators of large aeroplanes used in commercial air transport to ensure that every aeroplane for which the first individual certificate of airworthiness was issued on or after 1 January 2025, is equipped with a runway overrun awareness and alerting system (ROAAS).

Operators can comply with this requirement when the aeroplane TCHs deliver aeroplanes adequately equipped with a certified ROAAS.

EASA has been aware of significant difficulties faced by several TCHs such that some of their aeroplane types will not be equipped on time with a certified ROAAS to allow their operators to comply with the date specified by point 26.205 of Part-26. In a few cases, the date may be met but with no margin and a risk of delay is identified. The main reasons invoked by TCHs are:

— COVID-19 pandemic impacts: staff shortage, supply-chain disruptions;

— new and unexpected certification challenges across the industry;

— dependency on avionics supplier lead times;

— industrial limitations;

— time needed for the system to mature;

— late start of the system development for some manufacturers,

— special cases of aeroplane types close to end of production (MOD development not economically sustainable).

As of January 2024, the following TCHs were the most concerned: Airbus Canada, ATR, Boeing, Bombardier, Gulfstream, Textron Aviation. In addition, one Embraer type is at risk in case of industrial delay, and one Dassault type reaches the end of production (last aeroplanes at risk of not being sold by 31 December 2024).

2.1.4. Conversion of Class D compartments

Commission Implementing Regulation (EU) 2020/1159 inserted in Annex I (Part-26) to Regulation (EU) 2015/640 a new point 26.157. In accordance with that provision, all in-service large aeroplanes certified by the Agency and used in commercial air transport on or after 26 August 2023 are to comply with additional airworthiness requirements for the conversion of Class D cargo or baggage compartments. However, further analysis has shown that for certain type of operations, including primarily business operations, certain large, low-occupancy aeroplanes present lower risk of an in-flight fire starting in their Class D cargo or baggage compartment and developing into an uncontrollable fire. In order to avoid imposing non-proportionate and non-cost-efficient burdens on their operators, the operators of those aeroplane models therefore need to be exempted from the obligation to comply with point 26.157.

Commission Implementing Regulation (EU) 2022/1254 replaced Appendix 1 ‘List of aeroplane models not subject to certain provisions of Annex I (Part-26)’ with a new list, including aeroplane models for which point 26.157 shall not apply. Further investigations concluded that there are other low-occupancy large aeroplane models not included in this list, but which could also be involved in operations (primarily business operations), presenting a lower risk of an in-flight fire starting in their

Class D cargo or baggage compartment and developing into an uncontrollable fire. In order to avoid imposing non-proportionate and non-cost-efficient burdens on their operators, the operators of those aeroplane models therefore need to be also exempted from the obligation to comply with point 26.157.

2.1.5. Clarification of existing requirements and editorial improvements

2.1.6. Scope of Regulation (EU) 2015/640 for operators

The current scope for operators in Article 1(2)(a)(i) of Regulation (EU) 2015/640 does not specify the exclusion as the case is in Article 2(1)(b)(i) of the Basic Regulation.

While the Basic Regulation applies, there may be a lack of certainty regarding the scope of Regulation (EU) 2015/640.

2.1.7. Applicability of point 26.370 of Regulation (EU) 2015/640

The provisions on continuing airworthiness of ageing aeroplane structures in point 26.370, introduced with Regulation (EU) 2020/1159, apply currently to operators or owners, which are required to prepare the aircraft maintenance programme (AMP) that shall include the elements listed in the point.

The scope of Regulation (EU) 2015/640 covers the operators and design approval holders (DAHs). Owners are outside the scope.

2.1.8. Editorial improvements

During the review of Regulation (EU) 2015/640 EASA noticed some potential improvements to the regulatory text that should be considered.

2.2. What we want to achieve — objectives

The overall objectives of the EASA system are defined in Article 1 of the Basic Regulation. This Opinion will contribute to achieving the overall objectives by addressing the issues described in Section 2.1.

2.2.1. RMT.0710 — crash-resistant fuel systems

The specific objective is to mitigate the risks linked to a post-crash fire involving a helicopter, thus improving helicopter occupant survivability in the event of a crash. This can be achieved by increasing the number of helicopters that operate in the European Union with a CRFS installed, thereby reducing the likelihood of a post-crash fire.

2.2.2. RMT.0740 — information on cargo compartment fire protection capabilities

Many stakeholders within the global aviation community expressed their concern over 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).

2.2.3. Runway overrun awareness and alerting systems

The objective is to ensure that the date specified in point 26.205 of Part-26 is realistic and fairly achievable by large aeroplane TCHs. Ultimately, the risk must be minimised for operators that are concerned over taking delivery of an aeroplane that is not equipped with a certified ROAAS and hence over not being able to demonstrate compliance with point 26.205. At the same time, any delay of the date must not create a significant safety risk increase caused by a late implementation of the ROAAS requirement on newly produced large aeroplanes.

2.2.4. Conversion of Class D compartments

The objective is to ensure that the requirement that was introduced with point 26.157, to mitigate the risk of a serious incident or accident caused by a fire that starts in the Class D compartment of a large aeroplane, is proportionate and cost-efficient.

2.2.5. Clarification of existing requirements and editorial improvements and corrections

The objective is to provide certainty on the application of Regulation (EU) 2015/640 and improve the current regulatory text in order to resolve the issues identified in Section 2.1.4.

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

2.3.1. RMT.0710 — crash-resistant fuel systems

Based on the impact assessment (IA) and after consultations with the stakeholders, four options have been identified. This Opinion proposes to amend Part-26 to require compliance with the CRFS requirements for:

— newly manufactured helicopters with a compliance date of 2 years after the entry into force to allow time for kit development;

— in-service helicopters with 6 or more occupants certified after 2 October 1994 with a compliance date of 7 years after the entry into force. This covers the recent fleet mainly used for passenger transportation;

— in-service helicopters with 5 or less occupants certified after 2 October 1994 with a compliance date of 15 years after the entry into force. This covers the recent fleet of small helicopters; and

— helicopters imported from a non-Member State. This prevents importation of non-compliant helicopters on the EU market.

This stepped approach to the applicability of the amendments to Part-26 will allow for an incremental improvement in the safety of the EU helicopter fleet, whilst also providing operators and owners with the time needed to take decisions about the composition of their fleets and to implement the necessary design changes to ensure compliance. Over time, thanks to the requirement in point 26.440,

the portion of the EU helicopter fleet that is not compliant with the CRFS requirements should decrease, thereby reducing the overall risk of an otherwise survivable accident resulting in a post-crash fire.

2.3.2.RMT.0740 — information on cargo compartment fire protection capabilities

2.3.2.1 Scope

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

CS-25 applies to turbine-powered large aeroplanes. EASA CS-Definitions (Amendment 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 transpose 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 transposition of that new Part IIIB standard will obviate the need for Member States to file a difference to the ICAO SARPs.

This Opinion proposes to transpose the recommended practices in Part IVB and Part VB of ICAO Annex 8 with an applicability to:

— helicopters that have CS-27 and CS-29 or equivalent in their certification basis, and

— 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.

2.3.2.2 Proportionality

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.

Due to their nature, the Airworthiness Panel (AIRP) of the ICAO Air Navigation Commission (ANC) developed the recommended practices without considering further their applicability. However, for the transposition in Regulation (EU) 2015/640 these recommended practices should take the form of requirements. A direct conversion of the applicability of recommended practices would result in a wider scope for helicopters and small aeroplanes than for large aeroplanes.

This Opinion proposes to transpose the recommended practices using the same applicability as for 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.

In addition, this Opinion proposes to transpose the recommended practices only in the cases of cargo compartments separated from the flight deck. The benefit for operators to receive the information on the fire protection capabilities in the 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.

2.3.2.3 Applicability

Design approval holders

This Opinion proposes that the new SARPs apply to the following DAHs:

— type-certificate and restricted type-certificate holders; and

— supplemental type-certificate and design change approval holders when a change affects the cargo compartment fire protection capabilities.

Compared to NPA 2023-105, the applicability is extended to the design change approval holders as the result of a comment received during the AB consultation.

Applicability date

Due to the applicability date of 1 January 2025, the targeted applicability of the requirements should be as soon as the amending regulation is adopted (i.e. 20 days following its publication in the Official Journal of the European Union).

2.3.2.4 Regulatory material

The new SARPs relate to a task that the DAH shall carry out after certification or approval, 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 Opinion 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 Opinion 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.

Considering a comment received during the consultation of NPA 2023-105, the proposed regulatory text ensures that, if a change to the aircraft affects the cargo compartment fire protection capabilities after the DAH has made available the information, the DAH makes available any change to this information.

Compared to NPA 2023-105 the reference to the demonstration during the certification is deleted from point 26.175 and point 26.405 since the requirements relate to the information about the characteristics of the cargo compartment fire protection capabilities and not about the specifications with which compliance must be demonstrated.

Compared to NPA 2023-105 the DAH is not required to provide the information to all operators but to make it available to all known operators since the DAH may not know all operators and may not provide the information directly but through means such as a portal.

2.3.3. Runway overrun awareness and alerting systems

It is proposed to amend point 26.205 of Part-26. The current specified date of 1 January 2025 would be changed to 1 July 2026, thereby providing TCHs with an extra 18 months to develop, obtain certification, and implement a ROAAS into production.

2.3.4. Conversion of Class D compartments

Following the adoption of Commission Implementing Regulation (EU) 2022/1254, certain operators and aircraft manufacturers expressed their views and concerns about the applicability of point 26.157 to operators of certain large aeroplanes used in commercial air transport. In their view, the list in Appendix 1 needed to be further updated to include additional large aeroplane models also performing business operations, and for which the requirement was also not cost-efficient. EASA further analysed the impact of point 26.157, in coordination with the parties concerned. This proposal is the outcome of that analysis.

2.3.5. Clarification of existing requirements and editorial improvements

2.3.5.1 Scope of Regulation (EU) 2015/640 for operators

To ensure certainty on the scope for operators, this Opinion proposes to specify the exclusion as in Article 2(1)(b)(i) of the Basic Regulation into Article 1(2)(a)(i) of Regulation (EU) 2015/640.

In addition, since the current wording in Article 1(2)(a)(ii) originates from Regulation (EC) No 1592/2002 (the first Basic Regulation), this Opinion proposes to amend it such that it reflects the scope in Article 2(1)(b)(ii) of the current Basic Regulation specifying that the aircraft is operated by an operator having its principal place of business in a Member State. This proposed amendment does not modify the original scope.

2.3.5.2 Applicability of point 26.370 of Regulation (EU) 2015/640

This Opinion proposes to make point 26.370 applicable only to operators since aircraft owners are not within the scope of Regulation (EU) 2015/640.

While the operator may not be the organisation in charge of preparing the maintenance programme of the aircraft they operate, point 26.370 requires that the operators ensure that this maintenance programme includes the elements listed in that point.

It is proposed to refer generically to the maintenance programme and to delete the reference to (Part-M) to Regulation (EU) No 1321/2014 since the scope of Part-M does not cover all aircraft operated by the operators that are within the scope of Regulation (EU) 2015/640.

The title of point 26.370 is replaced to simply refer to the maintenance programme.

Other related requirements in the cover regulation and in Part-26 need to be amended accordingly. Specific amendments are detailed in Table 1 (see Section 2.3.6).

2.3.5.3 Editorial improvements and corrections

This Opinion proposes some editorial improvements. The main ones are the deletion of Article 3 due to redundancy following the amendment of Article 1 through Regulation (EU) 2020/1159, and the deletion of 'turbine-powered' in some requirements due to redundancy as the definition of 'large aeroplane' in Article 2 covers this category of aeroplanes. The editorial improvements are detailed in Table 1 of Section 2.3.6.

2.3.6. Summary of the proposed amendments and rationale

Table 1 provides an overview of the proposed amendments to Regulation (EU) 2015/640 and the related rationale. For the proposed regulatory material, see Chapter 4.

Table 1: Proposed amendments and rationale

Proposed amendments related to RMT.0710 (Section 2.3.1)	
26.440	This point is added to include the new requirements related to the post-crash fire protection.
Proposed amendments related to RMT.0740 (Section 2.3.2)	
Article 2	In Article 2, point (ba) is added to include the definition of 'small aeroplane' 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.
26.10(b)	Point 26.10(b) is amended so that its scope is more generic and to include the demonstration of compliance with any requirement applicable to those DAHs that need to show compliance with Part-26.
Subpart B	The title is amended to delete 'large' such that Subpart B includes types of aeroplanes other than large aeroplanes (e.g. the newly defined 'small aeroplanes').
26.100, 26.156, 26.157, 26.205, 26.300, 26.303 to 26.370	These points of Part-26 are amended to clarify that they apply to large aeroplanes and to avoid any confusion regarding the scope.
26.175	This point is inserted to include the new standard and recommended practices for aeroplanes and is placed after point 26.170 related to fire extinguishers (see Section 2.3.2).
26.405	This point is added to include the new recommended practices for helicopters and is placed after point 26.400 related to fire extinguishers (see Section 2.3.2).
Runway overrun awareness and alerting systems (Section 2.3.3)	
26.205	The date of 1 January 2025 specified in paragraph (a) is replaced by 1 July 2026.
Conversion of Class D compartments (Section 2.3.4)	
Appendix 1	The list of aeroplane models not subject to certain provisions of Annex I (Part-26) is replaced by a new one.

Clarification of existing requirements (Section 2.3.5)	
Article 1(2)(a)	In paragraph 2 of Article 1, point (a) is amended for consistency with the Basic Regulation (see Section 2.3.5.1)
Article 2(g), (i), (j), (m) and (n)	The definitions in Article 2(g), (i), (j), (m) and (n) are improved to add the missing DAHs as specified in Part-26.
26.30	Point 26.30 is improved and clarifies to whom the changes to the instructions for continued airworthiness (ICA) are to be made available.
26.306(c), 26.306(e), 26.307(d), 26.309(a)(ii), 26.330(a), 26.332(b), 26.332(c), 26.334(a)	These points are amended to clarify to whom the DAH shall make the information available when referring to points 26.330 and 26.370
26.370	Point 26.370 is made applicable to operators only and requires them to ensure that the maintenance programme includes the elements listed in that point. The reference to Annex I (Part-M) to Regulation (EU) No 1321/2014 is deleted since the scope of that Part does not cover all aircraft operated by the operators that are within the scope of Regulation (EU) 2015/640. The reference to the maintenance programme is generic and the title of point 26.370 is replaced to simply refer to the maintenance programme.
Editorial improvements (Section 2.3.5)	
Article 3	<u>Editorial improvement — deletion of Article 3 for consistency</u> It is proposed to delete Article 3 since it is redundant with Article 1. Article 3, which specifies the scope of Regulation (EU) 2015/640 for operators, refers to Article 1 from the initial issue of that regulation, in which the scope of the regulation was limited to the aircraft registered in a Member State or in a third country and used by an operator for which a Member State ensures oversight. Article 1 was amended with Regulation (EU) 2020/1159 to specify that the regulation applies to the operators of those aircraft such that Article 3 became redundant with Article 1(2)(a). However, Article 3 was not deleted with Regulation (EU) 2020/1159. The current proposed amendment to Article 1(2)(a)(ii) does not modify the original scope.
Article 1(2)(c) 26.300, 26.301, 26.302, 26.303, 26.304, 26.305, 26.306, 26.307, 26.308, 26.309, 26.370	<u>Editorial improvement – deletion of 'turbine-powered'</u> It is proposed to delete 'turbine-powered' in those requirements related to large aeroplanes where this term occurs due to redundancy given the definition of 'large aeroplane'. 'Large aeroplane' is defined in Article 2 as being an aeroplane that has CS-25 or equivalent in its certification basis, and CS-25 applies to turbine-powered large aeroplanes.
26.10(a)	<u>Competent authority for the operators</u> The current point 26.10(a) relates to the competent authority designated by the Member State in which the operator has its principal place of business. Since the

	competent authority is specified for each operation category in Regulation (EU) No 965/2012, it is proposed to amend point 26.10(a) to directly refer to that regulation. This ensures consistency with Regulation (EU) No 965/2012 for any potential operation. The reference to the Agency is added to cover the case where the responsibility of the oversight has been allocated to the Agency in accordance with Article 64 or 65 of Regulation (EU) 2018/1139.
26.330, 26.331, 26.332, 26.333, 26.334	Editorial improvement — major change approval In point 26.330(a), 'for major changes' is deleted since a supplemental type certificate is for major changes (redundancy). Points 26.331 to 26.334 are amended to specify and clarify that the requirements apply to the holders referred to in point 26.330(a). The title of point 26.330 is improved and the title of point 26.334 is improved for consistency with point 26.330.

2.3.7. Legal basis

The legal basis for amending Regulation (EU) 2015/640 is Article 17(1)(h) of the Basic Regulation.

2.4. What are the stakeholders' views

2.4.1. RMT.0710 — crash-resistant fuel systems

Stakeholders were involved in the development of the requirement. An initial set of options was proposed in NPA 2022-10, which was published on 11 November 2022. Throughout the consultation period, EASA received a total of 117 comments, reflecting a range of perspectives, including some controversial positions. To address these, a webinar was held on 29 June 2023, engaging stakeholders in a comprehensive discussion about the situation.

A workshop took place on 9 September 2023. Various options were discussed in depth. However, comments persisted about the time frame needed for kit development and the impact on older aircraft.

Taking into account the outcome, new proposals were then developed. These include an extended time frame of 2 years for kit development for newly produced helicopters and exempting aircraft certified before 1994 from the requirements. To share these updated options, a new event was organised on 13 November 2023 with the stakeholders where industry representatives and national competent authorities agreed on the new proposals.

2.4.2. RMT.0740 — information on cargo compartment fire protection capabilities

Stakeholders were involved in the development of the new SARPs within the AIRP of the ICAO 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.

During the focused consultation of NPA 2023-105, EASA received 7 comments from 4 representatives of the MAB, 7 comments from 3 representatives of the Stakeholder Advisory Body (SAB) and 1 comment from the Commission.

Nearly two third of the comments (60 %) were accepted, partially accepted or noted. From these comments, 7 comments relate to the proposal under RMT.0740 and 2 comments relate to existing regulatory text, as listed below.

RMT.0740-related comments:

— 3 comments support the proposal;

— 1 comment relates to the clarification of the scope (see Section 2.3.2);

— 1 comment relates to the confirmation of the link between the proposed requirements and Regulation (EU) No 965/2012 and NPA 2022-11;

— 1 comment for clarification will result in a change to CS-26 to specify the link with the requirements in point 26.175;

— 1 comment relating to any subsequent changes after the information was provided to the operators results in changes in the regulatory text (see Section 2.3.2).

Non-RMT.0740-related comments:

— 1 comment on the clarification of the scope of Regulation (EU) 2015/640 for operators results in proposed amendments in line with the Basic Regulation (see Section 2.3.5);

— 1 comment on the clarification of the applicability of the aircraft maintenance programme requirements in point 26.370 results in proposed amendments in line with the scope of Regulation (EU) 2015/640 (see Section 2.3.5).

The rest of the comments (40 %) were not accepted. These comments and the related EASA responses are summarised in Table 2.

Table 2

Commented topics	**EASA responses**
Proposal to add a reference in point 26.175 to points in Annex I (Part 21) of Regulation (EU) No 748/2012 related to operational suitability data (OSD)	OSD does not include the information requested in point 26.175
Proposal to create a specific subpart for small aeroplanes	The proposed approach to extend the scope of Subpart B to small aeroplanes is consistent with the approach chosen for Subpart C for helicopters (for which the scope was extended to small helicopters with Regulation (EU) 2022/1254). In addition, some provisions may apply to both small and large aeroplanes.
Question on the applicability of the requirements to ELA 1 and ELA 2 and proposal to require alternatives such as prohibitive markings	A representative of general aviation was involved in the AIRP discussions, although they focused on large aeroplanes. EASA assessed the impact of the SARPs implementation on small aircraft and concluded that applying the requirement in the case of a cargo compartment separated from the flight deck reduces the impact of the requirement on those aircraft since most of the cargo compartments are inside the flight deck.

	In addition, a prohibitive placard would require that the DAH does the risk assessment to determine what shall be prohibited.
Proposal to remove the requirements for helicopters, for the following reasons: — there are no SARPs in ICAO Annex 6 Part III similar to those in Part I Chapter 15; — the operational capability of helicopters to perform emergency landings in a shorter time than aeroplanes would likely lead to a risk assessment determining an acceptable risk level; — there are no certification requirements in place for fire suppression systems; helicopters mostly operate with cargo compartments fitted with a detection system to enable the crew to perform emergency procedures and ensure a continued safe flight and landing.	The fire protection certification specifications are not limited to detection systems. For example, cargo only helicopters must be equipped with a means to shut off the ventilating airflow to or within the compartment, among other requirements. In addition, a manufacturer may equip a helicopter with a built-in fire extinguishing system (some CS provisions exist about that, see CS 29.851(b)). All pertinent and useful information must be made available to the operator to support the required risk assessment in ORO.GEN.200(a)(3), which applies also to helicopters.
The level of detail requested goes beyond what is required in ICAO Annex 8. Some data may be proprietary.	The details are provided in the GM as examples; they are not required. In Part-26, the required information is related to what is necessary for the risk assessment. CS-26 relates to what has been certified. This is in line with the SARPs in ICAO Annex 8. The DAHs are not supposed to make available proprietary data.

2.4.3. Runway overrun awareness and alerting systems

The TCHs that are facing industrial difficulties requested to postpone the date of applicability specified in point 26.205. The new date, 1 July 2026, proposed in this Opinion should allow all — except one — TCHs to deliver ROAAS-equipped aeroplanes from this date. Therefore, most of the stakeholders (TCHs and operators concerned) agree with this proposal. EASA is working with the single TCH that has not yet been able to provide a certification plan allowing to meet the new proposed deadline (1 July 2026).

MAB advice was sought on the draft regulation in accordance with Management Board Decision N°01-2022 Article 6(9). No substantial divergent views were expressed. DGAC France reminded that the ICAO Annex 6 point 6.26.1 provisions enforce the ROAAS for 'All turbine-engined aeroplanes of a maximum certificated take-off mass in excess of 5 700 kg, for which the individual certificate of airworthiness is first issued on or after 1 January 2026' and asked what EASA intends to do regarding the difference between Annex 6 and Part-26. EASA will inform ICAO of the proposed postponement of the Part-26 applicability date and invite them to consider amending Annex 6 as well. A notification of difference will be made to ICAO as necessary.

2.4.4.Conversion of Class D compartments

Following the adoption of Implementing Regulation (EU) 2022/1254, certain operators and aircraft manufacturers, expressed their views and concerns about the applicability of point 26.157 to operators of certain large aeroplanes used in commercial air transport. In their view, the list in Appendix 1 needed to be further updated to include additional large aeroplane models also performing business operations, and for which the requirement was not cost-efficient. This proposal addresses those concerns.

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

3.1. RMT.0710 — crash-resistant fuel systems

The expected benefits of the proposed regulatory material are the following:

— a significant reduction in the likelihood of a post-crash fire in Europe in the event of a survivable helicopter accident;

— a reduction in the number of fatalities in Europe due to thermal injuries caused by a post-crash fire;

— harmonisation of the safety levels of newly produced helicopters between the EASA MSs and the USA; and

— reduced risk and exposure to potential litigation against operators in the event of a post-crash fire in an otherwise survivable helicopter accident.

The expected drawbacks of the proposed amendments are the following:

— additional costs of developing and installing the necessary design changes for the retrofit of the existing EU helicopter types that are currently not compliant with the CRFS requirements;

— additional operating costs due to the additional weight of a fuel system that is compliant with the CRFS requirements (when compared to the non-compliant helicopter design[14]), including a reduction in range, a reduction in payload or an increase in fuel consumption; and

— for a limited number of helicopter types, there could be a need for operators to replace a non-compliant helicopter if the OEM does not offer design changes to make the helicopter type compliant with the CRFS requirements.

3.2. RMT.0740 — information on cargo compartment fire protection capabilities

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

The issue as well as the new SARPs were assessed by ICAO. The impact assessment is summarised in Table3.

Table 3: 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	

[14] In this comparison, an equivalent compliant rotorcraft design (when initially certified after 1994) is not compared to a rotorcraft design that is required to be compliant through an amendment to Part 26.

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 TCHs 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.

3.3. Runway overrun awareness and alerting systems

The proposed amendment of point 26.205 will provide a more realistic applicability date that considers the industrial difficulties faced by several TCHs.

The new proposed date will prevent various operators concerned from not being able to comply with point 26.205 when taking delivery of an aeroplane that is not equipped with a certified ROAAS. This will hence also prevent such operators from having to request exemptions to Member State responsible authorities (Regulation (EU) 2018/1139, Article 71 'Flexibility provisions') and being exposed to the risk of negative decisions to these requests and the corresponding financial load if they have to cancel orders and/or purchase/lease replacement aeroplanes. This situation could also create a non-level playing field between EU and non-EU operators.

The new date should be met by all TCHs with one exception identified at the time of issuing this Opinion, and EASA is working with this TCH to reach an acceptable certification plan consistent with the new proposed applicability date.

In terms of safety impact, the delay in the implementation of the ROAAS on some newly produced aeroplanes will result in a postponement of the safety benefit as foreseen by the impact assessment (IA) presented in NPA 2018-12. This IA estimated the following safety benefits during the first 2 years of implementation of the ROAAS in production (including new type certification):

	Accidents	Fatalities	Injuries
First year	0.1	0.1	0.6
Second year	0.2	0.1	1.1

Considering that the two major types in terms of fleet size and number of flights used for commercial air transport (the Airbus A320 family and the Boeing 737) are not concerned by the delay, it can be

concluded that only a small portion of the above safety benefits will be gained later than expected. This drawback is deemed acceptable by EASA and balanced by the above-described benefits.

3.4. Conversion of Class D compartments

The proposal is expected to provide for a level playing field and equally avoid imposing non-proportionate and non-cost-efficient burdens on operators of certain large aeroplanes (business aeroplanes).

4. Proposed regulatory material

The proposed regulatory material is presented as annexes to this Opinion.

5. Monitoring and evaluation

5.1. RMT.0710 — crash-resistant fuel systems

The monitoring of the effects of the proposed requirement in Part-26 will include the following:

(a) experience gathered by EASA through the requests for the certification of design changes that enable helicopter designs to comply with the CRFS requirement;

(b) monitoring the number of post-crash fires and fatalities involving helicopters that are designed for 5 or more occupants after the applicability date of the amended regulation to determine whether that number has been reduced; and

(c) monitoring the number of post-crash fires and fatalities involving helicopters that are designed for 4 or less occupants after the applicability date of the amended regulation to determine whether that number has been reduced.

Item (a) depends on the applications that will be received by EASA after the amendments of Part-26. A review may be conducted no sooner than 5 years after the applicability date of the amendments.

Items (b) and (c) constitute an ongoing review. However, a more detailed review may be conducted no sooner than 5 years after the applicability date of the requirement to establish whether there is a positive trend in the reduction of post-crash fires and fatalities.

5.2. RMT.0740 — information on cargo compartment fire protection capabilities

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

5.3. Runway overrun awareness and alerting systems

EASA will monitor the large aeroplane TCHs ROAAS implementation activities so as to ensure that the new point 26.205 deadline is complied with.

5.4. Conversion of Class D compartments

The monitoring of the effects brought about by the proposed amendments to Part-26 / CS-26 will include monitoring the trend in the numbers of accidents and incidents caused by in-flight fire in large aeroplane Class D compartments after the end of the transition period.

6. Proposed actions to support implementation

6.1. RMT.0710 — crash-resistant fuel systems

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

6.2. RMT.0740 — information on cargo compartment fire protection capabilities

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

6.3. Runway overrun awareness and alerting systems

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

6.4. Conversion of Class D compartments

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

7. References

7.1. RMT.0710 — crash-resistant fuel systems

— ARAC Rotorcraft Occupant Protection Working Group (ROPWG) Task 5 'Crash Resistant Fuel Systems (CRFS) Final analysis report to the ARAC', submitted on 15 March 2018

— ARAC Rotorcraft Occupant Protection Working Group (ROPWG) Task 6 'Final Analysis Report to the ARAC', revised on 27 September 2018

— ARAC Rotorcraft Occupant Protection Working Group (ROPWG) Task 5 'Crash Resistant Seats and Structure (CRSS) Final Analysis Report to the ARAC', submitted on 29 January 2018

7.2. RMT.0740 — information on cargo compartment fire protection capabilities

— 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)