



# Terms of Reference

for rulemaking task RMT.0318 (OPS.049)

## Single-engine helicopter performance

ISSUE 1

### Issue/rationale

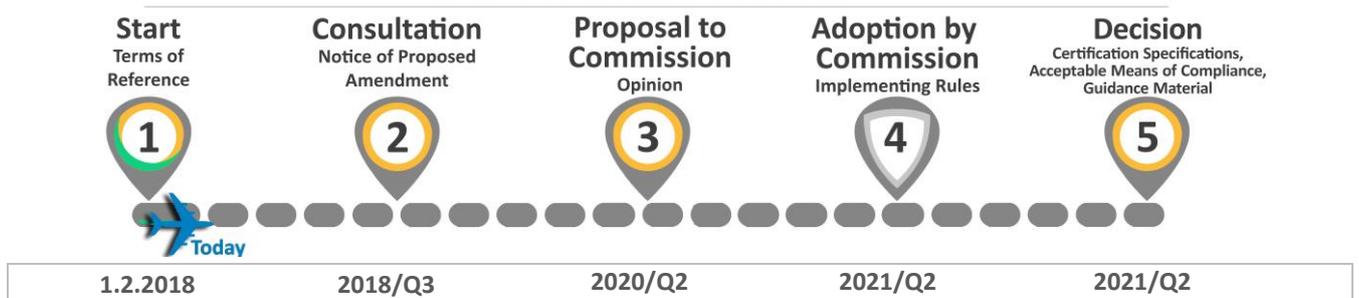
Review the applicable rules and the associated acceptable means of compliance (AMC) and guidance material (GM) in order to re-evaluate:

Restrictions on piston engine helicopters to operate over hostile environment;

Restrictions on performance class 3 helicopter operations over congested hostile environment.

<b>Action area:</b>	Helicopter operations		
<b>Affected rules:</b>	Commission Regulation (EU) No 965/2012 Definitions, ARO, ORO, CAT, SPA		
<b>Affected stakeholders:</b>	Helicopter operators, authorities, EASA		
<b>Driver:</b>	Level playing field and efficiency	<b>Rulemaking group:</b>	Yes
<b>Impact assessment:</b>	Full	<b>Rulemaking Procedure:</b>	Standard

• EASA rulemaking process milestones



## 1. Why we need to change the rules — issue/rationale

This rulemaking task (RMT) is addressing two separate issues.

- (a) The first issue is the restrictions on the use of piston-engined helicopters without safe forced landing areas. This issue is driven by level playing field considerations.

It is widely accepted that modern piston engines are now far more reliable and can be expected to achieve similar standards as turbine engines and should therefore be assessed on this basis. Performance-based regulations should be based on safety and reliability and not discriminate due to the type of engine technology used.

- (b) The second issue is the restrictions on the use of single-engined helicopters in congested-hostile areas. This issue is driven by efficiency considerations.

The current commercial air transport (CAT) regulations prohibit the use of single-engined helicopters over a congested hostile environment. This is more restrictive than the equivalent regulations of the USA or Canada. It is also not consistent with the current EU regulations for the use of single-engine turbine aeroplanes flying in accordance with instrument flight rules (IFR).

The protection of third parties has been one of the highest priorities in aviation safety, and any inconsistency between the aeroplane and helicopter rules needs to be further debated within this RMT.

### Related safety issues

No safety recommendations are pertinent to the scope of this RMT.

### Exemptions<sup>1</sup> in accordance with Article 14 ‘Flexibility provisions’ and/or Article 22 ‘Air operation certification’

No exemptions are pertinent to the scope of this RMT.

### Alternative means of compliance (AltMoC) relevant to the content of this RMT

The following alternative means of compliance have an impact on the development of the first part of this RMT content:

UK AltMoC 2015/00034 to CAT.POL.H.305(b)

AT AltMoC 2017/00017 to CAT.POL.H.305(b)

Both alternative means of compliance are identical and have been produced considering the development of modern reliable piston-powered helicopters suited for performance class 3 CAT. The increased reliability of such helicopters has made AMC2 CAT.POL.H.305(b) discriminative. The AltMoCs allow single-piston-engined helicopters to be considered for operations without a safe-forced landing capability alongside the turbine-powered helicopters as provided for in CAT.POL.H.400(c).

<sup>1</sup> Exemptions having an impact on the development of this RMT content and referring to:

- Article 14.1: Measures taken as an immediate reaction to a safety problem
- Article 14.4: Exemptions from substantive requirements laid down in the Basic Regulation and its implementing rules in the event of unforeseen urgent operational circumstances or operational needs of a limited duration;
- Article 14.6: Derogation from the rule(s) implementing the Basic Regulation where an equivalent level of protection to that attained by the application of the said rules can be achieved by other means;
- Article 22.2(b): Individual flight time specifications schemes deviating from the applicable certification specifications which ensure compliance with essential requirements and, as appropriate, the related implementing rules.

The alternative means of compliance reflect all the aspects of the current AMC2 CAT.POL.H.305(b) in the implementation of a set of conditions to obtain an approval under CAT.POL.H.305(a) but are adapted with piston engines instead of turbines. They provide means to establish an engine reliability programme for piston-engined helicopters.

The operator and the national aviation authority (NAA) will still need to take into consideration the appropriate power plant reliability statistics for the helicopter type/engine type combination when conducting the risk assessment for any such proposed operation and before any approval is granted.

### ICAO and third countries references relevant to the content of this RMT

Attachment A to ICAO Annex 6, Part 3 provides guidance to Contracting States. The current EU performance code has then been developed in compliance with this ICAO attachment.

Attachment A states that Member States 'may introduce alternatives or alleviations that would meet the safety objectives of Annex 6'.

The intent of this RMT is to remain aligned with ICAO Annex 6 while considering such alternatives and alleviations, and, at the same time, to maintain compliance with ICAO Annex 2, Chapter 3, Paragraph 3.1.2<sup>2</sup>:

*Except when necessary for take-off or landing, or except by permission from the appropriate authority, aircraft shall not be flown over the congested areas of cities, towns or settlements or over an open-air assembly of persons, unless at such a height as will permit, in the event of an emergency arising, a landing to be made without undue hazard to persons or property on the surface.*

Any other work produced by the ICAO flight operations panel helicopter study group (FLTOPS HSG) should also be considered to avoid duplication of effort and to remain compliant

## 2. What we want to achieve — objective

The overall objectives of the EASA system are defined in Article 2 of Regulation (EC) No 216/2008<sup>3</sup>. This project will contribute to the achievement of the overall objectives by addressing the issues outlined in Chapter 1.

The specific objective of this proposal is to ensure a level playing field by allowing performance class 3 operations to take place whenever a high level of safety can be achieved/maintained. This includes the following :

- (a) to ensure that the regulations are based on safety and reliability considerations and not on the technology used.
- (b) to define whether or not performance class 3 operations can take place in a congested hostile environment, and if so, under which conditions.

## 3. How we want to achieve it

A rulemaking group will be established and will be tasked with the following activities:

<sup>2</sup> This ICAO Annex 2 standard has been transposed into SERA 3105 Minimum heights. The aim is also to remain consistent with Part-SERA.

<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).



- review the current helicopter performance rules.
- review the reference documents listed in Section 8.3.
- draft new requirements as necessary to ensure that the performance requirements are based on safety and reliability and not on the technology used (objective (a)).
- draft new requirements as necessary to ensure that performance class 3 operations can take place whenever a high level of safety can be achieved/maintained. (objective (b)).
- consider changing from prescriptive to performance-based rulemaking, as appropriate (both objectives (a) and (b)).
- develop a regulatory impact assessment (RIA), using the helicopter Preliminary Impact Assessment (PIA) as a starting point (both objectives (a) and (b)).
- develop a notice of proposed amendment (NPA) including, as appropriate, amendments to Commission Regulation (EU) No 965/2012 and related AMC/GM (both objectives (a) and (b)).

#### 4. What are the deliverables

Following the work of the rulemaking group, the next deliverables are expected to be produced:

- an NPA with draft implementing rules (IRs), AMC, GM (2018/Q3);
- a comment-response document (CRD) to NPA (2019/Q2);
- an opinion with draft implementing rules (2019/Q4);
- a decision to amend AMC and GM (2020/Q4).

#### 5. How we consult

A public consultation of the published NPA will take place in accordance with Article 7 of the [Rulemaking Procedure](#).<sup>4</sup>

However, in case the scope of the amendments is restricted to objective (a) only and the expected impact remains negligible, an opinion and a decision to amend the associated AMC and GM may be published without an NPA, in accordance with the accelerated procedure defined in Article 16 of the [Rulemaking Procedure](#).

#### 6. Interface issues

N/a.

#### 7. Profile and contribution of the rulemaking group

A rulemaking group will be established. The tasks of the rulemaking group are defined in Section 3.

Profile of the rulemaking group and its members:

<sup>4</sup> EASA Management Board Decision N°18-2015 of 15 December 2015 replacing Decision 01/2012 concerning the procedure to be applied by the Agency for the issuing of opinions, certification specifications, acceptable means of compliance and guidance material ('Rulemaking Procedure')

- initial pilot training and checking experience at commercial pilot licence (CPL) or air transport pilot licence (ATPL) and type rating training level;
- recurrent pilot training and checking experience in CAT operations;
- pilot experience in CAT operations;
- helicopter flight operations management experience;
- performance-based risk management experience;
- experience in/knowledge of the oversight of helicopter operators;
- competent authority (CA) oversight experience;
- extensive knowledge of the ICAO Standards and Recommended Practices (SARPs) and EU regulatory framework;
- experience in the performance-based regulatory framework;
- experience in risk assessment and knowledge of the related methodology;
- substantial knowledge of the EU performance code provided in the CAT.POL.H, Section 2, Subpart C of Part-CAT of Commission Regulation (EU) No 965/2012
- knowledge and understanding of helicopter operations without safe-forced landing areas in performance class 2 and 3.
- Knowledge related to helicopter airworthiness, reliability, and equipment requirements

The rulemaking group should have a balanced representation of NAAs, air operators, pilot associations and manufacturers representing different types of operations relevant to the topic.

Additionally, for objective (a), a focused consultation may take place.

## 8. Reference documents

### 8.1. Affected regulations

- Commission Regulation (EU) No 965/2012 of 5 October 2012 laying down technical requirements and administrative procedures related to air operations pursuant to Commission Regulation (EU) No 216/2008 of the European Parliament and of the Council (OJ L 296, 25.10.2012, p. 1).

### 8.2. Affected decisions

- Decision N°2012/015/Directorate R of the Executive Director of the Agency of 24th October 2012 on Acceptable Means of Compliance and Guidance Material to 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 'Guidance Material to Annex I — Definitions'
- Decision 2014/025/R of the Executive Director of the Agency of 28 July 2014 adopting Acceptable Means of Compliance and Guidance Material to Part-ARO of Regulation (EU) No 965/2012 and repealing Decision 2014/014/R of the Executive Director of the Agency of 24 April 2014 'AMC and GM to Part-ARO — Issue 3'



- Decision 2014/017/R of the Executive Director of the Agency of 24 April 2014 adopting Acceptable Means of Compliance and Guidance Material to Part-ORO of Regulation (EU) No 965/2012 and repealing Decision 2012/017/R of the Executive Director of the Agency of 24 October 2012 ‘AMC and GM to Part-ORO — Issue 2’
- Decision 2014/015/R of the Executive Director of the Agency of 24 April 2014 adopting Acceptable Means of Compliance and Guidance Material to Part-CAT of Regulation (EU) No 965/2012 and repealing Decision 2012/018/R of the Executive Director of the Agency of 24 October 2012 ‘AMC and GM to Part-CAT — Issue 2’
- Decision N°2012/019/Directorate R of the Executive Director of the Agency of 24<sup>th</sup> October 2012 on Acceptable Means of Compliance and Guidance Material to 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 ‘Acceptable Means of Compliance and Guidance Material to Part-SPA’

### 8.3. Reference documents

- UK AltMoC 2015/00034 to CAT.POL.H.305 (b).
- AT AltMoC 2017/00017 to CAT.POL.H.305(b).
- FLTOPS HSG proposal for adopting an addendum to attachment A to Annex 6, Part 3 ‘guidance on the provision of acceptable level of safety performance’.
- 2014 rulemaking proposal by Robinson.
- 2013 single-engine performance study and comments to this study that have been received by EASA.
- 2016 rulemaking proposal by the European Helicopter Association (EHA) regarding the use of single-engined helicopters over a congested hostile environment.

