



# Notice of Proposed Amendment 2024-106 (A)

in accordance with Article 6 of MB Decision 01-2022

## Flight time limitations for commercial air transport with aeroplanes used in emergency medical services, air taxi and single pilot operations

RMT.0492, SUBTASK 1 & RMT.0493

<b>EXECUTIVE SUMMARY</b>		
<p>This notice of proposed amendment (NPA) puts forward harmonised and state-of-the-art flight time limitations (FTL) rules for commercial air transport operations with aeroplanes used in emergency medical services, air taxi and single pilot operations, considering operational experience and recent scientific evidence.</p> <p>The objective is to mitigate the risks linked to the accumulation of dangerous amounts of fatigue by flight crew, and to introduce a harmonised legal framework for the regulation of FTL in those areas, ensuring a uniform level of safety across Europe, and a level playing field for European operators and flight crews.</p> <p>The proposed regulatory material is expected to positively impact safety, by introducing the most up-to-date scientific principles and good operational practices in the existing regulatory framework. It is expected that the implementation of the proposals in this NPA will bring positive safety, social and economic impacts.</p>		
<b>REGULATION(S) TO BE AMENDED</b> — <a href="#">Regulation (EU) No 965/2012</a>	<b>ED DECISIONS TO BE AMENDED</b>  ED Decisions that issue the CSs and AMC/GM to support the application of that Regulation.	
<b>AFFECTED STAKEHOLDERS</b> Air operators conducting commercial air transport with aeroplanes used in emergency medical services, air taxi and single-pilot operations, and their flight crew members, Member States, and their national competent authorities.		
<b>WORKING METHODS</b>		
<b>Development</b>	<b>Impact assessment(s)</b>	<b>Consultation</b>
By EASA with external support	Detailed	NPA – public and focused
<b>RELATED DOCUMENTS / INFORMATION</b> — <a href="#">ToR RMT.0492</a> (former RMT.0346, former OPS.071(a)) issued on 18.4.2012. — <a href="#">ToR RMT.0493</a> (former OPS.071(b)) issued on 21.8.2012. — <a href="#">NPA 2017-17</a>		
<b>PLANNING MILESTONES:</b> Refer to the latest edition of the EPAS <i>Volume II</i> .		



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## 1. About this NPA

### 1.1. How this regulatory material was developed

The European Union Aviation Safety Agency (EASA), after having assessed the impacts of the possible intervention actions as described in Chapter 2, identified rulemaking as the necessary intervention action.

This rulemaking activity is included in the 2024 edition of Volume II of the European Plan for Aviation Safety (EPAS) for 2023–2025<sup>1</sup> under Rulemaking Task (RMT).0492, Subtask 1 and RMT.0493.

This rulemaking activity pursues adequate prevention against the effects of fatigue in line with Volume III of EPAS 2024<sup>2</sup> and, more specifically, with safety issue SI-3005 *Fatigue and quality sleep*, which identified fatigue ‘... as one of the most serious challenges within the aviation industry. The signs of fatigue are subtle and will lower human performance in all the known areas of human limitations. Preventing fatigue is dependent on obtaining both a sufficient quantity and quality of sleep.’

EASA developed the regulatory material in question in line with Regulation (EU) 2018/1139<sup>3</sup> (the Basic Regulation) and the Rulemaking Procedure<sup>4</sup>, as well as in accordance with the objectives and working methods described in the Terms of Reference (ToR) for this RMT<sup>5</sup>.

In 2017, EASA published NPA 2017-17<sup>6</sup> proposing FTL for air taxi operations with aeroplanes, emergency medical services operations with aeroplanes (AEMS), single-pilot operations with aeroplanes, and emergency medical services with helicopters (HEMS).

When developing the regulatory material EASA received the support of a rulemaking group and a review group<sup>7</sup>, which assisted in the review of comments received during the public consultation of

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<sup>1</sup> [European Plan for Aviation Safety \(EPAS\) 2024 - 13th edition | EASA \(europa.eu\)](#)

<sup>2</sup> [European Plan for Aviation Safety \(EPAS\) 2023-2025 | EASA \(europa.eu\)](#)

<sup>3</sup> 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>).

<sup>4</sup> 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 \(europa.eu\)](#)).

<sup>5</sup> [ToR OPS.071\(b\) - RMT.0429 and RMT.0493 - Updating and harmonising of FTL for commercial air transport \(CAT\) by aeroplane for air taxi operations and single-pilot operations taking into account operational experience and recent scientific evidence. | EASA \(europa.eu\)](#); and [ToR OPS.071\(b\) - RMT.0429 and RMT.0493 - Updating and harmonising of FTL for commercial air transport \(CAT\) by aeroplane for air taxi operations and single-pilot operations taking into account operational experience and recent scientific evidence. | EASA \(europa.eu\)](#).

<sup>6</sup> <https://www.easa.europa.eu/en/document-library/notices-of-proposed-amendment/npa-2017-07>

<sup>7</sup> [Development of FTL for CAT operations of EMS by aeroplanes & Updating and harmonising FTL for CAT by aeroplane for air taxi and single-pilot operations - RMT.0492 \(OPS.071\(a\)\) & RMT.0493 \(OPS.071\(b\)\) | EASA \(europa.eu\)](#)



NPA 2017-17. Some draft proposals were also discussed with the members of the FTL/FRM Expert Group established by the Air Ops TeB.

In addition, EASA partnered with the European Business Aviation Association (EBAA) for further collection of data on time zone crossings and acclimatisation issues, as well as for bio-mathematical modelling of the flight duty period (FDP) tables from the perspective of air taxi operations (using the SAFE model). EASA also commissioned bio-mathematical modelling of the FDP tables from the perspective of AEMS operations (using the SAFTE FAST model). Relevant reports are available in Appendices I and II to NPA 2024-106(B).

Due to the time elapsed and changes to the initial proposal, as contained in NPA 2017-17, EASA decided to launch another round of consultation with this NPA focused on the Advisory Bodies.

## 1.2. How to comment on this NPA

The draft regulatory material is hereby submitted for consultation with the EASA Advisory Bodies.

Please submit your comments via email to [Air\\_OPS@easa.europa.eu](mailto:Air_OPS@easa.europa.eu).

The deadline for the submission of comments is **DD Month 202X**.

## 1.3. The next steps

Following the 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. Depending on the comments received, EASA may request the support of (some of) the members of the FTL/FRM Expert Group for the review.

Considering the above, EASA may issue an Opinion proposing amendments to Regulation (EU) No 965/2012<sup>8</sup>. The Opinion will be submitted to the European Commission which shall consider its content and decide whether to issue amendments to the related Regulation. Following the amendment of that Regulation, EASA will issue a Decision issuing the relevant certification specifications (CSs), acceptable means of compliance (AMC) and guidance material (GM).

When issuing the Opinion and Decision, EASA will also provide feedback to the commentators and information to the public on who engaged in the process and/or provided comments during the consultation of the draft regulatory material, which comments were received, how such engagement and/or consultation was used in rulemaking, and how the comments were considered.

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<sup>8</sup> 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) (<http://data.europa.eu/eli/reg/2012/965/oj>).



## 2. In summary — why and what

### 2.1. Why we need to act

When developing the FTL requirements under Regulation (EU) No 965/2012, it was decided to prioritise scheduled and charter operations, and to address air taxi, single-pilot and emergency medical services operations with aeroplanes at a later stage to allow for the collection of scientific evidence on the factors affecting fatigue in those operations.

Therefore, today Regulation (EU) No 965/2012 does not regulate FTL for emergency medical services, air taxi and single-pilot commercial air transport (CAT) operations with aeroplanes. FTL for these operations are currently covered by Subpart Q of Annex III to Regulation (EEC) No 3922/91<sup>9</sup> and by national law, in accordance with Article 8(2) of Regulation (EU) No 965/2012.

However:

- Subpart Q is not fit for the purpose of regulating fatigue in these operations. The requirements of Subpart Q were developed with scheduled and charter multi-pilot operations in mind. Nevertheless, they continue to apply to on-demand air taxi and AEMS, as well as to single-pilot operations with aeroplanes, regardless of the obvious differences between the type of operations and the type of aircraft used in these operations (small business jets for air taxi or EMS and large aeroplanes for multi-pilot operations). Forcing flight crew on air taxi, AEMS and single-pilot CAT operations to apply rules that were developed for a multi-pilot operational environment may in fact impact the safety of the flights. One size does not fit all when it comes to air safety.
- Subpart Q does not regulate major elements of FTL for these operations. Subpart Q has some fundamental gaps: it does not establish a maximum daily FDP for single-pilot and EMS operations, and it does not provide for standby, in-flight rest and split duty. According to Article 8(4) of Regulation (EEC) No 3922/91, these areas may be covered by relevant national rules adopted by the Member State where the operator has its principal place of business. However, not all Member States have adopted such rules, and those that have been adopted are not harmonised. This means that there is no uniform level of safety, and no level playing field in this area.
- Subpart Q does not contain state-of-the-art requirements. The 2006-adopted Subpart Q and national rules established under it are out of step with contemporary fatigue management practices and scientific knowledge of human performance limitations and of sleep. For example, they may not properly address transient and cumulative fatigue, operators' and aircrew responsibilities, the impact of circadian rhythms and of crossing multiple time zones on the state of acclimatisation.

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<sup>9</sup> Council Regulation (EEC) No 3922/91 of 16 December 1991 on the harmonization of technical requirements and administrative procedures in the field of civil aviation (OJ L 373, 31.12.1991, p.4) (<http://data.europa.eu/eli/reg/1991/3922/oj>).



### 2.1.1. Who is affected by the issue

This issue affects all European CAT operators with aeroplanes used in EMS, air taxi and single-pilot operations, their flight crews as well as Member States and their competent authorities.

### 2.1.2. How could the issue evolve

If the issue is not addressed, the regulatory approach across Europe for FTL in the areas of EMS, air taxi and single-pilot operations with aeroplanes will continue to be inadequate and patchy, potentially leading to the accumulation of dangerous amounts of fatigue.

### 2.1.3. Conclusion on the need for rulemaking

EASA concluded, as explained further in Chapter 3 below, that an intervention was necessary and that non-regulatory actions cannot effectively address the issue. Therefore, regulatory material, including amendments to Regulation (EU) No 965/2012, its related AMC and GM, as well as to CS-FTL.1, together with a new dedicated CS-FTL.2, are necessary.

## 2.2. 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 issue described in Section 2.1.

More specifically, with the regulatory material presented here, EASA intends to achieve that flight crew in CAT with aeroplanes used in EMS, air taxi and single-pilot operations do not accumulate dangerous amounts of fatigue, and to ensure a uniform level of safety across Europe, and a level playing field for European operators and flight crews involved in these operations. The proposals in this NPA also aim to bring the regulation of fatigue in AEMS and air taxi operations to a level that is commensurate with the most up-to-date scientific principles and best operational practices.

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

EASA has used the latest scientific knowledge about fatigue and available good practices (approaches) for fatigue (risk) management in the development of this NPA. It is obvious, however, that fatigue science cannot be definitive considering the variety of matters pertaining to real-world operational safety. Therefore, this NPA proposes a combination of prescriptive requirements, operational experience, and risk mitigation approaches, considering the existing flexibility in air taxi and AEMS operations.

### 2.3.1. Main topics

#### Fatigue risk management

Many studies have confirmed the presence of fatigue-related performance challenges in flight crew from the sleep loss and circadian disruption. Fatigue is an operational safety risk.

This NPA therefore proposes a balanced set of requirements for fatigue risk management in air taxi and AEMS operations, in combination with prescriptive limits, through one or more of the following:

- implementation of a fatigue risk management system (FRMS) under point ORO.FTL.120 when scheduling flight crew in an unknown state of acclimatisation to reduced rest and long FDPs



(these two cases already require an FRMS in scheduled and charter operations), as well as when deviating from the maximum basic daily FDP limits;

- application of *appropriate* FRM to night duties and late-finish duties, within the operator's SMS;
- application of a safety risk management (SRM) process within the operators' safety management system (SMS) in accordance with ORO.GEN.200. The use of SRM/SMS to assess and mitigate fatigue risks is no different from assessing and mitigating any other operational risk. SRM/SMS should be tailored to the size and complexity of the operator and the nature of operations.

#### Sleep as an effective fatigue mitigation

This NPA is based on the scientific findings<sup>10</sup> that the most effective fatigue mitigation is sleep. An average individual needs an 8-hour sleep opportunity within any 24 hours to be restored, and daytime sleep is less restorative than night-time sleep.

Scientists draw attention to the fact that sleep debt can lead to serious health problems, that chronic sleep deprivation 'catastrophically' affects health and life expectancy, and that sleeping less than 7 hours a day is simply dangerous to health<sup>11</sup>.

For most people, 8 hours of sleep in each 24 hours sustains performance indefinitely, but there is a continuous decrease in performance as sleep is lost. Examples of this reduction in performance include complacency, a loss of concentration, cognitive and communicative skills, and a decreased ability to perform calculations. All these skills are critical for aviation safety<sup>12</sup>.

Scientists also warn that catching up at the weekend does not compensate for the lack of sleep during the working week.

#### Home base

The NPA specifically addresses the issue of 'home base' for flight crew involved in air taxi and AEMS operations. For scheduled operations the concept of 'home base' was built around a single airport location, to mitigate potential fatigue issues with aircrew having to travel to distant airports within the same airport system. In air taxi and AEMS, the duty scheduling structure, consisting of large off-duty times in between duty blocks, is considered a mitigating factor; hence, the airport location does not necessarily have to be a single one. Also, the increase of the recurrent extended recovery rest period prior to starting duty in a new home base (as today applies to scheduled operations) may be a business-limiting factor in view of the uncertainty and last-minute changes in air taxi and AEMS operations, including frequent changes of home base.

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<sup>10</sup> Akerstedt, T., & Gillberg, M. (1981). The circadian variation of experimentally displaced sleep. *Sleep*, 4 (2), 159–1659. Akerstedt, T., & Gillberg, M. (1990). Subjective and objective sleepiness in the active individual. *International journal of neuroscience*, 52 (1–2), 29–37. Gander, P.H., De Nguyen, B.E., Rosekind, M.R., & Connell, L.J. (1993). Age, circadian rhythms, and sleep loss in flight crews. *Aviation, Space, and Environmental Medicine*, 64 (3), 189–195.

<sup>11</sup> Matthew Walker, Professor of Neuroscience and Psychology at the University of California, Berkeley, and Founder and Director of the Center for Human Sleep Science.

<sup>12</sup> Caldwell, J.A., Mallis, M.M., Caldwell, J.L., Paul, M.A., Miller, J.C., & Neri, D.F. (2009). Fatigue countermeasures in aviation. *Aviation, Space, and Environmental Medicine*, 69 (1), 29–59.



### Standby

The certification specifications on standby in air taxi and AEMS operations consider the specificities of these operations and the need for flexibility. Air taxi and AEMS operations require 24-hour-a-day availability, which can include shift work, night work, irregular and unpredictable work schedules, and time zone changes. These factors challenge human physiology and can result in performance-impairing fatigue and an increased risk to safety.

### On-board rest

Unlike scheduled operations, flight crew in air taxi and AEMS operations may have a rest opportunity in an on-board facility both while in the air or on the ground. When taken in the air, on-board rest is for augmented flight crew only, during the cruise phase of flight, and cannot be taken during critical phases of flight and during briefings or flight preparation.

### Shared responsibility for fatigue management

The proposals in this NPA are based on the understanding that the responsibility for fatigue management is shared between the operator and all individuals who participate in flight operations, including company managers, aircrew, scheduling personnel and other safety-critical personnel. Shared responsibility allows each person to apply fatigue prevention strategies and to make informed decisions when managing fatigue risks within the context of operations.

## **2.3.2. Amendments proposed to the articles of Regulation (EU) No 965/2012**

### Article 2 Definitions

It is proposed to remove the definition of air taxi operation from Article 2 and add it instead to point ORO.FTL.105, where the other definitions relevant for FTL are located, since this term is only used in FTL. This will contribute to better visibility and accessibility of all relevant FTL definitions. This change follows a comment received during the consultation of NPA 2017-17.

### Article 8 Flight time limitations

This NPA proposes to delete paragraph 2 of Article 8 of Regulation (EU) No 965/2012, which will no longer be necessary once the requirements on FTL for air taxi, AEMS and single-pilot operations proposed with this NPA are adopted. This was already part of the proposals included in NPA 2017-17.

In addition, a few editorial changes are proposed to paragraphs 3 and 4. Further details can be found in the rationale behind the amendments proposed.

### Article 9b Review

This NPA proposes fundamental changes to paragraph (1) of Article 9b of Regulation (EU) No 965/2012. This paragraph was of a transitional nature and has already produced legal effects and exhausted its purpose. It is therefore proposed to replace it by a provision of a more permanent nature, mandating a continuous scientific review of FTL, based on regular data provided by Member States. The regular provision of relevant fatigue data by Member States is an essential element to allow the continuous review of FTL requirements.

These proposals were already part of NPA 2017-17. Nevertheless, the proposal in this NPA is different, to consider the comments received during the consultation of the NPA.





Further details can be found in the rationale behind the amendments proposed in NPA 2024-106(B).

### 2.3.3. Amendments proposed to Annex II (Part-ARO) to Regulation (EU) No 965/2012

#### ARO.OPS.235 Approval of individual flight time specification schemes

The proposed amendments to ARO.OPS.235 intend to clarify the responsibilities of the competent authority when approving individual flight time specification schemes (IFTSS), and to update the requirements following the adoption of Regulation (EU) 2018/1139. The changes are consistent with the modification of point ORO.FTL.125 *Flight time specification schemes*.

### 2.3.4. Amendments proposed to Subpart FTL of Annex III (Part-ORO) to Regulation (EU) No 965/2012

Below is a general overview of the proposed amendments to Subpart FTL. Further details can be found in the rationale behind each of the amendments proposed in NPA 2024-106(B).

#### ORO.FTL.100 Scope

In view of the introduction of air taxi and AEMS operations and the need to make the scope more precise, point ORO.FTL.100 is proposed to be complemented by two important clarifications:

- Subpart FTL applies to *flight crew and cabin crew*, and not to any other service personnel on board, performing duties for the operator. While these additional service personnel may also be crew members, Subpart FTL did not intend to cover all mobile workers in civil aviation. This is legally governed in Article 32 of the Basic Regulation which uses the term ‘aircrew’. The term ‘aircrew’ is defined in Article 2(12) of Regulation (EU) No 1178/2011 as follows: “‘aircrew’ means flight crew and cabin crew’.
- Subpart FTL applies only to *CAT operations by aeroplanes*, to exclude non-commercial operators of complex aircraft to which Annex III (Part-ORO) is also applicable.

#### ORO.FTL.105 Definitions

Several changes are proposed to point ORO.FTL.105, amending existing definitions and proposing new ones, to consider specific elements of air taxi and AEMS operations. In most cases, the changes proposed follow the proposals made in NPA 2017-17, amended to consider the comments received during the consultation. However, not all the definitions proposed in NPA 2017-17 have been retained due to the exclusion of HEMS from the scope of this rulemaking task (for example, the definitions for ‘sector’ and for ‘single-pilot operations’ are no longer needed given that HEMS is no longer mentioned). At the same time this NPA puts forward a couple of new definitions to bring clarity to concepts on which EASA receives frequent queries (such as the concept of ‘fatigue’ and ‘unforeseen operational circumstances’). In these cases, the definitions proposed in this NPA follow ICAO definitions.

#### ORO.FTL.110 Operator responsibilities

Operator responsibilities with regard to aircrew rosters (point ORO.FTL.110(k)) are tailored to the specificities of on-demand air taxi and AEMS operations. Operators still need to monitor the operational robustness of rosters and adapt aircrew arrangements, as necessary. However, aircrew rosters in air taxi and AEMS need not be as detailed as those in scheduled operations. A detailed



advance planning of FDPs for operations is not feasible. Instead, they may include a strategic planning of duty days, standby days, days-off, etc.

#### ORO.FTL.115 Crew member responsibilities

This NPA proposes some amendments to this point to increase aircrew awareness of the concept of *shared responsibility* for the management of fatigue.

#### ORO.FTL.120 Fatigue risk management

All amendments to this point are triggered by recent regulatory developments in the field of night/disruptive duties. In general terms, these amendments aim at clarifying the distinction between a fully-fledged FRMS and an *appropriate* fatigue risk management (FRM) process. Details about appropriate FRM are contained in the certification specifications applicable to the type of operation. Appropriate FRM does not entail a specific organisational setting, policy endorsement, governance, etc. as it covers certain duties only and is part of the operator's SMS.

#### ORO.FTL.125 Flight time specification schemes

The requirements applicable to operators' flight time specification schemes are proposed to be amended to reflect the experience accumulated so far with the implementation of Subpart FTL and to align with the Basic Regulation. The current text of point ORO.FTL.125 does not sufficiently emphasise the individual character of the operator's FTL scheme, whilst this was the purpose of the provisions. Any operator must develop an IFTSS that is appropriate to their operation(s). Point ORO.FTL.125 has been so far largely misunderstood by many operators who simply copy-paste ORO.FTL in their OM, Chapter 7, without any customisation.

#### ORO.FTL.205 Flight duty period

Several changes are proposed to this point to account for the specificities of single-pilot, air taxi and AEMS operations. A new Table 5 now provides for the maximum daily FDP for acclimatised flight crew members in single-pilot operations. An additional point (d1) is proposed to cater for FDPs with extensions without on-board rest for acclimatised flight crew in air taxi and AEMS operations with two pilots.

#### ORO.FTL.210 Flight times and duty periods

Changes are proposed to this point to include specific provisions for air taxi and AEMS operations and to introduce some flexibility to cover derogations previously approved under Article 14(6) of Regulation (EU) No 216/2008 and Article 8(3) of Council Regulation (EEC) No 3922/91.

#### ORO.FTL.215 Positioning

Changes are proposed to accommodate air taxi and AEMS operations.

#### ORO.FTL.220 Split duty

Additional flexibility (new point (a)(3)) is proposed for air taxi and AEMS operators allowing an extension of the FDP when unforeseen circumstances on the day of operation impose a break or breaks, on the condition that the commander so agrees and the flight crew members are provided with nutrition. Thus, air taxi and AEMS operators will eventually have more opportunities than scheduled operators to deal with unforeseen disruptions on the day of operation.

#### ORO.FTL.235 Rest periods



The changes proposed include requirements on reduced rest for air taxi and AEMS under point (c)(2) of point ORO.FTL.235, complemented by the travelling time to/from the place of rest.

### 2.3.5. Amendments proposed to CS-FTL.1

All proposed amendments to CS-FTL.1 were introduced after NPA 2017-17. They are intended to clarify the scope of CS-FTL.1 (CS FTL.1.100) and to align Table 8 (applicable to scheduled and charter operations) with Table 12 (applicable to air taxi and AEMS).

### 2.3.6. New proposed CS-FTL.2

CS-FTL.2 contains a full set of certification specifications for flight time and rest periods in air taxi and AEMS operations. Detailed description of the rulemaking process and rationale can be found in NPA 2024-106(B).

The following items, included in NPA 2017-17, have not been retained:

#### CS5 FTL.2.205

NPA 2017-17 proposed to apply a limit of four sectors to consecutive night duties, in a similar manner as for scheduled operations. After further consideration, EASA decided not to retain this proposal. As long as the number of consecutive night duties is not limited in neither of the operations, a limitation of the sectors would not bring any substantial relief. It would potentially force the air taxi and AEMS operators to have two different sets of flight crew for duties with more than four sectors or to alternate night and day duties in order to maximise flight crews' productivity. The first option would make the operation costly and the second one would increase flight crew fatigue.

#### CS FTL.2.210

After further consideration, EASA also decided to not retain the cumulative limits proposed in NPA 2017-17 (625 block hours in a calendar year and 80 block hours in 28 consecutive days), since they do not follow the relevant limits in Subpart Q (currently applicable) and, in addition, are far below the limits of other jurisdictions. For reference, the cumulative block hours in air taxi operations in European states allowable under Subpart Q (point OPS 1.1100) are: 900 block hours in a calendar year and 100 block hours in 28 consecutive days. Therefore, this NPA proposes to maintain the cumulative limits in Subpart Q. As a result, the limits under point ORO.FTL.210 apply to both scheduled/charter and air taxi/AEMS flights.

### 2.3.7. Amendments proposed to the AMC and GM to ORO.FTL

Several amendments are proposed, mainly for consistency with the changes proposed to the rule text. Detailed rationales can be found in NPA 2024-106(B).

### 2.3.8. Targeted applicability of the regulatory material

Considering that the proposed regulatory material extends the scope of Regulation (EU) No 965/2012 to a new area, and following requests from stakeholders, EASA intends to propose a deferred applicability of 2 years.

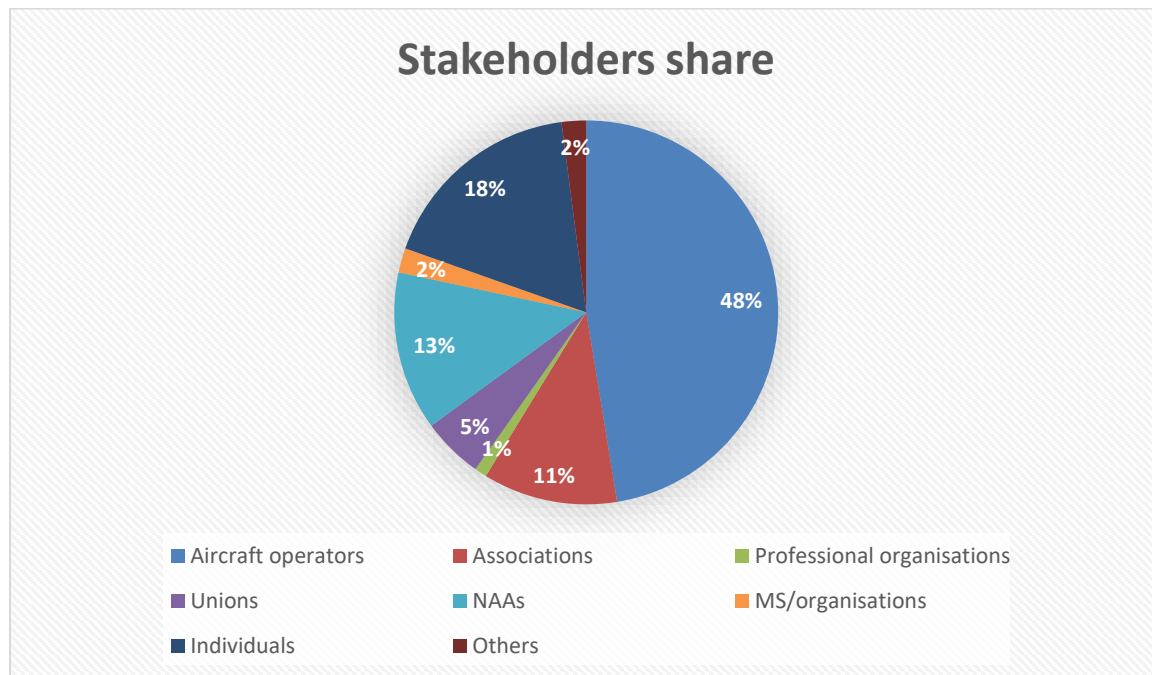


### 2.3.9. Legal bases

The legal bases for the proposals made in this NPA are Article 32(1) subparagraphs (a) and (b) (for the amendments proposed to Regulation (EU) No 965/2012), and Article 76(3) (for the amendments proposed to CS, AMC and GM) of the Basic Regulation.

### 2.4. What are the stakeholders' views

When developing the text of this NPA, EASA considered the comments received during the consultation of NPA 2017-17. In total, 1 464 comments were submitted. The distribution of stakeholders providing feedback is shown in the following chart.

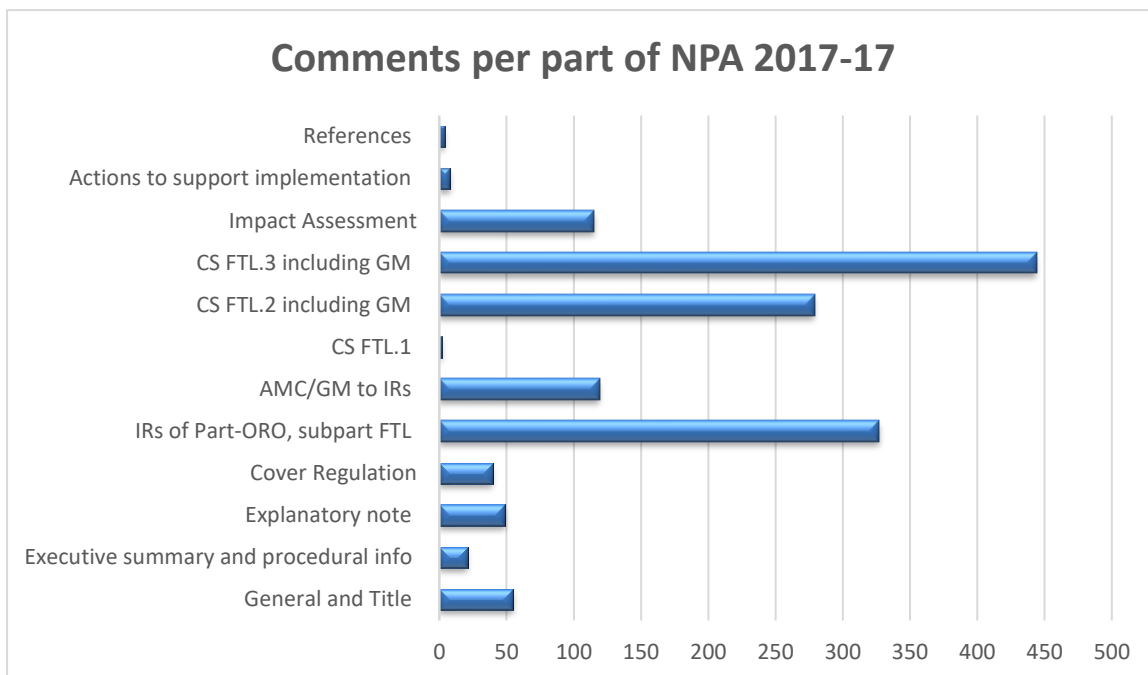


The comments were predominantly submitted by operators conducting air taxi, AEMS and HEMS operations, as well as by business associations of air operators. Very few individuals, including pilots or people providing consultancy, commented.

Consequently, it was difficult to assess to what extent the feedback received could provide an objective picture of pilots' utilisation in air taxi and AEMS operations, and it remains unclear what protection measures from increased levels of fatigue were available and being provided to those pilots.

EASA noted that a significant number of comments were duplicated. Some operators sent excerpts of their own manuals or national requirements, asking EASA to replace its proposals exactly with those texts.

The distribution of comments per part of the NPA is provided in the chart below.



Overall, the comments received were beneficial for the verification of the validity of the approach and of the content of the regulatory proposal.

Stakeholders and interested parties also provided valuable responses to the questions included in the NPA, thus contributing to the finalisation of EASA proposals on specific controversial subjects. In many cases, the commentators proposed amendments with the related justifications, which facilitated the review and, when considered appropriate, led to the introduction of modifications to the proposals in this NPA.

The main elements of the comments received are further detailed below.

Exclusion of HEMS from the scope of this rulemaking task

NPA 2017-17 also contained proposals for the regulation of FTL in HEMS operations as these were included in the initial scope of the rulemaking task.

Individual comments and responses can be found in detail in Comment-Response Document (CRD) 2 to NPA 2017-17 (HEMS).

Following the reactions of certain members of the HEMS community and recognising the importance of HEMS for the European communities, EASA decided to limit the scope of the rulemaking task to operations with fixed wing aircraft only. The regulation of FTL for HEMS is currently included in another rulemaking task in the 2024 edition of Volume II of the EPAS (RMT.0494).

Need for regulating fatigue at European level

Many commentators claimed that the national rules and operational experience provide adequate fatigue risk mitigation, with no evidence of systemic fatigue issues whilst operating under those rules, and therefore that changes were not justified.



However, the report<sup>13</sup> on the investigation, conducted by BEA (Bureau d'Enquêtes et d'Analyses pour la sécurité de l'aviation civile), of an accident that took place in 2012 with an AEMS operator, established that on the day of the accident, the pilot had been awake for more than 20 hours prior to commencing the flight.

The investigation found out that operators of short-notice AEMS flights with limited number of pilots could only maintain their operational objectives by placing their pilots '...in a situation of near-permanent on-call duty. This constraint makes it difficult to reconcile private and professional lives.'

'This may have altered the perception that pilots could have of the permanence of their on-call duties. In these circumstances, and although he was on standby, the pilot probably did not take into consideration that he could be called in the middle of the night to undertake a flight on short notice.'

As the report rightly states: 'At European level, the regulations (Regulation (EEC) 3922/91: Subpart Q of Annex III) only define standby periods at the airport. The regulations relating to standby periods other than at the airport are the responsibility of the national authorities. [...] The [national] regulations, in their current provisions, focus on flight duty time and the rest periods that result from it. No provision concerns the duration of the on-call duty before the flight and does not take into account the impact, particularly in terms of fatigue, that can be caused by the constraints generated by prolonged periods of on-call duty. As part of its oversight, the DSAC does not control these aspects.'

BEA concluded that one of the contributing factors to the accident is: 'the absence of a regulatory provision that allows the national civil aviation authorities to ensure the adequacy between an operator's operational objectives and its ability to carry out its activity. This absence could not guarantee that the on-call pilot was fit to undertake the flight.'

A large survey-based research study amongst European pilots (Reader, Parand & Kirwan, 2016)<sup>14</sup>, which is roughly equivalent to 14 % of commercial pilots working in Europe for various companies, including air ambulances and business aviation, and is statistically representative for the European pilot population, shows that 41 % of European pilots have mixed or negative perceptions in terms of feeling tired.

This study also shows that pilots tend to have concerns over the issues of fatigue and fatigue management, management commitment to safety, staff and equipment, and perceived organisational support.

The results of the survey indicate that pilots across the industry are concerned with fatigue management. Over half did not believe that their company takes fatigue seriously.

#### Specificities linked to air taxi and AEMS operations

Some commentators criticised NPA 2017-17 for not sufficiently addressing the specificities in air taxi and AEMS operations. They claimed that EASA had 'seriously failed to consider absolutely critical differences between what may be considered appropriate for FTLs and other rules in large-scale, scheduled commercial transport, and what serves safety and service in activities such as HEMS and air taxi (incorporating AEMS)'

<sup>13</sup> <https://bea.aero/docspa/2012/f-es120505/pdf/f-es120505.pdf>

<sup>14</sup> <https://ec.europa.eu/research/participants/documents/downloadPublic?documentIds=080166e5ae8f2500&appId=PPGMS>



Such comments seem to ignore the fact that air taxi and AEMS operations are already regulated by common requirements included in Subpart Q, adopted in 2006, and national rules, which are not only outdated but also ‘have not been tailored to consider EMS or similar operations’, as rightfully admitted by one EMS operator.

EASA developed FTL requirements for air taxi and AEMS operations with the understanding that each of these activities has specificities that need to be addressed separately. The Agency teamed up with industry experts who provided valuable input for the development of separate certification specifications depending on the type of operation. EASA also commissioned several studies for the collection of data. The data obtained was objective and reliable, and there was no reason to look for other data sources.

#### Cost of increasing the number of flight crew

Some operators commented that certain proposals of NPA 2017-17 such as: the limit of four sectors on consecutive night duties; the limit of 8 hours on the daily FDP when performing single-pilot multiple sector duties; the penalty on FDPs assigned during long standby; or the requirement to provide a rest period if no duty has been assigned during standby, would lead to hiring additional pilots and hence additional costs. EASA worked with the review group and with stakeholders to address these concerns. The new proposal aims to alleviate stakeholders’ concerns about cost increase.

More details of the individual comments and responses can be found in CRD 1 to NPA 2017-17 (Air Taxi and AEMS) and CRD 2 to NPA 2017-17 (HEMS), attached to this NPA.



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

EASA assessed that an intervention was required and that new or amended Regulations, AMC, GM, and CS are necessary to effectively address the issue described in Section 2.1, because the objectives described in Section 2.2 cannot be achieved effectively by non-regulatory action.

EASA also assessed the impacts of the proposed regulatory material to ensure that the regulatory material delivers its full benefits with minimum drawbacks.

The proposed regulatory material has been developed in view of the better regulation principles, and in particular the regulatory fitness principles. In particular, the proposed regulatory material will:

- alleviate existing regulatory burden by replacing the inadequate requirements of Subpart Q and existing national laws with harmonised, more appropriate requirements, considering the specific needs of the operations affected and incorporating the latest scientific evidence and operational best practices in fatigue management;
- limit the regulatory burden created by new / amended requirements to the minimum by having chosen the most flexible approach for the requirements proposed, opting whenever possible for the use of soft over hard law.

When developing the proposed regulatory material, EASA had identified different regulatory options on how to achieve the objective described in Section 2.2 and assessed their impacts. The analysis of the impacts of the different proposals were published with NPA 2017-17. The comments received during consultation were taken into account and used to further improve the regulatory material, in particular to address stakeholders' concerns about a potential cost increase. All safety, economic, level playing field, environment and proportionality impacts are described in that IA.

It is expected that the implementation of the proposals in this NPA will bring positive safety, social and economic impacts. No environmental impact has been identified.





#### 4. Proposed regulatory material

Please refer to NPA 2024-106(B).



## 5. Monitoring and evaluation

In order to verify that the objectives described in Section 2.2 are achieved, EASA will conduct a continuous review of the effectiveness of the provisions concerning flight and duty time limitations and rest requirements contained in Regulation (EU) No 965/2012. This review shall involve scientific expertise, where relevant, and be based, as a minimum, on the following quantitative operational data collected by the Member States and submitted to EASA in a standardised format not less than once a year:

- Number of fatigue reports;
- Frequency of exceedances of rostered FDPs without extensions compared to actual FDPs;
- Use of commander discretion to extend the FDP or to reduce the rest period.

Quantitative data shall be collected through the operators' SMS/FRMS and is not expected to put an additional burden on operators. The submission of data in a 'standardised format' will streamline the procedure for collection of data.

EASA will partner with the EBAA to continuously monitor pilots' fatigue levels and well-being.



## 6. Proposed actions to support implementation

In order to support affected stakeholders in the implementation of the new regulatory material, EASA plans to take the following actions:

- Focused communication for Advisory Body meetings (MAB, SAB, Air OPS TEB, FTL/FRM Expert Group);
- Providing clarifications through electronic communication tools to the competent authorities;
- Dedicated thematic webinar(s) for interested stakeholders during the transition period or initial implementation.



## 7. References

Council Regulation (EEC) No 3922/91 of 16 December 1991 on the harmonization of technical requirements and administrative procedures in the field of civil aviation (OJ L 373, 31.12.1991, p.4).



## Appendix 1— 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*

Fully agree / Agree / Neutral / Disagree / Strongly disagree

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

*Please choose one of the options*

Fully agree / Agree / Neutral / Disagree / Strongly disagree

### 3. The regulatory proposal is well substantiated

*Please choose one of the options*

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*

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*

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*

Fully agree / Agree / Neutral / Disagree / Strongly disagree

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

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

- [https://ec.europa.eu/info/law/law-making-process/planning-and-proposing-law/better-regulation-why-and-how\\_en](https://ec.europa.eu/info/law/law-making-process/planning-and-proposing-law/better-regulation-why-and-how_en)
- [https://ec.europa.eu/info/law/law-making-process/planning-and-proposing-law/better-regulation-why-and-how/better-regulation-guidelines-and-toolbox\\_en](https://ec.europa.eu/info/law/law-making-process/planning-and-proposing-law/better-regulation-why-and-how/better-regulation-guidelines-and-toolbox_en)

