

# **ANNEX 1: THE EUROPEAN PLAN FOR AVIATION SAFETY (EPAS) 2018-2022**





**EASA**  
European Aviation Safety Agency

**THE EUROPEAN PLAN** *for*  
**AVIATION  
SAFETY**  
(EPAS)



**2018-2022**

**European Plan for Aviation Safety (EPAS) 2018-2022**  
including the Rulemaking and Safety Promotion Programme

European Aviation Safety Agency, 14 November 2017



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## 1 Executive Summary

Air safety does not stop at borders, and cooperation amongst aviation stakeholders is needed more than ever in the face of rising traffic levels, diminishing resources and the opportunities and challenges presented by new technologies.

The European Plan for Aviation Safety (EPAS), a component of the European Aviation Safety Programme (EASP), provides a coherent and transparent framework for safety work at regional level, helping the identification of major safety risks and actions to take, supporting Member States to implement their State Safety Programmes (SSP) and the Global Aviation Safety Plan (GASP), and aiding the sharing of best practice and knowledge. The plan also includes European states not under the EASA umbrella.

The 2018-2022 edition of the EPAS is based on the following principles:

- **One comprehensive document.** The EPAS and RMP have been combined into one single document, thus providing the EASA stakeholders with a comprehensive and coherent vision of what EASA intends to do in the coming years in order to improve safety or the environmental performance of the aviation sector (safety/environment driver), to support fair competition and free movement of persons and services (level playing field driver), and to support business, technological development and competitiveness (efficiency/proportionality driver).
- **The regional dimension.** During ICAO 39th Assembly, ICAO Members supported the application of a regional approach to safety, capacity and efficiency improvements through the establishment of regional partnerships (such as Regional Aviation Systems), where appropriate regional aviation safety oversight organisations (RSOOs) should have significant potential to ensure the future safety of air navigation globally. Furthermore, the application of a regional approach will ensure that, in the spirit of resolution A39-23, No Country is Left Behind. In this context, the inclusion in EPAS of International Cooperation and Technical Training strategies emphasises the need to consider more than ever the coordination of, and support to, safety actions at regional and international levels, thereby acknowledging the growing role of RSOOs.
- **Rulemaking cool-down.** The document materialises the ambition to cool-down the rulemaking output already set up in the previous edition. In particular, the delivery of the number of opinions over the next five years has been reduced as compared to the previous years. This reflects the need to put more focus on supporting the implementation of recently adopted regulations and give priorities to other means to improve safety, notably like Focused Oversight and Safety Promotion. The shift to Safety Promotion is particularly significant in the field of General Aviation safety.
- **Research.** The research actions have undergone a full review, resulting in the incorporation of new research projects. This illustrates the growing importance of Research in the EU policies as an enabler to enhance safety.

The strategic approach in the areas of research, international cooperation, technical training and oversight is described in section 3.2 *Strategic enablers*. This section is new in this year's edition. The strategic priorities identified in the previous edition have been confirmed by stakeholders and therefore remain unchanged in this edition.



## 2 Introduction

### 2.1 The global aviation safety plan (GASP)

The EPAS implements the objectives and global priorities identified in the GASP.

The Universal Safety Oversight Audit Programme (USOAP) conclusions have identified that States' inability to effectively oversee aviation operations remains a global safety concern. For that reason, the GASP objectives call for States to put in place robust and sustainable safety oversight systems and to progressively evolve them into more sophisticated means of managing safety. These objectives are aligned with ICAO's requirements for the implementation of the States' Safety Programmes (SSPs) by the States and Safety Management Systems (SMS) by the service providers. The GASP objectives are addressed in section 5.1.1. Safety management.

In addition to the GASP objectives, ICAO has identified high-risk accident categories (global priorities). These categories were initially determined based on an analysis of accident data, for scheduled CAT operations, covering the 2006–2011 time period. Feedback from the Regional Aviation Safety Groups (RASGs) indicates that these priorities still applied during the development of the 2017–2019 GASP edition. The global priorities are addressed in the following sections: 5.2.1. Aircraft upset in flight (LOC-I), 5.2.2. Runway safety and 5.2.6. Terrain conflict.

In addition, during 2017 ICAO and EASA have been working together to develop a Regional Plan for Aviation Safety based on this document, thus allowing all States that are part of the European region to benefit from this approach. A proposal was presented on 30 October to the joint meeting of the Regional Aviation Safety Group (RASG-EUR) and the European Air Navigation Planning Group (EANPG) at the ICAO EUR/NAT office in Paris.

The meeting adopted the decision 'EANPG59 RASG-EUR06 Decision/03– Establishment of the EUR Regional Aviation Safety Plan (EUR-RASP):

- a) a project team consisting from its members and partners be established, with the task to further develop the proposed draft Plan as presented in attachment to this report; and
- b) a consolidated version of the Plan be presented for approval at the next RASG-EUR meeting.

### 2.2 How the plan is structured

This plan is divided in four drivers, which correspond to different chapters in the document. The drivers are:

- **Safety** (Chapter 5). The actions in this category are driven principally by the need to increase the current level of safety in the aviation sector.
- **Environment** (Chapter 6). The actions in this category are driven principally by the need to improve the current environmental protection in the aviation sector.
- **Efficiency/proportionality** (Chapter 7). The actions in this category are driven by the need to ensure that rules are cost-effective in achieving their objective as well as proportionate to the risks identified.
- **Level playing field** (Chapter 8) — The actions in this category are driven principally by the need to ensure that all players in a certain segment of the aviation market can benefit from the same set of rules, thereby promoting fair competition and free movement of persons and services. This is considered of particular importance for technological or business advancement where common 'rules of the game' need to be defined for all actors. These projects will also contribute to maintaining or even increasing the current level of safety.





The drivers are to be understood as *main* drivers. A number of tasks could well fall under several categories, but to avoid duplication they are sorted under the main driver (e.g. CS-23 re-launch, drones).

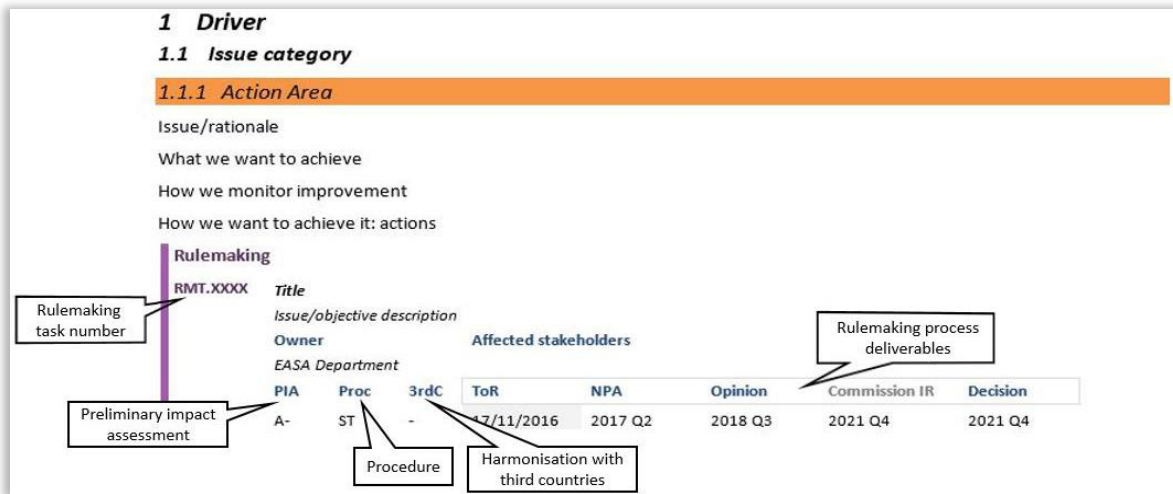


Figure 1: Overview of the conventions used in this plan

Chapter 5 (Safety) is further organised in safety issue categories and action areas. For each action area, the issue, the objective and the related actions are presented. An action area may contain several actions and types of tasks: Rulemaking (RMT), Safety Promotion (SPT), Focused Oversight (FOT), as well as Research Actions (RES)<sup>1</sup>. This chapter includes also tasks for the Member States identified as ‘MST’ tasks.

Chapter 6 is divided in two main environmental topics: climate change and aircraft noise, Chapter 7 and 8 are organised by the main stakeholders affected by the actions. These chapter contain only rulemaking tasks lead by the Agency. Section 7.1 includes now all the evaluation projects planned for the coming years. These projects intend to conclude whether the existing regulations are delivering the results they were design for and in which areas improvements are still needed.

For each task of the plan, the objective and main timelines are provided. Additionally for rulemaking tasks, basic information related to responsibility and affected stakeholders are also provided. The results from Preliminary Impact Assessments (PIAs) are presented, where available, in the form of a score: Letters ‘A’, ‘B’, and ‘C’ indicate strategic (‘A’), standard (‘B’) or regular update (‘C’) tasks.

Further information provided for rulemaking tasks only includes an indication if they are *harmonised* with third countries (field ‘3rdC’) in order to alleviate differences between EASA and other aviation authorities while ensuring an equivalent level of safety.

Rulemaking tasks that are following the accelerated procedure or direct publication (Article 15 ‘Direct publication’ and Article 16 ‘Accelerated procedure’ of MB Decision No 18-2015 on the Rulemaking Procedure) are indicated accordingly<sup>2</sup>. For all documents already delivered, the exact date is given in the format DD/MM/YYYY. For tasks not yet delivered, the planned date is given by Quarter (YYYY QX).

Tasks that were newly added to the plan are highlighted with red colour in the **RMT number**. An overview is also available in Appendix B ‘New and deleted tasks’.

<sup>1</sup> Note that the list of research tasks identified in this document is not exhaustive, and a full overview of research activities is available in the EASA research programme.

<sup>2</sup> Accelerated procedure is identified as ‘AP’, direct publication as ‘DP’, and standard procedure as ‘ST’ in the field for the procedure type called ‘Proc’.





### **2.3 How the plan is developed: The programming cycle**

This plan was developed in close cooperation with stakeholders drawing from an increasing evidence based approach. There were two distinct programming phases, each with a dedicated stakeholder consultation. Firstly, during the strategic phase, the strategic priorities developed in 2016 (now in Chapter 3) were discussed with the EASA Advisory Bodies. Based on these strategic priorities, the detailed planning was developed. This document covers a 5-year time frame. However, as it is a rolling 5-year plan, it will be updated every year.



## 3 Strategy

In the previous programming cycle, EASA introduced the notion of strategic priorities for the EPAS and the RMP. The strategic priorities were based on the [Commissions' Aviation strategy](#) and the EASA strategic plan (See Appendix D). The safety priorities were based on the European Safety Risk Portfolios published in the [Annual Safety Review 2017](#). The efficiency and level playing field priorities were based on stakeholders' feedback. The environmental priorities are based on the [European Aviation Environmental Report](#).

The priorities were consulted with stakeholders in April and May 2017. The comments received led to a number of adjustments and improvements, notably the identification of priorities to be addressed first. In the detailed Chapters 5-8 of the document, the actions linked to strategic priorities are identified with an 'A' in the PIA score.

The current proposal on the strategic priorities for this edition of the EPAS is presented below. In addition to the priorities identified in the previous edition, the strategic enablers in the areas of technical training, research and international cooperation have been incorporated in the document.

### 3.1 Strategic Priorities

#### 3.1.1 Systemic safety

##### **Improve safety by improving safety management**

Despite the fact that last years have clearly brought continued improvements in safety across every operational domain, last accidents underline the complex nature of aviation safety and the significance of addressing human factor aspects. Authorities and aviation organisations should anticipate more and more new threats and associated challenges by developing Safety Risk Management principles. Those principles will be strengthened by Safety Management System implementation supported by ICAO annex 19, and (EU) No 376/2014 for reporting reinforcement.. **See Section 5.1.1.**

**Data4Safety** (also known as D4S) is a data collection and analysis programme that aims at collecting and gathering all data that may support the management of safety risks at European level. This includes safety reports (or occurrences), flight data (i.e. data generated by the aircraft via the Flight Data Recorders), surveillance data (air traffic data), weather data - but those are only a few from a much longer list.

More specifically, the programme will allow to better know where the risks are (safety issue identification), determine the nature of these risks (Risk Assessment) and verify if the safety actions are delivering the needed level of safety (performance measurement). It aims to develop the capability to discover vulnerabilities in the system across terabytes of data.

EASA launched an initial phase called the "Proof of Concept" in 2017. The objective is to build a prototype or tester with a limited number of partners and a limited technical scope to test the technical and organisational challenges of the programme before launching the operational phase planned for 2020

##### **Human factors and competence of personnel**

As new technologies emerge on the market and the complexity of the system continues increasing, it is of key importance to have the right competencies and adapt training methods to cope with new challenges. It is equally important for aviation personnel to take advantage of the safety opportunities presented by new technologies.

The safety actions related to aviation personnel are aimed at introducing competency-based training in all licences and ratings, updating fatigue requirements, and facilitating the availability of adequate personnel in competent authorities (CAs). These actions will contribute to mitigating related safety issues, which play a role in improving safety across all aviation domains. Training and education are considered key enablers. The new strategy of the Agency for technical training takes this into account in the strategic objective B i.e. "Continuously



improve the technical competence of Agency staff and manage the harmonisation of training standards for aviation authority staff within the EASA system”. **See Section 5.1.2.**

### 3.1.2 Operational safety

#### **Commercial Air Transport Aeroplanes operations**

The only fatal accident in CAT aeroplane airline operations in 2016 that involved an EASA MS operator was the accident of a Bombardier CRJ-200 performing a cargo flight on 8 January 2016. From the analysis, it can be observed that there was a lower number of non-fatal accidents involving EASA MS operators in 2016 than the 10-year average, with 16 accidents compared to the average of 23.1 over the previous 10 years. At the same time, there was a 36% increase in the number of serious incidents over the same period resulting in a total of 106 serious incidents compared with the average of 78.2. In terms of fatalities, the single fatal accident resulted in 2 fatalities (the flight crew, the only occupants of the aeroplane), which is much lower than the 10 year average.

This operational domain is the greatest focus of the EASA safety activities and the reorganisation of the collaborative analysis groups (CAGs) and Advisory Bodies will help EASA to learn more about the safety challenges faced by airlines and manufacturers.<sup>3</sup>

The European Safety Risk Management (SRM) process identified the following as the most important risk areas for CAT Aeroplanes:

— *aircraft upset in flight (Loss of Control)*

Aircraft upset or loss of control is the most common accident outcome for fatal accidents in CAT aeroplanes operations, accounting for 75% of them. It includes uncontrolled collisions with terrain, but also occurrences where the aircraft deviated from the intended flight path or aircraft flight parameters, regardless of whether the flight crew realised the deviation and whether it was possible to recover or not. **See Section 5.2.1.**

— *runway excursions and collisions*

Runway excursions account for 13% of the fatal accidents in CAT aeroplane operations involving airline/cargo operations in the past decade. This includes materialised runway excursions, both high and low speed and occurrences where the flight crew had difficulties maintaining the directional control of the aircraft or of the braking action during landing, where the landing occurred long, fast, off-centred or hard, or where the aircraft had technical problems with the landing gear (not locked, not extended or collapsed) during landing. Runway collisions have been the outcome in 1% of fatal accidents in the past decade. Despite the low percentage, the risk of the reported occurrence demonstrated to be very real. **See Section 5.2.2.**

#### **Rotorcraft operations**

This area includes both CAT and offshore operations as well as aerial work performed by helicopters. In the offshore helicopter domain, there was one fatal accident, which involved the loss of an Airbus Helicopters EC225 Super Puma in Norway on 29 April 2016. The domain of CAT with helicopters mainly covers commercial transport and helicopter emergency medical services (HEMS), where there was an increase in fatal accidents in 2016 – 1 fatal accident occurred in Slovakia, and 1 in Moldova, which involved an EU operator. Both accidents involved HEMS flights and both had 4 fatalities each. In the aerial work domain there were no fatal accidents in 2016. The European Safety Risk Management process has identified opportunities to improve risk controls in the following areas so that accident numbers will not increase:

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<sup>3</sup> Extract from the EASA Annual Safety Review 2016.



— helicopter upset (Loss of Control)

This is key risk area with the highest priority in offshore and CAT helicopter operations (7 fatal accidents in the past 10 years). Loss of control for offshore helicopters generally falls into two scenarios, technical failure that renders the aircraft uncontrollable or human factors. In addition it is the second most common accident outcome for aerial work operations (9 fatal accidents in the past 10 years).

— terrain and obstacle collision

This is the second priority key risk area for offshore helicopter operations, although equipment is now fitted to helicopters in this domain that will significantly mitigate the risk of this outcome. Obstacle collisions is the second most common accident outcome in the CAT helicopters domain (4 fatal accidents in the past 10 years). This highlights the challenges of HEMS operations and their limited selection and planning for landing sites. It is the most common outcome for aerial work operations (11 fatal accidents in the past 10 years).

**Address safety risks in GA in a proportionate and effective manner**

In the last years, accidents involving recreational aeroplanes have led to an average of nearly 80 fatalities per year in Europe (excluding fatal accidents involving micro light airplanes), which makes it one of the sectors of aviation with the highest yearly number of fatalities. Furthermore, in 2016, there were 78 fatalities in non-commercial operations with aeroplanes (highest number) and 20 in the domain of glider/sailplane operations (2<sup>nd</sup> highest number). These two areas present the highest numbers of fatal accidents in 2016. The General Aviation Roadmap is key to the EASA strategy in this domain.

Although it is difficult to precisely measure the evolution of safety performance in GA due to lack of consolidated data (e.g. accumulated flight hours), it is reasonable to assume that step changes in the existing safety level are not being achieved at European level, despite all initiatives and efforts.

Therefore, in 2016 EASA decided to organise a workshop on GA safety to share knowledge and agree on the safety actions that will contribute to improve safety in this domain. A key element of discussions is the appropriate assessment of risks, taking into account the specificities of GA leisure flying with different risk profile and minimal risk for uninvolved third parties. The following strategic safety areas were identified during the workshop: preventing mid-air collisions, coping with weather, staying in control, and managing the flight.

**Ensure the safe operation of drones**

The number of drones within the EU has multiplied over the last 2 years. Available evidence demonstrates an increase of drones coming into close proximity with manned aviation (both aeroplanes and helicopters) and the need to mitigate the associated risk (15 non-fatal accidents were included in the European Central Repository in 2016).

Furthermore, the lack of harmonised rules at EU level makes unmanned aircraft systems (UAS) operations dependent on an individual authorisation by every MS, which is a burdensome administrative process that stifles business development and innovation. In order to remove restrictions on UAS operations at EU level, so that all companies can make best use of the UAS technologies to create jobs and growth while maintaining a high and uniform level of safety, EASA is engaged in developing the relevant regulatory material.

As the technology advances, consistent requirements and expectations in already crowded airspace will help manufacturers design for all conditions and ease compliance with requirements by operators. JARUS facilitates harmonisation of standards within the EU Member States and other participating authorities.



### **Address current and future safety risks arising from new and emerging business models**

Due to the increased complexity of the aviation industry, the number of interfaces between organisations, their contracted services and regulators has increased. CAs should work better together (cooperative oversight) and EASA should evaluate whether the existing safety regulatory system adequately addresses current and future safety risks arising from new and emerging business models.

### **Impact of security on safety**

#### — Cybersecurity

Citizens travelling by air are more and more exposed to cybersecurity threats. In order for the new generation of aircraft to have their systems connected to the ground in real time, ATM technologies require internet and wireless connections between the various ground centres and the aircraft. The multiplication of network connections increases the vulnerability of the whole system. It is essential that the aviation industry shares knowledge and learns from experiences to ensure systems are secure from individuals/organisations with malicious intent.

EASA signed on 10 February 2017 a Memorandum of Cooperation with the Computer Emergency Response Team (CERT-EU) of the EU Institutions. EASA and CERT-EU will cooperate in the establishment of a European Center for Cyber Security in Aviation (ECCSA). ECCSA's mission is to provide information and assistance to European aviation manufacturers, airlines, maintenance organizations, air navigation service providers, aerodromes, etc. in order to protect the critical elements of the system such as aircraft, navigation and surveillance systems, datalinks, etc. ECCSA will cover the full spectrum of aviation.

#### — Conflict zones

Since the tragic event of the downing of Malaysian Airlines flight MH17 there is a general consensus that States shall share their information about possible risks and threats in conflict zones. Numerous initiatives have been taken to inform the airlines about the risks on their international flights.

At global level, ICAO has launched since April 2015 a central repository where each State can notify on a voluntary basis its information about a particular risk in conflict zones.

An EU high-level task force was set up with the aim to define further actions to be taken at European level in order to provide common information on risks arising from conflict zones. The Task Force handed over its final report to Mrs Violeta Bulc, European Commissioner for Transport on 17 March 2016. It contains recommendations to be taken by various stakeholders and a proposal to set-up a Conflict Zone Alerting System at European Level, through cooperation between Member States, European institutions, EASA and other aviation stakeholders.

The objective of the alerting system is to join up available intelligence sources and conflict zone risk assessment capabilities, in order to enable the publication in a timely manner of information and recommendations on conflict zone risks, for the benefit of all European Member States, operators and passengers. It complements national infrastructure mechanisms when they exist, by adding, when possible, a European level common risk picture and corresponding recommendations.

EASA acts as coordinating entity for activities not directly under Member States or European Commission responsibility and initiates the drafting, consultation and publication of Conflict Zone Information Bulletins both in cases of availability and unavailability of a common EU risk assessment.



### 3.1.3 Environment

The aviation industry needs to minimise its impact on the environment as much as possible while providing safe air transport. In addition it is key to have environmental requirements that are consistent with the rest of the world to ensure a level playing field.

#### **Climate change and noise: Introduce the CAEP/10 recommendations**

Actions in this area will contribute to meet European targets on climate change prevention by implementing the ICAO CO<sub>2</sub> standard. ICAO CAEP in February 2016 adopted entirely new standards on CO<sub>2</sub> and particulate matter emissions. The agreed CO<sub>2</sub> standard needs to be implemented in the European system to become effective.

### 3.1.4 Efficiency

#### **Reduce the regulatory burden for GA**

EASA is fully engaged to develop simpler, lighter and better rules for GA. This will be achieved in line with the GA Road Map created in partnership with the European Commission and stakeholders and addressing the recognised importance of GA and its contribution to the European economy and a safe European aviation system.

#### **Enable the implementation of new technologies developed by SESAR**

EPAS also caters for the regulatory needs of the SESAR common projects and other new technological development (e.g. such but not limited to U-space deployment, virtualisation and cloud-based architecture and remote tower operations) by enabling the implementation of new working methods and technologies developed by SESAR with focus on data management. Interoperability, civil-military cooperation and compatibility and NextGen international compatibility (e.g. such but not limited to ICAO GANP/ASBUS and NextGen) will form an integral part of EASA's work in impact assessment and future rulemaking. In addition, there is a need to initiate an implementation support action to look holistically to the implementation needs of the necessary enabling infrastructure to facilitate the achievement of the necessary operational improvements and new ATM operational concepts. This action should aim to facilitate safe, secure and interoperable implementation of cost-effective solutions as considered necessary (e.g. this could include GNSS, SATCOM, other satellite-based CNS solutions or other technical solutions coming from the telecommunications field). It should avoid mandate specific technological solutions while specifying clear performance requirements to be met.

#### **Better Regulation: rules are evidence-based, where appropriate performance based, proportionate, fit-for-purpose, simply-written and contribute to the competitiveness of the industry**

Legislation is not an end to itself. Modern, proportionate rules that are fit for purpose are essential in aviation safety to uphold the high common standards and ensure the competitiveness of the European industry. The European Commission's (EC) better regulation agenda is aimed at delivering tangible benefits for European citizens and addressing the common challenges Europe faces. To meet this policy goal, EASA must ensure that its regulatory proposals deliver maximum benefits at minimum cost to citizens, businesses and workers without creating unnecessary regulatory burdens for Member States and EASA itself. To that end, EASA must design regulatory proposals transparently, based on evidence, understandable by those who are affected and backed up by the views of stakeholders.

To be fully effective, 'Better Regulation' must cover the entire regulatory cycle, i.e. the planning phase, design of a proposal, adoption, implementation, application, evaluation and revision. To ensure that the EU has the best regulation possible, EASA must examine each phase of new or existing projects with a view to ensure that the objectives, tools and procedures adhere to 'Better Regulation' principles.



Applying Better Regulation principles means for EASA that efforts must aim at:

- a transparent and streamlined regulatory process that is supported by an efficient stakeholder consultation;
- a plain and easily understandable language also for non-native English speakers;
- communication and IT platforms that give stakeholders easy access to consulted deliverables and regulatory material, including soft law
- a regulatory approach that is performance-based where appropriate and respects the principles of subsidiarity and proportionality; and
- actors involved in the drafting of regulatory material have been appropriately trained in drafting performance-based rules.

Regulating elements of aviation safety by describing the desired outcome is not new. This so-called performance-based approach is intended to make aviation safer, more efficient and flexible. By prescribing safety objectives instead of how to achieve them, this approach promotes the principles of subsidiarity and proportionality. Until recently EASA had not established a consistent and systematic approach to implementing Performance Based Regulations (PBR) principles. In 2016 EASA adopted a policy on PBR which establishes the expected benefits of PBR in term of: resilience, flexibility, safety management.

**Resilience:** The increased complexity in operations and aviation activities, the dynamics of aviation business models, fast and proliferating technologic development require a regulatory framework capable of anticipating changes (technology neutral regulations).

**Flexibility:** By focusing on safety outcomes, PBR provide flexibility and encourage innovation by not restricting a priori the means to control specific risks.

**Safety management:** By providing a flexible implementation framework and focusing on safety outcomes, PBR allow organisations and authorities to foster risk management capability and to better allocate resources against risks identified under their SMS and SSP.

It further specifies that actions towards the development of PBR are to be:

1. identified as part of the Rulemaking Programming process;
2. confirmed through impact assessment or ex post evaluation of rules;
3. discussed and agreed with stakeholders on that basis; and
4. formalised in the RMP.

To this end, the RMP contains identifiers for actions with a particular focus on PBR and an entire section dedicated to evaluation (section 7.1) which will focus on introducing more performance-based elements following a thorough assessment. The PBR policy is included in Appendix E to this document.

#### **Better regulation: Cool-down period**

As the European regulatory framework for aviation started being set up in 2002, the volume of regulation created was necessarily significant. As this process is now largely completed, a ‘cool-down period’ has been proposed by stakeholders in order to stabilise the regulatory system and reduce the burden on Member States and industry when implementing new requirements. This cooling down needs to differentiate between the EASA work on technical standards (Certification Specifications) and Opinions that are the basis of new Commission regulations. EASA introduced the cooling down ceilings in its 5–year plan. **See Chapter 4.**





### 3.1.5 Level playing field

#### **Enable innovation and efficiency gains following the review of the Basic Regulation**

The European Commission has proposed a modernisation of the Basic Regulation. Once the legal text is adopted by the Council and the Parliament, the related implementing rules need to be aligned. As the exact scope of this activity is not yet known, the present plan does not include activities related to the Basic Regulation review.

#### **Enable all-weather operations**

The European industry should have the capability to take full advantage of the safety and economic benefits generated through new technologies and operational experience. This represents a widely recognised interoperability subject touching on a wide range of areas, including aerodrome minima, aerodrome equipment, and procedures both for CAT and GA.

#### **Facilitate European emerging technologies and innovations**

The objective of this priority area is to enable the introduction of new technologies.

*Open rotor engine* technology is one of these technologies. The related activity will identify and recommend harmonised draft requirements and advisory material for CS-E, 14 CFR Part 33, CS-25 and 14 CFR Part 25 to address the novel features inherent in open rotor engine designs and their integration with the aircraft.

A number of aircraft manufacturers and suppliers are working on *electric propulsion* for aircraft. EASA has currently one application for type certificates. Many projects are experimental or geared towards the ultra-light market with national type certification. The market potential is considered significant with related effects on wealth and job creation. Environmental benefits for Europe are also potentially significant both in terms of gaseous emissions and noise. To allow for the projects to thrive, a complex number of issues has to be tackled from a regulatory perspective. However, concrete rulemaking actions are foreseen only for future editions of the EPAS, once EASA has collected concrete technical experience with the type certification of these types of aircraft.

#### **Harmonise FTL rules for CAT rotorcraft and commercial specialised operations**

Develop harmonised and state-of-the-art FTL rules for commercial operations other than CAT fixed wing, e.g. CAT operations with helicopters and commercial specialised operations.

## **3.2 Strategic Enablers**

### 3.2.1 Research

Today, Europe plays a leading role in the aviation sector thanks to its powerful research, innovation and technology development environment. Particularly in this field, systematic attention, integrated approach and coordination/correlation of the technological innovation with the re-assessment of the aviation safety standards and certification processes are crucial in order not to put the medium and long term European innovation system at risk and to remain competitive in the fast-moving global environment.

The EASA Research Strategy (accepted by the EASA MB in 2015) is articulated around four main objectives encompassing integrated/integrative and pro-active approaches:

1. Enable urgent aviation safety research: enable reactivity after incidents or accidents or support the identification of latent safety issues;
2. Get ready for global standards: ensure that EU has the means to play a leading role for setting-up global standards with respect to emerging and future technologies;



3. Reduce Time-to-Market: support the industry upstream, ensure that regulations' framework is not an impediment to innovation;
4. Cohesive Research Planning and Monitoring: ensure synergies, avoid duplication and dispersion of research efforts.

The management of aviation safety requires nowadays pro-active capabilities based on increased availability of operational and safety data. In this context (while the research items are still somehow limited in this edition), the introduction of "Aviation Research Agenda" in the next editions of EPAS aims at supporting the development of coordinated research actions and their implementation as part of EU and national programmes.

In this context EASA is ready to take a pro-active role for ensuring, in collaboration with Member States, the industry and the aviation research community, the consolidation of the research needs to respond to current safety issues identified in EPAS.

In line with the extended scope of EPAS (efficiency and level playing field dimensions) the research agenda may also encompass a series of innovation and efficiency related actions besides 'pure' safety research, in order to refine or complete the EU ACARE Strategic Research and Innovation Agenda (SRIA)<sup>4</sup>.

### 3.2.2 International Cooperation

One of the European Commission's 10 key priorities is that the EU becomes a stronger global actor. EASA supports the EU and cooperates with national, regional and international organisations alike to order to enhance global aviation safety and support the free movement of European products and services. Furthermore, the acknowledgement by ICAO that aviation safety can be better managed at regional level and the responsibility given to RSOOs in this respect, play in favour of an revised role of EASA in a broader European context.

In this perspective, the strategic priorities internationally are to:

#### **Promote safety and environmental protection for European passengers beyond Europe's borders**

- Contribute to improving global safety and environmental protection
- Support the resolution of safety deficiencies through technical assistance
- Promote regional integration wherever effective

#### **Support European industry interests**

- Promote fair and open competition and remove barriers to market access.
- Enable efficient oversight between international partners
- Promote EU aviation standards around the world

#### **Enable the European approach**

- Coordinate common positions at ICAO
- Centralise international oversight actions and intelligence
- Bring together different European actors in technical assistance
- Promote the recognition of the European system at ICAO level

### 3.2.3 Technical Training

As mentioned above, aviation is a very dynamic sector with rapidly innovating new technologies and business models, and constantly improving efficiency and productivity. At the same time, it is confronted with evolving new risk scenarios in terms of both safety and security. These rapid changes are a challenge for the staff of

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<sup>4</sup> 2017 edition of ACARE SRIA : <http://www.acare4europe.org/sria>



aviation authorities, as well as for aviation organisations, to keep abreast with new developments and to update their knowledge and competencies to discharge their responsibilities.

In addition, the new Basic Regulation proposes a framework for pooling and sharing of technical resources between the National aviation authorities and the Agency. The implementation of this new approach requires a stronger harmonisation of the description of job profiles as well as of training and assessment standards of aviation personnel.

To address these challenges and to better contribute to the enhancement of safety and efficiency, the Agency will focus on the following key areas:

- A. The continuous development and maintenance of the competences of EASA staff as well as the harmonisation of training and assessment standards for aviation inspectors within the EASA system;
- B. The implementation support to aviation authorities and aviation organisations as well as lectures to universities;
- C. The support of the international cooperation strategy through training services;
- D. The continuous improvement of the European Central Question Bank (ECQB), which is currently used for theoretical examinations of commercial pilots.

For the continuous development of technical competencies of authority staff, the Agency will closely work together with the Common Training Initiative Group (CTIG) which is composed of training managers from the Member States and additional ECAC countries. This group adopted in its last meeting new Terms of References with the aim to evolve to pro-active group for developing common training and assessment standards for aviation personnel.

As far as training on European aviation rules is concerned, the Agency will better align its competency-based training offers with the EPAS priorities and make them better accessible for the personnel of aviation authorities.

In the area of ECQB, the training-related services are solely provided to aviation authorities. Also in this area, the development of the syllabus for pilot training as well as the development and review of questions in the databank for examinations will duly take into account EPAS priorities where relevant for the training of pilot competencies.

### 3.2.4 Oversight

By introducing authority requirements, and in particular strict requirements for MS on oversight, the rules developed under the first and second extension of the EASA scope have significantly strengthened the oversight requirements. In terms of efficiency, such rules have also introduced the concept of risk-based and cooperative oversight.

To support Member States, this version of EPAS includes 6 projects identifying focused oversight areas. They include both standardisation actions from EASA, as well as oversight actions led by Member States. It also includes an EASA action to develop and test a concept, share best practices and develop enforcement strategies to enable the performance of audits by NAAs taking into account the risk-based oversight concept.

On cooperative oversight, EASA will continue to support NAAs in the practical implementation of cooperative oversight, e.g. existing trial projects, as well as via exchange of best practice and guidance.



## 4 Key indicators

*The safety driver is the one that contains most of the actions in the plan, followed by efficiency/proportionality*

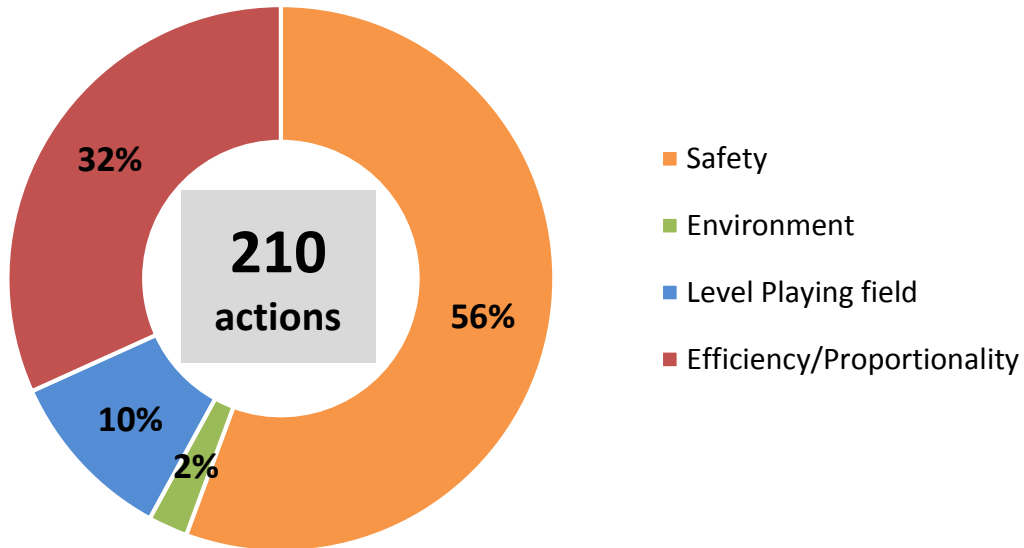


Figure 3: Share of tasks by driver

*There is an equal balance between strategic and standard actions*

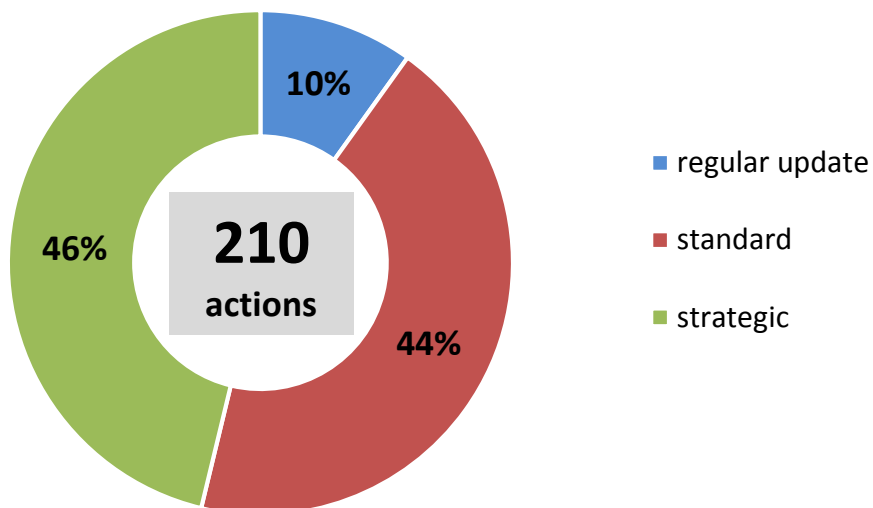


Figure 4: Share of tasks by priority type



**Most of the actions in the EPAS are rulemaking projects**

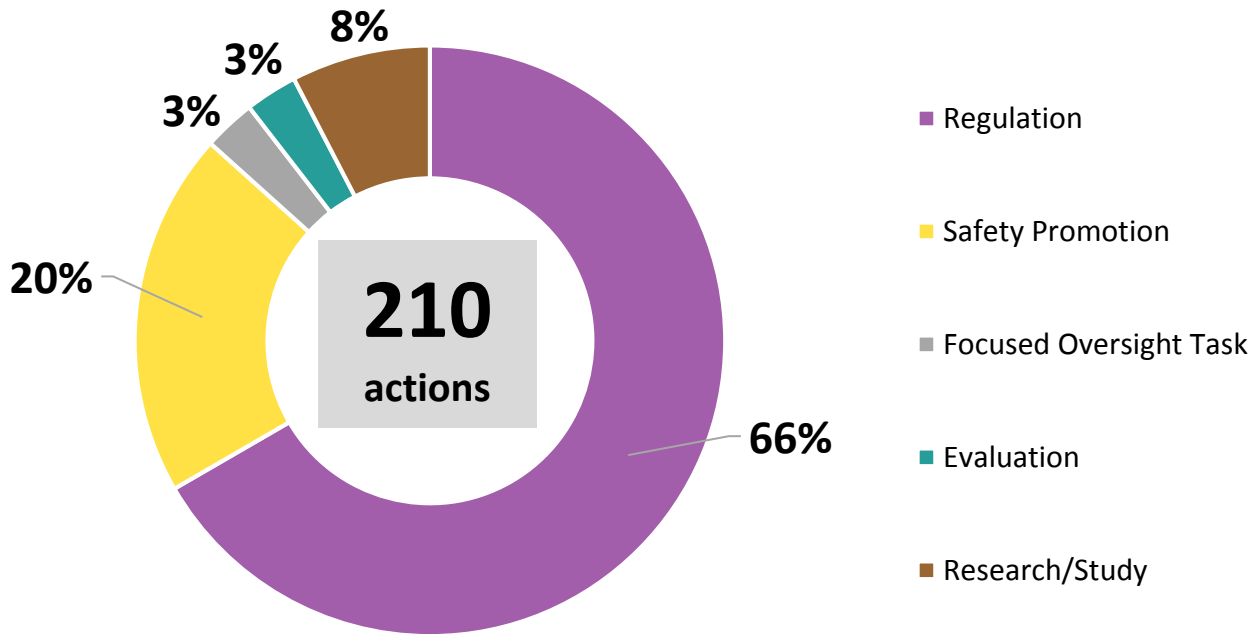


Figure 5: Share of safety tasks per activity type

**Average duration of rulemaking tasks**

The **average duration** of the rulemaking tasks that were closed in 2016 is **3,6 years**<sup>5</sup>, similar to the duration calculated in 2015. In those cases in which the accelerated procedure was used (articles 15 and 16 of the rulemaking process), the duration of the rulemaking tasks was less than a year.

**Rulemaking output**

The rulemaking activity shows a steady decrease of new rulemaking tasks, materialised by the blue line (number of new ToR) shown in the below graph. However, EASA has to handle a backlog of Rulemaking Tasks started in the previous years. The effort to reduce the backlog is materialised by the temporary peak of activity in 2018 and 2019.

In the graphs on the next pages, we show not only the total rulemaking output of the Agency, but also separately the rulemaking activity leading either to Opinions (hard law) or to Decisions CS (soft law), as the latter has little impact on the MS resources.

The graphs do not contain decision pending IR adoptions. Those are considered being counted through opinions.

<sup>5</sup> The calculation is based on rulemaking tasks closed during 2016, from the time the ToR were published till the time decisions or opinions were issued by the Agency



**Rulemaking activity – EASA**

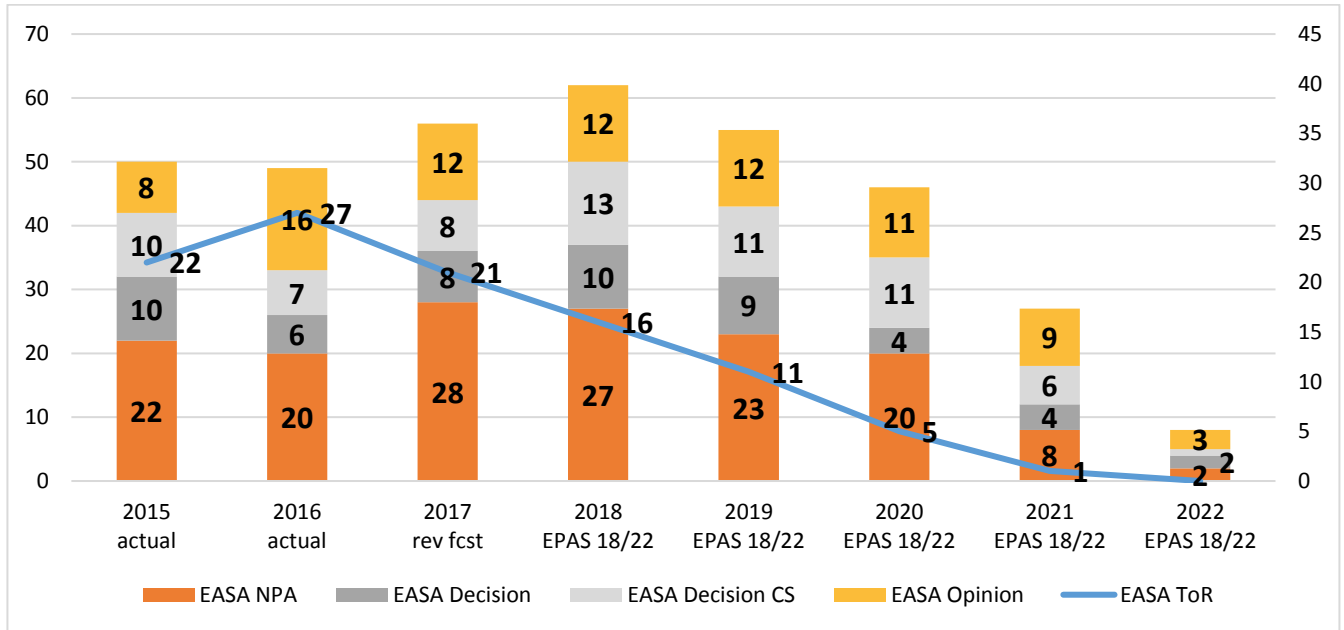


Figure 6: Rulemaking activity EASA 2015–2022

The rulemaking cool-down is materialised by the stabilisation and then reduction of Opinions delivered annually by the Agency. This is further confirmed by the diminution of ToR, which reflects a decrease of new rulemaking tasks being launched. The apparent peak of activity in 2017-2019 is due to the number of CS in the field of initial airworthiness that the Agency will deliver. This responds to the need to eliminate the backlog of rulemaking actions in this domain, knowing that there is a strong demand from Industry stakeholders to finalise those CS. Furthermore, the update of CS to keep up with safety needs and new technologies is not seen as “overregulation” but rather as providing adequate support to the manufacturing Industry.

**Rulemaking activity related to Hard Law**

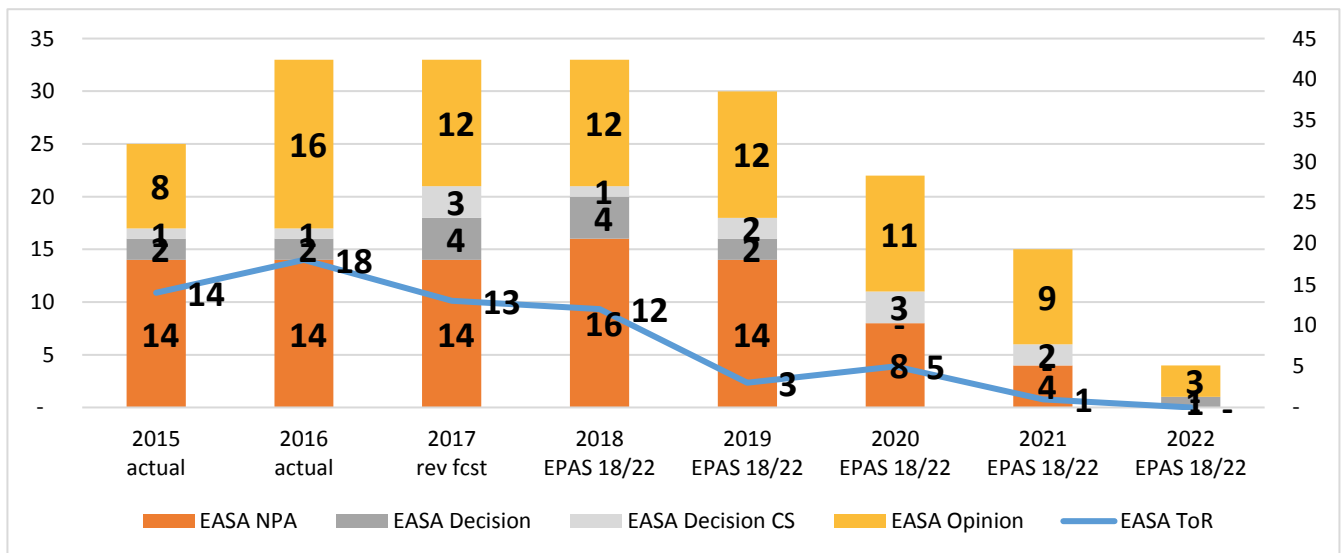


Figure 6: Rulemaking activity in Initial Airworthiness and Environment 2015–2022

The above chart shows the rulemaking output related to hard law: the ToRs and NPAs that lead to an Opinion, as well as those decisions associated to the opinions. The number of opinions has been limited to 12 per year (starting in 2017) to take into consideration the capacity of the EASA Committee. A decreasing trend in the output can be expected during the period of the plan (2018-2022).



**Rulemaking activity related to Soft Law**

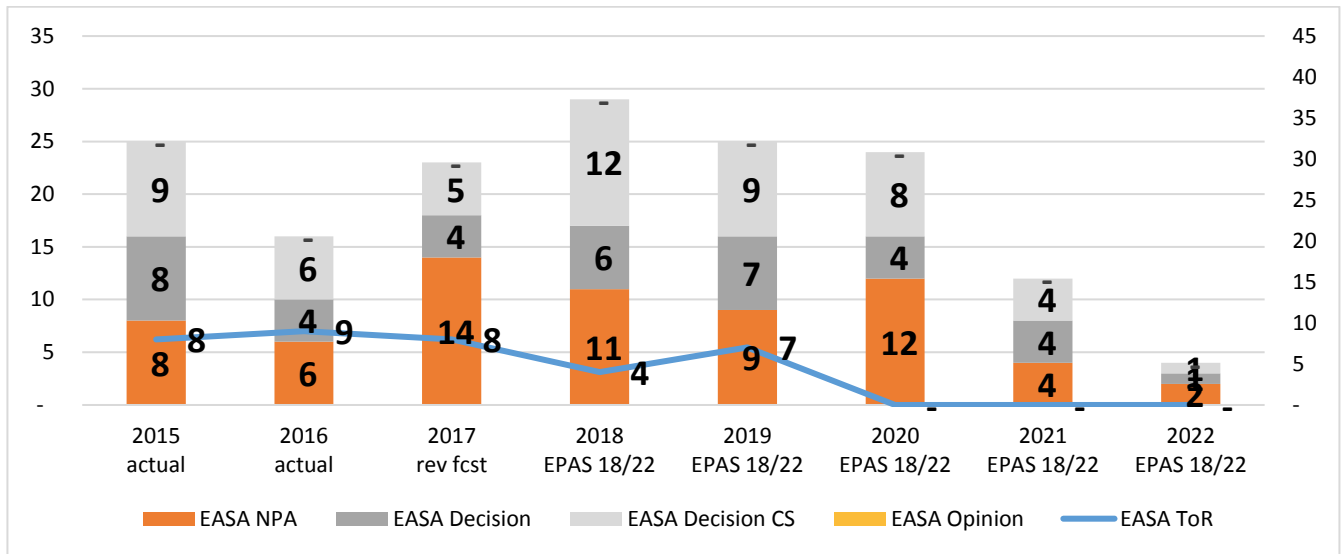


Figure 7: Rulemaking activity within the Flight Standards Directorate 2015–2022

The above chart shows the output related to soft law: ToRs and NPAs that do not lead to Opinions (i.e. only to decisions). These tasks have no impact in MS resources.

*Note: The above figures represent our best estimate at the moment of develop the EPAS. They will be reviewed before the document is published in order to reflect the actual output delivered in 2017. Those deliverables not finalised in 2017 will automatically be carried over to 2018.*





## 5 Safety (EPAS)

The actions in this section are driven principally by the need to maintain or increase the current level of safety in the aviation sector.

### 5.1 Safety performance

Risk areas and safety issues are identified in the Annual Safety Review (ASR) for each of the aviation domains. The ASR is used as the main source for the identification of safety issues that are then addressed in this chapter of the EPAS with concrete actions.

The ASR measures safety performance using 2 specific types of safety performance indicators (SPIs). Firstly, at Tier 1, the overall performance is measured across the different operational domains by considering the number of fatal accidents and fatalities in the previous year against the 10-year average. For 2016, this information is provided below and subdivided in three major domains CAT Aeroplanes, CAT Helicopters and Non-Commercial (General Aviation) activities.

| Domain                    | Fatal Accidents 2016 | Fatal Accidents Annual 10 Year Mean | Fatalities 2016 | Fatalities Annual 10 Year Mean | Fatalities Annual 10 Year Median |
|---------------------------|----------------------|-------------------------------------|-----------------|--------------------------------|----------------------------------|
| CAT Aeroplanes            |                      |                                     |                 |                                |                                  |
| Airline (Passenger/Cargo) | 1                    | 0.8                                 | 2               | 66.0                           | 5.0                              |
| Other                     | 0                    | 1.4                                 | 0               | 6.4                            | 2.0                              |
| SPO Aeroplanes            | 6                    | 10.7                                | 12              | 18.6                           | 16.5                             |
| CAT Helicopters           |                      |                                     |                 |                                |                                  |
| Offshore                  | 1                    | 0.4                                 | 13              | 3.0                            | 0.0                              |
| Other                     | 2                    | 0.9                                 | 8               | 2.8                            | 3.5                              |
| SPO Helicopters           | 0                    | 4.1                                 | 0               | 7.4                            | 6.0                              |
| Non-Commercial and Other  |                      |                                     |                 |                                |                                  |
| NCO Aeroplanes            | 46                   | 51.4                                | 78              | 94.4                           | 95.5                             |
| NCO Helicopters           | 9                    | 10.0                                | 11              | 17.5                           | 17.0                             |
| Balloons*                 | 1                    | 2.2                                 | 1               | 4.0                            | 3.0                              |
| Gliders                   | 19                   | 26.5                                | 20              | 31.1                           | 31.0                             |
| RPAS                      | 0                    | 0.0                                 | 0               | 0.0                            | 0.0                              |

\*Balloon data compares 2016 with the average for the five year period 2011-2015.

One of only two domains with an increase in fatalities in 2016 was Offshore Helicopters, where there was one accident with 13 fatalities. This is the first year that a fatal accident has been recorded in this domain since 2013. The second domain recording an increase was Other CAT Helicopters, where there were 2 HEMS accidents that resulted in 8 fatalities. For the other domains, there has been a reduction in both the number of fatal accidents and fatalities. Due to the low number of fatal accidents in CAT Aeroplanes, the median average is introduced to highlight that while the mean average number of fatalities is high, this is largely due to a small number of large accidents.



The top 5 operational domains in terms of the annual average of the number of fatalities for the past 10 years (2007-2016) are: Non-Commercial Aeroplanes, CAT Aeroplanes Airline (Passenger/Cargo), Gliders/ Sailplanes, SPO Aeroplanes and NCO Helicopters.

The second measure of Tier 2 SPIs monitor safety at an individual domain level. It captures both the Key Risk Areas (Outcomes), helping thus to identify the main areas of focus in each domain, and also identifies the main Safety Issues. More details can be found on the [Annual Safety Review 2017](#)



## 5.2 Systemic enablers

This area addresses system-wide problems that affect aviation as a whole. In most scenarios, these problems become evident by triggering factors and play a significant role in the final outcome of a safety event. They often relate to deficiencies in organisational processes and procedures.

### 5.2.1 Safety management

#### Issue/rationale

Safety management is a strategic priority. Despite the fact that last years have clearly brought continued improvements in safety across every operational domain, last accidents underline the complex nature of aviation safety and the significance of addressing human factor aspects. Authorities and aviation organisations should anticipate more and more new threats and associated challenges by developing Safety Risk Management principles. Those principles will be strengthened by Safety Management System implementation supported by ICAO annex 19, and (EU) No 376/2014 for reporting reinforcement.

#### What we want to achieve

Work with authorities and organisations to implement safety management.

#### How we monitor improvement

Regulatory framework requiring safety management is in place across all aviation domains, and organisations and authorities are able to demonstrate compliance (a cross-domain SMS assessment tool is under development).

#### How we want to achieve it: actions

##### Rulemaking

#### RMT.0251 Embodiment of safety management system requirements into Commission Regulations (EU) Nos 1321/2014<sup>6</sup> and 748/2012<sup>7</sup>

With reference to ICAO Annex 19, the objective is to set up a framework for safety management in the initial and continuing airworthiness domains.

Split task:

1. Part-M linked to OPS (CAMOs)
2. Part-145, Part-21 for production organisation approval (POA), design organisation approval (DOA).

##### Owner

EASA FS.1

##### Affected stakeholders

CAMOs, MOs, POA, DOA, TOs, and national aviation authorities (NAAs)

| PIA | Proc | 3rdC | SubT | ToR        | NPA        | Opinion    | Commission IR | Decision |
|-----|------|------|------|------------|------------|------------|---------------|----------|
| A-  | ST   | -    | 1    | 19/07/2011 | 10/10/2013 | 11/05/2016 | 2018 Q2       | 2018 Q2  |
|     |      |      | 2    |            | 2018 Q2    | 2019 Q2    | 2020 Q4       | 2020 Q4  |

<sup>6</sup> Commission Regulation (EU) No 1321/2014 of 26 November 2014 on the continuing airworthiness of aircraft and aeronautical products, parts and appliances, and on the approval of organisations and personnel involved in these tasks (OJ L 362, 17.12.2014, p. 1).

<sup>7</sup> 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 (OJ L 224, 21.8.2012, p. 1).



**RMT.0262 Embodiment of level of involvement (LOI) requirements into Part-21**

To ensure compliance of Part-21 with the framework of safety management provisions of ICAO Annex 19. Introduction in Part-21 of a risk-based approach for the determination of the LOI of EASA in product certification. This entails introduction of:

- systematic risk management (hazard identification, risk assessment and mitigation);
- safety performance-based oversight allowing to focus on areas of greater risk;
- safety awareness and promotion among all staff involved; and
- improved effectiveness and efficiency of Part-21 IRs achieved by their streamlining and improved consistency.

Phase 1 of the RMT will end with an Agency decision providing some initial AMC/GM to the amendments to Part-21; this decision will be issued upon adoption by the Commission and publication of the Regulation in the Official Journal, which is expected to take place 2017. In parallel, EASA develops further AMC/GM to support the application of the amendments to Part-21.

**Owner**

EASA CT.7

**Affected stakeholders**

Design approval holders (DAHs)

| PIA | Proc | 3rdC | ToR        | NPA                   | Opinion           | Commission IR  | Decision           |
|-----|------|------|------------|-----------------------|-------------------|----------------|--------------------|
| A-  | ST   | -    | 27/08/2013 | 02/03/2015<br>2017 Q4 | 23/05/2016<br>n/a | 2017 Q4<br>n/a | 2017 Q4<br>2018 Q3 |

**RMT.0469 Assessment of changes to functional systems by service providers in ATM/ANS and the oversight of these changes by competent authorities**

Development of the necessary AMC/GM for the service providers and the competent authorities.

**Owner**

EASA FS.4.2

**Affected stakeholders**

ANSPs, competent authorities

| PIA | Proc | 3rdC | ToR        | NPA                      | Opinion           | Commission IR     | Decision              |
|-----|------|------|------------|--------------------------|-------------------|-------------------|-----------------------|
| B-  | ST   | -    | 19/06/2012 | 24/06/2014<br>28/06/2017 | 16/12/2014<br>n/a | 01/03/2017<br>n/a | 08/03/2017<br>2018 Q4 |

**RMT.0681 Alignment of implementing rules & AMC/GM with Regulation (EU) No 376/2014**

Alignment of IRs & AMC/GM with Regulation (EU) No 376/2014.

With regards to Commission IR and Decision: Depends on the related content, to be published concurrently with another deliverable – specific arrangement with the EU Commission.

**Owner**

EASA FS.5

**Affected stakeholders**

Operators, pilots, MOs, ATOs, manufacturers, CAMOs, aerodrome operators, ATM/ANS service providers, and ATCO TOs

| PIA | Proc | 3rdC | ToR        | NPA        | Opinion | Commission IR | Decision |
|-----|------|------|------------|------------|---------|---------------|----------|
| B-  | ST   | -    | 30/09/2015 | 19/12/2016 | 2018 Q1 | 2020 Q1       | 2020 Q1  |

**RMT.0706 Update of authority and organisation requirements**

Address relevant elements of the ICAO Annex 19 considering the latest revision status of the document and ensure appropriate horizontal harmonisation of the requirements across different domains taking on board lessons learned.

**Owner**

EASA FS

**Affected stakeholders**

Competent Authorities: NAAs, NSAs, organisations

| PIA | Proc | 3rdC | ToR     | NPA     | Opinion | Commission IR | Decision |
|-----|------|------|---------|---------|---------|---------------|----------|
| A2  | ST   | -    | 2018 Q2 | 2019 Q2 | 2020 Q2 | 2021 Q2       | 2021 Q2  |



## Safety Promotion

|                |   |                        |   |             |
|----------------|---|------------------------|---|-------------|
| <b>MST.001</b> | <b>Member States to give priority to the work on SSPs</b><br>Make SSPs consistently available in Europe in compliance with the GASP objectives.   |                        |   |             |
|                | <b>Owner</b>  | <b>Activity sector</b> | <b>Deliverable</b>                            | <b>Date</b> |
|                | MS  | ALL                    | SSP established                               | Continuous  |
| <b>MST.002</b> | <b>Promotion of SMS</b><br>Encourage implementation of safety promotion material developed by the Safety Management International Collaboration Group (SMICG).  |                        |   |             |
|                | <b>Owner</b>  | <b>Activity sector</b> | <b>Deliverable</b>                            | <b>Date</b> |
|                | MS  | ALL, HF                | Best practice                                 | Continuous  |
| <b>MST.003</b> | <b>Member States should maintain a regular dialogue with their national aircraft operators on flight data monitoring (FDM) programmes</b><br>States should maintain a regular dialogue with their operators on flight data monitoring (FDM) programmes, with the objectives of: <ul style="list-style-type: none"><li>• promoting the operational safety benefits of FDM and the exchange of experience between subject matter experts,</li><li>• encouraging operators to make use of good practice documents produced by EOFDM and similar safety initiatives.</li></ul><br>The document titled 'Guidance for national aviation authorities on setting up a national flight data monitoring forum' (produced by EAFDM ) is offering guidance for this purpose |                        |   |             |
|                | <b>Owner</b>  | <b>Activity sector</b> | <b>Deliverable</b>                            | <b>Date</b> |
|                | MS  | CAT                    | Report on activities performed to promote FDM | Continuous  |
| <b>MST.026</b> | <b>SMS Assessment</b><br>Member States should make use of the EASA Management system assessment tool to support performance based oversight. Member States should provide feedback to EASA on how the tool is used for the purpose of standardisation and continual improvement   |                        |   |             |
|                | <b>Owner</b>  | <b>Activity sector</b> | <b>Deliverable</b>                            | <b>Date</b> |
|                | MS  | ALL                    | Feedback on the use of the tool               | Continuous  |
| <b>SPT.057</b> | <b>SMS international cooperation</b><br>Promote the common understanding of SMS and human factors principles and requirements in different countries, share lessons learned and encourage progress and harmonisation.   |                        |   |             |
|                | <b>Owner</b>  | <b>Activity sector</b> | <b>Deliverable</b>                            | <b>Date</b> |
|                | EASA FS.5   | ALL, HF                | Methodology/training material/best practice   | Continuous  |
| <b>SPT.076</b> | <b>FDM precursors of main operational safety risks</b><br>EASA should, in partnership with the industry, complete the good practice documentation which supports the inclusion of main operational safety risks such as RE, LOC-I, CFIT and MAC into operators' FDM programmes..  |                        |   |             |
|                | <b>Owner</b>  | <b>Activity sector</b> | <b>Deliverable</b>                            | <b>Date</b> |
|                | EASA SM.1 + EOFDM   | CAT                    | Good practice document                        | 2019        |



SPT.077

Good practices for the integration of operator’s FDM data with other safety data sources

EASA should, in partnership with the industry, establish good practices that help an operator in integrating its FDM data with other safety data sources.

| Owner             | Activity sector | Deliverable            | Date |
|-------------------|-----------------|------------------------|------|
| EASA SM.1 + EOFDM | CAT             | Good practice document | 2019 |

5.2.2 Human factors and competence of personnel

Issue/rationale

Human factors and competence of personnel is a strategic priority. As new technologies emerge on the market and the complexity of the system continues increasing, it is of key importance to have the right competencies and adapt training methods to cope with new challenges. It is equally important for aviation personnel to take advantage of the safety opportunities presented by new technologies.

The safety actions related to aviation personnel are aimed at introducing competency-based training in all licences and ratings, updating fatigue requirements and facilitating the availability of adequate personnel in CAs. These actions will contribute to mitigating safety issues such as personal readiness, flight crew perception or CRM and communication, which play a role in improving safety across all aviation domains.

What we want to achieve

Ensure continuous improvement of aviation personnel competence.

How we monitor improvement

Measurable improvement in aviation personnel competence at all levels (flight crews, ATCOs and CAs).

How we want to achieve it: actions

Rulemaking

RMT.0106 Certification specifications and guidance material for maintenance certifying staff type rating training

The main objective is to improve the level of safety by requiring the applicant for a type certificate (TC) or restricted TC for an aircraft to identify the minimum syllabus of maintenance certifying staff type rating training, including the determination of type rating.

This minimum syllabus, together with the requirements contained in Appendix III to Annex III (Part-66) to Commission Regulation (EU) No 1321/2014, will form the basis for the development and approval of Part-66 type rating training courses.

Owner

EASA FS.1

Affected stakeholders

DAHs, TOs, maintenance engineers, Approved Maintenance Training Organisations

| PIA | Proc | 3rdC | ToR        | NPA     | Opinion | Commission IR | Decision |
|-----|------|------|------------|---------|---------|---------------|----------|
| B-  | ST   | -    | 28/07/2014 | 2018 Q3 | n/a     | n/a           | 2019 Q4  |

RMT.0188 Update of EASA FCL implementing rules

A complete first review of Part-FCL addressing a number of issues to be clarified or amended as identified by industry and MS. It also establishes a flight examiner manual (FEM) and a first draft of the learning objectives (LOs). Some of these corrections and clarifications also pertain to alleviations for the GA community.

Owner

EASA FS.3

Affected stakeholders

Examiners, instructors, pilots, ATOs and DTOs

| PIA | Proc | 3rdC | ToR        | NPA        | Opinion    | Commission IR | Decision |
|-----|------|------|------------|------------|------------|---------------|----------|
| B-  | ST   | -    | 21/07/2011 | 17/12/2014 | 29/06/2017 | 2018 Q3       | 2018 Q3  |



**RMT.0194 Extension of competency-based training to all licences and ratings and extension of TEM principle to all licences and ratings**

More performance-based rulemaking will be addressed. The principles of CBT shall be transferred to other licences and ratings, and the multi-crew pilot licence (MPL) should be reviewed in order to address the input from the ICAO MPL symposium and the European MPL Advisory Board. Some action items from the GA Road Map activity list, such as modular training and CBT, will be addressed as well.

**Owner**

EASA FS.3

**Affected stakeholders**

ATOs and pilots

| PIA | Proc | 3rdC | ToR     | NPA     | Opinion | Commission IR | Decision |
|-----|------|------|---------|---------|---------|---------------|----------|
| B-  | ST   | -    | 2018 Q3 | 2020 Q3 | 2022 Q1 | 2023 Q1       | 2023 Q1  |

**RMT.0196 Improve flight simulation training devices (FSTDs) fidelity**

An ICAO harmonisation issue, as the main purpose is to include in the European provisions elements from ICAO Doc 9625 for the use of FSTDs in flight training. The task will also address three safety recommendations (SRs) and aims at including results and findings from the loss of control avoidance and recovery training (LOCART) and RMT.0581 working group results. Harmonisation with the Federal Aviation Administration (FAA) should be considered.

**Owner**

EASA FS.3

**Affected stakeholders**

Operators, ATOs, DTOs, pilots, instructors, and examiners

| PIA | Proc | 3rdC | SubT | ToR        | NPA     | Opinion | Commission IR | Decision |
|-----|------|------|------|------------|---------|---------|---------------|----------|
| A-  | ST   | -    | 1    | 15/07/2016 | 2017 Q4 | n/a     | n/a           | 2019 Q4  |
|     |      |      | 2    |            | 2019 Q1 | n/a     | n/a           | 2021 Q4  |
|     |      |      | 3    |            | 2021 Q1 | n/a     | n/a           | 2023 Q4  |

**RMT.0486 Alignment with ICAO on ATCO fatigue management provisions**

Alignment with ICAO on the subject provisions.

**Owner**

EASA FS.4.2

**Affected stakeholders**

ANSPs and ATCOs

| PIA | Proc | 3rdC | ToR     | NPA     | Opinion | Commission IR | Decision |
|-----|------|------|---------|---------|---------|---------------|----------|
| B-  | ST   | -    | 2019 Q4 | 2020 Q4 | 2021 Q4 | 2022 Q4       | 2022 Q4  |

**RMT.0544 Review of Part-147**

To perform a review of the effectiveness of the implementation of Part-147.

**Owner**

EASA FS.1

**Affected stakeholders**

Part-147 TOs and NAAs

| PIA | Proc | 3rdC | ToR     | NPA     | Opinion | Commission IR | Decision |
|-----|------|------|---------|---------|---------|---------------|----------|
| n/a | ST   | -    | 2018 Q3 | 2020 Q3 | 2021 Q3 | 2022 Q3       | 2022 Q3  |





**RMT.0589 Rescue and firefighting services (RFFS) at aerodromes**

The objective of this RMT is to ensure a high and uniform level of safety by establishing minimum medical standards for rescue and firefighting personnel required to act in aviation emergencies. It will also ensure that the level of protection for rescue and firefighting at aerodromes serving all-cargo or mail flights is proportionate to this type of traffic and their particular requirements. Finally, it will as well ensure a clearer implementation of the remission factor in general.

The RMT has been split in two sub-tasks:

- (a) 1st sub-task: Remission factor, cargo flights, etc.
- (b) 2nd sub-task: RFFS personnel physical and medical fitness standards.

**Owner** Affected stakeholders

EASA FS.4.3 Aerodrome operators

| PIA | Proc | 3rdC | ToR        | NPA                   | Opinion        | Commission IR  | Decision              |
|-----|------|------|------------|-----------------------|----------------|----------------|-----------------------|
| B-  | ST   | -    | 10/04/2014 | 09/07/2015<br>2017 Q4 | n/a<br>2018 Q4 | n/a<br>2020 Q4 | 23/05/2016<br>2020 Q4 |

**RMT.0595 Technical review and regular update of learning objectives and syllabi for commercial licences (IR)**

Technical review of theoretical knowledge syllabi, learning objectives, and examination procedures for the air transport pilot licence (ATPL), MPL, commercial pilot licence (CPL), and instrument rating (IR).

**Owner** Affected stakeholders

EASA FS.3/ECQB Team Competent authorities, ATOs, student pilots, providers of textbooks and training materials, ECQB

| PIA | Proc | 3rdC | ToR        | NPA                   | Opinion    | Commission IR | Decision           |
|-----|------|------|------------|-----------------------|------------|---------------|--------------------|
| B-  | ST   | -    | 11/03/2015 | 09/06/2016<br>2021 Q1 | n/a<br>n/a | n/a<br>n/a    | 2017 Q4<br>2022 Q1 |

**RMT.0596 Review of provisions for examiners and instructors (Subparts J & K of Part-FCL)**

A complete review of the subparts of Part-FCL containing the provisions for examiners and instructors. Industry and MS experts requested this task as an urgent correction and alignment of the rules in place. It will also address some of the elements proposed by the EASA examiner/inspector task force.

This task has been merged with RMT.0194

**Owner** Affected stakeholders

EASA FS.3 Pilots, instructors, examiners, ATOs, operators and DTOs

**RMT.0599 Update of ORO.FC**

A complete review of the provisions contained in ORO.FC. In a first phase, it will include the introduction of evidence-based training (EBT) and competency-based training (CBT) in the field of recurrent training and other training-related implementation issues.

The second phase will include the extension of EBT to other parts of the operator’s training (e.g. conversions course, type rating) allowing a single philosophy of training to the operator, and a third phase that will extend EBT to other aircrafts types (e.g. helicopters, business jets) allowing a single philosophy of training across the industry. Also it will include other implementation issues on the training-related rules brought to the attention of the Agency.

**Owner** Affected stakeholders

EASA FS.3 Pilots, instructors, examiners, ATOs and operators

| PIA | Proc | 3rdC | ToR        | NPA                | Opinion            | Commission IR      | Decision           |
|-----|------|------|------------|--------------------|--------------------|--------------------|--------------------|
| A-  | ST   | -    | 05/02/2016 | 2018 Q2<br>2021 Q3 | 2019 Q2<br>2022 Q3 | 2020 Q2<br>2023 Q3 | 2020 Q2<br>2023 Q3 |



**RMT.0700 Germanwings**

Preventive measures stemming from the taskforce:  
 (1) carrying out a psychological assessment of the flight crew before commencing line flying;  
 (2) enabling, facilitating and ensuring access to a flight crew support programme; and  
 (3) performing systematic drug and alcohol (D&A) testing of flight and cabin crew upon employment.  
 The AB consultation replaced the NPA.

**Owner**

EASA FS.5

**Affected stakeholders**

Pilots, AMEs, AeMCs, competent authorities

| PIA | Proc | 3rdC | ToR        | NPA | Opinion    | Commission IR | Decision |
|-----|------|------|------------|-----|------------|---------------|----------|
| A-  | DP   | -    | 20/04/2016 | n/a | 11/08/2016 | 2017 Q4       | 2017 Q4  |

**Focused Oversight**

**FOT.003 Unavailability of adequate personnel in competent authorities**

EASA Standardisation to monitor the availability of staff in CAs.

**Owner**

EASA FS.5

**Activity sector**

ALL

**Deliverable**

Report

**Date**

Annually

**FOT.004 Unavailability of adequate personnel in competent authorities**

EASA to support CAs: a. in defining the right competences needed to properly discharge their safety oversight responsibilities; and b. in providing training to their staff.

**Owner**

EASA FS.5

**Activity sector**

ALL, HF

**Deliverable**

Report

**Date**

Continuous

**Research**

**RES.006 Effectiveness of flight time limitations (FTL)**

The objective is to develop and demonstrate the due process for the assessment of the effectiveness of FTL and fatigue risk management (FRM) provisions as set in Article 9a of Regulation (EU) No 965/2012<sup>8</sup>. Particular emphasis will be put on the establishment and qualification of the appropriate metrics with a view to ascertaining the necessity for their update towards improving flight safety by better mitigating the possibly associated risks.

**Owner**

European Commission (H2020)

**Activity sector**

CAT, HF

**Deliverable**

Report

**Date**

2018

<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).



### 5.2.3 Aircraft tracking, rescue operations and accident investigation

#### Issue/rationale

Safety investigation authorities have frequently raised the issue of lack of data to support investigations of light aircraft accidents. This is also related to the fact that light aircraft are not required to carry a flight recorder. As regards large aircraft, the advent of new technologies, as well as findings during safety investigations highlight the need to update the installation specifications for flight recorders.

The safety actions in this area are aimed at introducing normal tracking of large aircraft, improving the availability and quality of data recorded by flight recorders, assessing the need for in-flight recording for light aircraft and the need to introduce data link recording for in-service large aircraft.

#### What we want to achieve

Increase safety by facilitating the recovery of information by safety investigation authorities and thus helping to avoid future accidents.

#### How we monitor improvement

Number of investigated accidents or serious incidents in which flight data is not recovered

#### How we want to achieve it: actions

##### Rulemaking

##### RMT.0249 Recorders installation and maintenance thereof — certification aspects

The general objective of this RMT is to improve the availability and quality of data recorded by flight recorders in order to better support safety investigation authorities in the investigation of accidents and incidents. More specifically, this RMT is aimed at modernising and enhancing the specifications for flight recorder installation on board large aeroplanes and large rotorcraft.

Phase 1 of the RMT will result into an NPA in 2017. Following the public consultation of said NPA, EASA will develop an opinion and a decision issuing CS-25 and CS-29. In phase 2 of this RMT, EASA will prepare a second NPA (planned for Q2/2019), which will lead to a decision issuing CS-25 and CS-29.

##### Owner

EASA CT.7

##### Affected stakeholders

Operators (of aircraft required to be equipped with flight recorders), manufacturers, applicants for TC/STC

| PIA | Proc | 3rdC | ToR        | NPA                | Opinion            | Commission IR      | Decision           |
|-----|------|------|------------|--------------------|--------------------|--------------------|--------------------|
| B-  | ST   | -    | 18/09/2014 | 2017 Q4<br>2019 Q2 | 2018 Q2<br>2020 Q1 | 2018 Q2<br>2020 Q1 | 2018 Q2<br>2020 Q1 |

##### RMT.0271 In-flight recording for light aircraft

Assess the need for in-flight recording and make proportionate suggestions for categories of aircraft and types of operation covered by the air operations rules for which there is no flight recorder carriage requirement. Following the publication and public consultation of NPA 2017-03, EASA will develop an Opinion, which will be published together with a Comment Response Document.

##### Owner

EASA FS.2

##### Affected stakeholders

Operators (of aircraft not yet required to have flight recorders)

| PIA | Proc | 3rdC | ToR        | NPA        | Opinion | Commission IR | Decision |
|-----|------|------|------------|------------|---------|---------------|----------|
| B-  | ST   | -    | 25/07/2014 | 03/04/2017 | 2019 Q1 | 2020 Q3       | 2020 Q3  |



**RMT.0294 Data link recording retrofit for aircraft used in CAT**

Assess the need to introduce data link recording for in-service aircraft in line with ICAO Annex 6 Parts I and III

**Owner**

EASA FS.2

**Affected stakeholders**

Operators (of aircraft required to be equipped with flight recorders), manufacturers, applicants for TC/STC

| PIA | Proc | 3rdC | ToR     | NPA     | Opinion | Commission IR | Decision |
|-----|------|------|---------|---------|---------|---------------|----------|
| B-  | ST   | -    | 2020 Q1 | 2021 Q1 | 2022 Q1 | 2023 Q1       | 2023 Q1  |

**RMT.0400 Amendment of requirements for flight recorders and underwater locating devices**

All IRs were adopted with Commission Regulation (EU) 2015/2338; however, the AMC & GM for CAT.GEN.MPA.205 (Aircraft tracking - aeroplanes) and CAT.GEN.MPA.210 (Location of an aircraft in distress) in the rules for air operations have not yet been issued. In addition, it has been identified that amendments to certification specifications may be necessary to facilitate the implementation of CAT.GEN.MPA.210.

**Owner**

EASA FS.2+CT.4

**Affected stakeholders**

Aircraft operators and manufacturers

| PIA | Proc | 3rdC | SubT | ToR        | NPA        | Opinion    | Commission IR | Decision   |
|-----|------|------|------|------------|------------|------------|---------------|------------|
| B-  | ST   | -    | 1    | 26/09/2012 | 20/12/2013 | 06/05/2014 | 11/12/2015    | 12/10/2015 |
|     |      |      | 2    |            |            |            |               | 17/12/2015 |
|     |      |      | 3    |            |            |            |               | 12/09/2016 |
|     |      |      | 4    |            |            |            |               | 2017 Q4    |
|     |      |      | 5    |            | 2018/Q4    |            |               | 2019/Q2    |

**Research**

**RES.013 Quick recovery of flight data recordings**

Assess means to recover flight recorder data quickly after an accident for the purpose of faster corrective actions, their limitations as well as the related challenges for standardisation and deployment.

**Owner**

EASA SM.1

**Activity sector**

CAT

**Deliverable**

Report

**Date**

2019



### 5.3 CAT by aeroplane

The only fatal accident in CAT aeroplane airline operations in 2016 that involved an EASA MS operator was the accident of a Bombardier CRJ-200 performing a cargo flight on 8 January 2016. From the analysis, it can be observed that there was a lower number of non-fatal accidents involving EASA MS operators in 2016 than the 10-year average, with 16 accidents compared to the average of 23.1 over the previous 10 years. At the same time, there was a 36% increase in the number of serious incidents over the same period resulting in a total of 106 serious incidents compared with the average of 78.2. In terms of fatalities, 2016 showed a lower fatality rate than the 10 year average with the single fatal accident resulting in 2 fatalities (the flight crew, the only occupants of the aeroplane).

This operational domain is the greatest focus of the EASA safety activities and the reorganisation of the collaborative analysis groups (CAGs) and Advisory Bodies will help EASA to learn more about the safety challenges faced by airlines and manufacturers<sup>9</sup>.

#### 5.3.1 Aircraft upset in flight (LOC-I)

##### Issue/rationale

Loss of control usually occurs because the aircraft enters a flight regime which is outside its normal envelope, usually, but not always, at a high rate, thereby introducing an element of surprise for the flight crew involved. Prevention of loss of control is a strategic priority.

Aircraft upset or loss of control is the most common accident outcome for fatal accidents in CAT aeroplanes operations, accounting for 75% of them. It includes uncontrolled collisions with terrain, but also occurrences where the aircraft deviated from the intended flight path or aircraft flight parameters, regardless of whether the flight crew realised the deviation and whether it was possible to recover or not.

##### What we want to achieve

Continuously assess and improve risk controls to mitigate the risk of loss of control.

##### How we monitor improvement

Continuous monitoring of safety issues identified in the Commercial Air Transport Fixed Wing Portfolio (ref: Annual Safety Review 2017)

##### How we want to achieve it: actions

##### Rulemaking

##### RMT.0397 Unintended or inappropriate rudder usage — rudder reversals

- To propose an amendment of CS-25 to protect the aeroplane against the risk of unintended or inappropriate rudder usage. This may be achieved either by taking actions to mitigate erroneous rudder inputs from pilots to ensure safe flight, or by proposing actions that will ensure pilots will not make the erroneous rudder input.
- To determine if retroactive specifications are suitable for already certified large aeroplanes. In case of a positive answer, to propose Part-26/CS-26 standards, eventually including applicability criteria. Those standards may differ from the ones proposed for CS-25 amendment.

##### Owner

EASA CT.7

##### Affected stakeholders

DAHs

| PIA | Proc | 3rdC | ToR        | NPA     | Opinion | Commission IR | Decision |
|-----|------|------|------------|---------|---------|---------------|----------|
| B-  | ST   | -    | 30/05/2017 | 2017 Q4 | n/a     | n/a           | 2018 Q3  |

<sup>9</sup> Extract from the EASA Annual Safety Review 2016.



**RMT.0581 Loss of control prevention and recovery training**

Review of the provisions for initial and recurrent training in order to address upset prevention and recovery training (UPRT). The review will also address the implementation of the ICAO documents and several SRs. Other aspects to be covered are manual aircraft handling of approach to stall and stall recovery (including at high altitude), the training of aircraft configuration laws, the recurrent training on flight mechanics, and training scenarios (including the effect of surprise).

This RMT is split into multiple deliverables. See the related ToR on the EASA website.

Note: Recurrent and conversion training provisions related to UPRT were already published in May 2015. They have been applicable as of May 2016.

**Owner**

EASA FS.3

**Affected stakeholders**

Pilots, instructors, examiners, ATOs and operators

| PIA | Proc | 3rdC | ToR        | NPA        | Opinion    | Commission IR | Decision   |
|-----|------|------|------------|------------|------------|---------------|------------|
| A-  | ST   | -    | 20/08/2013 | 01/09/2015 | n/a        | n/a           | 04/05/2015 |
|     |      |      |            |            | 29/06/2017 | 2018 Q3       | 2018 Q3    |

**RMT.0647 Loss of control or loss of flight path during go-around or climb**

The overall goal is to mitigate the safety risk (for large aeroplanes) of loss of control or loss of the flight path of the aircraft during the go-around or climb phases executed from a low speed configuration and close to the ground.

The first objective is to ensure that the thrust available after selecting the go-around mode is set to a reasonable value, such that the aeroplane’s performance parameters (e.g. forward and vertical speeds, pitch attitude) are not excessive to the point that the control of the flight path may be a very demanding or hazardous task. The thrust setting should be such that the aeroplane’s performance still complies with the performance requirements of CS-25 Subpart B, and the pilot can still easily select the full thrust, if needed.

The second objective is to prevent an excessive nose-up trim condition when transitioning from a low-speed phase of flight to go-around or climb when high level of thrust is applied. This may be achieved by different means, such as increasing the flight crew awareness of the low speed/excessive nose-up trim condition, or incorporating active systems preventing an unusual configuration (low speed/excessive nose-up trim condition) from developing.

**Owner**

EASA CT.7

**Affected stakeholders**

DAHs and operators

| PIA | Proc | 3rdC | ToR        | NPA        | Opinion | Commission IR | Decision |
|-----|------|------|------------|------------|---------|---------------|----------|
| A-  | ST   | -    | 06/07/2015 | 11/05/2017 | n/a     | n/a           | 2018 Q2  |

**Safety Promotion**

**MST.004 Include loss of control in flight in national SSPs**

LOC-I should be addressed by the MS on their SSPs. This will include as a minimum agreeing a set of actions and measuring their effectiveness.

**Owner**

MS

**Activity sector**

CAT, HF

**Deliverable**

SSP established

**Date**

Continuous

**SPT.012 Promote the new European provisions on pilot training**

The objective is to complement the new regulatory package on UPRT and EBT with relevant safety promotion material.

**Owner**

EASA FS.3

**Activity sector**

ALL, HF

**Deliverable**

Safety Promotion

**Date**

2019



**Research**

**RES.010**

**Ice crystal detection**

Ice crystal icing phenomenon is still posing a severe threat to high altitude flying, in particular to new engine designs. Pilots have little or no means to detect and/or avoid it, especially at night. A research is proposed in order to better detect the presence of ice crystal icing and to develop an equipment suitable to detect such a phenomenon.

| <b>Owner</b> | <b>Activity Sector</b> | <b>Deliverable</b> | <b>Date</b> |
|--------------|------------------------|--------------------|-------------|
| EASA SM.1    | CAT                    | Report             | 2019        |

**RES.017**

**Icing hazard linked to Super Large Droplet (SLD)**

Characterisation of phenomena (super-cooled large droplet icing) and analysis of impact/mitigation for safety in order to develop relevant airworthiness standards and means of compliance.

| <b>Owner</b> | <b>Activity Sector</b> | <b>Deliverable</b> | <b>Date</b> |
|--------------|------------------------|--------------------|-------------|
| EASA SM.1    | CAT                    | Report             | 2019        |





### 5.3.2 Runway safety

#### Issue/rationale

This section deals both with Runway Excursions and Runway Collisions and is a strategic priority.

According to the definition provided by ICAO, an RE is a veer or overrun off the runway surface. RE events can happen during take-off or landing.. They account for 13% of the fatal accidents in CAT aeroplane operations involving airline/cargo operations in the past decade. This includes materialised runway excursions, both high and low speed and occurrences where the flight crew had difficulties maintaining the directional control of the aircraft or of the braking action during landing, where the landing occurred long, fast, off-centred or hard, or where the aircraft had technical problems with the landing gear (not locked, not extended or collapsed) during landing.

An Runway Incursions refers to the incorrect presence of an aircraft, vehicle or person on an active runway or in its areas of protection. Their accident outcome, runway collisions have been the outcome in 1% of fatal accidents in the past decade. Despite the low percentage, the risk of the reported occurrence demonstrated to be very real..

#### What we want to achieve

Continuously assess and improve risk controls to mitigate the risk of REs and RIs.

#### How we monitor improvement

Continuous monitoring of safety issues identified in the ATM and Aerodrome risk portfolio (currently under development)

#### How we want to achieve it: actions

#### Rulemaking

##### RMT.0296 Review of aeroplane performance requirements for operations

- Develop regulatory material to provide improved clarity, technical accuracy, flexibility or a combination of these benefits for the EU operational requirements on aeroplane performance in air operations with the aim of reducing the number of accidents and serious incidents where aeroplane performance is a causal factor; and
- Contribute to the harmonisation of the FAA and EU operational requirements on aeroplane performance in CAT operations.

#### Owner

EASA FS.2

#### Affected stakeholders

Aeroplane operators, manufacturers, Competent authorities

| PIA | Proc | 3rdC | ToR        | NPA        | Opinion | Commission IR | Decision |
|-----|------|------|------------|------------|---------|---------------|----------|
| A-  | ST   | -    | 09/06/2015 | 30/09/2016 | 2018 Q2 | 2019 Q4       | 2019 Q4  |

##### RMT.0570 Reduction of runway excursions

The objective of this task is to increase the level of safety by reducing the number of REs through mandating existing technologies on aeroplane that allow to measure remaining runway left and thus support pilot-decision-making.

Due to the nature of the comments received on NPA 2013-09, EASA has decided to publish a new NPA on the reduction of REs. The proposal of the new NPA will put more emphasis on safety objectives against the risk of REs, while providing more flexibility in terms of design solutions. The means to achieve these objectives will be provided in a technical standard developed jointly by industry and NAAs with the support of an international standardisation body (EUROCAE).

#### Owner

EASA CT.7

#### Affected stakeholders

Operators, manufacturers, applicants for TC/STC

| PIA | Proc | 3rdC | ToR        | NPA        | Opinion | Commission IR | Decision |
|-----|------|------|------------|------------|---------|---------------|----------|
| A-  | ST   | -    | 09/10/2012 | 10/05/2013 | 2018 Q4 | 2018 Q4       | 2018 Q4  |
|     |      |      |            | 2018 Q1    | n/a     | n/a           | 2020 Q1  |



**RMT.0703 Runway safety**

European Action Plans for the Prevention of Runway Incursions (EAPPRI) and Excursions (EAPPRE) contain several recommendations to Competent Authorities, Aerodrome Operators and EASA in order to mitigate the risks.

In the aerodromes' domain, EASA had included in Regulation (EU) No 139/2014<sup>10</sup> and in the relevant AMC/GM and CS many of these recommendations, however there are some of them that have not been addressed.

**Owner**

EASA FS.4.3

**Affected stakeholders**

National Aviation Authorities, aerodrome operators

| PIA       | Proc | 3rdC | ToR        | NPA     | Opinion | Commission IR | Decision |
|-----------|------|------|------------|---------|---------|---------------|----------|
| A1 to 2.5 | ST   | -    | 14/09/2017 | 2018 Q1 | 2019 Q1 | 2020 Q1       | 2020 Q1  |

**RMT.0704 Runway surface condition assessment and reporting**

Revision and update of Regulation (EU) No 139/2014 and of the related AMC and GM in order to include the changes in Annex 14 and PANS Aerodromes.

**Owner**

EASA FS.4.3

**Affected stakeholders**

Aerodrome operators, aircraft operators, GA, ANSPs, National Aviation Authorities

| PIA  | Proc | 3rdC | ToR        | NPA     | Opinion | Commission IR | Decision |
|------|------|------|------------|---------|---------|---------------|----------|
| A2.5 | ST   | -    | 13/09/2017 | 2018 Q3 | 2019 Q1 | 2020 Q2       | 2020 Q2  |

**RMT.0722 Provision of aeronautical data by the aerodrome operator**

**Owner**

EASA FS.4.3

**Affected stakeholders**

| PIA | Proc | 3rdC | ToR     | NPA     | Opinion | Commission IR | Decision |
|-----|------|------|---------|---------|---------|---------------|----------|
| A2  | ST   | -    | 2018 Q3 | 2019 Q3 | 2020 Q2 | 2021 Q2       | 2021 Q2  |

**Safety Promotion**

**MST.007 Include runway excursions in national SSPs**

REs should be addressed by the MS on their SSPs in close cooperation with the aircraft operators, air traffic control, airport operators and pilot representatives. This will include as a minimum agreeing a set of actions and measuring their effectiveness. MS should implement actions suggested by the European Action Plan for the Prevention of Runway Excursions (EAPPRE) and monitor effectiveness.

**Owner**

MS

**Activity sector**

CAT, HF

**Deliverable**

SSP established

**Date**

Continuous

**MST.014 Include runway incursions in national SSPs**

RI should be addressed by the MS on their SSPs. This will include as a minimum agreeing a set of actions and measuring their effectiveness. MS should implement actions suggested by the European Action Plan for the Prevention of Runway Incursions (EAPPRI).

**Owner**

MS

**Activity sector**

CAT/GA, HF

**Deliverable**

SSP established

**Date**

Continuous

<sup>10</sup> Commission Regulation (EU) No 139/2014 of 12 February 2014 laying down requirements and administrative procedures related to aerodromes pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council, OJ L 44, 14.2.2014, p. 1–34.



### 5.3.3 Airborne conflict (Mid-air collisions)

#### Issue/rationale

Airborne conflict refers to the potential collision of two aircraft in the air. It includes direct precursors such as separation minima infringements, genuine TCAS resolution advisories or airspace infringements. Although there have been no CAT aeroplane airborne collision accidents in recent years within the EASA MS, this key risk area has been raised by a number of MS at the Network of Analysts (NoA) and also by some airlines, specifically in the context of the collision risk with aircraft without transponders in uncontrolled airspace. This is one specific safety issue that is a main priority in this key risk area. The risk scoring of accident and serious incidents highlights the continued risk of this type of accident.

#### What we want to achieve

Continuously assess and improve risk controls to mitigate the risk of mid-air collisions.

#### How we monitor improvement

Continuous monitoring of safety issues identified in the Commercial Air Transport Fixed Wing Portfolio (ref: Annual Safety Review 2017<sup>11</sup>)

#### How we want to achieve it: actions

##### Rulemaking

#### RMT.0376 Anti-collision systems on aircraft other than aeroplanes in excess of 5 700 kg or 19 pax

Set up the framework for reducing the risk of MACs. This task will include a thorough impact assessment aimed at evaluating the cost-benefit of anti-collision systems carriage.

##### Owner

EASA FS.4.2

##### Affected stakeholders

Aircraft operators

| PIA | Proc | 3rdC | ToR     | NPA     | Opinion | Commission IR | Decision |
|-----|------|------|---------|---------|---------|---------------|----------|
| A-  | ST   | -    | 2018 Q2 | 2019 Q4 | 2020 Q3 | 2021 Q3       | 2021 Q3  |

##### Safety Promotion

#### MST.010 Include MACs in national SSPs

MACs should be addressed by the MS on their SSPs. This will include as a minimum agreeing a set of actions and measuring their effectiveness. MS should implement actions of the European Action Plan for Airspace Infringement Risk Reduction.

##### Owner

MS

##### Activity sector

CAT, HF

##### Deliverable

SSP established

##### Date

Continuous

#### MST.024 Loss of separation between civil and military aircraft

Several EU MS have reported an increase in losses of separation involving civil and military aircraft and more particularly an increase in non-cooperative military traffic over the high seas. Taking into account this situation, and the possible hazard to civil aviation safety, the European Commission mandated EASA to perform a technical analysis of the reported occurrences. The technical analysis issued a number of recommendations for the MS:

- endorse and fully apply Circular 330;
- closely coordinate to develop, harmonise and publish operational requirements and instructions for state aircraft to ensure that 'due regard' for civil aircraft is always maintained;
- develop and harmonise civil/military coordination procedures for ATM at EU level;
- report relevant occurrences to EASA; and
- facilitate/make primary surveillance radar data available in military units to civil ATC units. The objective of this action is to ensure that MS follow-up on the recommendations and provide feedback on the implementation.

##### Owner

MS

##### Activity sector

CAT

##### Deliverable

Report

##### Date

2018

<sup>11</sup> See link in Executive Summary above.



5.3.4 Design and maintenance improvements

Issue/rationale

Design and maintenance improvements may limit the probability of technical failures. Many fatal accidents involve some sort of technical failure, in many cases not properly managed during flight, thus making it a precursor of other types of accident<sup>12</sup>. Specific analysis work is ongoing to identify the systemic, safety issues that may be present in the domains of airworthiness, maintenance and production.

What we want to achieve

Continuously assess and improve risk controls related to design and maintenance

How we monitor improvement

Continuous monitoring of safety issues identified in the Commercial Air Transport Fixed Wing Portfolio (ref: Annual Safety Review 2017)

How we want to achieve it: actions

Rulemaking

RMT.0049 Specific risk and standardised criteria for conducting aeroplane-level safety assessments of critical systems

To define a standardised criterion for conducting aeroplane-level safety assessment of specific risks that encompasses all critical aeroplane systems on large aeroplanes (i.e. in particular update AMC to CS 25.1309), based on the results of the Aviation Rulemaking Advisory Committee (ARAC) Airplane-level Safety Analysis Working Group (ASAWG).

In addition, to amend AMC 25.1309 taking into account the latest updates of industry documents, such as ED79A/ARP4754A.

To update CS 25.671 on safety assessment of flight control systems, based on the results of the ARAC Flight Controls Harmonisation Working Group (FCHWG).

For both objectives, harmonisation with the FAA, the Transport Canada Civil Aviation (TCCA) and Agência Nacional de Aviação Civil (ANAC) will be ensured as much as possible.

Owner

EASA CT.7

| PIA | Proc | 3rdC |
|-----|------|------|
| B-  | ST   | -    |

Affected stakeholders

DAHs

| ToR        | NPA        | Opinion | Commission IR | Decision |
|------------|------------|---------|---------------|----------|
| 18/03/2013 | 27/01/2014 | n/a     | n/a           | 2019 Q2  |

RMT.0069 Seat crashworthiness improvement on large aeroplanes — Dynamic testing 16g

The objective is to improve the protection of occupants on board large aeroplanes operated for commercial air transportation of passengers, when they are involved in a survivable impact accident.

This improvement would be reached by introducing on large aeroplanes used for commercial air transportation that were type certified without the JAR-25 change 13 standard improvements, passenger and cabin crew seats meeting the improved standard for dynamic testing and occupant protection, already used for type certification of new large aeroplanes.

Owner

EASA CT.7

| PIA | Proc | 3rdC |
|-----|------|------|
| B-  | ST   | -    |

Affected stakeholders

CAT operators and manufacturers

| ToR        | NPA        | Opinion    | Commission IR | Decision |
|------------|------------|------------|---------------|----------|
| 17/09/2010 | 10/10/2013 | 20/05/2016 | 2018 Q2       | 2018 Q2  |

<sup>12</sup> This statement is coming from our Annual Safety Review 2016. It does not necessarily mean that the technical failure was the direct cause of the accidents, but that a system component failure was identified in the sequence of events of 1 of the 5 fatal accidents in CAT Aeroplanes during the past 10 years (out of a total of 11). This could be an engine failure, an avionics system failure or some other recoverable technical failure. The cause of the accident is usually the result of a combination of circumstances and events that can only be understood after reading the investigation report. Specific analysis work is ongoing to identify the systemic safety issues that may be present in the domains of airworthiness, maintenance and production. Non-accident data will be used for the analysis.



**RMT.0217 CAMOs’ and Part-145 organisations’ responsibilities**

Establishment of the principles to mitigate the risks linked to a faulty assessment and coordination of the responsibilities of CAMOs and Part-145 organisations, especially in complex, multi-tier and subcontracted maintenance.

**Owner**

EASA FS.1

**Affected stakeholders**

Operators, CAMOs and MOs

| PIA | Proc | 3rdC | ToR        | NPA        | Opinion | Commission IR | Decision |
|-----|------|------|------------|------------|---------|---------------|----------|
| B-  | ST   | -    | 12/03/2013 | 02/12/2014 | 2020 Q2 | 2021 Q2       | 2021 Q2  |

**RMT.0097 Functions of B1 and B2 support staff and responsibilities**

Introduce principles for increased robustness of the maintenance certification process eliminating potential ‘safety gaps’ by clarifying the roles and responsibilities of certifying staff, support staff and ‘sign-off’ staff, both in line and base maintenance.

**Owner**

EASA FS.1

**Affected stakeholders**

MOs (145 AMOs)

| PIA | Proc | 3rdC | ToR        | NPA        | Opinion | Commission IR | Decision |
|-----|------|------|------------|------------|---------|---------------|----------|
| B-  | ST   | -    | 02/11/2011 | 13/05/2014 | 2019 Q2 | 2021 Q2       | 2021 Q2  |

**RMT.0225 Development of an ageing aircraft structure plan**

Develop the technical elements for an ageing aircraft structure plan:

- Review and update the supplemental structural inspection programme (SSIP) for effectiveness;
- Review existing corrosion prevention programmes and develop a baseline corrosion prevention/control programme to maintain corrosion to an acceptable level;
- Review all structurally-related service actions/bulletins and determine which require mandatory terminating action or enforcement of special repetitive inspections;
- Develop guidelines to assess the damage tolerance of existing structural repairs, which may have been designed without using damage tolerance criteria. Damage tolerance methodology needs to be applied to future repairs; and
- Evaluate individual aeroplanes design regarding the susceptibility to widespread fatigue damage (WFD) and develop a programme for corrective action.

The rulemaking framework for such issues is somewhat complex because it is necessary to address, generally speaking, the following items:

- Amendment to certification specifications (CSs) to improve the standards for ageing aircraft issues. This will address the case of future TC and future amendments to TC/future STC in accordance with the changed product rule; and
- Requirements on existing DAHs (e.g. TC, STC holders) to review their existing designs to demonstrate compliance with the amended CS. Requirements on operators to introduce modifications in individual aircraft and maintenance programmes resulting from the design review.

**Owner**

EASA CT.7

**Affected stakeholders**

DAHs and operators

| PIA | Proc | 3rdC | ToR        | NPA        | Opinion    | Commission IR | Decision |
|-----|------|------|------------|------------|------------|---------------|----------|
| B-  | ST   | ✓    | 08/05/2007 | 23/04/2013 | 10/10/2016 | 2018 Q2       | 2018 Q2  |

**RMT.0393 Maintenance check flights (MCFs)**

Establish operational requirements and crew competence criteria for the performance of maintenance check flights to reduce the probability of incidents and accidents of this type of flights. This will not be limited to operators subject to EU-OPS approval but also to any operator performing these flights.

**Owner**

EASA FS.1

**Affected stakeholders**

Operators, CAMOs, and MOs

| PIA | Proc | 3rdC | ToR        | NPA        | Opinion    | Commission IR | Decision |
|-----|------|------|------------|------------|------------|---------------|----------|
| B-  | ST   | -    | 04/04/2011 | 30/07/2012 | 08/03/2017 | 2020 Q1       | 2020 Q1  |



**RMT.0453 Ditching parameters without engine power**

Amend CS-25 to require that ditching parameters can be attained by pilots without the use of exceptional skills, including without engine power.

**Owner**

EASA CT.7

**Affected stakeholders**

DAHs

| PIA | Proc | 3rdC | ToR     | NPA     | Opinion | Commission IR | Decision |
|-----|------|------|---------|---------|---------|---------------|----------|
| B-  | ST   | -    | 2019 Q1 | 2020 Q2 | n/a     | n/a           | 2021 Q3  |

**RMT.0521 Airworthiness review process**

Performance of a full review of the airworthiness review process to introduce an improved framework to mitigate the risks linked to a faulty airworthiness review with potential safety consequences where the actual airworthiness status of the aircraft is below the standard.

**Owner**

EASA FS.1

**Affected stakeholders**

Operators, CAMOs and NAAs

| PIA | Proc | 3rdC | ToR        | NPA        | Opinion | Commission IR | Decision |
|-----|------|------|------------|------------|---------|---------------|----------|
| B-  | ST   | -    | 07/05/2013 | 05/11/2015 | 2019 Q2 | 2020 Q2       | 2020 Q2  |

**RMT.0586 Tyre pressure monitoring system**

- The specific objective is to propose a regulatory change to ensure that large aeroplanes tyres inflation pressures remain within the pressure specifications defined by the aircraft manufacturer.
- The rulemaking proposal should consider better enforcing the operator’s responsibility to ensure regular tyre pressure checks, and also the aircraft manufacturer’s obligation to define the tyre pressure check procedures and intervals in the instructions for continued airworthiness (ICA); as different practices exist in terms of content and presentation of the information in the aircraft maintenance manual (AMM), it could be proposed to better standardise this ICA item among manufacturers and aircraft.
- Since a tyre pressure check legal obligation would not always guarantee that the tyres are correctly inflated (e.g. air leakage in the tyre/wheel assembly, maintenance error or negligence, failure/inaccuracy of the inflation equipment, operator not correctly performing the regular checks, etc.), the rulemaking proposal should also include the installation of a tyre pressure monitoring system which will alert the pilots when a tyre pressure is abnormal or out of tolerance.

**Owner**

EASA CT.7

**Affected stakeholders**

Operators

| PIA | Proc | 3rdC | ToR        | NPA     | Opinion | Commission IR | Decision |
|-----|------|------|------------|---------|---------|---------------|----------|
| B-  | ST   | -    | 30/05/2017 | 2019 Q1 | 2020 Q1 | 2021 Q1       | 2021 Q1  |

**RMT.0588 Aircraft continuing airworthiness monitoring — Review of key risk elements**

Considering the implementation experience (including Standardisation feedback), the objective is to review the current principles specified in AMC3 M.B.303(b) ‘Aircraft continuing airworthiness monitoring’, and the related GM1 M.B.303(b) and Appendix III to GM1 M.B.303(b). In particular, to assess:

- if the requirements adequately address the processing of key risk elements (KREs) requiring annual reviews to ensure that all regulatory references remain up to date; and
- the appropriateness of each KRE, determine the need for additional KREs, review the adequacy and pertinence of typical inspection items included.

**Owner**

EASA FS.1

**Affected stakeholders**

NAAs

| PIA | Proc | 3rdC | ToR     | NPA     | Opinion | Commission IR | Decision |
|-----|------|------|---------|---------|---------|---------------|----------|
| B-  | ST   | -    | 2019 Q1 | 2020 Q1 | n/a     | n/a           | 2021 Q1  |



**RMT.0671 Engine bird ingestion**

A US ARAC group was tasked to work on several improvements to the bird ingestion requirements.

**Owner**

EASA CT.7

**Affected stakeholders**

Manufacturers

| PIA | Proc | 3rdC | ToR        | NPA        | Opinion | Commission IR | Decision |
|-----|------|------|------------|------------|---------|---------------|----------|
| B-  | ST   | ✓    | 30/05/2017 | 02/10/2017 | n/a     | n/a           | 2018 Q2  |

**RMT.0686 HP rotor integrity and loss-of-load (due to shaft failure)**

The task will review and amend CS-E 840 and CS-E 850 to address certification issues for new designs. There will be a US industry-led group which will be formed, to discuss the pre-rulemaking on this issue. European industry has raised this item and they would support EASA rulemaking on this issue preferring EASA to take the lead.

**Owner**

EASA CT.7

**Affected stakeholders**

DAHs

| PIA | Proc | 3rdC | ToR     | NPA     | Opinion | Commission IR | Decision |
|-----|------|------|---------|---------|---------|---------------|----------|
| B-  | ST   | ✓    | 2019 Q1 | 2020 Q1 | n/a     | n/a           | 2021 Q1  |

**Research**

**RES.014 Air Data Enhanced Fault Detection & Diagnosis**

Develop new fault detection & diagnosis (FDD) and fault tolerant control (FTC) methods of the following types:

- Model-based analytical redundancy (e.g. virtual sensors),
- Data-based (i.e. model free-methods), or
- a combination of both types.

**Owner**

EASA SM.1

**Activity Sector**

CAT

**Deliverable**

Report

**Date**

2019



### 5.3.5 Ground safety

#### Issue/rationale

This risk area includes all ground-handling and apron management-related issues (aircraft loading, de-icing, refuelling, ground damage etc.) as well as collision of the aircraft with other aircraft, obstacles or vehicles while the aircraft is moving on the ground, either under its own power or being towed. It does not include collisions on the runway. While it was not the accident outcome for any fatal accidents in the past years, the risk score warrants its inclusion as a key risk area in this domain.

#### What we want to achieve

Continuously assess and improve risk controls to mitigate the risk of ground safety.

#### How we monitor improvement

Continuous monitoring of safety issues identified in the Commercial Air Transport Fixed Wing Portfolio (ref: Annual Safety Review 2017) for this particular risk area.

#### How we want to achieve it: actions

##### Rulemaking

##### RMT.0116 Real weight and balance of an aircraft

The objective of this task is to propose an amendment of CS for large aeroplanes (CS-25) to require the aeroplane being equipped with a weight and centre of gravity measuring system. Based on safety and cost-effectiveness consideration, it might be proposed:

- A retroactive requirement for such system to be installed on already type-certified large aeroplanes (using a Part-26/CS-26 rule).
- CS-23 amendment for commuters aeroplanes.

The rulemaking should consider the minimum operational performance specification (MOPS) which will be produced by the European Organisation for Civil Aviation Equipment (EUROCAE) WG-88.

##### Owner

EASA CT.7

##### Affected stakeholders

DAHs and operators

| PIA | Proc | 3rdC | ToR     | NPA     | Opinion | Commission IR | Decision |
|-----|------|------|---------|---------|---------|---------------|----------|
| A-  | ST   | -    | 2018 Q3 | 2020 Q1 | 2021 Q1 | 2022 Q1       | 2022 Q1  |

##### RMT.0118 Analysis of on-ground wings contamination effect on take-off performance degradation

- To propose an amendment of CS-25 to require applicants performing an assessment of the effect of aircraft aerodynamic surfaces on-ground contamination on take-off performance and on aircraft manoeuvrability and controllability.
- To propose a retroactive rule Part-26/CS-26 applicable to large aeroplane TC holders; this rule would require a similar analysis and means of protection as the ones proposed for amending CS-25. The retroactive rule may be limited in terms of applicability to a category of aircraft which would be the most vulnerable.

EASA will publish its NPA on this RMT in Q2/2018. Following the NPA's public consultation, EASA will publish a decision issuing CS-25, as well as an opinion proposing amendments to Part-26. Upon adoption of the Part-26 amendment by the Commission and publication in the Official Journal, EASA will issue the related CS-26.

##### Owner

EASA CT.7

##### Affected stakeholders

Manufacturers, operators, applicants for TC/STC

| PIA | Proc | 3rdC | ToR        | NPA     | Opinion        | Commission IR  | Decision           |
|-----|------|------|------------|---------|----------------|----------------|--------------------|
| A   | ST   | -    | 21/03/2017 | 2018 Q2 | n/a<br>2019 Q1 | n/a<br>2020 Q1 | 2019 Q1<br>2020 Q1 |





### Safety Promotion

#### MST.018 Include ground safety in national SSPs

This safety issue should be addressed by the MS on their SSPs. This will include as a minimum agreeing a set of actions and measuring their effectiveness.

| Owner | Activity sector | Deliverable     | Date       |
|-------|-----------------|-----------------|------------|
| MS    | CAT/HE, HF      | SSP established | Continuous |

## 5.3.6 Terrain conflict

### Issue/rationale

This risk area includes the controlled collision with terrain together with undershoot or overshoot of the runway during approach and landing phases. It comprises those situations where the aircraft collides or nearly collides with terrain while the flight crew has control of the aircraft. It also includes occurrences which are the direct precursors of a fatal outcome, such as descending below weather minima, undue clearance below radar minima, etc.

### What we want to achieve

Continuously assess and improve risk controls to mitigate the risk of controlled flight into terrain.

### How we monitor improvement

Continuous monitoring of safety issues identified in the Commercial Air Transport Fixed Wing Portfolio (ref: Annual Safety Review 2017) for this particular risk area.

### How we want to achieve it: actions

#### Rulemaking

#### RMT.0371 TAWS operation in IFR and VFR and TAWS for turbine-powered aeroplanes under 5 700 kg MTOM able to carry six to nine passengers

Develop a regulatory framework for:

- mitigation of the risks of accidents categorised as CFIT in turbine-powered aeroplanes having a maximum certified take-off mass (MCTOM) below 5 700 kg or a maximum operational passenger seating configuration (MOPSC) of more than five and not more than nine; and
- improvement of the terrain awareness warning system (TAWS) efficiency in reducing CFIT accidents.

#### Owner

EASA FS.2

#### Affected stakeholders

Operators

| PIA | Proc | 3rdC | ToR        | NPA        | Opinion    | Commission IR | Decision |
|-----|------|------|------------|------------|------------|---------------|----------|
| B-  | ST   | -    | 31/01/2014 | 18/12/2015 | 16/12/2016 | 2017 Q4       | 2017 Q4  |

### Safety Promotion

#### MST.006 Include CFIT in national SSPs

Controlled flight into terrain should be addressed by the MS on their SSPs. This will include as a minimum agreeing a set of actions and measuring their effectiveness.

| Owner | Activity sector | Deliverable     | Date       |
|-------|-----------------|-----------------|------------|
| MS    | CAT, HF         | SSP established | Continuous |



### 5.3.7 Fire, smoke and fumes

#### Issue/rationale

Uncontrolled fire on board an aircraft, especially when in flight, represents one of the most severe hazards in aviation. Post-crash fire is also addressed in this section.

In-flight fire can ultimately lead to loss of control, either as a result of structural or control system failure, or again as a result of crew incapacitation. Fire on the ground can take hold rapidly and lead to significant casualties if evacuation and emergency response is not swift enough. Smoke or fumes, whether they are associated with fire or not, can lead to passenger and crew incapacitation and will certainly raise concern and invite a response. Even when they do not give rise to a safety impact, they can give rise to concerns and need to be addressed.

While there were no fatal accidents involving EASA MS operators in the last years involving fires, there have been occurrences in other parts of the world that make it an area of concern within the EPAS.

#### What we want to achieve

Continuously assess and improve risk controls to mitigate the risk of fire, smoke and fumes.

#### How we monitor improvement

Continuous monitoring of safety issues identified in the Commercial Air Transport Fixed Wing Portfolio (ref: Annual Safety Review 2017) for this particular risk area.

#### How we want to achieve it: actions

##### Rulemaking

#### RMT.0070 Additional airworthiness specifications for operations: Fire hazard in Class D cargo compartments

| Owner     |      |      | Affected stakeholders       |         |         |               |          |
|-----------|------|------|-----------------------------|---------|---------|---------------|----------|
| EASA CT.7 |      |      | Operators and manufacturers |         |         |               |          |
| PIA       | Proc | 3rdC | ToR                         | NPA     | Opinion | Commission IR | Decision |
| B-        | ST   | -    | 17/09/2010                  | 2018 Q2 | n/a     | n/a           | 2019 Q2  |

#### RMT.0071 Additional airworthiness specifications for operations: Thermal/acoustic insulation material

The general objective of this RMT is to reduce the safety risks due to flame penetration and propagation in the fuselage by introducing retroactive specifications based on CS 25.856(a) and (b), applicable to already type-certified large aeroplanes.

| Owner     |      |      | Affected stakeholders       |            |            |               |          |
|-----------|------|------|-----------------------------|------------|------------|---------------|----------|
| EASA CT.7 |      |      | Operators and manufacturers |            |            |               |          |
| PIA       | Proc | 3rdC | ToR                         | NPA        | Opinion    | Commission IR | Decision |
| B-        | ST   | -    | 18/09/2014                  | 01/10/2015 | 23/05/2016 | 2018 Q2       | 2018 Q2  |

##### Safety Promotion

#### MST.005 Include fire, smoke and fumes in national SSPs

This safety issue should be addressed by the MS on their SSPs. This will include as a minimum agreeing a set of actions and measuring their effectiveness.

| Owner | Activity sector | Deliverable     | Date       |
|-------|-----------------|-----------------|------------|
| MS    | CAT, HF         | SSP established | Continuous |



## Research

### RES.003

#### Research study on cabin air quality

Investigation of the quality level of the air inside the cabin of large transport aeroplanes and its health implication. The work aims at demonstrating, on the basis of a sound scientific process, whether potential health implications may result from the quality of the air on board commercially operated large transport aeroplanes.

| Owner                       | Activity sector | Deliverable  | Date |
|-----------------------------|-----------------|--------------|------|
| European Commission (H2020) | CAT             | Study report | 2018 |

### RES.004

#### Transport of lithium battery by air

Develop mitigating measures for the transport of lithium metal and lithium ion batteries on board an aircraft.

This would include, at least:

- Identification of potential risks.
- Assessment of packaging solutions/standards (both for lithium metal and lithium ion batteries).
- Identification and assessment of additional measures that may mitigate the risks of thermal runaway and propagation of the fire.
- Evaluation of firefighting measures and suppression systems that could substitute halon.
- Development of a risk assessment method to enable operators to establish and evaluate safe conditions for air transport..

This must take into consideration the specific operational conditions of air transport (vibrations, changes of temperature, pressure, etc.) that might impact the stability of lithium battery.

| Owner                       | Activity sector | Deliverable | Date |
|-----------------------------|-----------------|-------------|------|
| European Commission (H2020) | CAT             | Report      | 2019 |

### RES.016

#### Fire risks with large PED in checked luggage

Characterise fire risk (propagation, detection, suppression) for large PED transported in aircraft cargo compartment (checked luggage).

| Owner     | Activity sector | Deliverable | Date |
|-----------|-----------------|-------------|------|
| EASA CT.7 | CAT             | Report      | 2019 |



## 5.4 Rotorcraft operations

### Issue/rationale

This area includes both CAT and offshore operations as well as aerial work performed by helicopters. In the offshore helicopter domain, there was one fatal accident, which involved the loss of an Airbus Helicopters EC225 Super Puma in Norway on 29 April 2016. The CAT helicopters domain mainly covers business aviation and helicopter emergency medical services (HEMS), where there was an increase in fatal accidents in 2016 – 1 fatal accident occurred in Slovakia, and 1 in Moldova, which involved an EU operator. Both accidents involved HEMS flights and both had 4 fatalities each. In the aerial work domain there were no fatal accidents in 2016.

The European Safety Risk Management process has identified opportunities to improve risk controls in the following areas so that accident numbers will not increase.. Through the Offshore Helicopter Collaborative Analysis Group (CAG) there has been specific work in this area of helicopter operations that has identified both some additional work to existing actions as well as a small number of specific actions within this domain. These are identified within each action. The strategic priorities for helicopter operations are:

- helicopter upset in flight (Loss of Control)

This is key risk area with the highest priority in offshore and CAT helicopter operations (7 fatal accidents in the past 10 years). Loss of control for offshore helicopters generally falls into two scenarios, technical failure that renders the aircraft uncontrollable or human factors. In addition it is the second most common accident outcome for aerial work operations (9 fatal accidents in the past 10 years). The following actions contribute to mitigate risks in this area: RMT.0127, RMT.0709, RMT.0711 and RMT.0608

- terrain and obstacle conflict

This is the second priority key risk area for offshore helicopter operations, although equipment is now fitted to helicopters in this domain that will significantly mitigate the risk of this outcome. Obstacle collisions is the second most common accident outcome in the CAT helicopters domain (4 fatal accidents in the past 10 years). This highlights the challenges of HEMS operations and their limited selection and planning for landing sites. It is the most common outcome for aerial work operations (11 fatal accidents in the past 10 years). The following actions contribute to mitigate risks in this area: RMT.0708

### What we want to achieve

Continuously assess and improve risk controls in the above areas.

### How we monitor improvement

Continuous monitoring of safety issues identified in the Helicopter Safety Risk Portfolios (ref: Annual Safety Review 2017)

### How we want to achieve it: actions

#### Rulemaking

##### RMT.0120 Helicopter ditching and water impact occupant survivability

This task aims at enhancing post-ditching and water impact standards for rotorcraft that could significantly enhance occupant escape and survivability. It will, in part, consider the recommendations arising from early work performed by the Joint Aviation Authorities (JAA) Water Impact, Ditching Design and Crashworthiness Working Group (WIDDCWG) and the Helicopter Offshore Safety and Survival Working Group (HOSSWG).

EASA plans to issue CS-27/29 in Q1/2017. In a second phase, EASA will consider whether the safety issue also necessitates amendment of Part-26/CS-26. An NPA is planned for Q4/2018, which may lead to an opinion proposing amendments to Part-26 in Q3/2019. Upon adoption of the Part-26 amendment by the Commission and publication in the Official Journal, EASA will issue the related CS-26 (expected in Q1/2021).

#### Owner

EASA CT.7

#### Affected stakeholders

DAHs and operators

| PIA | Proc | 3rdC | ToR        | NPA        | Opinion | Commission IR | Decision |
|-----|------|------|------------|------------|---------|---------------|----------|
| B-  | ST   | -    | 24/10/2012 | 23/03/2016 | n/a     | n/a           | 2017 Q4  |
|     |      |      |            | 2018 Q4    | 2019 Q3 | 2021 Q1       | 2021 Q1  |



**RMT.0127 Pilot compartment view**

This proposal addresses a safety issue related to rotorcraft windshield misting and subsequent restriction of pilot vision. The existing rules are unclear as to what is required and how compliance can be demonstrated. The specific objective is to mitigate the risks linked to restricted pilot vision, particularly during critical phases of flight (take-off, landing, low hover), by requiring a means to remove or prevent the misting of internal portions of transparencies in rotorcraft, thus ensuring safe operations in all likely flight and operating conditions. In addition, the RMT’s scope is proposed to be extended to address the rules governing pilot vision in snow conditions, which are unclear, particularly in relation to piston-engine rotorcraft.

**Owner** Affected stakeholders

EASA CT.7 Manufacturers

| PIA | Proc | 3rdC | ToR     | NPA     | Opinion | Commission IR | Decision |
|-----|------|------|---------|---------|---------|---------------|----------|
| B-  | ST   | -    | 2018 Q4 | 2019 Q3 | n/a     | n/a           | 2020 Q3  |

**RMT.0608 Rotorcraft gearbox loss of lubrication**

This task aims to strengthen the existing CS-29 requirements pertaining to rotor drive system lubrication. It proposes a harmonised action to address gaps identified in the existing requirements, clarify the intent of the rule and redefine test requirements to meet the intended safety standards. This will both reduce the potential for lubrication system failures from occurring and mitigate the consequences of any failure, should this happen.

**Owner** Affected stakeholders

EASA CT.7 DAHs

| PIA | Proc | 3rdC | ToR        | NPA        | Opinion | Commission IR | Decision |
|-----|------|------|------------|------------|---------|---------------|----------|
| A-  | ST   | -    | 22/05/2014 | 31/05/2017 | n/a     | n/a           | 2018 Q2  |

**RMT.0708 Controlled flight into terrain (CFIT) prevention with helicopter terrain avoidance warning systems (HTAWS)**

Mandating HTAWS is expected to prevent between 8.5 and 11.5 CFIT accidents with fatalities or severe injuries within 10 years (medium safety improvement). This RMT will consider mandating the installation of HTAWS on board the helicopter for certain operations. The RMT should only mandate HTAWS to be retrofitted to the current fleet if HTAWS standards are improved. An appropriate impact assessment for retrofit will need to be further developed. Based on the preliminary cost effectiveness analysis, HTAWS for the following operations are not to be considered: NCO, SPO, and CAT with small helicopters in VFR operations. For offshore helicopter operations, this also includes the involvement of the EASA Certification Directorate working with stakeholders on the evaluation of updated HTAWS standards

**Owner** Affected stakeholders

EASA FS.2 Helicopter operators

| PIA         | Proc | 3rdC | ToR     | NPA     | Opinion | Commission IR | Decision |
|-------------|------|------|---------|---------|---------|---------------|----------|
| B0.5 to 1.5 | ST   | -    | 2018 Q4 | 2019 Q4 | n/a     | n/a           | 2020 Q4  |

**RMT.0709 Prevention of catastrophic accidents due rotorcraft hoists issues**

Improvements in the certification specifications and standards relating to the certification of rotorcraft hoists is expected to significantly reduce the risk of catastrophic accidents due to rotorcraft hoists. The current certification specifications relating to the certification of rotorcraft hoists are not being appropriately applied. In addition, some failure modes are not consistently taken into consideration and this is reflected in service experience. A high number of safety occurrences have been reported that are attributed to rotorcraft hoists. The ETSO that is being developed is hoped to address some existing design shortfalls. Retrospective application of any additional certification specifications may be considered. Moreover, cargo hook aspects will also be considered along with the safety affects to people on the ground during non-human external cargo operations.

**Owner** Affected stakeholders

EASA CT.7 Manufacturers and operators

| PIA  | Proc | 3rdC | ToR     | NPA     | Opinion | Commission IR | Decision |
|------|------|------|---------|---------|---------|---------------|----------|
| B1.5 | ST   | -    | 2019 Q3 | 2020 Q2 | n/a     | n/a           | 2021 Q1  |



**RMT.0710 Improvement in the survivability of rotorcraft occupants in the event of a crash**

The likelihood of survival of rotorcraft occupants in the event of a crash would significantly be improved through the retroactive application of the current improvements in fuel tank crash resistance and occupant safety for rotorcraft that were certified before the new certification specifications for type designs entered into force in the 1980s and 1990s. SRs have been raised by Accident Investigation Boards on fuel tanks and occupant safety for helicopters certified before the upgrade of the rules for emergency landing conditions and fuel system crash resistance, for new type designs in the 1980s and 1990s. In November 2015, a new task was assigned by the FAA for the Aviation Rulemaking Advisory Committee (ARAC) to provide recommendations regarding occupant protection rulemaking in normal and transport category rotorcraft for older certification basis type designs. EASA participates to the Working Group and should consider the application of the outcome of this activity for application to the existing European fleet.

| Owner     |      |      | Affected stakeholders |         |         |               |          |
|-----------|------|------|-----------------------|---------|---------|---------------|----------|
| EASA CT.7 |      |      | DAH and Manufacturers |         |         |               |          |
| PIA       | Proc | 3rdC | ToR                   | NPA     | Opinion | Commission IR | Decision |
| B2        | ST   | -    | 2020 Q1               | 2020 Q3 | 2021 Q3 | 2022 Q1       | 2022 Q1  |

**RMT.0711 Reduction in accidents caused by failures of critical rotor and rotor drive components through improved vibration health monitoring systems**

The use of vibration health monitoring (VHM) systems to detect imminent failures of critical rotor and rotor drive components have been shown to greatly improve the level of safety of rotorcraft particularly for offshore operations. However, there is a need to improve the current certification specifications to reflect the evolution of modern VHM systems in order to gain the associated benefits from these systems. Improved certification specifications would drive and enable improvements in the fidelity of VHM systems and also foster the modernisation of these systems which would provide additional safety benefits when compared to the existing legacy systems.

| Owner     |      |      | Affected stakeholders |         |         |               |          |
|-----------|------|------|-----------------------|---------|---------|---------------|----------|
| EASA CT.7 |      |      | DAH and manufacturers |         |         |               |          |
| PIA       | Proc | 3rdC | ToR                   | NPA     | Opinion | Commission IR | Decision |
| B1.5      | ST   | -    | 2019 Q2               | 2020 Q1 | n/a     | n/a           | 2020 Q3  |

**RMT.0713 Reduction in human-factors-caused rotorcraft accidents that are attributed to the rotorcraft design**

It is widely recognised that human factors contribute either directly or indirectly to a majority of aircraft accidents and incidents and that the design of the flight deck and systems can strongly influence the crew performance and the potential for crew errors.

Currently, the certification specifications for rotorcraft do not contain any specific requirements for a human factor assessment to be carried out. Large transport aircraft have benefited from human factor assessments of the design of the flight deck and associated systems. New generation helicopters are characterised by having a high level of integration of cockpit equipment, displays and controls. It is also likely that the future rotorcraft projects, embodying fly-by-wire technology flying controls, will pose new and additional challenges from a human factors perspective.

The development of certification specifications for human factors in the design of rotorcraft cockpits would mitigate the probability of human factors and pilot workload issues that could lead to an accident.

| Owner     |      |      | Affected stakeholders |         |         |               |          |
|-----------|------|------|-----------------------|---------|---------|---------------|----------|
| EASA CT.7 |      |      | DAH                   |         |         |               |          |
| PIA       | Proc | 3rdC | ToR                   | NPA     | Opinion | Commission IR | Decision |
| B2        | ST   | -    | 2018 Q1               | 2019 Q1 | n/a     | n/a           | 2019 Q3  |



## Research

### RES.009

#### Ditching in water or a Survivable water impact (SWI) for Rotary wing aircrafts (Helicopter, Tilt Rotor, Compound Rotorcraft)

Sufficient real flotation time (2-3 Minutes) before any capsizing or side floating movement to provide opportunities for the occupants to escape a rotary wing aircraft, taking into consideration sea state 6 conditions (irregular waves), in case of ditching in water or in the event of a survivable water impact (SWI).

| Owner     | Activity Sector | Deliverable | Date |
|-----------|-----------------|-------------|------|
| EASA SM.1 | HE              | Report      | 2019 |

### RES.011

#### Helicopter, tilt rotor and hybrid aircraft Gearbox health monitoring - In-situ failure detection

New technologies for in-situ detection of tilt rotor, helicopter and hybrid aircraft gearbox failures.

| Owner     | Activity sector | Deliverable | Date |
|-----------|-----------------|-------------|------|
| EASA SM.1 | HE              | Report      | 2019 |

### RES.008

#### Rotorcraft main gear box (MGB) design to guarantee integrity of critical parts and system architecture to prevent separation of the main rotor following any MGB failure.

1. Enhancement for new design features of helicopter MGB and attachment, to prohibit at any time separation of the mast and main rotor from the helicopter, allowing in case of any major failure of the main gear box components, the helicopter to autorotate.

2. Study to understand threats to rotor drive system critical component integrity and methods to design and substantiate flaw tolerant critical component designs.

| Owner     | Activity Sector | Deliverable | Date |
|-----------|-----------------|-------------|------|
| EASA SM.1 | HE              | Report      | 2019 |

### RES.020

#### Identify helicopter technologies with safety benefits

Revise and update the study performed by the NLR for EHEST on the safety benefits of technologies to assess and when relevant include new technologies addressing safety threats such as laser pointing, drones, bird strike, wire strike, etc.

| Owner     | Activity Sector | Deliverable | Date |
|-----------|-----------------|-------------|------|
| EASA SM.1 | HE              | Report      | 2019 |

## Safety Promotion

### MST.015

#### Helicopter safety events

NAAs, in partnership with industry representatives, to organise helicopter safety events annually or every two years. The EHEST, IHST, NAA, HeliOffshore or other sources of Safety Promotion materials could be freely used and promoted.

| Owner | Activity sector | Deliverable | Date       |
|-------|-----------------|-------------|------------|
| MS    | HE              | Workshop    | Continuous |

### SPT.082

#### Support the development and implementation of FCOM for offshore helicopter operations

To provide support to manufacturers, if needed, in the development of FCOM for different helicopter types and support/encourage operators in their implementation.

| Owner                   | Activity sector | Deliverable | Date |
|-------------------------|-----------------|-------------|------|
| Offshore Helicopter CAG | HE              | Report      | 2019 |



**SPT.092**

**Improve dissemination of existing Safety Promotion material by developing mobile applications & e-platforms**

Reaching target audience is one of the main challenges of Safety Promotion. This task aims at improving dissemination of existing Safety Promotion material by developing mobile applications & e-platforms. This will increase user-friendliness of existing paper format Safety Promotion material and will facilitate translations and future revisions.

| Owner  | Activity sector | Deliverable                            | Date |
|--------|-----------------|--|------|
| ESPN-R | HE              | Mobile applications and/or e-platforms | 2019 |

**SPT.093**

**Develop new Safety Promotion material on high profile helicopter**

In cooperation with the IHST, develop new Safety Promotion material (leaflets, videos, applications, etc.) on subjects such as Performance Based Navigation, Point in Space, low level IFR, bird strike, operational and passenger pressure management aimed at non-pilot owners of private helicopters.

| Owner  | Activity sector | Deliverable                                     | Date |
|--------|-----------------|---|------|
| ESPN-R | HE              | Leaflets, videos, web-pages and/or applications | 2021 |

**SPT.094**

**Helicopter safety and risk management**

Review existing helicopter safety & risk management material to check consistency and update (when applicable) material to new rules, standards and international good practice guidelines coming for example from IHST and SM-ICG.

| Owner  | Activity sector | Deliverable   | Date |
|--------|-----------------|---|------|
| ESPN-R | HE              | Revised helicopter safety & risk management manuals and/or toolkits | 2021 |

**SPT.095**

**Promote helicopter technologies with safety benefits**

Following the Research action identifying promising helicopter technologies (update of the study performed by the NLR for EHEST), promote the helicopter technologies having high safety benefits.

| Owner  | Activity sector | Deliverable                   | Date |
|--------|-----------------|-------------------------------|------|
| ESPN-R | HE              | Web-page, flyer and/or report | 2021 |

**SPT.096**

**Organise an annual safety workshop at Helitech Int.**

The European Safety Promotion Network Rotorcraft (ESPN-R) to organise in cooperation with the International Helicopter Safety Team (IHST) for EHA the HELITECH Intl. Safety Workshop. This high profile event promotes safe helicopter operations and fosters interactions within the community.

The event theme changes every year.

| Owner  | Activity sector | Deliverable     | Date       |
|--------|-----------------|-----------------|------------|
| ESPN-R | HE              | Safety Workshop | Continuous |





## 5.5 General Aviation: Fixed-wing leisure flying

In the last years, accidents involving recreational aeroplanes have led to an average of nearly 80 fatalities per year in Europe (excluding fatal accidents involving microlight airplanes), which makes it one of the sectors of aviation with the highest yearly number of fatalities. Furthermore, in 2016, there were 78 fatalities in non-commercial operations with aeroplanes (2<sup>nd</sup> highest number) and 20 in the domain of glider/sailplane operations (2<sup>nd</sup> highest number). These two areas present the highest numbers of fatal accidents in 2015. The General Aviation Road Map is key to the EASA strategy in this domain. This area is a strategic priority.

Although it is difficult to measure precisely the evolution of safety performance in GA due to lack of consolidated data (e.g. accumulated flight hours), it is reasonable to assume that step changes in the existing safety level are not being achieved at European level, despite all initiatives and efforts.

Therefore, EASA organised a workshop (5–6 October 2016) on general aviation safety to share knowledge and agree on the safety actions that will contribute to improving safety in this domain. The below strategic safety areas and related actions were identified and discussed during the workshop.

### 5.5.1 Systemic enablers

#### Issue/rationale

This section addresses system-wide or transversal issues that affect GA as a whole and are common to several safety risk areas. In combination with triggering factors, transversal factors can play a significant role in incidents and accidents. Conversely, they also offer opportunities for improving safety across risk domains.

#### What we want to achieve

Reduce the number of fatalities in GA through the implementation of systemic enablers.

#### How we monitor improvement

Continuous monitoring of safety issues identified in the GA-related portfolios (ref: Annual Safety Review 2016).

#### How we want to achieve it: actions

##### Safety Promotion

##### MST.025 Improve the dissemination of safety messages

Improve the dissemination of Safety Promotion and training material by authorities, associations, flying clubs, insurance companies targeting flight instructors and/or pilots through means such as safety workshops and safety days/evenings.

| Owner                          | Activity sector | Deliverable                               | Date       |
|--------------------------------|-----------------|---|------------|
| Safety Promotion Network (SPN) | GA              | Safety workshops and safety days/evenings | Continuous |

##### SPT.083 Flight instruction

Develop Safety Promotion material aimed at making more effective use and maximising the safety benefits of biennial check flights with flight instructors, including differences between aircraft types.

| Owner      | Activity sector | Deliverable               | Date |
|------------|-----------------|---------------------------|------|
| GA Roadmap | GA              | Safety Promotion material | 2019 |



**SPT.084**

**Promoting safety improving technology**

Encourage the installation and use of modern technology (e.g. weather information, moving maps, envelope protection, tablet applications, avoidance systems, angle of attack indicators, etc.). This task is linked to rulemaking activities in Section 7.5 ‘GA Efficiency’ that allow for the affordable and timely installation of such systems.

| Owner            | Activity sector | Deliverable                               | Date |
|------------------|-----------------|---|------|
| GA Roadmap & SPN | GA              | Safety Promotion material / Dissemination | 2018 |

**MST.027**

**Develop Just Culture in GA**

NAAAs should include in their SSPs provisions for Just Culture in GA to encourage occurrence reporting and foster positive safety behaviours.

| Owner | Activity sector | Deliverable                  | Date       |
|-------|-----------------|------------------------------|------------|
| MS    | GA              | Just culture included in SSP | Continuous |

**5.5.2 Staying in control**

**Issue/rationale**

This section addresses subjects such as flying skills, pilot awareness and the management of upset or stall at take-off, in flight, or during approach and landing, flight preparation, aborting take-off and going around. Staying in control prevents loss of control accidents. Loss of control usually occurs because the aeroplane enters a flight regime outside its normal envelope, thereby introducing an element of surprise for the flight crew involved. Loss of control accidents are both frequent and severe. With 47 %, aircraft upset including loss of control is the most common type of fatal accidents in the last 10 years for EASA MS non-commercial operations with aeroplanes.

**What we want to achieve**

Reduce the risk of Loss of Control accidents.

**How we monitor improvement**

Continuous monitoring of safety issues identified in the GA-related portfolios (ref: Annual Safety Review 2016).

**How we want to achieve it: actions**

**Safety Promotion**

**SPT.086**

**Campaign on staying in control**

Launch a campaign on staying in control covering topics such as aircraft performance, flight preparation and management, role of angle of attack, Threat and error management (TEM), upset and stall avoidance and recovery, and startle and surprise management.

| Owner      | Activity sector | Deliverable               | Date |
|------------|-----------------|---------------------------|------|
| GA Roadmap | GA              | Safety Promotion campaign | 2018 |



### 5.5.3 Coping with weather

#### Issue/rationale

This section addresses subjects such as entering IMC, icing conditions, carburettor icing, and poor weather conditions. Weather is an important contributing factor to GA accidents, often related to pilots underestimating the risks of changing weather conditions prior to take-off and during the flight, as weather deteriorates. Dealing with poor weather may increase pilot workload and affect situation awareness and aircraft handling. Decision-making can also be impaired, as a plan continuation bias may lead pilots to press on to the planned destination despite threatening weather conditions.

#### What we want to achieve

Reduce the number of weather-related accidents.

#### How we monitor improvement

Continuous monitoring of safety issues identified in the GA-related portfolios (ref: Annual Safety Review 2016).

#### How we want to achieve it: actions

##### Safety Promotion

###### SPT.087

###### Weather awareness for pilots

Produce a safety promotion material (video) addressing subjects such as weather awareness, flight preparation, management and debrief, the use of flight information services (FIS), the benefits of using modern technology including cockpit weather information systems (including GPS integrated, mobile/4G connected apps, etc.), communication with ATC, inadvertent entry into IMC, TEM, and Human Factors (HF).

| Owner      | Activity sector | Deliverable         | Date |
|------------|-----------------|---------------------|------|
| GA Roadmap | GA              | Video/media product | 2018 |

###### SPT.088

###### Launch a Safety Promotion campaign promoting instrument flying for GA pilots

Promote the results of RMT.0677 on the easier access of GA pilots to instrument flight rules (IFR) flying in order to ensure that the safety and efficiency benefits materialise across Europe.

| Owner      | Activity sector | Deliverable               | Date |
|------------|-----------------|---------------------------|------|
| GA Roadmap | GA              | Safety Promotion campaign | 2019 |



## 5.5.4 Preventing mid-air collisions

### Issue/rationale

This section addresses subjects such as airspace complexity, airspace infringement and use of technology. Statistics show that MACs affect both novice and experienced pilots and can occur in all phases of flight and at all altitudes. However, the vast majority of them occur in daylight and in excellent meteorological conditions. A collision is more likely where aircraft are concentrated, especially close to aerodromes. Airspace infringements by GA aircraft into controlled airspace is an important related safety risk.

### What we want to achieve

Reduce the risk of airspace infringement for GA.

### How we monitor improvement

Continuous monitoring of safety issues identified in the GA-related portfolios (ref: Annual Safety Review 2016).

### How we want to achieve it: actions

#### Safety Promotion

##### MST.016 Airspace infringement risk in General Aviation

National authorities should play the leading role in establishing and promoting local implementation priorities and actions.

| Owner | Activity sector | Deliverable | Date       |
|-------|-----------------|-------------|------------|
| MS    | GA, HF          | Report      | Continuous |

##### SPT.089 European Safety Promotion on Mid-air collisions and airspace infringement

Develop and implement a pan-European Safety Promotion campaign on preventing airspace infringement and reducing the risk of MAC including awareness of airspace complexity and the use of technology such as ADS-B out.

| Owner            | Activity Sector | Deliverable               | Date |
|------------------|-----------------|---------------------------|------|
| GA Roadmap & SPN | GA              | Safety Promotion Campaign | 2018 |

#### Focused Oversight

##### FOT.010 Service provision to GA flights

Raising the quality of support provided to GA flights by air navigation service providers (ANSPs) through focused oversight.

| Owner              | Activity sector | Deliverable   | Date       |
|--------------------|-----------------|---------------|------------|
| MS and GA.COM/ TeB | GA              | Best Practice | Continuous |



## 5.5.5 Managing the flight

### Issue/rationale

This section addresses subjects such as navigation, fuel management, terrain and obstacle awareness, and forced landings. Most accidents are the result of the pilot's actions, including decisions made while preparing the flight or due to changing circumstances during the flight. Pilot decisions including their ability to prioritise workload affect safety and survival of the aircraft and its occupants.

### What we want to achieve

Reduce the number of fatalities in GA.

### How we monitor improvement

Continuous monitoring of safety issues identified in the GA-related portfolios (ref: Annual Safety Review 2016)

### How we want to achieve it: actions

#### Safety Promotion

##### SPT.090

##### Fuel management for pilots

Compile and disseminate to the community already available material on fuel management.

##### Owner

GA Roadmap & SPN

##### Activity sector

GA

##### Deliverable

Leaflet/webpage

##### Date

2018



## 5.6 Emerging issues

This section addresses already emerging issues as well as issues that could potentially emerge in the immediate or near future. Giving consideration to safety issues derived from operations or regulations that have not been fully deployed, it incorporates a forward-looking element in EPAS.

### 5.6.1 Civil drones (Unmanned Aircraft Systems)

#### Issue/rationale

Most of EU Member States adopted national regulations to ensure *safe operations* of Unmanned Aircraft Systems (UAS) below MTOM of 150 kg. There are currently no harmonised rules at EU level, and UAS operations still depend on an individual authorisation from every MS, which is a burdensome administrative process that stifles business development and innovation. The proposal of the EU commission for a revision of the Basic Regulation extends the scope of the EU competence to regulate UAS even below the MTOM of 150 kg, also to allow free circulation of UAS throughout the EU.

This task has multiple drivers due to its very nature. There are also very strong efficiency and level playing field aspects.

#### What we want to achieve

To create a level playing field in all EU Member States, using an operation centric concept, which is proportionate and risk and performance-based, so that all companies can make best use of the UAS technologies to create jobs and growth while maintaining a high and uniform level of safety.

#### How we monitor improvement

In the latest edition of the EASA Annual Safety Review, a new safety risk portfolio for civil drones was created.

#### How we want to achieve it: actions

#### Rulemaking

##### RMT.0230 Introduction of a regulatory framework for the operation of drones

Development of IRs for UAS based on EC communication COM(2015)613 and attached proposals to amend Regulation 216/2008/EC. There are three categories of UAS defined:

- Open category: Low-risk operation not requiring authorisation or declaration before flight
- Specific operation category: Medium-risk operation requiring authorisation or declaration before flight
- Certified category: High-risk operation requiring certification process

In order to implement an innovative new set of rules for the three categories, the following five subtasks were identified:

- 1 Open and specific category with dedicated implementing rule
- 2 Certified category with amendments to OPS, FCL, ACAS, Initial AW, Continued AW, ATCO licensing, ATM/ANS oversight, SERA, ADR
- 3 Specific category: New AMC std scenario and amendments to AMC1309, CS-ACNS; \*this subtask is subject to the accelerated procedure.
- 4 Certified category with amendments to CS ETSO, CS-36; new CS-UAS

The indicative timelines and deliverables for the four subtasks (*SubT*) are given in the table below (next page). SubTask 3 will be according to Art.16 an accelerated procedure.

#### Owner

EASA CT.7

#### Affected stakeholders

Individuals and organisations using or intending to use UAS, Member States, UAS manufacturer, Manned Aviation community, Model Aircraft Community, Air Navigation Service Providers, aerodromes, all airspace users

| PIA | Proc | 3rdC | SubT | ToR        | NPA        | Opinion | Commission IR | Decision |
|-----|------|------|------|------------|------------|---------|---------------|----------|
| A-  | ST   | -    | 1    | 22/12/2016 | 04/05/2017 | 2018 Q1 | 2018 Q3       | 2018 Q3  |
|     |      |      | 2    |            | 2018 Q1    | 2019 Q1 | 2020 Q1       | 2020 Q1  |
|     | AP   |      | 3    |            | *          | n/a     | n/a           | 2018 Q3  |
|     |      |      | 4    |            | 2018 Q3    | 2019 Q1 | 2019 Q1       | 2019 Q1  |



### Safety Promotion

#### SPT.091 European Safety Promotion on civil drones

Coordinate European activities to promote safe operation of drones to the general public.

| Owner | Activity sector | Deliverable      | Date |
|-------|-----------------|------------------|------|
| SPN   | General public  | Safety Promotion | 2019 |

## 5.6.2 Safety and security

### Issue/rationale

The safety actions in this area are aimed at mitigating the cybersecurity risks. The impact of security in safety is a strategic priority.

### What we want to achieve

Manage the impact of security on safety.

### How we monitor improvement

Continuous assessment and mitigation of security threats.

### How we want to achieve it: actions

#### Rulemaking

##### RMT.0648 Aircraft cybersecurity

The specific objective of this task is to mitigate the safety effects stemming from cybersecurity risks due to acts of unlawful interference with the aircraft on-board electronic networks and systems. To achieve this objective, it is proposed to introduce in CS-25 new cybersecurity provisions taking into account the existing special condition and the recommendations of the AISP ARAC group. The need to include similar provisions such as CS-29, CS-27, CS-23, CS-E, CS-ETSO, and CS-P will also be considered.

| Owner     |      |      | Affected stakeholders  |         |         |               |          |
|-----------|------|------|--|---------|---------|---------------|----------|
| EASA CT.7 |      |      | Applicants for TC/STC for large aeroplanes or large rotorcraft |         |         |               |          |
| PIA       | Proc | 3rdC | ToR  | NPA     | Opinion | Commission IR | Decision |
| A-        | ST   | ✓    | 17/05/2016   | 2018 Q1 | n/a     | n/a           | 2019 Q1  |

##### RMT.0720 Cybersecurity risks

The specific objective of this task is to create a regulatory system which efficiently contributes to the protection of the aviation system from cyber-attacks and their consequences. To achieve this objective it is proposed to introduce a regulation covering all the aviation domains (design, production, maintenance, operations, aircrew, ATM/ANS, aerodromes), which include high-level, performance-based requirements, and which is supported by AMC/GM material and Industry Standards.

| Owner     |      |      | Affected stakeholders  |         |         |               |          |
|-----------|------|------|--|---------|---------|---------------|----------|
| EASA SM.1 |      |      | Manufacturer, Airlines, MRO, CAMO, Training Organisations, ATM/ANS Providers, Aerodromes |         |         |               |          |
| PIA       | Proc | 3rdC | ToR  | NPA     | Opinion | Commission IR | Decision |
| A-        | ST   | ✓    | 2017 Q4  | 2018 Q2 | 2019 Q2 | 2020 Q1       | 2020 Q1  |



## Safety Promotion

### SPT.071 Strategy for Cybersecurity in Aviation

Citizens travelling by air are more and more exposed to cybersecurity threats. The new generation of aircraft have their systems connected to the ground in real time. Air traffic management technologies require internet and wireless connections between the various ground centres and the aircraft. The multiplication of network connections increase the vulnerability of the whole system.

In order to address those concerns, a Strategy for Cybersecurity in Aviation will be developed jointly by the European Commission and EASA in close cooperation with EU Member States and industry. This strategy will include, among others, actions in the following areas:

- Information sharing
- Research and studies
- Event investigation and response
- Knowledge and competence building
- International cooperation and harmonization
- Regulatory activities and development of Industry Standards

This Strategy for Cybersecurity in Aviation, together with the wider cybersecurity strategy being implemented in the EU for the protection of EU citizens against cybercrime, will pave the way for a secure and safe air transport system.

| Owner        | Activity sector | Deliverable    | Date |
|--------------|-----------------|----------------|------|
| EASA, EC, MS | CAT/HE          | Strategy Paper | 2018 |

## Research

### RES.012 Cybersecurity: common aeronautical vulnerabilities database

Develop a vulnerability database collecting, maintaining, and disseminating information about discovered vulnerabilities targeting major transport information systems.

| Owner     | Activity Sector | Deliverable | Date |
|-----------|-----------------|-------------|------|
| EASA SM.1 | ALL             | Database    | 2019 |





### 5.6.3 New business models

#### Issue/rationale

Due to the increased complexity of the aviation industry, the number of interfaces between organisations, their contracted services and regulators has increased. NAAs should work better together (cooperative oversight) and EASA should evaluate whether the existing safety regulatory system adequately addresses current and future safety risks arising from new and emerging business models. Upon the request of MS, EASA tasked a working group of NAAs to assess airlines' emerging 'new' business models and to identify related safety risks posed to the aviation system. This is a strategic priority.

#### What we want to achieve

Continuously assess and mitigate risks posed by the introduction of new business models.

#### How we monitor improvement

Significant increase in the number of MS making use of the cooperative oversight provisions for organisations/persons certified by the CA of another MS.

#### How we want to achieve it: actions

##### Safety Promotion

##### MST.019 Better understanding of operators' governance structure

NAAs to have a thorough understanding of operators' governance structure. In particular, influence of financial stakeholders and of the controlling management personnel, where such personnel are located outside the scope of approval.

| Owner | Activity sector | Deliverable                   | Date |
|-------|-----------------|-------------------------------|------|
| MS    | CAT/HE          | Research or Guidance Material | 2018 |

##### Focused Oversight

##### FOT.007 Cooperative oversight

Part-ARO requires that the scope of the oversight of activities performed in the territory of a MS by organisations established or residing in another MS shall be determined on the basis of the safety priorities. In assessing these safety priorities, the 'local' CA shall participate in a mutual exchange of all necessary information and assistance with the other CAs concerned .

EASA will ensure that the EASA standardisation inspections monitor whether such authority requirements are adhered to. The objective is to ensure that each organisation's activities are known to the relevant authorities and that those activities are adequately overseen, either with or without an agreed transfer of oversight tasks.

In parallel EASA will continue to support NAAs in the practical implementation of cooperative oversight, e.g. existing trial projects (UK, NO, FR, CZ), as well as via exchange of best practice and guidance.

| Owner     | Activity sector | Deliverable                   | Date |
|-----------|-----------------|-------------------------------|------|
| EASA FS.2 | ALL             | Feedback from standardisation | 2018 |

##### FOT.008 Operator's management system

EASA will ensure that the EASA standardisation inspections have due regard to the ability of CAs to evaluate and oversee the operator's management system, in particular as regards the consideration of specific safety risks, such as safety culture, the governance structure of the operator, and any other feature that may introduce new risks.

| Owner     | Activity sector | Deliverable                   | Date |
|-----------|-----------------|-------------------------------|------|
| EASA FS.2 | ALL, HF         | Feedback from standardisation | 2018 |



## 5.6.4 New products, systems, technologies and operations

### Issue/rationale

This section addresses the introduction of new designs, technologies or types of operation for which regulatory updates are needed, and highlights some of the most relevant trends that will influence aviation in the years to come.

The safety actions in this area include the mitigation of the risks posed by flying over zones where an armed conflict exists.

### What we want to achieve

Manage the introduction of new products, systems, technologies and operations.

### How we monitor improvement

Continuous assessment and mitigation of safety aspects related to new products

### How we want to achieve it: actions

#### Rulemaking

##### **RMT.0266 Powered lift (tilt rotor) applicable requirements (pilot licensing with synthetic training devices, air operations and maintenance)**

To develop IRs for powered lift pilot licensing and operations.

*This task has been put on hold until further notice.*

|              |                              |
|--------------|------------------------------|
| <b>Owner</b> | <b>Affected stakeholders</b> |
| EASA FS.5    | Pilots, TOs, and NAAs        |

##### **RMT.0414 Operations and equipment for high-performance aircraft (HPA)**

Review of IRs/AMC/GM in relation to the operation of HPA.

*This task has been put on hold until further notice.*

|              |                              |
|--------------|------------------------------|
| <b>Owner</b> | <b>Affected stakeholders</b> |
| EASA FS.2    | HPA operators                |

#### Safety Promotion

##### **MST.020 Loss of radar detection**

On 5 and 10 June 2014, there were several occurrences of radar losses from ATC displays in central Europe. These events resulted in reduced capacity in some of the affected ATC sectors, in introduction of flow measures and in delays. As this type of events may also have a serious impact on safety, EASA was mandated by the EC to perform a technical investigation and propose recommendations.

The technical investigation concluded that the source of the interference was a system or installation which over-interrogated the transponders on board aircraft not only at rates beyond their requirements but also beyond design limits.

MS are encouraged to implement the recommendations of the technical report and to consider implementation of other mitigation techniques against loss of detection of aircraft as a result of secondary surveillance radar (SSR) over-interrogation.

| <b>Owner</b> | <b>Activity sector</b> | <b>Deliverable</b> | <b>Date</b> |
|--------------|------------------------|--------------------|-------------|
| MS           | ALL                    | Report             | 2017        |

##### **SPT.078 Disseminate information on conflict zones**

In the aftermath of the B777 MH17 accident, an EU high-level task force is working to define further actions to be taken at European level in order to provide common information on risks arising from conflict zones.

| <b>Owner</b> | <b>Activity sector</b> | <b>Deliverable</b> | <b>Date</b> |
|--------------|------------------------|--------------------|-------------|
| EASA SM.1    | ALL                    | Information to MS  | Continuous  |



**Research**

**RES.015 Vulnerability of manned aircraft to drone strike**

Assess the potential MAC threat posed by drones to manned aircraft and validate its results by means of a complete set of activities including modelling and impact tests.

| Owner     | Activity Sector | Deliverable | Date |
|-----------|-----------------|-------------|------|
| EASA SM.2 | CAT             | Report      | 2019 |

**5.6.5 Regulatory oversight considerations**

**Issue/rationale**

By introducing authority requirements, and in particular strict requirements for MS on oversight, the rules developed under the first and second extension of the EASA scope have significantly strengthened the oversight requirements. In terms of efficiency, such rules have also introduced the concept of risk-based and cooperative oversight.

The following actions focus on supporting the implementation of these new requirements by updating inspector qualifications and enabling the implementation of risk-based oversight.

**What we want to achieve**

Improve MS oversight capacities and capabilities.

**How we monitor improvement**

Significant increase in the number of EASA MS implementing risk-based oversight. Increase in the number of inspectors qualified to conduct risk-based oversight.

**How we want to achieve it: actions**

**Rulemaking**

**RMT.0516 Update of the rules on air operations (Air OPS Regulation — all Annexes & related AMC/GM)**

- Improve the authority and organisational requirements of the Air OPS Regulation taking into account identified implementation issues;
- Better identify inspector qualifications;
- Take into account new business models, as appropriate;
- Take into account the development of any lessons learned from the implementation of SMS;
- Align with the Occurrence Reporting Regulation (Regulation (EU) No 376/2014);
- Ensure compliance with the ICAO Standards And Recommended Practices (SARPs);
- Address identified safety issues such as pax seating and briefing;
- GA Road Map issues.

| Owner     |      |      | Affected stakeholders  |            |            |               |          |
|-----------|------|------|------------------------|------------|------------|---------------|----------|
| EASA FS.2 |      |      | All operators and NAAs |            |            |               |          |
| PIA       | Proc | 3rdC | ToR                    | NPA        | Opinion    | Commission IR | Decision |
| A-        | ST   | -    | 16/09/2013             | 27/11/2015 | 29/06/2017 | 2018 Q4       | 2018 Q4  |

**Focused Oversight**

**FOT.009 Conduct of audits within risk-based oversight**

Develop and test a concept, share best practices and develop enforcement strategies to enable the performance of audits by NAAs taking into account the risk-based oversight concept.

| Owner     | Activity Sector | Deliverable                | Date |
|-----------|-----------------|----------------------------|------|
| EASA FS.5 | ALL, HF         | Concept and best practices | 2018 |



## 6 Environment

The actions in this section are driven principally by the need to improve the current environmental protection in the aviation sector.

### 6.1 Climate change

#### Issue/rationale

Further to the latest developments at ICAO level under the CAEP/10 framework, the Basic Regulation (in particular Article 6) and the relevant EASA rules need to be adapted accordingly. Further work may be needed to take into account as well as the outcome of the ICAO 39th Triennial Assembly.

#### What we want to achieve

To align Article 6 of the Basic Regulation with the ICAO CAEP/10 recommendations;

To align CS-34 with the ICAO CAEP/10 recommendations; and

To balance the environmental needs with safety and with cost-efficient rules for progressive phase-out of halon.

#### How we monitor improvement

European Aviation Environmental Report.

#### How we want to achieve it: actions

##### Rulemaking

##### RMT.0514 Implementation of the CAEP/10 amendments

To align Article 6 of the Basic Regulation with the ICAO CAEP/10 recommendations

##### Owner

EASA CT.5

##### Affected stakeholders

Design and production organisations

| PIA | Proc | 3rdC | ToR        | NPA        | Opinion | Commission IR | Decision |
|-----|------|------|------------|------------|---------|---------------|----------|
| A-  | ST   | -    | 13/06/2016 | 17/01/2017 | 2017 Q4 | 2018 Q4       | 2018 Q4  |

##### RMT.0560 Halon — Update of Part-26 to comply with ICAO standards

To balance the environmental needs with safety and with cost-efficient rules for progressive phase-out of halon

##### Owner

EASA CT.7

##### Affected stakeholders

Operators and MOs — large aircraft operators and manufacturers

| PIA | Proc | 3rdC | ToR        | NPA        | Opinion    | Commission IR | Decision |
|-----|------|------|------------|------------|------------|---------------|----------|
| A-  | ST   | -    | 18/09/2013 | 18/11/2014 | 02/08/2016 | 2018 Q2       | 2018 Q2  |

##### Research

##### RES.018 Development of Particulate Matter (PM) regulations and guidelines

Acquire high quality PM data, analysis, modelling and expert support for regulatory action.

##### Owner

EASA SM.1

##### Activity sector

ALL

##### Deliverable

Report

##### Date

2019

##### RES.019 Aviation Emissions Support

Obtain high quality technical expert support on standardisation issues.

##### Owner

EASA SM.1

##### Activity sector

CAT

##### Deliverable

Report

##### Date

2019



## 6.2 Aircraft noise

### Issue/rationale

Further to the latest developments at ICAO level under the CAEP/10 framework, the Basic Regulation (in particular Article 6) and the relevant CSs need to be adapted accordingly.

### What we want to achieve

To align CS-36 with the ICAO CAEP/10 recommendations.

### How we monitor improvement

European Aviation Environmental Report.

### How we want to achieve it: actions

#### Rulemaking

**RMT.0513** Update CS 36 to refer to the environmental technical manual on noise certification as amended after CAEP/10

To align CS-36 with the ICAO CAEP/10 recommendations

#### Owner

EASA CT.5

#### Affected stakeholders

Design and production organisations

| PIA | Proc | 3rdC | ToR        | NPA        | Opinion | Commission IR | Decision |
|-----|------|------|------------|------------|---------|---------------|----------|
| A-  | ST   | -    | 13/06/2016 | 17/01/2017 | 2017 Q4 | 2018 Q4       | 2018 Q4  |



## 7 Efficiency/Proportionality

The actions in this section are driven by the need to ensure that European rules are cost-effective in achieving their objective as well as proportionate to the risks identified. Even if for some of the actions under this heading the link to safety is not immediately evident, at the end they will translate, directly or indirectly, into safety improvements..

### 7.1 Evaluations

The RMP includes proposals for evaluation of existing rules with the objective of reviewing feedback from implementation and assessing the rules' relevancy, efficiency and effectiveness. The evaluations should identify which rules could be clarified, simplified, updated or possibly repealed. It should also assess whether a performance-based approach could be applied as a tool for increasing regulatory efficiency.

#### Evaluation

##### **EVT.0001**

##### **Evaluation of Part-66**

Assessment of the effectiveness of the implementation of provisions for Part-66 in Regulation No 2042/2003 repealed by 1321/2014, identifying problems, recommendations (solutions) fitting to the licensing needs in a fast-evolving world.

##### **Owner**

EASA FS.1.2

##### **Affected stakeholders**

Maintenance staff licensing system and CAs

##### **PIA**

n/a

##### **Proc**

ST

##### **3rdC**

-

##### **ToR**

2017

##### **Evaluation report**

2018

##### **EVT.0002**

##### **Evaluation of Part-147**

Assessment of the effectiveness of the implementation of provisions for Part-147 in Regulation No 2042/2003 repealed by 1321/2014, identifying problems, recommendations (solutions) fitting to the licensing needs in a fast-evolving world.

##### **Owner**

EASA FS.1.2

##### **Affected stakeholders**

Maintenance training organisations

##### **PIA**

n/a

##### **Proc**

ST

##### **3rdC**

-

##### **ToR**

2017

##### **Evaluation report**

2018

##### **EVT.0004**

##### **Evaluation of rules on examiners in aviation domains**

Evaluation on rules of examiners in Part FCL, Commission Regulation (EU) 1178/2011. The objective of the evaluation is to assess the efficiency and effectiveness of existing provisions for examiners (Subpart K of Part FCL) and to provide recommendations for regulatory improvements.

##### **Owner**

EASA FS.3.2 in collaboration with SM.2.1

##### **Affected stakeholders**

Examiners; Approved Maintenance Training Organisations

##### **PIA**

n/a

##### **Proc**

ST

##### **3rdC**

-

##### **ToR**

2017

##### **Evaluation report**

2018



**EVT.0005**

**Evaluation of Part-145**

Assessment of the effectiveness of the implementation of provisions for Part-145 in Regulation No 2042/2003 repealed by 1321/2014, identifying problems, recommendations (solutions) fitting to the licensing needs in a fast-evolving world.

**Owner**

EASA FS.1.2 in collaboration with SM.2.1

**Affected stakeholders**

Maintenance organisations and CAs; Approved Maintenance Training Organisations

**PIA**

n/a

**Proc**

ST

**3rdC**

-

**ToR**

2019

**Evaluation report**

2020

**EVT.0006**

**Evaluation on provisions for flight crew licences laid down in the Commission Regulation (EU) No 1178/2011<sup>13</sup>**

The regulation will be reassessed with regard to pilot training, testing and periodic checking for performance-based regulation.

**Owner**

EASA FS.3 in collaboration with SM.2.1

**Affected stakeholders**

Organisations and CAs

**PIA**

n/a

**Proc**

ST

**3rdC**

-

**ToR**

2018

**Evaluation report**

2019

**EVT.0007**

**Evaluation on Regulation 748/2012**

Evaluation of several aspects of the Regulation, including continued validity of type certificates

**Owner**

EASA CT 7.1 in cooperation with SM.2.1

**Affected stakeholders**

Part-21 organisations (DO, PO, ETSO, etc), NAA, EASA

**PIA**

n/a

**Proc**

ST

**3rdC**

-

**ToR**

n/a

**Evaluation report**

2020

<sup>13</sup> Commission Regulation (EU) No 1178/2011 of 3 November 2011 laying down technical requirements and administrative procedures related to civil aviation aircrew pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council, OJ L 311, 25.11.2011, p. 1–193



## 7.2 Aerodrome design and operations

### Issue/rationale

Development of a framework commensurate with the complexity of aerodrome activities and management of potential risks.

### What we want to achieve

Ensure safety with sufficient flexibility for aerodrome operators to adjust to local conditions.

### How we monitor improvement

The EASA Advisory Bodies will give feedback on the effectiveness of the activities.

### How we want to achieve it: actions

#### Rulemaking

##### **RMT.0638 Certification requirements for VFR heliports located at aerodromes falling under the scope of the Basic Regulation**

Ensure a high uniform level of safety at aerodromes by aligning Regulation (EU) No 139/2014 with ICAO Annex 14, Volume II, Heliports; develop necessary CS and GM for design and, if necessary, AMC/GM for operation and oversight of visual flight rules (VFR) heliports co-located at aerodromes (falling under the scope of the Basic Regulation).

#### Owner

EASA FS.4.3

#### Affected stakeholders

Aerodrome operators

| PIA | Proc | 3rdC | ToR        | NPA        | Opinion | Commission IR | Decision |
|-----|------|------|------------|------------|---------|---------------|----------|
| B-  | ST   | -    | 22/09/2014 | 01/08/2017 | n/a     | n/a           | 2018/Q1  |

##### **RMT.0705 Addition of a new requirement for the handling of dangerous goods at aerodromes**

Under the current provisions of Regulation 139/2014, (ADR.OR.D.020) aerodrome operators are required to designate appropriate areas for the storage of dangerous goods. However, Regulation 139/2014 does not contain a requirement for the establishment of the methods for the delivery storage, dispensing and handling of dangerous goods at the aerodrome.

Under the current provisions of Regulation 139/2014, there is no direct requirement for aerodrome operators to train their personnel in the handling of dangerous goods, in the case that the aerodrome operator is acting as sub-contractor (handling agent) of air-operators.

It is therefore recommended to address these issues by incorporating relevant ICAO provisions in Regulation 139/2014.

*This task has been put on hold until further notice.*

#### Owner

EASA FS.4.3

#### Affected stakeholders

Aerodrome operators





## 7.3 ATM/ANS

### Issue/rationale

If ATM/ANS systems and their constituents are not successfully designed, manufactured, installed and put into operation, they may fail to support the provision of services to aircraft, as equipment may not deliver the necessary performance nor be operated as expected. In some cases, systems and constituents may not ensure the required interoperability with the aircraft segment either..

### What we want to achieve

To enable a cost-efficient conformity assessment of ATM/ANS systems and constituents that is harmonised with the requirement for changes to functional systems and that ensures interoperability. These procedures should contribute to ensure that ATM/ANS systems and constituents are fit for their intended purpose and guarantee fair competition, while facilitating the free movement of goods, persons and services.

### How we monitor improvement

After the adoption of the new rules, implementation issues associated with ATM/ANS systems and constituents should decrease, especially those related to lack of interoperability and performance that may have an impact on operations.

### Rulemaking

#### RMT.0161 Conformity assessment

Development and introduction of new technologies and systems that conform to agreed goals needs to be achieved in a harmonised and consistent manner. The general objective is to develop the requirements and guidance material for the declaration or certification of systems and constituents in a manner consistent with the existing process related to changes to the functional systems.

##### Owner

EASA FS.4.2

##### Affected stakeholders

ANSPs, Manufacturers, maintenance organisations, CAs (including EASA)

| PIA  | Proc | 3rdC | ToR     | NPA     | Opinion | Commission IR | Decision |
|------|------|------|---------|---------|---------|---------------|----------|
| B2.5 | ST   | -    | 2018 Q1 | 2019 Q2 | 2020 Q4 | 2022 Q4       | 2022 Q4  |

#### RMT.0445 Technical requirements and operating procedures for airspace design, including flight procedure design

Development of the necessary organisational and technical requirements on airspace design, thus ensuring that the specific safety objectives of the Basic Regulation are met. Basically, the scope of the task is to establish the requirements for the design of flight procedures and ATS routes, to support the implementation of PBN operations and evaluate the need for extension to other airspace structures and flight procedure design. This will include an analysis of the need to include procedures for airspace design in the ATM/ANS certification scheme.

##### Owner

EASA FS.4.2

##### Affected stakeholders

MS, CAs, ANSPs, aerodrome operators and operators

| PIA | Proc | 3rdC | ToR        | NPA        | Opinion | Commission IR | Decision |
|-----|------|------|------------|------------|---------|---------------|----------|
| A-  | ST   | -    | 14/07/2014 | 25/10/2016 | 2017 Q4 | 2019 Q1       | 2019 Q1  |



**RMT.0464 Requirements for air traffic services**

Transposition of the relevant ICAO provisions on ATS. The objective is to establish a sufficient level of harmonisation throughout the EU, based on mandatory and flexible requirements, and to define proportionate and cost-efficient rules.

**Owner**

EASA FS.4.2

**Affected stakeholders**

MS; CAs; ANSPs; ATCOS; aerodrome operators; aircraft operators; professional organisations; trade unions; pilots; passengers

| PIA | Proc | 3rdC | ToR        | NPA        | Opinion | Commission IR | Decision |
|-----|------|------|------------|------------|---------|---------------|----------|
| A-  | ST   | -    | 09/07/2014 | 14/09/2016 | 2018 Q1 | 2019 Q1       | 2019 Q1  |

**RMT.0477 Technical requirements and operational procedures for aeronautical information services and aeronautical information management**

Development of the necessary harmonised requirements and AMC/GM for the provision of aeronautical information and data, mainly based on the transposition of ICAO Annex 15 and ICAO Annex 4. The task will also fulfil specific needs stemming from the SES implementation.

**Owner**

EASA FS.4.2

**Affected stakeholders**

MS, CAs, ANSPs aerodrome operators and operators

| PIA | Proc | 3rdC | ToR        | NPA        | Opinion | Commission IR | Decision |
|-----|------|------|------------|------------|---------|---------------|----------|
| A-  | ST   | -    | 11/10/2013 | 26/04/2016 | 2017 Q4 | 2019 Q1       | 2019 Q1  |



## 7.4 Airlines

### Issue/rationale

Passenger and cargo transport by airlines generate producer, consumer and wider economic benefits by multiple perspectives. Regulatory and administrative burden reduce these benefits and need therefore to be fully justified by corresponding safety benefits.

### What we want to achieve

Ensure effective regulatory framework for airlines.

### How we monitor improvement

The EASA Advisory Bodies will give feedback on the effectiveness of the activities.

### How we want to achieve it: actions

#### Rulemaking

##### RMT.0190 Requirements for relief pilots

Address the provisions for the use of relief pilots as regards experience, training, checking and crew resource management.

#### Owner

EASA FS.3

#### Affected stakeholders

Pilots, ATOs, and operators

| PIA | Proc | 3rdC | ToR        | NPA        | Opinion | Commission IR | Decision |
|-----|------|------|------------|------------|---------|---------------|----------|
| B-  | ST   | -    | 02/11/2012 | 04/11/2014 | 2021 Q2 | 2022 Q2       | 2022 Q2  |

##### RMT.0352 Non-commercial operations of aircraft listed in the operations specifications (OpSpecs) by an AOC holder

Identify the categories of flights considered to be non-commercial flights conducted by air operator certificate (AOC) holders;  
Standardise the unofficial terms used in order to have a clear understanding of the different categories of non-commercial flights;  
Specify standards for non-commercial operations of AOC holders related to the preparation, programme and operational framework, as appropriate;  
Establish the minimum requirements for qualifications and training of the crews for each type of non-commercial flights conducted by AOC holders, as appropriate;  
Harmonise implementation.

#### Owner

EASA FS.2

#### Affected stakeholders

CAT Operators

| PIA | Proc | 3rdC | ToR        | NPA        | Opinion    | Commission IR | Decision |
|-----|------|------|------------|------------|------------|---------------|----------|
| B-  | ST   | -    | 04/12/2013 | 30/03/2015 | 29/06/2017 | 2017 Q4       | 2017 Q4  |



## 7.5 General Aviation

### Issue/rationale

GA is a high priority for EASA. EASA is dedicating effort and resources towards creating simpler, lighter and better rules for GA. Recognising the importance of GA and its contribution to a safe European aviation system, EASA in partnership with the EC and other stakeholders has created the GA Road Map.

### What we want to achieve

Reduce the regulatory burden for GA.

### How we monitor improvement

The EASA Advisory Bodies will give feedback on the effectiveness of the activities.

### How we want to achieve it: actions

#### Rulemaking

##### RMT.0135 B2L and L Part-66 aircraft maintenance licences

Introduce licensing requirements for maintenance of:

- avionic and electrical systems applicable for lower complexity of light aircraft; and
- aircraft other than aeroplanes and helicopters and in the maintenance of ELA1 aeroplanes,

by adapting the current B2 licensing requirements for maintenance of avionic and electrical systems to the lower complexity of light aircraft, and propose a simple and proportionate system for the licensing of certifying staff involved in the maintenance of aircraft other than aeroplanes and helicopters and in the maintenance of ELA1 aeroplanes.

#### Owner

EASA FS.1

#### Affected stakeholders

Approved Maintenance Training Organisations, Maintenance engineers or mechanics/GA

| PIA | Proc | 3rdC | ToR        | NPA        | Opinion    | Commission IR | Decision |
|-----|------|------|------------|------------|------------|---------------|----------|
| B-  | ST   | -    | 15/04/2011 | 04/10/2012 | 22/06/2015 | 2018 Q2       | 2018 Q2  |

##### RMT.0547 Task force for the review of Part-M for General Aviation (PHASE II)

The following important topics are part of this task:

- Light Part-M;
- Defect management; and
- Time between overhaul (TBO) extension.

#### Owner

EASA FS.1

#### Affected stakeholders

Operators other than airlines and GA

| PIA | Proc | 3rdC | ToR        | NPA        | Opinion    | Commission IR | Decision |
|-----|------|------|------------|------------|------------|---------------|----------|
| A-  | ST   | -    | 23/10/2012 | 09/07/2015 | 13/04/2016 | 2018 Q4       | 2018 Q4  |

##### RMT.0657 Review of the Aircrew Regulation in order to provide a system for private pilot training outside approved training organisations, and of the associated acceptable means of compliance and guidance material

Review the existing requirements for providing training for LAPL, PPL, SPL or BPL as regards the question on how far training can be provided outside ATOs.

#### Owner

EASA FS.3

#### Affected stakeholders

Pilots, instructors, examiners, NAAs and DTOs.

| PIA | Proc | 3rdC | ToR        | NPA        | Opinion    | Commission IR | Decision |
|-----|------|------|------------|------------|------------|---------------|----------|
| A-  | ST   | -    | 13/10/2015 | 18/12/2015 | 07/09/2016 | 2018 Q2       | 2018 Q2  |



**RMT.0677 Easier access of General Aviation (GA) pilots to instrument flight rules (IFR) flying**

Review the existing requirements for the instrument ratings and most probably the development of a new instrument rating specifically catering for the needs of the PPL holders.

**Owner**

EASA FS.3

**Affected stakeholders**

Pilots, instructors, examiners and ATOs

| PIA | Proc | 3rdC | ToR        | NPA        | Opinion | Commission IR | Decision |
|-----|------|------|------------|------------|---------|---------------|----------|
| A-  | ST   | -    | 18/12/2015 | 09/11/2016 | 2018 Q3 | 2019 Q2       | 2019 Q2  |

**RMT.0678 Simpler, lighter and better Part-FCL requirements for general aviation**

Review the different requirements which have been identified by the GA Road Map to cause problems for GA. Examples:

- Modular LAPL\*;
- Review of different LAPL and PPL requirements (crediting, revalidation, seaplane rating for LAPL);
- Review of class & type ratings requirements (new propulsion systems, amphibious aircraft);
- Review of language proficiency requirements for GA pilots;
- Provisions on TMG (definition, additional crediting);
- Mountain rating for helicopters;
- Review of the flight test rating requirements in the context of GA;
- Development of a ‘light aircraft flight instructor (LAFI)’ for LAPL training only;
- Examiner’s vested interests in the context of GA.

The starred (\*) items will be processed through the procedure in accordance with Article 15 of the Rulemaking Procedures (direct publication (DP)). For all other items, the standard rulemaking (ST) procedure will be applied.

**Owner**

EASA FS.3

**Affected stakeholders**

Pilots, examiners and NAAs

| PIA | Proc | 3rdC | SubT | ToR        | NPA     | Opinion    | Commission IR | Decision |
|-----|------|------|------|------------|---------|------------|---------------|----------|
| A-  | AP   | -    | 1    | 01/09/2016 | n/a     | 23/10/2017 | n/a           | n/a      |
|     | ST   |      | 2    |            | 2020 Q2 | 2021 Q2    | 2022 Q4       | 2022 Q4  |

**RMT.0689 ‘PART-21 proportionality’**

**Introduction of proportionality and simplification of airworthiness and environmental certification regulations for small aircraft**

Simplification of the approval process and the oversight of small design, production and MOs. A template manual should simplify the approval process. The oversight should be streamlined and privileges can be granted to organisations based on the demonstrated experience.

For individual simple aircraft, the task’s objective is to explore if private operation of aircraft where the owner takes full responsibility should be allowed.

In a first phase of this RMT, EASA will investigate whether some immediate benefits can be implemented by amendments to AMC/GM to Part-21. A decision will be issued in Q3/2017. In a second phase of this RMT, EASA will review Part-21 and develop an A-NPA, which is planned for Q2/2018. Following the A-NPA’s public consultation, EASA will propose amendments to Part-21 and its AMC/GM in the context of a new RMT proposing amendments to Part-21 necessary to implement the revised basic Regulation.

**Owner**

EASA CT.7

**Affected stakeholders**

Design, production and maintenance approval holders, and owners of simple aircraft

| PIA | Proc | 3rdC | ToR        | NPA     | Opinion | Commission IR | Decision |
|-----|------|------|------------|---------|---------|---------------|----------|
| A-  | AP   | -    | 09/06/2016 | FC      | n/a     | n/a           | 2017 Q4  |
|     | ST   |      |            | 2018 Q2 | n/a     | n/a           | n/a      |



## **Balloons and sailplanes**

### **RMT.0654 Revision of the balloon licensing requirements**

Address topics identified by the industry balloon experts on the aircrew and on the medical side. A focused consultation was performed and no NPA was published.

**Owner**

EASA FS.3

**Affected stakeholders**

Balloon operators, pilots, instructors and examiners, competent authorities and DTOs

| PIA | Proc | 3rdC | ToR        | NPA | Opinion | Commission IR | Decision |
|-----|------|------|------------|-----|---------|---------------|----------|
| A-  | AP   | -    | 16/09/2016 | n/a | 2019 Q1 | 2020 Q1       | 2020 Q1  |

### **RMT.0674 Revision of the European operational rules for balloons**

Create a new Annex for balloons. A focused consultation was performed and no NPA was published.

**Owner**

EASA FS.2

**Affected stakeholders**

Balloon operators

| PIA | Proc | 3rdC | ToR        | NPA | Opinion    | Commission IR | Decision |
|-----|------|------|------------|-----|------------|---------------|----------|
| A-  | ST   | -    | 23/04/2015 | n/a | 07/01/2016 | 2018 Q1       | 2018 Q1  |

### **RMT.0698 Revision of the operational rules for sailplanes**

Establish a set of rules covering Air Operations with sailplanes as the only regulatory reference for such operations, which addresses the specificities and associated risks in an efficient and proportional manner

**Owner**

EASA FS.2

**Affected stakeholders**

Sailplane operators

| PIA | Proc | 3rdC | ToR        | NPA | Opinion    | Commission IR | Decision |
|-----|------|------|------------|-----|------------|---------------|----------|
| A-  | AP   | -    | 26/04/2016 | n/a | 29/08/2017 | 2019 Q1       | 2019 Q1  |

### **RMT.0701 Revision of the sailplane licensing requirement**

Address topics identified by the industry sailplane experts on the aircrew side.

**Owner**

EASA FS.3

**Affected stakeholders**

Sailplane operators, pilots, instructors, examiners, ATOs and DTOs

| PIA | Proc | 3rdC | ToR        | NPA | Opinion | Commission IR | Decision |
|-----|------|------|------------|-----|---------|---------------|----------|
| A-  | AP   | -    | 15/12/2016 | n/a | 2019 Q1 | 2020 Q1       | 2020 Q1  |



## 7.6 Manufacturers

### Issue/rationale

Aircraft design evolves at a rapid pace. Requirements for initial airworthiness (CSs) need to be constantly reviewed and adjusted for cost-effectiveness.

### What we want to achieve

Ensure an effective regulatory framework for manufacturers.

### How we monitor improvement

The EASA Advisory Bodies will give feedback on the effectiveness of the activities.

### How we want to achieve it: actions

#### Rulemaking

##### RMT.0180 CS-E engine testing, endurance/IMI/ETOPS

Endurance:

Review the existing engine endurance test requirements, assess its suitability for all engines, and consider an alternate endurance test and associated methods of compliance. The current regulations may not adequately address the technological advancements in modern engines, as related to the current engine endurance test.

Initial maintenance inspection (IMI):

It has become increasingly clear that reliance upon robust development testing to support a certification programme can no longer be guaranteed. There is now a need to consider a potential revision to the CSs to better ensure that any reliability and integrity issues regarding the engine's design are identified and rectified prior to the engine entering service.

This task will introduce into CS-E a requirement based upon, if not identical to, the current FAR 33.90. This will ensure that engine tests are conducted at conditions representative of those expected to occur in service prior to the issue of a TC. The expected benefits of this include a reduction in the number of issues that arise following type certification, and a more robust certification programme.

#### Owner

EASA CT.7

#### Affected stakeholders

DAHs

| PIA | Proc | 3rdC | ToR     | NPA     | Opinion | Commission IR | Decision |
|-----|------|------|---------|---------|---------|---------------|----------|
| B5  | ST   | -    | 2019 Q1 | 2020 Q1 | n/a     | n/a           | 2021 Q1  |

##### RMT.0456 Integrated modular avionics (IMA)

The objectives are to ensure a cost-efficient and transparent certification process by:

- offering to IMA manufacturers the possibility to obtain European technical standard order authorisations (ETSOAs) at platform/module level, independent from aircraft;
- providing public guidance for incremental certification of IMA, starting from platform modules and culminating with installation on aircraft and covering all connected aspects (e.g. impact on Master Minimum Equipment List (MMEL)).

RMT.0456 will develop European technical standard order (ETSO)-2C153 enabling authorisations at platform/module level, independent from aircraft;

As part of the regular updates, amendments to CS-ETSO Subpart A will be developed to: 1) enable ETSOAs when aircraft functional modules are integrated on the already authorised IMA platform, during the initial design phase; and 2) issue AMC 20-170 to provide public guidance for incremental certification of IMA, from platform modules up to aircraft level.

#### Owner

EASA CT.7

#### Affected stakeholders

ETSOA holders

| PIA | Proc | 3rdC | ToR        | NPA        | Opinion | Commission IR | Decision   |
|-----|------|------|------------|------------|---------|---------------|------------|
| B-  | ST   | -    | 24/10/2013 | 10/09/2014 | n/a     | n/a           | 27/04/2016 |
|     |      |      |            | 21/07/2017 | n/a     | n/a           | 2018 Q3    |



## 7.7 Rotorcraft operations

### Issue/rationale

Helicopter operators perform a wide range of highly specialised operations that are important for the European economy and citizens. There is a need to further develop towards an efficient regulatory framework.

### What we want to achieve

Enable implementation of appropriate and balanced regulation.

### How we monitor improvement

The EASA Advisory Bodies will give feedback on the effectiveness of the activities.

### How we want to achieve it: actions

#### Rulemaking

#### RMT.0712 Enhancement of the safety assessment processes for rotorcraft designs

The safety assessment of the design of aircraft systems and equipment can help to identify shortfalls in the robustness of the design and also help aircraft designers to mitigate the risk of undesirable events by introducing means to reduce their likelihood. Ensuring robust safety assessment of rotorcraft designs can be considered to be even more critical due to the high number of single-point failures. Technology and techniques have evolved since the inception of formal safety assessment processes and therefore it is vital that certification specifications keep abreast with the latest thinking on safety assessment to maximise the potential that safety issues are identified during certification.

The safety requirements for equipment, systems and installations contained in the certification specifications should be improved for small and large rotorcraft to reflect current best practice for safety assessment.

The FAA is also developing new rules for the safety assessment of rotorcraft and these changes will create significant standard differences between the EU and US regulations and are likely to result in a lower regulatory efficiency. The proposed RMT also aims at reviewing these changes to achieve harmonisation where possible.

#### Owner

EASA CT.7

#### Affected stakeholders

DAH and manufacturers

| PIA | Proc | 3rdC | ToR     | NPA     | Opinion | Commission IR | Decision |
|-----|------|------|---------|---------|---------|---------------|----------|
| B5  | ST   | ✓    | 2018 Q3 | 2019 Q1 | n/a     | n/a           | 2019 Q3  |

#### RMT.0714 Enable the safe introduction of rotorcraft Fly-by-Wire technology

Currently, civil rotorcraft are equipped with mechanical flight controls (with or without hydraulic assistance), and trim and automatic flight control system (AFCS) functions are typically introduced in the mechanical flight control chains. Fly-By-Wire (FbW/FBW) technology has been in service on civil large aeroplanes for more than 40 years and this technology is now being applied to civil rotorcraft. This technology allows the introduction of advanced flight control laws and flight control protections which greatly increase the complexity of the flight control system and integration with the other systems and interaction with the aircraft handling qualities. Fly-by-Wire flight control systems are highly complex and also highly safety-critical.

EASA has already been involved in a validation activity with a US applicant, for which a set of dedicated and bespoke requirements are being developed by the FAA and EASA. It is expected that there will be an application for a design containing Fly-By-Wire technology from an EU applicant shortly.

It is for these reasons that appropriate certification specifications for rotorcraft Fly-by-Wire systems should be developed to enable the safe introduction of this technology to rotorcraft.

#### Owner

EASA CT.7

#### Affected stakeholders

DAH and manufacturers

| PIA  | Proc | 3rdC | ToR     | NPA     | Opinion | Commission IR | Decision |
|------|------|------|---------|---------|---------|---------------|----------|
| B1.2 | ST   | ✓    | 2019 Q2 | 2020 Q1 | n/a     | n/a           | 2020 Q3  |





## 7.8 Specialised operations

### Issue/rationale

Other than CAT Operators, e.g. conducting specialised operations, make an important contribution to aviation’s overall role in modern economies. There is thus a need for an efficient regulatory framework.

### What we want to achieve

Enable implementation of appropriate balanced approach.

### How we monitor improvement

The EASA Advisory Bodies will give feedback on the effectiveness of the activities.

### How we want to achieve it: actions

#### Rulemaking

##### RMT.0340 Standard operating procedures and specific requirements/alleviations for specialised operations

Development of SOPs and specific requirements/alleviations in Subpart SPO.SPEC for activities covered by Part-SPO. It includes aerobatic flights and the review of SR FRAN-2011-006 recommending equipping aerobatic aeroplanes with parachutes with a strap for automatic opening.

#### Owner

EASA FS.2

#### Affected stakeholders

Operators conducting specialised operations

| PIA | Proc | 3rdC | ToR     | NPA     | Opinion | Commission IR | Decision |
|-----|------|------|---------|---------|---------|---------------|----------|
| B2  | ST   | -    | 2019 Q1 | 2020 Q3 | 2021 Q3 | 2023 Q3       | 2023 Q3  |

##### RMT.0255 Review of Part-66

Review the effectiveness of the Part-66 implementation and, in particular, further simplify the licensing system for aircraft below 5 700 Kg and legacy aircraft.

#### Owner

EASA FS.1

#### Affected stakeholders

Maintenance engineers

| PIA | Proc | 3rdC | ToR     | NPA     | Opinion | Commission IR | Decision |
|-----|------|------|---------|---------|---------|---------------|----------|
| n/a | ST   | -    | 2018 Q3 | 2020 Q3 | 2021 Q3 | 2023 Q3       | 2023 Q3  |



## 7.9 Maintenance training organisations

### Issue/rationale

Development of principles and criteria commensurate with the competency needs in the field of maintenance engineers.

### What we want to achieve

Ease processing of converted licence and improve efficiency of examination.

### How we monitor improvement

The EASA Advisory Bodies will give feedback on the effectiveness of the activities.

### How we want to achieve it: actions

#### Rulemaking

##### **RMT.0281 New training/teaching technologies for maintenance staff**

Set up the framework for:

- e-learning and distance learning;
- simulation devices or STDs;
- specialised training such as human factors, FTS, continuation training; and
- blended teaching methods.

#### Owner

EASA FS.1

#### Affected stakeholders

Maintenance training organisations (MTOs), MOs, CAMOs, and NAAs

| PIA | Proc | 3rdC | ToR        | NPA        | Opinion | Commission IR | Decision |
|-----|------|------|------------|------------|---------|---------------|----------|
| B-  | ST   | -    | 19/12/2012 | 09/09/2014 | 2020 Q1 | 2021 Q1       | 2021 Q1  |



## 7.10 Maintenance organisations

### Issue/rationale

Certain existing requirements are either not efficient or not proportionate to the risks involved.

### What we want to achieve

To introduce more proportionate and efficient requirements in the airworthiness field.

### How we monitor improvement

The EASA Advisory Bodies will give feedback on the effectiveness of the activities.

### How we want to achieve it: actions

#### Rulemaking

##### **RMT.0018 Installation of parts and appliances that are released without an EASA Form 1 or equivalent**

The intent of this task is:

- to provide a consistent interpretation of the definition of ‘parts & appliances’ and other terms used in the various rules;
- to develop criteria for the acceptance of parts and appliances with different production background for installation in certified aircraft;
- to create a parts classification for commercial parts, allowing an installer to install commercial parts on a type-certified product without having to obtain parts manufactured under a POA. This proposal will also allow manufacturers to continue to use parts now categorised as commercial parts in their type designs. The added benefit of the proposal is to have the manufacturers identify for EASA approval the commercial parts they intend to use;
- to develop criteria for production and release of parts and appliances proportionate to the potential impact on safety as determined in the design certification process;
- to develop the draft amendments to Regulations (EU) Nos 748/2012 and 1321/2014 as necessary to incorporate the above concepts and integrate the existing alleviations for sailplanes and European light aircraft (ELA);
- to develop the necessary AMC and GM to accompany the amendments to the regulations;
- to develop AMC and GM to support the interpretation of the above-mentioned provisions in the Basic Regulation related to parts and appliances; and
- to elaborate the AMC and GM related to standard parts.

#### Owner

EASA FS.1

#### Affected stakeholders

Manufacturers, DAHs, operators, AMOs, and engineers

| PIA | Proc | 3rdC | ToR        | NPA     | Opinion | Commission IR | Decision |
|-----|------|------|------------|---------|---------|---------------|----------|
| B-  | ST   | -    | 01/11/2012 | 2017 Q4 | 2018 Q4 | 2019 Q4       | 2019 Q4  |



## 7.11 PCP SESAR deployment

### Issue/rationale

Implement the regulatory needs of the SESAR pilot common projects.

### What we want to achieve

The rationale behind the following actions is to cater for the regulatory needs of the SESAR common projects and other new technological development (e.g. such but not limited to U-space deployment, virtualisation and cloud-based architecture and remote tower operations) by enabling the implementation of new working methods and technologies developed by SESAR. Interoperability, civil-military cooperation and compatibility and NextGen international compatibility (e.g. such but not limited to ICAO GANP/ASBUS and NextGen) will form an integral part of EASA's work in impact assessment and future rulemaking. In addition, there is a need to initiate a consolidated and coordinated implementation support action that should look holistically to the implementation needs of the necessary enabling infrastructure to facilitate the achievement of the needed operational improvements and new ATM operational concepts.

### How we monitor improvement

The EASA Advisory Bodies will give feedback on the effectiveness of the activities.

### How we want to achieve it: actions

#### Rulemaking

##### RMT.0524 Data link services

Development of requirements for extended data link operations for safety-critical message use, including D-TAIX, DCL, protected mode controller–pilot data link communication (PM CPDLC), D-ATIS and controller–pilot data link communication (CPDLC), automatic dependent surveillance — contract (ADS-C) outside VHF data link coverage. This task is stemming from the single European sky (SES) initiative and SESAR and will address the PCP ATM functionality 6 requirements as well as the existing issues related to the current DLS regulation (Regulation (EC) No 29/2009<sup>14</sup>).

#### Owner

EASA FS.4.2

#### Affected stakeholders

CAs, ANSPs, aerodrome operators, aircraft operators and manufacturers

| PIA | Proc | 3rdC | ToR     | NPA     | Opinion | Commission IR | Decision |
|-----|------|------|---------|---------|---------|---------------|----------|
| A-  | ST   | -    | 2017 Q4 | 2018 Q3 | 2019 Q1 | 2019 Q4       | 2019 Q4  |

##### RMT.0624 Technical and operational requirements for remote tower operations

The development and introduction of new technologies permits the provision of aerodrome ATS from a remote location either in the form of aerodrome flight information service (AFIS) or ATC. This concept also provides the possibility to use the remote facility for contingency purposes. The general objective is to ensure that aerodrome ATS provided from a remote location meet the applicable EU and ICAO requirements and ensure at least the same level of safety as when provided from a control tower.

#### Owner

EASA FS.4.2

#### Affected stakeholders

CAs, ANSPs and operators

| PIA | Proc | 3rdC | ToR        | NPA        | Opinion | Commission IR | Decision   |
|-----|------|------|------------|------------|---------|---------------|------------|
| A-  | ST   | -    | 09/12/2014 | 23/03/2015 | n/a     | n/a           | 03/07/2015 |
|     |      |      |            | 2017 Q4    | n/a     | n/a           | 2018 Q2    |

<sup>14</sup> Commission Regulation (EC) No 29/2009 of 16 January 2009 laying down requirements on data link services for the single European sky (OJ L 13, 17.1.2009, p. 3).



**RMT.0639 Performance-based navigation implementation in the European air traffic management network**

PBN implementation that supports the improved performance of the EATMN, the uniform use of PBN specifications and functionalities. The optimal and safe use of airspace and the improved safe access to aerodromes through the improved airspace design, arrival/departure routes and approach procedures would be ensured based on a common application of navigation specifications and functionalities.

These regulatory measures define the ICAO PBN specifications and functionalities that are to be used in the European airspace and the dates by which they are to be applied in accordance with the SES objectives and the PCP implementation.

**Owner**

EASA FS.4.2

**Affected stakeholders**

MS, CAs, ANSPs and aircraft operators

| PIA | Proc | 3rdC | ToR        | NPA        | Opinion    | Commission IR | Decision |
|-----|------|------|------------|------------|------------|---------------|----------|
| A-  | ST   | -    | 25/06/2014 | 19/01/2015 | 28/07/2016 | 2018 Q3       | 2018 Q3  |

**RMT.0679 Revision of surveillance performance and interoperability (SPI)**

The current SPI Regulation (Regulation (EU) No 1207/2011<sup>15</sup>) details the requirements for the carriage and operation of airborne surveillance equipment by both civil and State registered aircraft, and the dates by which qualifying aircraft must be equipped.

Several implementation issues have led the EC to propose a revision of the SPI Regulation, to be prepared by EASA.

**Owner**

EASA FS.4.2

**Affected stakeholders**

MS, CAs, ANSPs and aircraft operators

| PIA | Proc | 3rdC | ToR        | NPA | Opinion | Commission IR | Decision |
|-----|------|------|------------|-----|---------|---------------|----------|
| A-  | ST   | -    | 18/03/2016 | FC  | n/a     | 2019 Q2       | 2019 Q2  |

**RMT.0682 Implementation of the regulatory needs of the SESAR common projects**

The general objective of the task is the development of the implementing measures as required to enable the timely deployment of the ATM functionalities and other operational changes stemming from SESAR and the European ATM Master Plan by addressing those issues which are not covered by existing RMTs.

The initial purpose of this task is to address the implementation needs, among others and when known, of the following:

- Extended arrival management (AMAN) in high-density terminal manoeuvring areas (TMAs);
- Airport integration and throughput;
- Flexible airspace management and free route;
- Network collaborative management;
- Initial system-wide information management (SWIM);
- Development of the requirements for the use of GBAS augmented GNSS to support CAT I/II/III operations;
- Other new essential operational changes (e.g. user-driven prioritisation process (UDPP), trajectory-based tools, sector-based operations, etc.)

**Owner**

EASA FS.4.2

**Affected stakeholders**

MS, CAs, ANSPs, aircraft operators, aerodrome operators, manufacturers

| PIA | Proc | 3rdC | ToR     | NPA     | Opinion | Commission IR | Decision |
|-----|------|------|---------|---------|---------|---------------|----------|
| B-  | ST   | -    | 2017 Q4 | 2019 Q1 | 2020 Q3 | 2021 Q2       | 2021 Q2  |

<sup>15</sup> Commission Implementing Regulation (EU) No 1207/2011 of 22 November 2011 laying down requirements for the performance and the interoperability of surveillance for the single European sky (OJ L 305, 23.11.2011, p. 35).



## 7.12 Regular updates

### Issue/rationale

The aviation industry is complex and rapidly evolving. The corresponding rules need to be updated regularly to ensure that they are fit for purpose, cost-effective, can be implemented in practice, and are in line with the latest ICAO requirements.

Regular updates are issued when relevant data is available following an update of industry standards or feedback from certification activities or minor issues raised by the stakeholders.

### What we want to achieve

Ensure that the regulatory framework is cost-effective and can be effectively implemented.

### How we monitor improvement

The EASA Advisory Bodies will give feedback on the effectiveness of the activities.

### How we want to achieve it: actions

#### Rulemaking

##### RMT.0031 Regular update of AMC/GM to Part-21

| Owner     | ToR        | NPA     | Opinion | Commission IR | Decision |
|-----------|------------|---------|---------|---------------|----------|
| EASA CT.7 | 15/12/2016 | 2018 Q4 | n/a     | n/a           | 2019 Q3  |

##### RMT.0037 Regular update of CS-22

| Owner     | ToR        | NPA     | Opinion | Commission IR | Decision |
|-----------|------------|---------|---------|---------------|----------|
| EASA CT.7 | 14/01/2016 | 2018 Q2 | n/a     | n/a           | 2018 Q4  |

##### RMT.0128 Regular update of CS-27&29, CS VLR

| Owner     | ToR        | NPA | Opinion | Commission IR | Decision |
|-----------|------------|-----|---------|---------------|----------|
| EASA CT.7 | 28/09/2016 | DP  | n/a     | n/a           | 2018 Q2  |

##### RMT.0134 Rotorcraft AMC revision

| Owner     | ToR        | NPA     | Opinion | Commission IR | Decision |
|-----------|------------|---------|---------|---------------|----------|
| EASA CT.7 | 20/10/2010 | 2018 Q3 | n/a     | n/a           | 2019 Q2  |

##### RMT.0184 Regular update of CS-E

| Owner     | ToR        | NPA | Opinion | Commission IR | Decision |
|-----------|------------|-----|---------|---------------|----------|
| EASA CT.7 | 27/07/2015 | DP  | n/a     | n/a           | 2018 Q3  |

##### RMT.0287 Updating Part-MED and related AMC and GM

| Owner     | ToR        | NPA     | Opinion | Commission IR | Decision |
|-----------|------------|---------|---------|---------------|----------|
| EASA FS.3 | 22/10/2012 | 2017 Q4 | 2019 Q1 | 2020 Q1       | 2020 Q1  |

##### RMT.0392 Regular updates of OPS rules

| Owner     | ToR     | NPA | Opinion | Commission IR | Decision |
|-----------|---------|-----|---------|---------------|----------|
| EASA FS.2 | 2018 Q2 | n/a | 2019 Q1 | n/a           | n/a      |

##### RMT.0412 Update of the authority and organisation requirements pertaining to Part-FCL

| Owner     | ToR        | NPA     | Opinion | Commission IR | Decision |
|-----------|------------|---------|---------|---------------|----------|
| EASA FS.3 | 30/10/2012 | 2019 Q1 | 2020 Q4 | 2021 Q4       | 2021 Q4  |



|                 |   |            |                |                      |                    |  |
|-----------------|---|------------|----------------|----------------------|--------------------|--|
| <b>RMT.0424</b> | <b>Regular update of Part-MED</b>                             |            |                |                      |                    |  |
| <b>Owner</b>    | <b>ToR</b>  | <b>NPA</b> | <b>Opinion</b> | <b>Commission IR</b> | <b>Decision</b>    |  |
| EASA FS.3       | 09/10/2017  | 2019 Q2    | 2020 Q2        | 2021 Q2              | 2021 Q2            |  |
| <b>RMT.0457</b> | <b>Regular update of EASA TSOs</b>                            |            |                |                      |                    |  |
| <b>Owner</b>    | <b>ToR</b>  | <b>NPA</b> | <b>Opinion</b> | <b>Commission IR</b> | <b>Decision</b>    |  |
| EASA CT.7       | 21/08/2015  | 22/06/2017 | n/a            | n/a                  | 2018 Q3            |  |
| <b>RMT.0476</b> | <b>Regular update of SERA IR (stemming from ICAO SL)</b>      |            |                |                      |                    |  |
| <b>Owner</b>    | <b>ToR</b>  | <b>NPA</b> | <b>Opinion</b> | <b>Commission IR</b> | <b>Decision</b>    |  |
| EASA FS.4.2     | 18/08/2017  | DP         | 2017 Q4        | 2018 Q4              | 2018 Q4            |  |
| <b>RMT.0499</b> | <b>Regular update of CS-MMEL</b>                              |            |                |                      |                    |  |
| <b>Owner</b>    | <b>ToR</b>  | <b>NPA</b> | <b>Opinion</b> | <b>Commission IR</b> | <b>Decision</b>    |  |
| EASA CT.7       | n/a   | 2018 Q1    | n/a            | n/a                  | 2018 Q3            |  |
| <b>RMT.0502</b> | <b>Regular update of CS for balloons</b>                      |            |                |                      |                    |  |
| <b>Owner</b>    | <b>ToR</b>  | <b>NPA</b> | <b>Opinion</b> | <b>Commission IR</b> | <b>Decision</b>    |  |
| EASA CT.7       | n/a   | n/a        | n/a            | n/a                  | n/a                |  |
| <b>RMT.0503</b> | <b>Regular update of CS-APU</b>                               |            |                |                      |                    |  |
| <b>Owner</b>    | <b>ToR</b>  | <b>NPA</b> | <b>Opinion</b> | <b>Commission IR</b> | <b>Decision</b>    |  |
| EASA CT.7       | n/a   | n/a        | n/a            | n/a                  | n/a                |  |
| <b>RMT.0508</b> | <b>Regular update of CS-CC</b>                                |            |                |                      |                    |  |
| <b>Owner</b>    | <b>ToR</b>  | <b>NPA</b> | <b>Opinion</b> | <b>Commission IR</b> | <b>Decision</b>    |  |
| EASA CT.7       | n/a   | 2020 Q1    | n/a            | n/a                  | 2020 Q3            |  |
| <b>RMT.0509</b> | <b>Regular update of CS-FC</b>                                |            |                |                      |                    |  |
| <b>Owner</b>    | <b>ToR</b>  | <b>NPA</b> | <b>Opinion</b> | <b>Commission IR</b> | <b>Decision</b>    |  |
| EASA CT.7       | n/a   | 2019 Q1    | n/a            | n/a                  | 2019 Q3            |  |
| <b>RMT.0519</b> | <b>Regular update of CS-ACNS</b>                              |            |                |                      |                    |  |
| <b>Owner</b>    | <b>ToR</b>  | <b>NPA</b> | <b>Opinion</b> | <b>Commission IR</b> | <b>Decision</b>    |  |
| EASA FS.4.2     | 12/09/2015  | 2018 Q2    | n/a            | n/a                  | 2019 Q1<br>2020 Q2 |  |
| <b>RMT.0541</b> | <b>Aircraft type ratings for Part-66 Aircraft Maintenance</b> |            |                |                      |                    |  |
| <b>Owner</b>    | <b>ToR</b>  | <b>NPA</b> | <b>Opinion</b> | <b>Commission IR</b> | <b>Decision</b>    |  |
| EASA FS.1.2     | 12/05/2009  | 2018 Q2    | n/a            | n/a                  | 2018 Q4            |  |



|                 |   |            |                |                      |                 |  |
|-----------------|---|------------|----------------|----------------------|-----------------|--|
| <b>RMT.0561</b> | <b>Update of AMC-20 — ‘In-flight entertainment (IFE), lead-free soldering, harmonisation of safety and software criteria’</b> |            |                |                      |                 |  |
| <b>Owner</b>    | <b>ToR</b>  | <b>NPA</b> | <b>Opinion</b> | <b>Commission IR</b> | <b>Decision</b> |  |
| EASA CT.7       | 20/07/2015  | 22/06/2017 | n/a            | n/a                  | 2019 Q1         |  |
| <b>RMT.0587</b> | <b>Regular update of regulations regarding pilot training, testing and checking and the related oversight</b>                 |            |                |                      |                 |  |
| <b>Owner</b>    | <b>ToR</b>  | <b>NPA</b> | <b>Opinion</b> | <b>Commission IR</b> | <b>Decision</b> |  |
| EASA FS.3       | 11/05/2016  | 30/11/2016 | 11/05/2017     | 2018 Q2              | 2018 Q2         |  |
| <b>RMT.0591</b> | <b>Regular update of aerodrome rules</b>  |            |                |                      |                 |  |
| <b>Owner</b>    | <b>ToR</b>  | <b>NPA</b> | <b>Opinion</b> | <b>Commission IR</b> | <b>Decision</b> |  |
| EASA FS.4.3     | 29/07/2016  | 11/04/2017 | n/a            | n/a                  | 2017 Q4         |  |
| <b>RMT.0605</b> | <b>Regular update of CS-LSA</b>   |            |                |                      |                 |  |
| <b>Owner</b>    | <b>ToR</b>  | <b>NPA</b> | <b>Opinion</b> | <b>Commission IR</b> | <b>Decision</b> |  |
| EASA CT.7       | 14/01/2016  | 2018 Q2    | n/a            | n/a                  | 2018 Q4         |  |
| <b>RMT.0643</b> | <b>Regular update of AMC-20</b>   |            |                |                      |                 |  |
| <b>Owner</b>    | <b>ToR</b>  | <b>NPA</b> | <b>Opinion</b> | <b>Commission IR</b> | <b>Decision</b> |  |
| EASA CT.7       | 20/07/2015  | AP         | n/a            | n/a                  | 2018 Q2         |  |
| <b>RMT.0668</b> | <b>Regular update of ATCO licensing rules (IR/AMC/GM)</b>   |            |                |                      |                 |  |
| <b>Owner</b>    | <b>ToR</b>  | <b>NPA</b> | <b>Opinion</b> | <b>Commission IR</b> | <b>Decision</b> |  |
| EASA FS.4.2     | 10/08/2017  | 2018/Q4    | n/a            | n/a                  | 2019 Q4         |  |
| <b>RMT.0673</b> | <b>Regular update of CS-25</b>  |            |                |                      |                 |  |
| <b>Owner</b>    | <b>ToR</b>  | <b>NPA</b> | <b>Opinion</b> | <b>Commission IR</b> | <b>Decision</b> |  |
| EASA CT.7       | 27/04/2015  | 2018 Q2    | n/a            | n/a                  | 2019 Q1         |  |
| <b>RMT.0684</b> | <b>Regular update of CS-P</b>   |            |                |                      |                 |  |
| <b>Owner</b>    | <b>ToR</b>  | <b>NPA</b> | <b>Opinion</b> | <b>Commission IR</b> | <b>Decision</b> |  |
| EASA CT.7       | n/a   | n/a        | n/a            | n/a                  | n/a             |  |
| <b>RMT.0687</b> | <b>Regular update of CS-23</b>  |            |                |                      |                 |  |
| <b>Owner</b>    | <b>ToR</b>  | <b>NPA</b> | <b>Opinion</b> | <b>Commission IR</b> | <b>Decision</b> |  |
| EASA CT.7       | 09/08/2017  | 2018 Q1    | n/a            | n/a                  | 2018 Q3         |  |
| <b>RMT.0688</b> | <b>Regular update of CS SIMD</b>  |            |                |                      |                 |  |
| <b>Owner</b>    | <b>ToR</b>  | <b>NPA</b> | <b>Opinion</b> | <b>Commission IR</b> | <b>Decision</b> |  |
| EASA CT.7       | n/a   | 2020 Q1    | n/a            | n/a                  | 2020 Q3         |  |
| <b>RMT.0690</b> | <b>Regular update of CS-STAN</b>  |            |                |                      |                 |  |
| <b>Owner</b>    | <b>ToR</b>  | <b>NPA</b> | <b>Opinion</b> | <b>Commission IR</b> | <b>Decision</b> |  |
| EASA CT.7       | 09/06/2016  | 2018 Q3    | n/a            | n/a                  | 2019 Q1         |  |





## European Plan for Aviation Safety EPAS 2018–2022

Efficiency/Proportionality

### RMT.0692 Regular update of the acceptable means of compliance and guidance material on the safety (key) performance indicators

| Owner       | ToR     | NPA     | Opinion | Commission IR | Decision |
|-------------|---------|---------|---------|---------------|----------|
| EASA FS.4.2 | 2018 Q1 | 2019 Q1 | n/a     | n/a           | 2019 Q3  |

### RMT.0719 Regular update of ATM/ANS rules (IR/AMC/GM)

| Owner       | ToR        | NPA | Opinion | Commission IR | Decision |
|-------------|------------|-----|---------|---------------|----------|
| EASA FS.4.2 | 18/08/2017 | DP  | 2018 Q1 | 2019 Q1       | 2019 Q1  |

### RMT.0721 RAMP Deregulation

| Owner     | ToR     | NPA | Opinion | Commission IR | Decision |
|-----------|---------|-----|---------|---------------|----------|
| EASA FS.2 | 2017 Q4 | AP  | n/a     | n/a           | 2018 Q3  |



## 8 Level playing field

The actions in this section are driven principally by the need to ensure that all players in a certain segment of the aviation market can benefit from the same set of rules, thereby promoting fair competition and free movement of persons and services. This is considered of particular importance for technological or business advancement where common 'rules of the game' need to be defined for all actors. This also includes the need for international harmonisation as well as the need to keep pace with ICAO amendments. These projects will also contribute to maintaining or even increasing the current level of safety.

### 8.1 Implementation of the upcoming new Basic Regulation

This action area will only be activated once the discussions between the European Parliament and Council on the revised Basic Regulation are more advanced.

### 8.2 Aerodromes operators

#### Issue/rationale

The regulatory requirement is stemming from the Basic Regulation. It was meant to be included in the Aerodrome Rules, but it has been decided to deal with the issue at a later stage.

#### What we want to achieve

The changes are expected to ensure compliance with ICAO SARPs on the provision of apron management services, maintain a uniform and high level of safety in the MS and ensure a harmonised approach which will support the free movement of services within the MS and reduce the administrative burden especially for those providers providing apron management services in different MS.

#### How we monitor improvement

The EASA Advisory Bodies will give feedback on the effectiveness of the activities.

#### How we want to achieve it: actions

##### Rulemaking

##### RMT.0485 Requirements for apron management services at aerodromes

The changes proposed allow the apron management services to be provided either by the aerodrome operator or by the ANSP (or any subcontractor to them). The changes are expected to ensure compliance with ICAO SARPs on the provision of apron management services, maintain a uniform and high level of safety in the MS and ensure a harmonised approach which will support the free movement of services within the MS and reduce the administrative burden especially for those providers providing apron management services in different MS.

##### Owner

EASA FS.4.3

##### Affected stakeholders

Aerodrome Operators / Air Traffic Services Providers  
Providers of Apron Management Service

| PIA | Proc | 3rdC | ToR        | NPA        | Opinion    | Commission IR | Decision |
|-----|------|------|------------|------------|------------|---------------|----------|
| B-  | ST   | -    | 20/07/2012 | 18/12/2013 | 24/09/2014 | 2018 Q4       | 2018 Q4  |



## 8.3 Airlines

### Issue/rationale

Rules may need to be harmonised within the EU as well as with the main international trade partners in order to either ensure fair competition or facilitate the free movement of goods, persons and services.

### What we want to achieve

Harmonise requirements where this ensures fair competition or facilitates the free movement of goods, persons and services.

### How we monitor improvement

The EASA Advisory Bodies will give feedback on the effectiveness of the activities.

### How we want to achieve it: actions

#### Rulemaking

##### RMT.0276 Technical records

Clarification of criteria for preventing incomplete records. Incomplete records may lead to a wrong assessment of the airworthiness status of the product with a consequent safety risk, development of back-to-birth concept, components traceability, and use of radio frequency identification (RFID).

#### Owner

EASA FS.1

#### Affected stakeholders

Operators, CAMOs and MOs

| PIA | Proc | 3rdC | ToR        | NPA        | Opinion    | Commission IR | Decision |
|-----|------|------|------------|------------|------------|---------------|----------|
| B-  | ST   | -    | 28/11/2011 | 07/02/2014 | 17/11/2016 | 2019 Q2       | 2019 Q2  |

##### RMT.0278 Importing of aircraft from other regulatory system, and Part-21 Subpart H review

Develop criteria for importing of aircraft from other regulatory system, and Part-21 Subpart H review.

#### Owner

EASA FS.1

#### Affected stakeholders

Operators and NAAs

| PIA | Proc | 3rdC | ToR        | NPA        | Opinion | Commission IR | Decision |
|-----|------|------|------------|------------|---------|---------------|----------|
| B-  | ST   | -    | 01/02/2013 | 07/09/2016 | 2019 Q2 | 2020 Q2       | 2020 Q2  |

##### RMT.0312 Review of standard weight

Transposed task from the JAA to review the standard weights due to demographic changes. Review of IRs/AMC/GM based on the weight survey commissioned by EASA.

#### Owner

EASA FS.2

#### Affected stakeholders

CAT and NCC operators

| PIA | Proc | 3rdC | ToR     | NPA     | Opinion | Commission IR | Decision |
|-----|------|------|---------|---------|---------|---------------|----------|
| B3  | ST   | -    | 2018 Q4 | 2019 Q4 | 2021 Q2 | 2022 Q4       | 2022 Q4  |



**RMT.0379 All-weather operations**

Review and update the all-weather operations (AWO) rules in all aviation domains, as regards:

- possibility of applying safety performance principle in redrafting of current rules with the aim of allowing a better integration of new and future technologies supporting AWO operations, as e.g. enhanced flight vision systems (EFVS), synthetic vision systems (SVS), synthetic vision guidance systems (SVGS), combined vision systems (CVS), head-up displays (HUD);
- conventional low visibility operations (LVO), such as instrument landing system (ILS)-based CAT II and CAT III approach operations or low visibility take-offs;
- other than AWO, such as CAT I operations using ILS, GLS or SBAS, or approach operations to higher minima using area navigation (RNAV)(GNSS), non-directional beacons (NDBs) or VHF omnidirectional ranges (VORs);
- miscellaneous items, such as the improvement of existing rules text and the transposition of the new ICAO approach classification;
- harmonisation with bilateral partners (e.g. FAA) to the extent possible;
- introduction of operations with operational credits such as newly introduced SA CAT I<sup>16</sup> not being yet part of ICAO regulatory system.

As a result of the task, the European industry should be enabled to take full advantage of safety and economic benefits generated through new technologies and operational experience.

Note: As regards the proposed amendments to implementing rules, a focused consultation is foreseen instead of an NPA consultation. There will be an NPA proposing only amendments to CS, AMC/GM.

**Owner**

EASA FS.2

**Affected stakeholders**

Manufacturers, MOs, air operators, ATOs, aerodrome operators, ATM/ANS

| PIA | Proc | 3rdC | ToR        | NPA     | Opinion | Commission IR | Decision |
|-----|------|------|------------|---------|---------|---------------|----------|
| A-  | AP   | -    | 09/12/2015 | 2017 Q4 | 2018 Q2 | 2018 Q3       | 2018 Q3  |

**RMT.0573 Fuel planning and management**

Review and update the EU fuel rules, taking into account ICAO amendments and a related SR, and providing for operational flexibility

**Owner**

EASA FS.2

**Affected stakeholders**

Operators

| PIA | Proc | 3rdC | ToR        | NPA        | Opinion | Commission IR | Decision |
|-----|------|------|------------|------------|---------|---------------|----------|
| B-  | ST   | -    | 27/04/2015 | 15/07/2016 | 2018 Q2 | 2019 Q4       | 2019 Q4  |

**RMT.0577 Extended diversion time operations**

To harmonise extended diversion time operations (EDTOs) rules with the related ICAO SARPS and modernise the EASA extended-range twin-engine operational performance standards (ETOPS) rules.

**Owner**

EASA FS.2

**Affected stakeholders**

CAT aeroplane operators

| PIA | Proc | 3rdC | ToR     | NPA     | Opinion | Commission IR | Decision |
|-----|------|------|---------|---------|---------|---------------|----------|
| B3  | ST   | -    | 2018 Q1 | 2019 Q1 | 2020 Q4 | 2021 Q4       | 2021 Q4  |

<sup>16</sup> Special Approval CAT I represents a type of low-visibility operations with operational credits with the following provisions:

- the decision height (DH) of an SA CAT I operation should not be lower than the highest of the minimum DH specified in the AFM (if stated), the applicable obstacle clearance height (OCH) for the category of aeroplane, the DH to which the flight crew is qualified to operate; or 150 ft; and
- the lowest RVR minima to be used are specified vs approach lighting system and are typically between 400 and 700 (m).



**RMT.0601 Transposition of provisions on electronic flight bag from ICAO Annex 6**

Transpose ICAO SARPs in EU rules and update the EU rules in line with the latest EFB developments

**Owner**

EASA FS.2

**Affected stakeholders**

CAs and operators

| PIA | Proc | 3rdC | ToR        | NPA        | Opinion | Commission IR | Decision |
|-----|------|------|------------|------------|---------|---------------|----------|
| B-  | ST   | -    | 05/10/2015 | 04/10/2016 | 2017 Q4 | 2019 Q3       | 2019 Q3  |

**RMT.0494 FTL requirements for CAT operations of helicopters**

Establish harmonised and state-of-the-art rules for CAT helicopter operations.

**Owner**

EASA FS.2

**Affected stakeholders**

CAT helicopter operators

| PIA | Proc | 3rdC | ToR     | NPA     | Opinion | Commission IR | Decision |
|-----|------|------|---------|---------|---------|---------------|----------|
| A-  | ST   | -    | 2020 Q3 | 2021 Q2 | 2022 Q2 | 2023 Q2       | 2023 Q2  |

**Safety Promotion**

**SPT.097**

**Promote the new European provisions on fuel planning and management**

The objective is to complement the new regulatory package on fuel planning and management with relevant safety promotion material. The event theme changes every year.

**Owner**

EASA SM.1

**Activity sector**

ALL

**Deliverable**

Safety Promotion

**Date**

2019



## 8.4 Manufacturers

### Issue/rationale

Rules may need to be harmonised within the EU as well as with the main international trade partners in order to either ensure fair competition or facilitate the free movement of goods, persons and services.

### What we want to achieve

Harmonise requirements where this ensures fair competition or facilitates the free movement of goods, persons and services.

### How we monitor improvement

The EASA Advisory Bodies will give feedback on the effectiveness of the activities.

### How we want to achieve it: actions

#### Rulemaking

##### RMT.0252 Instructions for Continued Airworthiness (ICA)

Subtask 1:

- Definition and identification of ICA (to be provided during the certification process).
- Completeness of ICA (during the certification process).
- LOI of the CA (during the certification process).

Subtask 2:

- Availability of ICA (to owners, operators, MOs, etc.).

Subtask 3:

- MRB Scheduling Information (guidance on the MRB process).-> transferred to CAW.

Subtask 4:

- Acceptance/approval of ICAs by other than the authority.

Subtask 5:

- Certification maintenance requirements.

With regard to Subtasks 1, 2, and 4, EASA will develop an NPA, which is planned to be published in 2017. Following the NPA public consultation, EASA will develop an opinion proposing amendments to Part-21 and the Continued Airworthiness Regulation (planned for Q4/2018). Upon adoption of the amendments of the Regulations by the Commission and publication in the Official Journal, EASA will issue the related AMC/GM. With regard to subtask 5, EASA plans to issue CS-25 in 2017.

#### Owner

EASA CT.7

#### Affected stakeholders

Design Approval holders and manufacturers

| PIA | Proc | 3rdC | ToR        | NPA                   | Opinion        | Commission IR  | Decision              |
|-----|------|------|------------|-----------------------|----------------|----------------|-----------------------|
| B-  | ST   | -    | 15/05/2013 | 23/11/2016<br>2017 Q4 | n/a<br>2018 Q4 | n/a<br>2019 Q3 | 30/08/2017<br>2019 Q3 |

##### RMT.0348 Flights related to design and production activities

To establish IRs and associated AMC/GM on operational requirements for flights related to design and production activities ('manufacturers flights').

*This task has been put on hold until further notice.*

#### Owner

EASA FS.2

#### Affected stakeholders

Manufacturers



**RMT.0384 Enable open rotor engine & installation**

A new engine concept is being proposed to power future large transport aircraft as a means of improving aircraft fuel burn and emissions. This concept is known as the ‘open rotor engine’.

The objective of this task is to identify and recommend harmonised draft requirements and advisory material for CS-E, 14 CFR Part 33, CS-25 and 14 CFR Part 25 to address the novel features inherent in open rotor engine designs and their integration with the aircraft.

Consideration should also be given to the development of new requirements to provide the required safety objectives based on the unique nature of the open rotor configuration. These new provisions and associated AMC material should ensure that the safety levels of open rotor engine installations are consistent with those of the existing turbofan fleet.

Harmonisation with 14 CFR Part 25 and 33 (and/or Special Conditions) is an objective of this RMT.

EASA will issue a second NPA on this RMT in Q2/2018. EASA plans to issue its decisions on the basis of the first and second NPA.

**Owner**

EASA CT.7

**Affected stakeholders**

DAHs; manufacturers of engines

| PIA | Proc | 3rdC | ToR        | NPA        | Opinion | Commission IR | Decision |
|-----|------|------|------------|------------|---------|---------------|----------|
| B-  | ST   | ✓    | 14/03/2011 | 21/12/2015 | n/a     | n/a           | n/a      |
|     |      |      |            | 2018 Q2    | n/a     | n/a           | 2019 Q2  |

**RMT.0695 Non-ETOPS operations using performance class A aeroplanes with an MOPSC of 19 or less**

The objective is to accommodate new business-jet aeroplanes operated by European CAT operators in the 180’ non-ETOPS category.

**Owner**

EASA FS.2

**Affected stakeholders**

Operators

| PIA | Proc | 3rdC | ToR        | NPA        | Opinion | Commission IR | Decision |
|-----|------|------|------------|------------|---------|---------------|----------|
| B-  | ST   | -    | 15/12/2015 | 25/09/2017 | 2018 Q2 | 2019 Q2       | 2019 Q2  |



## 8.5 Operators other than airlines

### Issue/rationale

Rules may need to be harmonised within the EU as well as with the main international trade partners in order to either ensure fair competition or facilitate the free movement of goods, persons and services.

### What we want to achieve

Harmonise requirements where this ensures fair competition or facilitates the free movement of goods, persons and services.

### How we monitor improvement

The EASA Advisory Bodies will give feedback on the effectiveness of the activities.

### How we want to achieve it: actions

#### Rulemaking

##### RMT.0300 Operations with airships

Development of rules for the operation of airships

*This task has been put on hold until further notice.*

**Owner** Affected stakeholders

EASA FS.2 Airship operators

##### RMT.0318 Single-engine helicopter operations

Review the applicable rules and the associated AMC and GM in order to re-evaluate:

- Restrictions on piston engine helicopters to operate over hostile environment;
- Restrictions on single-engine helicopters to operate over congested environment.

**Owner** Affected stakeholders

EASA FS.2 Helicopter operators

| PIA | Proc | 3rdC | ToR     | NPA     | Opinion | Commission IR | Decision |
|-----|------|------|---------|---------|---------|---------------|----------|
| B-  | ST   | -    | 2017 Q4 | 2018 Q1 | 2020 Q2 | 2021 Q2       | 2021 Q2  |

##### RMT.0325 HEMS performance and public interest sites

To properly address the issues stemming from non-implementation or deviation from JAR-OPS 3 performance and public interest sites (PIS) provisions, in particular performance in high mountains considering review of helicopter emergency medical services (HEMS) flights at night safety level following a UK Safety Directive.

**Owner** Affected stakeholders

EASA FS.2 Helicopter CAT and HEMS operators

| PIA | Proc | 3rdC | ToR        | NPA     | Opinion | Commission IR | Decision |
|-----|------|------|------------|---------|---------|---------------|----------|
| B-  | ST   | -    | 26/03/2014 | 2018 Q1 | 2018 Q3 | 2019 Q4       | 2019 Q4  |





**RMT.0492 Development of FTL for CAT operations of emergency medical services by aeroplanes and helicopters**

Harmonised and state-of-the-art rules for EMS

**Owner**

EASA FS.2

**Affected stakeholders**

Develop harmonised and state of the art rules for EMS.

| PIA | Proc | 3rdC | ToR        | NPA        | Opinion | Commission IR | Decision |
|-----|------|------|------------|------------|---------|---------------|----------|
| B-  | ST   | -    | 18/04/2012 | 30/10/2017 | 2018 Q3 | 2019 Q3       | 2019 Q3  |

**RMT.0493 Update and harmonisation 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**

Develop harmonised and state-of-the-art-rules for air taxi and single-pilot operations.

**Owner**

EASA FS.2

**Affected stakeholders**

CAT aeroplane operators

| PIA | Proc | 3rdC | ToR        | NPA        | Opinion | Commission IR | Decision |
|-----|------|------|------------|------------|---------|---------------|----------|
| B-  | ST   | -    | 21/08/2012 | 30/10/2017 | 2018 Q3 | 2019 Q3       | 2019 Q3  |

**RMT.0495 FTL requirements for commercial operations other than CAT**

Establish harmonised and state-of-the-art rules for commercial operations other than CAT.

**Owner**

EASA FS.2

**Affected stakeholders**

Commercial operators

| PIA | Proc | 3rdC | ToR     | NPA     | Opinion | Commission IR | Decision |
|-----|------|------|---------|---------|---------|---------------|----------|
| A2  | ST   | -    | 2020 Q2 | 2021 Q2 | 2023 Q1 | 2024 Q3       | 2024 Q3  |



## 8.6 Maintenance organisations – service providers – CAMOS

### Issue/rationale

Rules may need to be harmonised within the EU as well as with the main international trade partners in order to either ensure fair competition or facilitate the free movement of goods, persons and services.

### What we want to achieve

Harmonise requirements where this ensures fair competition or facilitates the free movement of goods, persons and services.

### How we monitor improvement

The EASA Advisory Bodies will give feedback on the effectiveness of the activities.

### How we want to achieve it: actions

#### Rulemaking

#### **RMT.0096 Amendments (IR and AMC/GM) in line with the process of granting foreign Part-145 approvals**

Streamline the approval process

#### Owner

EASA FS.1

#### Affected stakeholders

Maintenance organisations

| PIA | Proc | 3rdC | ToR        | NPA        | Opinion | Commission IR | Decision |
|-----|------|------|------------|------------|---------|---------------|----------|
| B-  | ST   | -    | 17/06/2008 | 11/07/2013 | n/a     | n/a           | 2020 Q3  |



## 8.7 Horizontal issues

### Issue/rationale

Rules may need to be harmonised within the EU as well as with the main international trade partners in order to either ensure fair competition or facilitate the free movement of goods, persons and services.

### What we want to achieve

Harmonise requirements where this ensures fair competition or facilitates the free movement of goods, persons and services.

### How we monitor improvement

The EASA Advisory Bodies will give feedback on the effectiveness of the activities.

### How we want to achieve it: actions

#### Rulemaking

##### **RMT.0707 Medical Regulation — Combine Part-MED and Part ATCO MED**

The main benefits are that Medical Assessor (MA) within the authorities, and the Aero-medical Examiner (AME) and Aeromedical centres (AeMC) only need to use one common regulatory document, encouraging harmonisation and removing duplication between Part-MED and Part ATCO.MED. Consequently, the regulation should be easier to keep up to date. Moreover, currently AMEs and AeMCs require duplicate certifications on both Part-MED and Part ATCO.MED.

The task may also consider alleviations to the existing pilot age limitation by applying a more evidence-based medical approach, subject to existing scientific evidence available as a results of EASA commissioned study on pilot age limitations, complemented with other scientific research on the same topic.

#### Owner

EASA FS.3

#### Affected stakeholders

MAs, AMEs, AeMC, pilots, ATCOs

| PIA | Proc | 3rdC | ToR     | NPA     | Opinion | Commission IR | Decision |
|-----|------|------|---------|---------|---------|---------------|----------|
| B5  | ST   | -    | 2019 Q1 | 2019 Q3 | 2021 Q3 | 2022 Q4       | 2022 Q4  |



## Appendix A: Deliverables expected in 2018

### Terms of Reference (ToRs):

| Driver                       | Baseline Quarter | Task Number | Task Title  | Count     |
|------------------------------|------------------|-------------|---|-----------|
| Safety                       | 1                | RMT.0713    | Reduction in human factors caused rotorcraft accidents that are attributed to the rotorcraft design                   | 1         |
|                              | 2                | RMT.0376    | Anti-collision systems on aircraft other than aeroplanes in excess of 5 700 kg or 19 pax                              | 1         |
|                              | 3                | RMT.0706    | Update of authority and organisation requirements   | 1         |
|                              |                  | RMT.0116    | Real weight and balance of an aircraft  | 1         |
|                              |                  | RMT.0194    | Competency-based training   | 1         |
|                              |                  | RMT.0544    | Review of Part-147  | 1         |
|                              | 4                | RMT.0722    | Provision of aeronautical data by the aerodrome operator  | 1         |
|                              |                  | RMT.0127    | Pilot compartment view  | 1         |
|                              |                  | RMT.0708    | Controlled Flight into Terrain (CFIT) prevention with Helicopter Terrain Avoidance Warning Systems (HTAWS)            | 1         |
| Efficiency / Proportionality | 1                | RMT.0161    | Conformity assessment   | 1         |
|                              |                  | RMT.0692    | Regular update of the acceptable means of compliance and guidance material on the safety (key) performance indicators | 1         |
|                              | 2                | RMT.0392    | Regular updates of OPS rules  | 1         |
|                              | 3                | RMT.0255    | Review of Part-66   | 1         |
|                              |                  | RMT.0712    | Enhancement of the safety assessment processes for rotorcraft designs   | 1         |
| Level Playing field          | 1                | RMT.0577    | Extended diversion time operations  | 1         |
|                              | 4                | RMT.0312    | Review of standard weight   | 1         |
| <b>TOTAL</b>                 |                  |             |   | <b>16</b> |



**Notice of Proposed Amendments (NPAs):**

| Driver                              | Baseline Quarter | Task Number | Task Title  | Count   |
|-------------------------------------|------------------|-------------|---|---|
| <b>Safety</b>                       | 1                | RMT.0570    | Reduction of runway excursions  | 1.0   |
|                                     |                  | RMT.0599    | Update of ORO.FC  | 1.0   |
|                                     |                  | RMT.0648    | Aircraft cybersecurity  | 1.0   |
|                                     |                  | RMT.0703    | Runway Safety   | 1.0   |
|                                     |                  | RMT.0720    | Cybersecurity risks   | 1.0   |
|                                     | 2                | RMT.0118    | Analysis of on-ground wings contamination effect on take-off performance degradation                            | 1.0   |
|                                     |                  | RMT.0251    | Embodiment of safety management system requirements into Commission Regulations (EU) Nos 1321/2014 and 748/2012 | 1.0   |
|                                     |                  | RMT.0262    | Embodiment of level of involvement (LOI) requirements into Part-21  | 1.0   |
|                                     | 3                | RMT.0070    | Additional airworthiness specifications for operations: Fire hazard in Class D cargo compartments               | 1.0   |
|                                     |                  | RMT.0106    | Certification specifications and guidance material for maintenance certifying staff type rating training        | 1.0   |
|                                     |                  | RMT.0704    | Runway surface condition assessment and reporting   | 1.0   |
|                                     |                  | 4           | RMT.0120  | Helicopter ditching and water impact occupant survivability |
|                                     | RMT.0400         |             | Amendment of requirements for flight recorders and underwater locating devices                                  | 1.0   |
| <b>Efficiency / Proportionality</b> | 1                | RMT.0230    | Introduction of a regulatory framework for the operation of drones  | 0.5   |
|                                     |                  | RMT.0499    | Regular update of CS-MMEL   | 1.0   |
|                                     |                  | RMT.0591    | Regular update of aerodrome rules   | 1.0   |
|                                     |                  | RMT.0687    | Regular update of CS 23   | 1.0   |
|                                     | 2                | RMT.0037    | Regular update of CS-22   | 1.0   |
|                                     |                  | RMT.0605    | Regular update of CS-LSA  | 1.0   |
|                                     |                  | RMT.0673    | Regular update of CS-25   | 1.0   |
|                                     | 3                | RMT.0230    | Introduction of a regulatory framework for the operation of drones  | 0.5   |
|                                     |                  | RMT.0524    | Data link services  | 1.0   |
|                                     |                  | RMT.0690    | Regular update of CS-STAN   | 1.0   |
|                                     |                  | 4           | RMT.0031  | Regular update of AMC/GM to Part-21                         |
| <b>Level playing field</b>          | 1                | RMT.0318    | Single-engined helicopter operations  | 1.0   |
|                                     |                  | RMT.0325    | HEMS performance and public interest sites  | 1.0   |
|                                     | 2                | RMT.0384    | Open rotor engine & installation  | 1.0   |
|                                     |                  | RMT.0541    | Aircraft Type Ratings for Part-66 Aircraft Maintenance License  | 1.0   |
| <b>TOTAL</b>                        |                  |             |   | <b>27.0</b>   |



**Decisions:**

| Driver                              | Baseline Quarter | Task Number                       | Task Title  | Count     |
|-------------------------------------|------------------|-----------------------------------|---|-----------|
| <b>Safety</b>                       | 1                | RMT.0196                          | Improve flight simulation training devices (FSTDs) fidelity   | 1         |
|                                     | 2                | RMT.0249                          | Recorders installation and maintenance thereof — certification aspects  | 1         |
|                                     |                  | RMT.0608                          | Rotorcraft gearbox loss of lubrication  | 1         |
|                                     |                  | RMT.0647                          | Loss of control or loss of flight path during go-around or climb  | 1         |
|                                     |                  | RMT.0671                          | Engine bird ingestion   | 1         |
|                                     | 3                | RMT.0397                          | Unintended or inappropriate rudder usage — rudder reversals   | 1         |
|                                     | 4                | RMT.0469                          | Assessment of changes to functional systems by service providers in ATM/ANS and the oversight of these changes by competent authorities | 1         |
|                                     |                  | RMT.0570                          | Reduction of runway excursions  | 1         |
| <b>Efficiency / Proportionality</b> | 1                | RMT.0638                          | Certification requirements for VFR heliports located at aerodromes falling under the scope of the Basic Regulation                      | 1         |
|                                     | 2                | RMT.0128                          | Regular update of CS-27&29, CS VLR  | 1         |
|                                     |                  | RMT.0624                          | Technical and operational requirements for remote tower operations  | 1         |
|                                     |                  | RMT.0643                          | Regular update of AMC-20  | 1         |
|                                     | 3                | RMT.0230                          | Introduction of a regulatory framework for the operation of drones  | 1         |
|                                     |                  | RMT.0456                          | Integrated modular avionics (IMA)   | 1         |
|                                     |                  | RMT.0457                          | Regular update of EASA TSOs   | 1         |
|                                     |                  | RMT.0499                          | Regular update of CS-MMEL   | 1         |
|                                     |                  | RMT.0687                          | Regular update of CS 23   | 1         |
|                                     |                  | RMT.0721                          | RAMP Deregulation   | 1         |
|                                     | 4                | RMT.0037                          | Regular update of CS-22   | 1         |
|                                     |                  | RMT.0184                          | Regular update of CS-E  | 1         |
|                                     | RMT.0591         | Regular update of aerodrome rules | 1   |           |
|                                     |                  | RMT.0605                          | Regular update of CS-LSA  | 1         |
| <b>Level Playing field</b>          | 4                | RMT.0541                          | Aircraft Type Ratings for Part-66 Aircraft Maintenance License  | 1         |
| <b>TOTAL</b>                        |                  |                                   |   | <b>23</b> |



**Opinions:**

| Opinion   | Task Number | Driver  | Task Title  | Baseline Quarter |
|-----------|-------------|---|---|------------------|
| <b>1</b>  | RMT.0230    | Efficiency / Proportionality  | Introduction of a regulatory framework for the operation of drones                                | <b>1</b>         |
| <b>2</b>  | RMT.0464    | <b>Safety</b>   | Requirements for air traffic services   |                  |
| <b>3</b>  | RMT.0681    |   | Alignment of implementing rules & AMC/GM with Regulation (EU) No 376/2014                         |                  |
| <b>4</b>  | RMT.0249    | <b>Level playing field</b>  | Recorders installation and maintenance thereof — certification aspects                            | <b>2</b>         |
|           | RMT.0296    |   | Review of aeroplane performance requirements for CAT operations                                   |                  |
|           | RMT.0695    |   | Non-ETOPS operations using performance class A aeroplanes with an MOPSC of 19 or less             |                  |
| <b>5</b>  | RMT.0379    |   | All-weather operations  |                  |
| <b>6</b>  | RMT.0573    |   | Fuel planning and management  | <b>3</b>         |
| <b>7</b>  | RMT.0325    |   | HEMS performance and public interest sites  |                  |
| <b>8</b>  | RMT.0492    |   | Development of FTL for CAT operations of emergency medical services by aeroplanes and helicopters |                  |
|           | RMT.0493    | Update and harmonisation 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 |   |                  |
| <b>9</b>  | RMT.0654    | <b>Efficiency / Proportionality</b>   | Revision of the balloon licensing requirements  | <b>4</b>         |
|           | RMT.0677    |   | Easier access of General Aviation (GA) pilots to instrument flight rules (IFR) flying             |                  |
|           | RMT.0701    |   | Revision of the sailplane licensing requirement   |                  |
| <b>10</b> | RMT.0018    | <b>Level playing field</b>  | Installation of parts and appliances that are released without an EASA Form 1 or equivalent       | <b>4</b>         |
|           | RMT.0252    |   | Instructions for continuing airworthiness (ICA)   |                  |
| <b>11</b> | RMT.0570    | <b>Safety</b>   | Reduction of runway excursions  |                  |
| <b>12</b> | RMT.0589    |   | Rescue and firefighting services (RFFS) at aerodromes   |                  |



**Decision pending IR:**

| Driver                       | Baseline Quarter                  | Task Number | Task Title   | Count        |
|------------------------------|-----------------------------------|-------------|--|--------------|
| Safety                       | 2                                 | RMT.0069    | Seat crashworthiness improvement on large aeroplanes — Dynamic testing 16g   | 1.00         |
|                              |                                   | RMT.0071    | Additional airworthiness specifications for operations: Thermal/acoustic insulation material   | 1.00         |
|                              |                                   | RMT.0225    | Development of an ageing aircraft structure plan   | 1.00         |
|                              |                                   | RMT.0251    | Embodiment of safety management system requirements into Commission Regulations (EU) Nos 1321/2014 and 748/2012  | 1.00         |
|                              | 3                                 | RMT.0188    | Update of EASA FCL implementing rules  | 0.50         |
|                              |                                   | RMT.0262    | Embodiment of level of involvement (LOI) requirements into Part-21   | 1.00         |
|                              |                                   | RMT.0581    | Loss of control prevention and recovery training   | 0.50         |
|                              | 4                                 | RMT.0516    | Update of the rules on air operations (Air OPS Regulation - all Annexes & related AMC/GM)  | 1.00         |
| Efficiency / Proportionality | 2                                 | RMT.0135    | B2L and L Part-66 aircraft maintenance licences  | 1.00         |
|                              |                                   | RMT.0591    | Regular update of aerodrome rules  | 1.00         |
|                              |                                   | RMT.0657    | Review of the Aircrew Regulation in order to provide a system for private pilot training outside approved training organisations, and of the associated acceptable means of compliance and guidance material | 1.00         |
|                              | 3                                 | RMT.0230    | Introduction of a regulatory framework for the operation of drones   | 1.00         |
|                              |                                   | RMT.0587    | Regular update of regulations regarding pilot training, testing and checking and the related oversight   | 1.00         |
|                              | 4                                 | RMT.0639    | Performance-based navigation implementation in the European air traffic management network   | 1.00         |
|                              |                                   | RMT.0674    | Revision of the European operational rules for balloons  | 1.00         |
|                              |                                   | RMT.0352    | Non-commercial operations of aircraft listed in the operations specifications (OpSpecs) by an AOC holder   | 1.00         |
|                              |                                   | RMT.0476    | Regular update of SERA IR (stemming from ICAO SL)  | 1.00         |
|                              |                                   | RMT.0547    | Task force for the review of Part-M for General Aviation (PHASE II)  | 1.00         |
| RMT.0591                     | Regular update of aerodrome rules | 1.00        |  |              |
| Level playing field          | 3                                 | RMT.0379    | All-weather operations   | 1.00         |
|                              | 4                                 | RMT.0485    | Requirements for Apron Management Services at aerodromes   | 1.00         |
| Environment                  | 2                                 | RMT.0560    | Halon — Update of Part-26 to comply with ICAO standards  | 1.00         |
|                              | 4                                 | RMT.0513    | Update CS 36 to refer to the environmental technical manual on noise certification as amended after CAEP/10  | 0.50         |
|                              |                                   | RMT.0514    | Implementation of the CAEP/10 amendments   | 0.50         |
| <b>TOTAL</b>                 |                                   |             |  | <b>22.00</b> |





## Appendix B: New and deleted tasks overview

### New tasks:

#### Regulation:

| Strategic Priorities | Driver     | Action Area  | Task Number | Task Title   | Start date |
|----------------------|------------|--|-------------|--|------------|
| strategic            | Safety     | New products, systems, technologies and operations | RMT.0720    |  | 2017       |
| standard             | Efficiency | Regular updates/review of Rules                    | RMT.0721    | RAMP Deregulation  |            |
| strategic            | Safety     | Runway Safety                                      | RMT.0722    | Provision of aeronautical data by the aerodrome operator |            |

#### Research:

| Strategic Priorities | Driver      | Action Area  | Task Number | Task Title   | Start date |
|----------------------|-------------|--|-------------|--|------------|
| Strategic            | Safety      | Design and Maintenance Improvements                                      | RES.008     | Rotorcraft main gear boxes (MGB) integrity improvements (by design)  | 2017       |
| Strategic            | Safety      | Helicopter operation   | RES.009     | Ditching in water or a Survivable water impact (SWI) for Rotary wing aircrafts (Helicopter, Tilt Rotor, Compound Rotorcraft) |            |
| Strategic            | Safety      | Loss of Control In-Flight  | RES.010     | Ice crystal detection  |            |
| Strategic            | Safety      | Aircraft tracking, rescue operation and incident/accident investigations | RES.011     | Underwater Evacuation from Helicopters   |            |
| Strategic            | Safety      | New products, systems, technologies and operations                       | RES.012     | Cybersecurity: common aeronautical vulnerabilities database  |            |
| Strategic            | Safety      | Aircraft tracking, rescue operation and incident/accident investigations | RES.013     | Quick recovery of flight data recordings   |            |
| Strategic            | Safety      | Design and Maintenance Improvements                                      | RES.014     | Air Data Enhanced Fault Detection & Diagnosis  |            |
| Strategic            | Safety      | New products, systems, technologies and operations                       | RES.015     | Vulnerability of manned aircraft to drone strike   |            |
| Strategic            | Safety      | Fire, smoke and Fumes  | RES.016     | Fire risks with large PED in checked luggage   |            |
| Strategic            | Safety      | Loss of Control In-Flight  | RES.017     | Icing hazard linked to Super Large Droplet (SLD)   |            |
| Strategic            | Environment | Climate Change   | RES.018     | Development of Particulate Matter (PM) regulations and guidelines  |            |
| Strategic            | Environment | Climate Change   | RES.019     | Aviation Emissions Support   |            |
| Strategic            | Safety      | New products, systems, technologies and operations                       | RES.020     | Identify helicopter technologies with safety benefits.   |            |



#### Safety Promotion:

| Strategic Priorities | Driver | Action Area          | Task Number | Task Title  | Start date |
|----------------------|--------|----------------------|-------------|---|------------|
| Standard             | Safety | Safety Management    | MST.026     | SMS Assessment  | 2017       |
| Standard             | Safety | General Aviation     | MST.027     | Develop Just Culture in GA  |            |
| Strategic            | Safety | Safety Management    | SPT.092     | Improve dissemination of existing Safety Promotion material by developing mobile applications & e-platforms |            |
| Strategic            | Safety | Helicopter operation | SPT.093     | Develop new Safety Promotion material on high profile helicopter safety issues                              |            |
| Strategic            | Safety | Helicopter operation | SPT.094     | Helicopter safety & risk management   |            |
| Strategic            | Safety | Helicopter operation | SPT.095     | Promote helicopter technologies with safety benefits  |            |
| Strategic            | Safety | Helicopter operation | SPT.096     | Organise an annual Safety Workshop at HELITECH Intl.  |            |

#### Deleted task:

| Strategic Priorities | Driver                         | Action Area         | Task Number | Task Title  | Reason  |
|----------------------|--------------------------------|---------------------|-------------|---|---|
| standard             | Efficiency/<br>Proportionality | Manufacturers       | RMT.0017    | 21A.163 POA privileges  | <p>This task was discussed in the early days of EASA and a pre-RIA was drafted in 2006, 11 years ago. The NPA was intended to address an amendment to IR Part 21 paragraphs 21A.163 and 21A.183 and the associated AMC/GM material by:</p> <ul style="list-style-type: none"><li>– Adding a POA privilege under 21A.163 for the issue of an initial Airworthiness Review Certificate;</li><li>– Extension of the maintenance privilege of 21A.163(d) in time and to other products and parts; and</li><li>– Making the conditions for the issuance of a C of A for new aircraft as stated in 21A.183(1)(ii) consistent with the POA privilege.</li></ul> <p>The first two issues are not safety related and the maintenance privileges can be covered by the organisation holding a Part-145 approval. For smaller companies this request for extended maintenance privileges is part of the considerations for the Part-21 proportionality task. The third bullet point is no longer relevant because 21.A.183 was deleted with amending Regulation (EC) No 1194/2009.</p> |
| Standard             | Level playing field            | Airlines            | RMT.0209    | Contracting of continuing airworthiness management activities | An opinion will be issued to close the task.  |
| Standard             | Safety                         | Managing the flight | RES.007     | Terrain and obstacle awareness for light aircraft             |   |



## Appendix C: EPAS safety objectives vs EASA strategic objectives

| EPAS action area        |   |  | EASA's strategic objectives  |  |   |   |  |  |   |   |  |  |  |   |   |  |  |  |  |  |  |  |
|-------------------------|---|--|--|--|---|---|--|--|---|---|--|--|--|---|---|--|--|--|--|--|--|--|
|                         |   |  | 1.1 Facilitating competitiveness, innovation and emerging technologies which generate European success.    | 1.2 Sustaining worldwide recognition for the European aviation safety system | 2.1 Applying an advanced, pro-active and systematic approach to aviation safety | 2.2 Using information technology to the benefit of the European Safety Management process | 3.1 Identifying safety deficiencies and taking corrective actions in a common, coordinated and rapid manner. | 3.2 Integrating technical resource management at European level for efficiency, effectiveness and flexibility. | 3.3 Establishing a new resource scheme to sustain the European aviation safety system | 4.1 Empowering individuals to develop, engage and grow so as to deliver on our priorities | 4.2 Creating a quality work environment that helps staff succeed | 4.3 Pledging to improve, refine and simplify processes, procedures and practices so as to drive efficiency | 5.1 Redefining and simplifying Rulemaking activities | 5.2 Assessing Rules and Regulations to ensure they are effective, proportionate and remain relevant | 6.1 Demonstrating integrity by assuring technical independence and robustness of safety decision-making | 6.2 Minimising the consequences of political or unexpected constraints that may impact on aviation safety. |  |  |  |  |  |  |
| Systemic issues         | Safety Management   | Work with authorities and organisations to implement safety management.  |  |  |   |   |  |  |   |   |  |  |  |   |   |  |  |  |  |  |  |  |
|                         | Aviation personnel  | Ensure continuous improvement of aviation personnel competence.  |  |  |   |   |  |  |   |   |  |  |  |   |   |  |  |  |  |  |  |  |
|                         | Aircraft tracking, rescue operation and accident investigations | Increase safety by facilitating the recovery of information by safety investigation authorities, thus helping to avoid future accidents.                   |  |  |   |   |  |  |   |   |  |  |  |   |   |  |  |  |  |  |  |  |
| Operational issues      | CAT by Aeroplanes   | Loss of control in flight  | Further reduce the risk of accidents in this category  |  |   |   |  |  |   |   |  |  |  |   |   |  |  |  |  |  |  |  |
|                         |   | Design and maintenance improvements  | Improve overall safety in relation to bird ingestion, ditching, etc. through targeted design improvements. |  |   |   |  |  |   |   |  |  |  |   |   |  |  |  |  |  |  |  |
|                         |   | Mid-air collisions   | Further reduce the risk of MACs.   |  |   |   |  |  |   |   |  |  |  |   |   |  |  |  |  |  |  |  |
|                         |   | Runway safety  | Reduce the number of RES and RIs in fixed wing commercial air transport.                                   |  |   |   |  |  |   |   |  |  |  |   |   |  |  |  |  |  |  |  |
|                         |   | Ground safety  | Further reduce the risk of accidents in this category.   |  |   |   |  |  |   |   |  |  |  |   |   |  |  |  |  |  |  |  |
|                         |   | Controlled flight into terrain   | Further reduce the risk of accidents in this category.   |  |   |   |  |  |   |   |  |  |  |   |   |  |  |  |  |  |  |  |
|                         |   | Fire, smoke and fumes  | Further reduce the risk of accidents in this category.   |  |   |   |  |  |   |   |  |  |  |   |   |  |  |  |  |  |  |  |
|                         | Helicopter operations   | Reduce the overall accident rate in helicopter operations.   |  |  |   |   |  |  |   |   |  |  |  |   |   |  |  |  |  |  |  |  |
| General aviation safety | Improve GA pilot risk awareness and airmanship.                 |  |  |  |   |   |  |  |   |   |  |  |  |   |   |  |  |  |  |  |  |  |
| Emerging issues         | New products, systems, technologies and operations              | Manage the introduction of new products, systems, technologies, and operations.  |  |  |   |   |  |  |   |   |  |  |  |   |   |  |  |  |  |  |  |  |
|                         | Regulatory and oversight considerations                         | Improve MS oversight capacities and capabilities.  |  |  |   |   |  |  |   |   |  |  |  |   |   |  |  |  |  |  |  |  |
|                         | New business models   | Evaluate whether the existing safety regulatory system adequately addresses current and future safety risks arising from new and emerging business models. |  |  |   |   |  |  |   |   |  |  |  |   |   |  |  |  |  |  |  |  |



## Appendix D: European Commission's priorities and EASA's Strategic Plan

EASA is a European Union body, therefore its planning exercise must be aligned to the 10 key priorities defined by the Juncker's Commission at the beginning of its mandate, which are the following:

- 1. Jobs, Growth and Investment**
  - ✓ Creating jobs and boosting growth
- 2. Digital Single Market**
  - ✓ Bringing down barriers to unlock online opportunities
- 3. Energy Union and Climate**
  - ✓ Making energy more secure, affordable and sustainable
- 4. Internal Market**
  - ✓ Stronger industry, fewer national trade barriers, stricter business ethics
- 5. Economic and Monetary Union**
  - ✓ A deeper and fairer economic and monetary Union
- 6. EU-US Free Trade**
  - ✓ Reaching a reasonable and balanced trade agreement
- 7. Justice and Fundamental Rights**
  - ✓ Upholding shared values, the rule of law and fundamental rights
- 8. Migration**
  - ✓ Towards a European agenda on Migration
- 9. EU as a Global Actor**
  - ✓ A stronger global actor
- 10. Democratic Change**
  - ✓ Making the EU more democratic

Out of the above priorities for the transport sector, Commissioner Bulc identified the following as key priorities:

- Jobs, Growth and Investment
- Internal Market
- EU as a Global Actor
- Democratic Change

Cascading from these priorities, the Transport Agencies of the European Commission have been assigned the following objectives:

- Become global leaders
- One-stop shop for all domain-related matters
- Efficiency effort to be made, in particular on the simplification of processes
- Support to the industry
- Strategic alignment with the Juncker Objectives
- Innovative funding schemes

The Agency reviewed its planning framework taking into account all the elements above, aiming for a clear cascade from the Commission's vision to its objectives and actions. This led to the development of 6 strategic statements that represent the goals to be achieved by the Agency. The strategic statements respond to the inputs analysed by the Agency as well as the objectives set by Commissioner Bulc.

**1. Our ambition is to be the foremost Aviation Safety Agency in the world**

*(Linked to the Juncker objective: EU as Global Actor)*

**2. The Agency works on safety, in a proactive manner, helped by an enhanced safety analysis capability**

*(Linked to the Juncker objective: EU as Global Actor)*

**3. One system based on partners working in an integrated, harmonised and coordinated manner**

*(Linked to the Juncker objective: Jobs, Growth and Investment)*



**4. The Agency builds on committed, agile and talented staff**

*(Linked to the Juncker objective: EU as Global Actor)*

**5. Rules are smart, proportionate and contribute to the competitiveness of the Industry**

*(Linked to the Juncker objective: Jobs, Growth and Investment)*

**6. The Agency will continue to be independent from political or economic influence in all its safety actions**

*(Linked to the Juncker objective: EU as Global Actor)*

The strategic statements are then developed into Strategic Objectives, which have been used to derive the strategic priorities of the EPAS. They can be found in our Single Programming Document (Chapter 5)<sup>17</sup> and are extracted here for better reference:

| <i>Strategic statement</i>   |     | <b>Objective</b>  | <b>Outcome</b>  | <b>Action</b>   |
|--|-----|---|---|---|
| <b>1. Our ambition is to be the foremost Aviation Safety Agency in the world</b>                               | 1.1 | Facilitating competitiveness, innovation and emerging technologies which generate European success        | Achieving proportionate and performance-based regulatory actions that efficiently maintain safety, stimulate jobs, growth and European industry                             | EASA increases safety and environmental performance by facilitating new technology deployment, impact assessment, analysis and mitigation of risks, and ex post evaluations.  |
|  | 1.2 | Sustaining worldwide recognition for the European aviation safety system                                  | Recognition and respect as a strong partner with integrity, transparency and professional excellence  | EASA shall implement an ‘international strategy’, promote European aviation standards and continue improving global safety and environmental protection levels.   |
| <b>2. The Agency works on safety, in a proactive manner, helped by an enhanced safety analysis capability.</b> | 2.1 | Applying an advanced, pro-active and systematic approach to aviation safety                               | In consultation with National Aviation Authorities and industry, develop a Safety Management capability that can programme and deliver effective and robust safety actions. | Within the framework of the European Plan for Aviation Safety (EPAS), EASA shall assess, integrate and programme actions that result in Safety Promotion, Focused Oversight or Rulemaking.  |
|  | 2.2 | Using information technology to the benefit of the European Safety Management process                     | Managerial and technical processes and interactions with stakeholders are universal, simplified and streamlined   | Consistent with strategic priorities, EASA shall implement integrated safety and environmental programming. Taking a holistic approach, EASA shall manage the analysis of complex safety data efficiently and effectively. EASA shall follow an ‘Information Security Roadmap’ to protect its technical infrastructure. |
| <b>3. One system based on partners working in an integrated, harmonised and coordinated manner</b>             | 3.1 | Identifying safety deficiencies and taking corrective actions in a common, coordinated and rapid manner   | A comprehensive risk-based oversight system provides safety performance monitoring of aviation activities.  | EASA shall develop and implement one harmonised risk-based oversight system capable of targeted and timely responses to identified issues.  |
|  | 3.2 | Integrating technical resource management at European level for efficiency, effectiveness and flexibility | Competent well-trained technical experts can be deployed in a coordinated manner to support safety activities and National Aviation Authorities throughout Europe.          | EASA shall lead the integration of planning, deployment and support for the ‘common pool’ of experts. EASA shall develop and maintain an ‘EASA Virtual Academy’.  |
|  | 3.3 | Establishing a new resource scheme to sustain the European aviation safety system                         | One new harmonised resource management mechanism that forecasts revenues and reliably provides funds over the complete business cycle. Cooperative oversight and            | EASA shall investigate, report and recommend innovative and proportionate new funding mechanisms.   |

<sup>17</sup> Single Programming Document (SPD) 2017-2020 is accessible here: <http://www.easa.europa.eu/system/files/dfu/EASA%20MB%20Decision%2011-2016%20Annex%20SPD%202017-2020.pdf>



## European Plan for Aviation Safety EPAS 2018–2022

### Appendix D: European Commission's priorities and EASA Strategic Plan

| Strategic statement   | Objective | Outcome   | Action  |   |
|---|-----------|---|---|---|
| <b>4. The Agency builds on committed, agile and talented staff</b>  | 4.1       | Empowering individuals to develop, engage and grow so as to deliver on our priorities                   | pooling of experts at EU level are included.<br>Clear, concise and complete HR policies, procedures and practices that include encompassing recognition, training and development | For all activities, EASA shall ensure regular tailored job evaluations, professional growth opportunities and succession planning for its staff.  |
|   | 4.2       | Creating a quality work environment that helps staff succeed  | Facilities that encourage team work, cooperation and collaboration and encompass a paperless workplace with up-to-date support tools  | EASA shall provide customised work premises and tools for active staff collaboration and support.   |
|   | 4.3       | Pledging to improve, refine and simplify processes, procedures and practices so as to drive efficiency. | Stakeholders receive an efficient, straightforward, quality service at a high level of availability and low level of bureaucracy.   | EASA shall implement improvements, track progress, benchmark and review performance; with particular attention to certificate applicants and the Fees & Charges framework.  |
| <b>5. Rules are smart, proportionate and contribute to the competitiveness of the Industry.</b>                     | 5.1       | Redefining and simplifying rulemaking activities  | Consultation mechanisms and rules, opinions and guidance that are objective, understandable and responsive to demand  | EASA shall monitor, and if necessary, restructure its consultative bodies in order to assure a consistent, efficient and effective approach. In addition, EASA shall consistently conduct preliminary impact assessments. |
|   | 5.2       | Assessing rules and regulations to ensure they are effective, proportionate and remain relevant.        | A smart feedback loop constantly improving aviation rules and regulations.  | In consultation with stakeholders, EASA shall regularly review enacted rules and regulations to maintain, amend, remove or replace them with measures like safety promotion.  |
| <b>6. The Agency will continue to be independent from political or economic influence in all its safety actions</b> | 6.1       | Demonstrating integrity by assuring technical independence and robustness of safety decision-making     | Technical safety decision-making that is objective, based on analysis, impact assessment and fair judgment and not influenced by bias or undue influence.                         | EASA shall maintain a conflict of interest management system and strengthen existing mechanisms such as the job rotation scheme.  |
|   | 6.2       | Minimising the consequences of political or unexpected constraints that may impact on aviation safety   | Problems are anticipated and countermeasures are enacted so that safety risks are minimised and stakeholder expectations are satisfied  | EASA shall employ data-based decision-making processes and establish practical measures to counter safety risks stemming from resource constraints and the impact of undue influence.                                     |



## Appendix E: Policy on performance-based regulation

### Introduction

A performance-based approach is intended to make aviation safer, more efficient and flexible. Performance-based regulations (PBR) have been in existence for decades; however, no consistent and systematic approach to implementing PBR principles has been implemented so far at EASA level. To support a consistent, systematic and performance-based management of aviation safety, in 2014 EASA issued a paper laying down general principles and key concepts for ensuring a harmonised European approach in that area<sup>18</sup>. The PBE paper proposed further work on performance-based oversight as well as performance-based regulations.

This paper focuses on PBR and includes:

- Terminology to enhance a common understanding;
- A PBR policy to guide future action; and
- An implementation plan.

PBR are those regulations where the implementing rules focus on desired, measurable outcomes, rather than on defining prescriptive means and conditions for achieving compliance with the requirements. The objective of PBR is thus to better focus on critical safety outcomes and to increase regulatory efficiency.

Besides the regulation of aviation safety, this 'performance-based' approach may also apply to regulating capacity/efficiency, level playing field or environmental protection.

The expected benefits of PBR are threefold: resilience, flexibility, safety management.

**Resilience:** The increased complexity in operations and aviation activities, the dynamics of aviation business models, fast and proliferating technologic development require a regulatory framework capable of anticipating changes.

**Flexibility:** By focusing on safety outcomes, PBR provide flexibility and encourage innovation by not restricting a priori the means to control specific risks.

**Safety management:** By providing a flexible implementation framework and focusing on safety outcomes, PBR allow organisations and authorities to foster risk management capability and to better allocate resources against risks identified under their SMS and SSP.

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<sup>18</sup> A Harmonised European Approach to a Performance-Based Environment (PBE), available on the EASA website.



## Terminology<sup>19</sup>

### **Prescriptive rule:**

*A rule that specifies what needs to be done and how.*

### **Performance-based rule:**

*A rule that specifies what the outcome should be instead of how to achieve the outcome.*

‘Performance-based rules’ come in different shapes and variants, which can generally be associated with one of the below categories:

**Objective-based rules:** only the objective is defined, not the means to achieve it.

Example: *‘Records must be stored in a manner that ensures preservation and traceability throughout the entire lifecycle.’*

**Process-based rules:** specific organisational requirements and/or processes are prescribed as enablers of a desired outcome.

Example: *‘The operator shall establish, implement and maintain a management system that includes the identification of aviation safety hazards entailed by the activities of the operator, their evaluation and the management of associated risks, including taking actions to mitigate the risk and verify their effectiveness.’*

**Performance-standard-based rules:** a set of performance metrics (quantitative and qualitative) is defined based on which to determine whether a system or process is operating in accordance with expectations

Example: *“Record keeping must ensure that lost/destroyed record incidents remain below 2 over any 2 year period.”*

## **PBR Policy**

Through the consultation of A-NPA 2014-12<sup>20</sup> on the topic of ‘Reinforcing the performance-based approach’ stakeholders, while acknowledging the benefits of such approach, called for a consolidation of the existing regulatory system before implementing any new approach, in particular by ensuring uniform interpretation and application of the existing rules.

EASA agrees with stakeholder views that PBR should not totally replace the prescriptive elements of the framework, but should rather gradually complement them further or possibly replace them where appropriate.

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<sup>19</sup> While the term ‘regulation’s encompasses essential requirements, implementing rules, Certification Specifications, AMC and GM, these definitions apply to essential requirements and implementing rule material only.

<sup>20</sup> ‘European Commission policy initiative on aviation safety and a possible revision of Regulation (EC) No 216/2008’ - <https://www.easa.europa.eu/system/files/dfu/A-NPA%202014-12.pdf>





The PBR policy includes the following elements:

1. The further introduction or review of performance-based elements in regulations shall be gradual and be part of the overall change management process to implement safety management in accordance with ICAO Annex 19.
2. To encourage and maximise the potential of proactive safety management introducing SMS should go in parallel with a review of existing prescriptive requirements, in particular in relation to items requiring competent authority involvement and to the nature of oversight, where both should be adapted to the level of risk and performance.
3. Combinations of prescriptive and performance-based elements should be determined depending on context and domain.
  - a. Inclusion of prescriptive elements should be balanced with the need to ensure resilience of the Implementing Rules, provide flexibility, enhance safety management and efficiency.
  - b. Inclusion of performance-based elements shall consider :
    - safety criticality of non-compliance;
    - impact on international harmonisation;
    - impact on oversight capabilities;
    - proportionality and flexibility; and
    - risk management capability of regulated entities.
4. As far as relevant, the above principles shall apply to the EASA Authority Requirements and Organisation Requirements and should be promoted for any other regulation within the EASA remit.
5. EASA shall ensure consistency in the use of prescriptive and performance-based elements across domains.

### **Implementation Plan**

Implementation of a performance-based approach must take due account of the need to consolidate and stabilise the existing regulatory framework.

Implementation in specific areas shall be carefully assessed, considering the particular issue to be addressed, the benefits and drawbacks of different types of rules; specifically how they can be overseen in the field and their effects on international harmonisation, compliance with ICAO standards and on the level playing field. Related impact assessments shall specifically consider the diversity of national legal and administrative systems across Europe, the implementation costs for industry and NAAs and the impact on smaller NAAs.

The gradual process to introduce PBR complementing or as a replacement for prescriptive rules should allow to identify key areas where the benefits of PBR are expected to be significant. This process should also allow identifying which parts of the rules are obsolete and can be deleted without replacement.



The implementation plan addresses:

- the method to assess the need for a performance-based approach;
- oversight methodologies;
- the establishment of priorities for candidate PBR;
- the implementation process.

#### *Pre-Impact Assessment / Impact assessment*

Identification of key areas suitable for PBR shall be made on the basis of sound **Impact Assessment** (IA). The new Rulemaking Process promotes IA as a tool to have ‘less and better regulation’ as well as to implement a performance-based approach. Impact Assessments will be the means to determine if an area should rather be regulated in a prescriptive way or if it qualifies for PBR. This determination shall be addressed in three different phases:

- **Preliminary Impact Assessment** (PIA), occurring at programming phase, will consider the possibility of using more performance-based elements [e.g. find the optimal combination between soft law (i.e. Certification Specifications, Acceptable Means of Compliance and Guidance Material) and hard law (i.e. Implementing Rules)];
- **Regulatory Impact Assessment** (RIA) accompanying the drafting of the Notice of Proposed Amendment (NPA); it will support the inclusion of performance based elements by way of checking:
  - if the objective of at least one of the 3 benefits is met: resilience, flexibility, safety management;
  - if at least an equivalent level of safety compared to a prescriptive rule will be ensured;
  - if effective oversight and enforcement will be ensured, taking into account the cost burden on NAAs, particularly the smaller ones;
  - if the impact, if any, on international harmonisation and mutual recognition can be minimised.
- **Ex post evaluation**, assessing the implementation of the rules and systematically considering the possible introduction of performance-based elements as a tool for increasing regulatory efficiency.

#### *Oversight*

The introduction of PBR shall be supported by common advanced oversight methodologies ensuring harmonised implementation (including where relevant related AMCs and GM) to enable competent authorities to monitor compliance and assess performance as part of their oversight.

EASA’s capabilities to ensure uniform interpretation and application of the existing rules shall be strengthened.

#### *Priorities in the Rulemaking Programme (RMP)*

Priorities for selecting candidate Implementing Rules for PBR shall be:

- identified as part of the **Rulemaking Programming** process;
- confirmed through **Impact Assessment** or **Ex Post evaluation** of Rules;
- discussed and **agreed with stakeholders** on that basis;
- formalised in the **Rulemaking Programme**.



### *Implementation Process*

The above approach will allow to fully embed the performance-based approach in the Rulemaking Process.

The gradual introduction of PBR will be effectively implemented through and accompanied by:

- a consistent, transparent and continual action plan, the Rulemaking Programme, which will define related actions in terms of rulemaking, oversight and safety promotion;
- the rulemaking procedure, as revised in 2015, aiming at efficient processing, enhanced impact assessment and uniform application of standards for the drafting of PBR;
- education of top and middle management of NAAs.

Implementation starts as a continuous process with the 2017–2021 planning cycle, i.e. with the implementation of the new rulemaking process and the preparation of the 2017–2021 RMP. In line with the new approach regarding planning and programming, all related actions (regulatory action, oversight, training or safety promotion) are managed as a single project.

Throughout this process, proper change management, including communication and training, will be ensured.

Finally, working in partnership with the NAAs and industry is a key success factor in PBR implementation.



## **Appendix F: Policy on Safety Management Systems**

### **General**

- 1.1. The main purpose of an SMS is to ensure that, beyond assuring mere compliance with regulations, organisations have the capacity of identifying the risks they may pose to flight safety and mitigating those risks.
- 1.2. Accidents having generally multiple, cross-domain causes. Authorities and organisations should have a consistent approach when dealing with the identification of hazards and management of safety risks.
- 1.3. In its report ‘Harmonised European Approach to a Performance Based Environment’ EASA identified that effective implementation of SMS is the most important driver for implementing a risk- and performance-based approach<sup>21</sup>.

### **Applicability and consistency**

- 1.4. As a general principle, all organisations exposed to or possibly contributing to aviation safety risks, should be subject to SMS requirements. Possible exceptions should be determined based on:
  - the overall contribution of a particular activity to the safety of the total system;
  - the relative costs and benefits of SMS implementation both for organisations and authorities.This may concern notably Part-147 Training Organisations and DOA limited to minor changes and repairs.
- 1.5. Applicability dates should be adapted to the type of activity of the organisations, in particular as regards their contribution to aviation safety risks.
- 1.6. In order to minimise changes in existing regulations and therefore the impact on organisations, the introduction of SMS requirements into new domains should be based on a careful gap analysis between existing requirements and the ICAO Annex 19 framework.
- 1.7. While minimising those changes, the resulting regulations should foster consistent implementation of SMS in the regulated fields. This is particularly important for those organisations holding multiple approvals within the scope of the Basic Regulation.
- 1.8. Common core authority requirements should apply in all technical domains to support the standardisation objectives set out in the Basic Regulation, support the implementation of SSP/EPAS, to streamline competent authority management systems and procedures, and to ensure consistency in organisation approvals.

### **Proportionality and flexibility**

- 1.9. The Organisation’s SMS must be commensurate with the size and complexity of the organisation and the level of risks involved.
- 1.10. To ensure proportionality and flexibility, the SMS requirements at Implementing Rule level should be limited to key principles. Non-essential implementation provisions should be included as AMC.

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<sup>21</sup> This view also aligns with the majority views expressed by stakeholders through the A-NPA 2014-12 consultation as related to question 3.1.1.



1.11. The implementation provisions at AMC level should be further adapted to the size, nature and complexity of specific technical domains or categories of organisations, while ensuring a consistent approach between different technical domains.

### **Implementation**

1.12. The development and acceptance of industry standards and Safety Promotion material should be encouraged to support SMS implementation

1.13. SMS implementation should be given reasonable time, beyond the mere implementation deadline, following a phased, performance-based approach.

1.14. Further emphasis should be put on supporting the implementation of simple, robust and proportionate SMS for simple, low-risk organisations.

### **General Aviation and small organisations**

1.15. Safety management principles, centred on the individual, should systematically be considered when developing or amending regulations

### **International harmonisation**

1.16. The common EASA management system framework should address the elements of ICAO Annex 19 while providing proportionality and flexibility. However, a less prescriptive and more proportionate approach than the ICAO Annex 19 SARPS is desirable.



## Appendix G: Acronyms and Definitions

|                |  |
|----------------|--|
| 14 CFR Part 25 | airworthiness standards: transport category airplanes                                      |
| 14 CFR Part 33 | airworthiness standards: aircraft engines  |
| 4G             | fourth generation of wireless mobile telecommunications technology                         |
| PIA A          | strategic  |
| PIA B          | standard   |
| PIA C          | regular update   |
| AAD            | advanced anomaly detection   |
| ACAS           | airborne collision avoidance system  |
| ADR            | aerodromes   |
| ADS-B          | automatic dependent surveillance - broadcast   |
| ADS-C          | automatic dependent surveillance - contract  |
| AFIS           | aerodrome flight information service   |
| Air Crew       | air operations   |
| AMAN           | arrival management   |
| AMC            | acceptable means of compliance   |
| AMC 20         | general Acceptable Means of Compliance for airworthiness of products, parts and appliances |
| AMM            | aircraft maintenance manual  |
| AMO            | approved maintenance organisation  |
| ANAC           | Agência Nacional de Aviação Civil (Portuguese national aviation authority)                 |
| ANS            | air navigation services  |
| ANSP           | air navigation service provider  |
| AOC            | air operator certificate   |
| AP             | accelerated procedure  |
| ARAC           | Aviation Rulemaking Advisory Committee   |
| ARC            | aircraft airworthiness review certificate OR abnormal Runway contact                       |
| ASAGA          | aeroplane state awareness during go-around   |
| ASAWG          | ARAC Airplane-level Safety Analysis Working Group  |
| ASR            | safety analysis report   |
| ATC            | air traffic control  |
| ATCO           | air traffic controller   |
| ATM            | air traffic management   |
| ATO            | approved training organisation   |
| ATPL           | air transport pilot licence  |
| ATQP           | Alternative and Training Qualification Programme   |
| ATS            | air traffic services   |



## **European Plan for Aviation Safety EPAS 2018–2022**

### *Appendix G: Acronyms and definitions*

|                  |   |
|------------------|---|
| AV-CERT          | Aviation Computer Emergency Response Team   |
| AWO              | all-weather operations  |
| B777             | Boeing 777  |
| Basic Regulation | Regulation (EC) No 216/2008 of 20/02/2008 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/E |
| BEA              | Bureau d'Enquetes et d'Analyses   |
| BPL              | balloon pilot licence   |
| CA               | competent authority   |
| CAA              | civil aviation authority  |
| CAEP             | Committee on Aviation Environmental Protection (ICAO)   |
| CAEP/10          | tenth meeting of the committee on Aviation Environmental Protection   |
| CAG              | Collaborative Analysis Group  |
| CAMOs            | continuing airworthiness management organisation  |
| CASA             | Civil Aviation Safety Authority of Australia  |
| CAT              | commercial air transport  |
| CAT I, II, III   | category I, II, III   |
| CAW              | continuing airworthiness  |
| CBT              | competency-based training   |
| CFIT             | controlled flight into terrain  |
| CO <sub>2</sub>  | carbon dioxide  |
| CPDLC            | controller–pilot data link communication  |
| CPL              | commercial pilot licence  |
| CRM              | crew resource management  |
| CS               | certification specification   |
| CS SIMD          | Certification Specifications for Simulator Data   |
| CS VLR           | Certification Specifications for Very Light Rotorcraft  |
| CS-22            | Certification Specifications for sailplanes and powered sailplanes  |
| CS-23            | Certification Specifications for normal, utility, aerobatic and commuter aeroplanes   |
| CS-25            | Certification Specifications for large aeroplanes   |
| CS-26            | Certification Specifications for additional airworthiness specifications for operations   |
| CS-27            | Certification Specifications for small rotorcraft   |
| CS-29            | Certification Specifications for large rotorcraft   |
| CS-34            | Certification Specifications for aircraft engine emissions and fuel venting   |
| CS-ACNS          | Certification Specifications for Airborne Communication, Navigation and Surveillance  |
| CS-APU           | Certification Specifications for Auxiliary Power Units  |
| CS-CC            | Certification Specifications for cabin crew data  |
| CS-E             | Certification Specifications for Engines  |
| CS-ETSO          | Certification Specifications for European Technical Standard Orders   |



## **European Plan for Aviation Safety EPAS 2018–2022**

### *Appendix G: Acronyms and definitions*

|              |   |
|--------------|---|
| CS-FCD       | Certification Specifications for flight crew data                                     |
| CS-LSA       | Certification Specifications for Light Sport Aeroplanes                               |
| CS-MMEL      | Certification Specifications for Master Minimum Equipment List                        |
| CS-STAN      | Certification Specifications for Standard Changes/Standard Repairs                    |
| CS-VLA       | Certification Specifications for Very Light Aeroplanes                                |
| CVS          | combined vision systems   |
| CZ           | Czech Republic  |
| DAH          | design approval holder  |
| DAT.OR       | organisational requirements for the data service providers                            |
| DAT provider | (aeronautical) data provider, indirectly, competent authority                         |
| DAT.TR       | technical requirements for the provision of data services                             |
| D-ATIS       | digital - automatic terminal information service                                      |
| DCL          | departure clearance   |
| DLS          | data link services  |
| DOA          | design organisation approval  |
| DP           | direct publication  |
| DTO          | declared training organisation  |
| D-TAXI       | delivery of planned and cleared departure routes by datalink                          |
| ETSO         | European technical standard order   |
| EAFDM        | European Authorities Coordination Group on Flight Data Monitoring                     |
| EAPPRE       | European Action Plan for the Prevention of Runway Excursions                          |
| EASA         | European Aviation Safety Agency   |
| EASA CT      | EASA Certification  |
| EASA CT.2    | EASA General Aviation & Remotely Piloted Aircraft Systems (RPAS) Department           |
| EASA CT.5    | EASA Environment Department   |
| EASA CT.7    | EASA Certification Policy & Safety Information Dept.                                  |
| EASA FS.1    | EASA Maintenance & Production Dept.   |
| EASA FS.1.2  | EASA Maintenance Regulations Section  |
| EASA FS.2    | EASA Air Operations Department  |
| EASA FS.2.4  | EASA Safety Assessment of Foreign Aircraft Section                                    |
| EASA FS.3    | EASA Aircrew & Medical Department   |
| EASA FS.4    | EASA Air Traffic Management/Air Navigation Services (ATM/ANS) & Aerodromes Department |
| EASA FS.4.2  | EASA Air Traffic Management/Air Navigation Services (ATM/ANS) Regulations Section     |
| EASA FS.4.3  | EASA Aerodromes Regulations Section   |
| EASA FS.5    | EASA Policy & Planning Department   |
| EASA SM 2.1  | EASA Safety Programmes Section  |
| EASA SM.1    | EASA Safety Intelligence & Performance Department                                     |
| EASA SM.2    | EASA Strategy & Programmes Department   |





## **European Plan for Aviation Safety EPAS 2018–2022**

### *Appendix G: Acronyms and definitions*

|           |   |
|-----------|---|
| EATMN     | European air traffic management network   |
| EBT       | evidence-based training   |
| EC        | European Commission   |
| ECAST     | European Commercial Aviation Safety Team  |
| ECQB      | European Central Question Bank  |
| ECTRL     | Eurocontrol   |
| EDTO      | extended diversion time operation   |
| EFB       | electronic flight bag   |
| EGAST     | European General Aviation Safety Team   |
| EHEST     | European Helicopter Safety Team   |
| ELA       | European light aircraft   |
| EMS       | emergency medical services  |
| EPAS      | European Plan for Aviation Safety   |
| EOFDM     | European Operators Flight Data Monitoring forum   |
| ESSI      | European Strategic Safety Initiative  |
| ETOPS     | extended-range twin-engine operational performance standards  |
| ETSOA     | European technical standard order (authorisation)   |
| EU        | European Union  |
| EU-OPS    | Commission Regulation (EC) No 859/2008 of 20 August 2008 amending Council Regulation (EEC) No 3922/91 as regards common technical requirements and administrative procedures applicable to commercial transportation by aeroplane |
| EUROCAE   | European Organisation for Civil Aviation Equipment  |
| EVS       | enhanced vision systems   |
| FAA       | Federal Aviation Administration   |
| FABs      | functional airspace blocks  |
| FAR 33.90 | Federal Aviation Regulation Section 33.90 — Initial maintenance inspection test   |
| FbW/FBW   | fly-by-wire   |
| FCHWG     | ARAC Flight Controls Harmonisation Working Group  |
| FCOM      | flight crew operating manual  |
| FDM       | flight data monitoring  |
| FEM       | flight examiner manual  |
| FIS       | flight information services   |
| F-NI      | fire - non-impact   |
| FOT       | focused oversight   |
| F-POST    | fire - post accident  |
| FR        | France  |
| FRM       | fatigue risk management   |
| FSTD      | flight synthetic training devices   |
| FTE       | flight test engineer  |



## **European Plan for Aviation Safety EPAS 2018–2022**

### *Appendix G: Acronyms and definitions*

|             |  |
|-------------|--|
| FTL         | flight time limitation                                 |
| FTS         | flight time specifications                             |
| FW          | fixed wing   |
| GA          | general aviation                                       |
| GASP        | Global Aviation Safety Plan (ICAO)                     |
| GBAS        | ground based augmentation system                       |
| GCOL        | ground collision                                       |
| GLS         | GBAS (ground-based augmentation system) landing system |
| GM          | guidance material                                      |
| GNSS        | global navigation satellite system                     |
| GPS         | global positioning system                              |
| H2020       | Horizon 2020   |
| HE          | helicopter   |
| HEMS        | helicopter emergency medical services                  |
| HF          | human factor   |
| HOSSWG      | Helicopter Offshore Safety and Survival Working Group  |
| HPA         | high-performance aircraft                              |
| HTAWS       | helicopter terrain avoidance warning systems           |
| HUD         | head-up displays                                       |
| HUMS        | health and usage monitoring systems                    |
| IATA        | International Air Transport Association                |
| ICA         | instructions for Continued Airworthiness               |
| ICAO        | International Civil Aviation Organization              |
| ICAO SL     | ICAO State letter                                      |
| IFE         | In-flight entertainment                                |
| IFR         | instrument flight rules                                |
| ILS         | instrument landing system                              |
| IMA         | Integrated modular avionics                            |
| IMC         | instrument meteorological conditions                   |
| IMI         | initial maintenance inspection                         |
| Init. Airw. | initial airworthiness                                  |
| IR          | (Commission) Implementing rule                         |
| IR          | Instrument rating                                      |
| JAA         | Joint Aviation Authorities                             |
| JAR-25      | joint aviation requirements                            |
| JARUS       | Joint Authorities for Rulemaking on Unmanned Systems   |
| KRE         | key risk element                                       |
| LAPL        | light aircraft pilot licence                           |



## **European Plan for Aviation Safety EPAS 2018–2022**

### *Appendix G: Acronyms and definitions*

|              |  |
|--------------|--|
| LAPL(A)      | allows pilots to act as pilot in command on aeroplanes or touring motor gliders    |
| LAPL(S)      | allows pilots to act as pilot in command on EASA sailplanes and powered sailplanes |
| LFTE         | lead flight test engineer  |
| LO           | learning objective   |
| LOCART       | loss of control avoidance and recovery training                                    |
| LOC-I        | loss of control - inflight   |
| LOI          | level of involvement   |
| LVO          | low visibility operations  |
| MAC          | mid-air collision  |
| MCF          | maintenance check flights  |
| MET          | meteorology/meteorologic   |
| MET provider | Meteorological service provider, indirectly, competent authority                   |
| MH17         | Malaysia Airlines flight 17  |
| MMEL         | master minimum equipment list  |
| mn           | minutes  |
| MO           | maintenance organisation   |
| MOPS         | minimum operational performance specification                                      |
| MOPSC        | maximum operational passenger seating configuration                                |
| MPL          | multi-crew pilot licence   |
| MRB          | Maintenance Review Board   |
| MS           | Member States  |
| MST          | Member States' tasks   |
| MTO          | maintenance training organisation  |
| MTOM         | maximum take-off mass  |
| NAAs         | national aviation authorities  |
| NCC          | non-commercial air operations with complex motor-powered aircraft                  |
| NCO          | non-commercial air operations with other-than-complex motor-powered aircraft       |
| NDB          | non-directional beacon   |
| NextGen      | next generation  |
| NO           | Norway   |
| NoA          | Network of Analysts  |
| NPA          | notice of proposed amendment   |
| OEM          | original equipment manufacturer  |
| OJ           | Official Journal of the European Union   |
| OPS          | air operations   |
| OpSpecs      | operations specifications  |
| ORO.FC.      | organisation requirements for air operations - flight crew                         |
| PANS         | procedures for air navigation services (ICAO)                                      |



|                   |   |
|-------------------|---|
| Part-21           | airworthiness and environmental certification of aircraft and related products, parts and appliances, as well as for the certification of design and production organisations |
| Part-145          | maintenance organisation approvals  |
| Part-147          | training organisations requirements   |
| Part-21 Subpart H | Airworthiness certificates and restricted certificates of airworthiness   |
| Part-26           | additional airworthiness requirements for operations  |
| Part-66           | certifying staff  |
| Part-ARO          | authority requirements for air operations   |
| Part-FCL          | flight crew licensing   |
| Part-M            | continuing airworthiness requirements   |
| Part-MED          | medical certification of pilots, medical fitness of cabin crew, certification of AMEs and requirements of GMPs and OHMPs  |
| Part-SPO          | specialised Operations  |
| pax               | passengers  |
| PBN               | performance-based navigation  |
| PBR               | performance-based regulations   |
| PCP               | pilot common project (SESAR)  |
| PIA               | preliminary impact assessment   |
| PIS               | public interest sites   |
| PM CPDLC          | protected mode controller–pilot data link communication   |
| POA               | production organisation approval  |
| PPL               | private pilot license   |
| Q                 | quarter   |
| RAMP              | aerodrome ramp  |
| RE                | runway excursion  |
| RES               | research actions  |
| RFFS              | rescue and firefighting services  |
| RFID              | radio frequency identification  |
| RI                | runway incursion  |
| RIA               | regulatory impact assessment  |
| RI-VAP            | runway incursion (vehicle animal person)  |
| RMP               | rulemaking programme  |
| RMT               | rulemaking task   |
| RNAV              | area navigation   |
| SARPS             | standards and recommended practices (ICAO)  |
| SA CAT I          | Special approval CAT I  |
| SBAS              | satellite based augmentation system   |
| SCF-NP            | system component failure (non-powerplant)   |
| SCF-PP            | system component failure (powerplant)   |



## **European Plan for Aviation Safety EPAS 2018–2022**

### *Appendix G: Acronyms and definitions*

|                            |  |
|----------------------------|--|
| SERA IR                    | standardised European rules of the air implementing rule   |
| SERA Part C                | Commission Implementing Regulation (EU) 2016/1185 of 20 July 2016 amending Implementing Regulation (EU) No 923/2012 as regards the update and completion of the common rules of the air and operational provisions regarding services and procedures in air navigation (SERA Part C) and repealing Regulation (EC) No 730/2006 |
| SES                        | Single European Sky  |
| SESAR                      | Single European Sky ATM Research   |
| SET                        | single-engined turbine   |
| SLD                        | supercooled large droplets   |
| SMICG                      | Safety Management International Collaboration Group  |
| SMS                        | safety management systems  |
| SOPs                       | standard operating procedures  |
| SPI                        | safety performance indicator   |
| SPL                        | sailplane pilot license  |
| SPN                        | Safety Promotion Network   |
| SPT                        | safety promotion   |
| SR                         | safety recommendation  |
| SR FRAN-2011-006           | French Safety recommendation from 2011 No 6  |
| SSIP                       | supplemental structural inspection programme   |
| SSP                        | state safety programme   |
| ST                         | standard procedure   |
| STC                        | supplemental type certificate  |
| STD                        | synthetic training device  |
| STeB                       | stakeholder technical body   |
| Subpart SPO.SPEC           | specialised operations specific requirements   |
| Subparts J & K of Part-FCL | instructors and examiners  |
| SVGS                       | synthetic vision guidance systems  |
| SVS                        | synthetic vision systems   |
| SWIM                       | system-wide information management   |
| TAWS                       | terrain awareness warning system   |
| TBD                        | to be determined   |
| TBO                        | time between overhaul  |
| TC                         | type certificate   |
| TCAS                       | traffic collision avoidance system   |
| TCCA                       | Transport Canada Civil Aviation  |
| TCP                        | tricresyl phosphate  |
| TeB                        | Member State technical body  |
| TEM                        | threat and error management  |
| TMA                        | terminal manoeuvring area  |



**European Plan for Aviation Safety EPAS 2018–2022**  
*Appendix G: Acronyms and definitions*

|         |   |
|---------|---|
| TO      | training organisation   |
| ToR     | terms of reference  |
| TSO     | technical standard order  |
| UAS     | unmanned aircraft systems                                       |
| UDPP    | user-driven prioritisation process                              |
| UK      | United Kingdom  |
| UPRT    | upset prevention and recovery training                          |
| VFR     | visual flight rules   |
| VHF     | digital - automatic terminal information service                |
| VOR     | VHF omnidirectional range                                       |
| VHM     | vibration health monitoring                                     |
| VLA     | very light aeroplane  |
| WFD     | widespread fatigue damage                                       |
| WIDDCWG | Water Impact, Ditching Design and Crashworthiness Working Group |
| WP      | working paper   |



## Appendix H: Working groups owning EPAS Actions

### EAFDM

#### [Web Link](#)

The Agency and NAAs have formed a group of experts called the **European Authorities Coordination Group on FDM** (EAFDM). It is a voluntary and independent safety initiative with the following objectives:

- a) contribute to improving the implementation of FDM programmes and to making FDM programmes more safety effective;
- b) contribute to the EASA objective of a high and uniform level of safety in Europe; and
- c) contribute to a better overview of air transport operational safety in Europe for EASA and NAAs.

Among the topics covered by EAFDM are:

- Development of national FDM forums;
- Oversight of FDM programs by NAAs; and
- FDM-based indicators.

### EOFDM

#### [Web Link](#)

The **European Operators Flight Data Monitoring** (EOFDM) forum is a project of a voluntary partnership between European operators and the European Aviation Safety Agency (EASA) in order to:

- a) facilitate the implementation of Flight Data Monitoring (FDM) by Operators,
- b) help operators draw the maximum safety benefits from an FDM Programme

### CTIG

The **Common Training Initiative Group** (CTIG), is composed of training managers from national aviation authorities. The CTIG plays a crucial role in the implementation of the new EASA aviation training strategy. The Group is mandated to harmonise training and assessment standards for aviation inspectors, with the aim to provide for highly qualified and sufficiently trained authority inspectors across Europe.

The CTIG deliverables will, among others, contribute to the functioning of the pool-of-experts, will be used for the training-related annex in NAA Partnership Agreements and will strengthen the role of EASA as an RSOO (Regional Safety Oversight Organisation).

### NoA

#### [Web Link](#)

The **Network of Analysts** was established in 2011 to provide a collaborative framework for the EASA MS to work together on safety analysis activities. The NoA was formalized within European Regulation (EU) 376/2014 and has a role in analysing the European Central Repository of mandatory occurrences to support both the EPAS and the State Safety Programmes of the EASA MS. The NoA works closely with the CAGs in the identification of Safety Issues, Safety Risk Assessment and the monitoring of safety performance.

### SM ICG

#### [Web Link](#)

The **SMS International Collaboration Group** (SMICG) — created in February 2009 — is a collaboration activity between aviation authorities in order to promote a common understanding of SMS principles and requirements in different countries, share lessons learned and encourage progress and harmonisation. The SMICG consists of a core group and a participant group. The core group is comprised of authorities with resources and expertise for product development. It



## European Plan for Aviation Safety EPAS 2018–2022

### Appendix H: Working groups owning EPAS Actions

includes members from the FAA, EASA (supported by FOCA of Switzerland, the DGAC of France, AESA Spain, the CAA of the Netherlands, ENAC Italy, Trafi Finland and UK CAA, TCCA, CASA of Australia, JCAB of Japan, CAA of New Zealand and ANAC of Brazil). The participant group tests and reviews the core group's work products and resources. Additionally, the Civil Aviation Department of Hong Kong (CAD HK), ICAO, and the UAE General Civil Aviation Authority (UAE GCAA) are observers to this group.

#### SPN

##### [Web Link](#)

The **Safety Promotion Network (SPN)** is a voluntary partnership between EASA and other aviation organisations. The objective of the Safety Promotion Network is to enhance aviation safety in Europe by providing a framework for the collaboration of safety promotion activity throughout the EASA Member States (MS).

For mutual benefit and a common purpose the members of the safety promotion network take on these objectives:

- exchanging information.
- coordinating activities.
- cooperating and sharing joint activities.
- collaborating to increase the capacity for activities.

#### ESPN-R

##### [Web Link](#)

The **European Safety Promotion Network Rotorcraft (ESPN-R)** is a mixed industry-authorities team established by the Rotorcraft Sectorial Committee (RSC) in January 2017.

The ESPN-R develops, disseminates and evaluates Safety Promotion (SP) material and actions on a voluntary basis in support of the RSC, of EASA and of the industry. The ESPN-R can also contribute to Safety Promotion campaigns

#### CAG

The **Collaborative Analysis Groups** operate at a domain level to enable EASA to work with both the EASA MS and industry on the tasks of identifying Safety Issues, Safety Risk Assessment and the monitoring of Safety Performance. The CAGs provide a mechanism for external engagement with industry and the Member States' NoA Representatives on the Safety Risk Portfolios, which are used to ensure agreement on the Key Risk Areas and Safety Issues in each domain. CAGs have already been established for CAT Aeroplanes, Offshore Helicopters and Balloons. Over the coming year, further groups will be established to cover the other operational domains.

#### Advisory Bodies

##### [Web Link](#)

A large number of proposed Agency actions directly affect the Member States and the Industry. So called **advisory bodies** provide the Agency with a forum for consultation of interested parties and national authorities on Agency priorities, both at strategic and technical level.

The following advisory bodies are relevant for the EPAS:

- Member States Technical Bodies (TeBs): The TeBs are Technical Bodies encompassing the scope of the TAGs and Standardisation meetings and enlarging their scope to also include safety promotion.
- Stakeholder Technical Bodies (STeBs): In the recent restructuring of the advisory bodies, the STeBs replace the sub-committees of the Safety Standards Consultative Committee (SSCC) and they are responsible for reviewing and committing to concrete actions that address the specific Safety Issues at sectorial and technical level.
- Member State Advisory Body (MAB): The MAB is strategic body encompassing and extending the scope of RAG, EASAC and EASp Summit and advising on strategic developments.
- Stakeholder Advisory Body (SAB): The SAB replace the Safety Standards Consultative Committee (SSCC) and the EASA Advisory Board (EAB) and within the Safety Risk Management process is responsible for advising on strategic developments.





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| RMT.0371 | 44 | RMT.0577 | 88 |
| RMT.0376 | 38 | RMT.0581 | 34 |
| RMT.0379 | 88 | RMT.0586 | 41 |
| RMT.0384 | 91 | RMT.0587 | 84 |
| RMT.0392 | 82 | RMT.0588 | 41 |
| RMT.0393 | 40 | RMT.0589 | 29 |
| RMT.0397 | 33 | RMT.0591 | 84 |
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| RMT.0412 | 82 | RMT.0596 | 29 |
| RMT.0414 | 62 | RMT.0599 | 29 |
| RMT.0424 | 83 | RMT.0601 | 89 |



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| RMT.0605 | 84 |
| RMT.0608 | 48 |
| RMT.0624 | 80 |
| RMT.0638 | 68 |
| RMT.0639 | 81 |
| RMT.0643 | 84 |
| RMT.0647 | 34 |
| RMT.0648 | 58 |
| RMT.0654 | 74 |
| RMT.0657 | 72 |
| RMT.0668 | 84 |
| RMT.0671 | 42 |
| RMT.0673 | 84 |
| RMT.0674 | 74 |
| RMT.0677 | 73 |
| RMT.0678 | 73 |
| RMT.0679 | 81 |
| RMT.0681 | 25 |
| RMT.0682 | 81 |
| RMT.0684 | 84 |
| RMT.0686 | 42 |
| RMT.0687 | 84 |
| RMT.0688 | 84 |
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| RMT.0700 | 30 |
| RMT.0701 | 74 |
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