

## EUROPEAN PLAN FOR AVIATION SAFETY (EPAS)

## VOLUME II EPAS actions 2024 Edition

**European Union Aviation Safety Agency** 

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## Introduction

#### General

This EPAS Volume II edition provides an update of the detailed list and description of EPAS actions, in evolution of the Volume II edition of the previous year. It builds upon the strategic priorities defined in EPAS Volume I 2023-2025.

With the 2024 edition EASA included 3 new specific RMTs, 6 new regular update RMTs (related to newly adopted Regulations to address in the future, whenever necessary, non-controversial, non-complex amendments resulting, for instance, from lessons learnt of their implementation), 1 new MST, 7 new RES projects and 2 new ISTs. The most important new actions are, addressing

- Systemic safety and resilience:
  - MST.0043 Improvement of data quality in occurrence reporting; RES.0059 Impact of climate change on CAT aeroplanes;
- Competence of personnel:
  - RES.0055 Training media allocation: simulator vs actual flying;
- Operational safety:
  - RMT.0741 Take-off performance parameters and position errors large aeroplanes;
  - RES.0054 Detection of lithium batteries using airport screening equipment;
  - IST.0002 Conformity Assessment (ATM ground equipment);
- New technologies and operational concepts:
  - RMT.0742 Artificial Intelligence Trustworthiness;
  - RMT.0747 High airspace operations;
  - IST.0003 Support the implementation of U-Space Regulation.

Furthermore, 2 existing RES were split into 5 distinct RES actions to allow for a better project management.

At the same time 5 RMTs, 5 RES and 4 SPT were completed throughout 2023 and 3 more actions were deleted.

Overall, this edition now includes 164 active EPAS actions, with 64 Rulemaking Tasks (RMTs), 31 Safety Promotion Tasks (SPTs), 21 Member State Tasks (MSTs), 43 Research projects (RES), 2 Evaluation Tasks (EVT) and 3 Implementation Support Tasks (ISTs). In addition to that, 11 actions are on hold and 12 regular update tasks are inactive.

#### How Volume II is structured

The structure of Volume II reflects the various domains defined within the European SRM process to provide a link with the corresponding safety data portfolios included in the ASR and the Safety Risk Portfolios in Volume III :

- All systemic safety issues are grouped within **Chapter 1** which is further subdivided to address the various action areas.
- All issues related to competence of personnel are included in a separate **Chapter 2**.
- All actions other than those related to systemic safety and competence of personnel, corresponding to the drivers 'safety', 'level playing field' and/or 'efficiency/proportionality' are grouped per domain (see Chapter 3 to 11).

- All actions corresponding to the driver 'environment' are included in a separate **Chapter 12**.
- Regular-update RMTs are included in the respective **domain** chapter.

The table below provides an overview of the structure of Volume II:

EPAS Volume II 2024 edition	Title
1	Systemic safety and resilience
2	Competence of personnel
3	Flight operations — aeroplanes
4	Rotorcraft
5	General Aviation
6	Design and production
7	Maintenance and continuing airworthiness management
8	Air traffic management/air navigation services (ATM/ANS)
9	Aerodromes and ground handling
10	Unmanned aircraft systems and manned VTOL-capable aircraft
11	New technologies and concepts
12	Environmental protection

Within each chapter/section, actions are grouped per EPAS action type (RMT, IST, SPT, RES, EVT, MST) and within each action type, they are listed in ascending order of the unique EPAS action reference number.

More information on the types of EPAS actions and the corresponding action templates can be found at <a href="https://www.easa.europa.eu/sites/default/files/dfu/EPAS">https://www.easa.europa.eu/sites/default/files/dfu/EPAS</a> action types and templates.pdf.

Where an action is relevant to more than one domain, its full description is included in the main domain chapter, and a reference to it is added in the other domain chapter(s).

#### Example:

An action for flight crew training in the rotorcraft domain is included with its full description in Chapter 2 'Competence of personnel'. In addition, a reference to it is provided in Chapter 4 'Rotorcraft'.

References to the safety issues in EPAS Volume III are included at action level, where relevant. Safety issues which were transferred from one Safety Risk Portfolio to another with the 2024 edition are referred to at the given EPAS action as follows: 'SI-new reference number (old reference number)', e.g. 'SI-9009 (8039)'.

#### Appendices to Volume II

EPAS Volume II is complemented by six appendices with additional information in support of or for easy access to the information provided in Volumes I, II and III:

- Appendix A: Rulemaking and safety promotion deliverables published in 2023
- Appendix B: Rulemaking deliverables planned for 2024
- Appendix C: Overview of new actions, actions deleted, put on hold or completed in 2023
- Appendix D: Overview of the Strategic Priorities i.a.w. EPAS Volume I 2023-2025 edition
- Appendix E: Key indicators in terms of EPAS actions
- Appendix F: Overview of Best Intervention Strategies



#### **EPAS supporting documents**

EPAS Volume II is complemented by the following supporting documents:

- Information on the different types of actions and related templates: <u>https://www.easa.europa.eu/downloads/134924/en</u>
- A list of EPAS acronyms & definitions is available here: https://www.easa.europa.eu/sites/default/files/dfu/list\_of\_epas\_acronyms\_and\_definitions.pdf
- An overview of ICAO SARPS amendments with details on their transposition into EU rules, organised by ICAO Annexes, is available here: Transposition table of ICAO SARPS | EASA (europa.eu)

# 1. Systemic safety and resilience





## 1. Systemic safety and resilience

This area addresses system-wide issues that affect aviation as a whole. In most scenarios, these issues are related to the impact of security on safety, human factors and human performance, socio-economic factors, or to deficiencies in organisational processes and procedures, whether at authority or industry level.

## **1.1** Risk interdependencies

**Refer to EPAS Volume I Section 3.1.1 Manage risk interdependencies** 

#### 1.1.1 Management of information security risks

#### Issue / rationale

The management of information security risks that have an impact on safety is a strategic priority.

The global civil aviation system accelerates towards more digitalisation. This implies that any exchange of information within any digital workflow of the aviation community needs to be resilient to information security (cybersecurity) threats which have far-reaching consequences, such as on flight safety or the availability of airspace.

The safety actions in this area are aimed at mitigating the information-security-related safety risks.

#### What we want to achieve

Increase aviation safety by managing the impact of information security risks on safety and mitigating the related safety risks.

#### How we monitor improvement

Continuous assessment of the safety-related cybersecurity posture and mitigation of information security risks.

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



## IST.0001 Supporting the implementation of the IS management system (ISMS) by industry and NCAs

Following the adoption of the Part-IS regulation (Commission Delegated Regulation (EU) 2022/1645), the Commission Implementing Regulation (EU) 2023/203 and the publication of related AMC and GM, a number of activities are planned to support the implementation of the new regulatory framework, including but not limited to:

- defining competence objectives for the different roles involved in the implementation of the ISMS and its oversight; and
- launching pilot projects with volunteer organisations to implement Part-IS ahead of the applicability date.

Furthermore, aviation stakeholders will be encouraged to keep the focus on cybersecurity resources investment by:

- maintaining a high level of awareness through information sharing;
- promoting the reporting of information security events, collecting and analysing them following the methodology established pursuant to Regulation (EU) No 376/2014 (pending the amendment of its Annex I) and Commission Implementing Regulation 2015/1018, to include details for this type of occurrences; and
- managing an 'EASA Cybersecurity Lab' to identify/test threat scenarios and demonstrate them in a contained environment.

The action to create an information sharing and occurrence analysis platform was completed in 2023.

Status	Ongoing
Sls	n/a
SRs	n/a
Reference(s)	n/a
Dependencies	RMT.0720 (completed)
Affected stakeholders	DOA and POA holders, Part-ORO air operators, AeMCs, FSTD operators, U-space service providers and single common information service providers, apron management service providers, AOC holders (CAT), MOs, CAMOs, training organisations, ATM/ANS providers, aerodrome operators, Member States
Owner	SM.1 - Safety Intelligence & Performance department

EXPECTED OUTPUT			
Deliverable(s)	Timeline		
ISMS training objectives, pilot projects	2025		
EASA Cybersecurity Lab	Continuous		



#### **RES.0033** Aviation resilience - cybersecurity threat landscape

Assess the safety impact of cybersecurity threats to aviation users, support the development of mitigations and specific training actions, identify and mitigate the vulnerabilities of aviation products and identify the required changes to aviation standards.

Status	Ongoing
Sls	SI-5017 Aircraft vulnerability leading to flight safety degradation due to cyber attacks
SRs	n/a
Reference(s)	Aviation resilience to threats to GNSS - DG DEFIS - Defence industry and Space call for tender (cf. tender notice https://ted.europa.eu/udl?uri=TED:NOTICE:369183-2020:TEXT:EN:HTML)
Dependencies	RES.0048
Affected stakeholders	Pilots, aircraft operators, NCAs, ANSPs, industry (e.g. avionics and ATM systems manufacturers)
Owner	SM.2 - Strategy & Programmes department

EXPECTED OUTPUT		
Deliverable(s)	Timeline	
Final report	2026	

#### 1.1.2 Management of security risks that have an impact on aviation safety

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#### Issue/rationale

The Basic Regulation addresses some of the interdependencies between safety and security in civil aviation and requires the EC, the Agency and the Member States to cooperate on security matters where interdependencies between civil aviation safety and security exist.

The implementation of aviation security measures can have a direct impact on the safety aspects of aerodrome or aircraft operations. Airport, aircraft or in-flight security are the areas where the interdependencies are highly visible and where any security requirements should also consider possible potential impacts on aviation safety.

#### What we want to achieve

Increase safety by managing the impact of security on safety, avoiding risk transfer and mitigating related safety risks. Encourage an integrated approach to management of safety and security risks across the spectrum of aviation activities.

#### How we monitor improvement

Continuous assessment and mitigation of aviation security risks with a negative impact on safety.

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

#### MST.0040 Safety and security reporting coordination mechanism

Without prejudice to the obligations stemming from Regulation (EU) No 376/2014, Member States shall ensure that appropriate coordination mechanisms are established between safety and security reporting systems in order to allow for an integrated approach to the management of risks.

Note: This MST was expected to be completed in 2023.

It will be formally closed and removed from the EPAS once sufficient feedback on implementation is collected by the Agency.

Status	Ongoing
Sls	n/a
SRs	n/a
Reference(s)	n/a
Dependencies	RMT.0720 (completed)
	All
Owner	Member States

EXPECTED OUTPUT		
Deliverable(s)	Timeline	
Establish coordination mechanism	2023-Q4	
Feedback on implementation of MST.0040	2024-Q4	



#### **RES.0048** Impact of security measures on safety

Assess the impact of security measures implemented on the ground and in flight on operational safety and performance.

Assess the preparedness of aviation personnel and flight crews to cope with potential conflicting security and safety measures.

Assess safety risk management techniques that can be applied to the security domain in order to produce harmonised risk assessment and support integrated policy and decision-making processes at national and EU level.

Status	Ongoing
Sls	n/a
SRs	n/a
Reference(s)	n/a
Dependencies	n/a
Affected stakeholders	All
Owner	SM.2 - Strategy & Programmes department

EXPECTED OUTPUT		
Deliverable(s)	Timeline	
Final report	2025	

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#### 1.1.3 Management of the risks arising from conflict zones

#### Issue/rationale

Managing the risks arising from conflict zones is a strategic priority.

The safety actions in this area are aimed at providing information on conflict zones developments and resulting risks to air operators so that they would be in a position to conduct an informed risk assessment in order to mitigate the risks and threats posed by flying over or in the vicinity of zones where armed conflicts exist.

#### What we want to achieve

Enable effective information sharing about risks and possible threats in conflict zones. Manage the risks arising from conflict zones.

#### How we monitor improvement

Continuous assessment and mitigation of conflict zones risks by air operators.

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

#### SPT.0078 Dissemination of information on conflict zones

In 2021 the European Information Sharing and Cooperation Platform on Conflict Zones (the Platform) was launched by EASA to support the EU CZ Alerting System. After a trial period, the Platform was established for long-term operation as of 2022. The Platform is a voluntary, cooperative partnership for the European aviation community that is designed to assist institutions and air operators conducting risk assessments in a timely manner in particular by providing conflict-zone-related information. The membership is open to eligible EU institutions, EASA Member States, as well their national commercial air carriers.

Status	Ongoing
Sls	n/a
SRs	n/a
Reference(s)	n/a
Dependencies	n/a
	Aircraft Operators - All, NCAs
Strategic level	Strategic
Strategic priority	EPAS Volume I §3.1.1.3
Owner	SM.1 - Safety Intelligence & Performance department

EXPECTED OUTPUT			
Deliverable(s)	Timeline		
Provide information to Member States, share information	Continuous		
and setup a Cooperation Platform on Conflict Zones			

#### 1.1.4 Management of the risks arising from socio-economic factors

#### Issue/rationale

Article 89 of Regulation formally requires the Commission, the Agency, other Union institutions bodies, offices and agencies and the Member States, within their respective fields of competence, to cooperate with a view to ensuring that interdependencies between civil aviation safety and related socio-economic factors are taken into account including in regulatory procedures, oversight and implementation of just culture as defined in Article 2 of Regulation (EU) No 376/2014, to address socio-economic risks to aviation safety.

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One of the main discussions on socio-economic factors is currently focused on the employment and working conditions of pilots in commercial air transport. Several EU-wide studies suggest that there may be concerns about the possible impact of the working conditions on safety culture and safety reporting (data for other safety-critical personnel is limited).

However, these studies, and data available to the Agency, fail to establish a connection between employment and working conditions and level of safety. The absence of an established connection could also be due to the lack of adequate data and the lack of reporting from safety-critical personnel.

#### What we want to achieve

Enable a better understanding of the possible risks arising from socio-economic factors and manage them.

#### How we monitor improvement

Continuous assessment and mitigation of the risks arising from socio-economic factors.

How we want to achieve it: actions



#### MST.0042 Assessment of safety culture at air operators

A strong safety and reporting culture is an essential enabler of an effective management system. This task aims to improve the Member States' capacity to assess the safety culture at air operators involved in CAT operations, and complements EPAS action RES.0053 'Mapping the socio-economic impact on aviation safety'.

In a first phase (ending 2024-Q1), in order to support national competent authorities (NCAs), EASA will develop guidance and practical tools to measure safety culture at air operators. As soon as finalised, such guidance and tools will be made available to the Member States. This phase will be an interactive phase where contributions/feedback from Member States and industry stakeholders will be sought.

In a second phase (2024-2025), the task for Member States will consist in including in their oversight programmes the assessment of safety culture of air operators with the support of the EASA guidance and practical tools.

Status	Ongoing
Sls	SI-0041 Effectiveness of safety management
SRs	n/a
Reference(s)	EASA Article 89 Report Edition 2021 Regulation (EU) No 376/2014 SMICG Industry Safety Culture Evaluation Tool and Guidance
Dependencies	MST.0026
Affected stakeholders	AOC holders (CAT)
Owner	Member States

EXPECTED OUTPUT			
Deliverable(s)	Timeline		
Guidance and practical tools to measure safety culture at air operators	2024-Q1		
Oversight programme for air operators includes the assessment of safety culture	2024-2025		



#### RES.0053 Mapping the socio-economic impact on aviation safety

To map the impact of socio-economic factors on aviation safety for all safety-critical personnel, including an assessment of the adequacy of the current data collection process to identify socio-economic risks.

One of the main discussions on socio-economic factors is currently focused on the employment and working conditions of pilots. Several EU-wide studies suggest that there may be concerns about the possible impact of the working conditions on aviation safety, in particular on safety culture and safety reporting (data for other safety-critical personnel is limited). However, these studies, and data used by the Agency, fail to establish a correlation between employment and working conditions and level of safety.

The absence of an established correlation could be due to the lack of both adequate data and reporting from safetycritical personnel. It could also be due to the fact that the current measures in place in the EU aviation safety system (safety management system, human factors, safety promotion, just culture, oversight by the competent authorities, etc.) already provide for adequate mitigation.

Status	Ongoing
Sls	n/a
SRs	n/a
Reference(s)	EASA Article 89 Report Edition 2021
Dependencies	n/a
	All
Owner	SM.2 - Strategy & Programmes department

EXPECTED OUTPUT			
Deliverable(s)	Timeline		
Final report	2025		

#### 1.1.5 Manage public and aviation health safety (AHS) risks

#### Issue/rationale

The COVID-19 pandemic demonstrated that public health emergencies may severely impact the entire aviation environment and in particular crew members and passengers. The objective is to minimise the impact of health safety threats on CAT considering that the COVID-19 is unlikely to be the last pandemic we will be faced with. It is crucial to continue supporting the European aviation industry competitiveness by offering the safest aircraft interior environment to reduce the risk of disease transmission between continents and States, restore public trust and facilitate future responses to events of a similar nature.

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Key areas for short-term development include the assessment of passive and active disinfection means, validation of new materials and air filtering technologies. Risks associated with various disinfection and cleaning methods implemented by operators is a growing concern to aircraft manufacturers. For example, the risks of material degradation and potentially reduced fire resistance under prolonged exposure to ultraviolet light or aggressive chemicals should be assessed. Many other parameters remain unquantified and will need an in-depth assessment, not only for initial airworthiness aspects, but also for continuing airworthiness and maintenance.

#### What we want to achieve

Reduce the risk of disease transmission during the travel experience, restore public trust and facilitate future responses to public health emergencies.

#### How we monitor improvement

Regular assessment of preventive measures used onboard aircraft while at the same time monitoring the emerging public health threats.

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



#### **RES.0057** New health safety measures in aircraft

The objectives of the project are to investigate the possibilities to further reduce the spread of a series of airborne infectious agents (viruses, bacteria, fungi) within the aircraft environment by improving filtration systems, recirculation systems and cabin airflow, including individual air supply nozzles, to ensure that passengers are not adversely affected during the flight.

This research project is expected to analyse scientifically proven solutions to reduce the spread of airborne infectious agents within the aircraft environment. In addition, risks associated with various disinfection and cleaning methods implemented by operators is a growing concern to aircraft manufacturers and many other parameters remain unquantified and will need an in-depth assessment, not only for initial airworthiness aspects but also for continuing airworthiness and maintenance.

The project is expected to provide scientific evidence to support regulatory decision making, as well as an implementation roadmap for the Agency and Industry. The project shall take into consideration retrofit solutions, as well as solutions applicable to new aircraft cabin design.

This project is funded by Horizon European under the 3rd Contribution Agreement with the European Commission.

New
n/a
n/a
https://www.easa.europa.eu/en/research-projects/health
n/a
DOA holders, Aircraft operators – CAT, MOs - Part-145, NCAs
SM.2 - Strategy & Programmes department

EXPECTED OUTPUT			
Deliverable(s)	Timeline		
Final report	2025		

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#### 1.1.6 Manage the impact of climate change on aviation safety

#### Issue/rationale

Managing the impact of climate change on aviation safety is one of the strategic goals for the Agency (refer to Volume I of the EPAS). Climate change is likely to affect the frequency and the intensity of hazardous weather phenomena, but also where and at what time of the year such phenomena tend to occur.

Examples of hazardous weather phenomena are severe airborne icing, severe turbulence, low-level windshear, hail encounters, lightning strikes, etc.

Although the effects of climate change on hazardous weather phenomena are rather long-term, they should be considered to ensure that safety risk assessments and risk mitigation measures are sustainable.

Better understanding these effects of climate change is beneficial for all types of aircraft operations. However, the initial focus is on commercial air transport operations with aeroplanes, as they make most of flying passengers and large aeroplanes are potentially exposed to a great variety of atmospheric conditions and weather hazards during the flight.

#### What we want to achieve

Collect scientific knowledge on the effects of climate change on weather phenomena that are sources of hazards for commercial air transport with large aeroplanes.

#### How we monitor improvement

The first annual report of the EASA Scientific Committee contains the scientific knowledge collected through this task. This knowledge basis will be consolidated with each new edition of that report.

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



## **RES.0059** Impact of climate change on commercial air transport with aeroplanes - review of scientific works

Review scientific works on the past and future trends regarding weather-related hazards for commercial air transport aeroplanes, and on the impact of climate change on these trends. Provide advice to EASA.

This task is funded by EASA.

Status	New
Sls	SI-0003-Adverse convective weather (turbulence, hail, lightning, ice)
	SI-8021-Adverse weather encounter — effects other than impaired visibility
	SI-2019-Airborne sector overload
	SI-4015-Crosswind
	SI-0015-Entry of aircraft performance data
	SI-2018-Failure of air-ground communication service
	SI-2016-Failure of navigation service
	SI-2017-Failure of surveillance service
	SI-0017-Gap between certified take-off performance and take-off performance achieved in operations
	SI-1044-Ground operations in extreme temperatures
	SI-1042-Ground operations in high winds, rain and thunderstorms
	SI-0003A-Hail
	SI-7013-High wind encounter
	SI-0001-Icing in flight
	SI-0002-Icing on ground
	SI-8051-Inadvertent flight into IMC
	SI-2032-Mass diversions
	SI-0006-Runway surface condition
	SI-0024-Wind shear
	SI-1043-Ground operations in snow/ice conditions
SRs	n/a
Reference(s)	EASA's Scientific Committee - webpage
Dependencies	n/a
Affected stakeholders	Aircraft Operators - CAT - Aeroplanes, Aerodrome Operators, ATM/ANS providers Design Approval Holders, Organisations involved in the design, production and maintenance of safety related aerodrome equipment used or intended for use at aerodromes, Organisations involved in the design, production or maintenance of ATM/ANS systems and ATM/ANS constituents
Owner	SM.2 - Strategy & Programmes department

EXPECTED OUTPOT			
Deliverable(s)	Timeline		
Scientific Committee Annual Report 2023	2024-Q1		
Scientific Committee Annual Report 2024	2025		

## **1.2** Safety management

#### Refer to EPAS Volume I Section 3.1.2 Improve safety by improving safety management

#### **Issue/rationale**

The proactive implementation of safety management considering all known safety data and information has proven essential for the ability of the aviation system to deal with safety issues, including new items coming from disruptive events or from a crisis (recovery). Both the SSP and SMS will be increasingly instrumental within the EU aviation safety management system, not only in ensuring that safety issues are addressed at the right level, but also in guaranteeing the availability of the required data and safety intelligence to support the timely identification of safety risks and issues.

#### What we want to achieve

Improve the level of safety through the effective implementation of safety management by authorities and organisations.

#### How we monitor improvement

Organisations and authorities shall demonstrate compliance with applicable regulations and their effective implementation, in order to maintain and further improve safety performance. For ATM/ANS, this will be monitored as part of the ATM Performance and Charging Scheme.

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

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

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

This RMT has been processed in four subtasks:

<u>Subtask 1:</u> Changes to Part-M linked to OPS (CAMOs) - completed following the publication of Commission Regulation (EU) 2019/1383 on 08/07/2019, and the publication of Decision 2020/002/R on 13/03/2020;

Subtask 2a: Changes to Part-145 - completed following the publication of Commission Regulation (EU) 2021/1963 on 08/11/2021, and the publication of Decision 2022/011/R on 10/05/2022;

<u>Subtask 2b:</u> Changes to Part 21 - completed following the adoption of Delegated Regulation (EU) 2022/2016 on 10 December 2022 and Implementing Regulation (EU) 2022/2037 on 14 February 2022, and the publications of ED Decision 2022/021/R and ED Decision 2023/014/R, respectively on 19/12/2022 and 20/10/2023.

<u>Subtask 3:</u> Changes to the AMC and GM to Part-145: Consultation of the SMS Industry International Standard SM-0001 as an acceptable means of compliance (AMC) to Part-145

Status	Ongoing				
Sls	SI-0041 Effectiveness of safety management SI-3004 Integration of HF/HP principles into the organisation's management				
SRs	UNKG-2010-072 UNKG-2011-018 UNKG-2015-001				
ICAO ref.	ICAO Annex 19				
Other ref.	n/a	n/a			
Dependencies	RMT.0681 RMT.0720 (completed)				
Affected stakeholders	CAMOs, AMOs (Part-145), POA holders, DOA holders, ETSOA holders, NCAs				
Affected regulation(s)	Commission Regulation (EL Commission Regulation (EL				
Strategic level	Strategic	Strategic priority	EPAS Volume I Section 3.1.2		
Harmonisation	No				

		WOR	KING METHOD			
Owner	FS.0 - Flight Standards Director's office					
SubT	Development	Impac	Impact Assessment(s)			
3	by EASA	Light	Light			
PLANNING MILESTONES						
SubT	Initiation	Consultation	Opinion	Commission IR	Decision	
3	ToRs MDM.055 17/07/2011	<tbd></tbd>	<tbd></tbd>	n/a	<tbd></tbd>	

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## **RMT.0681** Alignment of the IRs of the EASA Basic Regulation and of the associated acceptable means of compliance (AMC) and guidance material (GM) with Regulation (EU) No 376/2014

Note: NPA 2016-19 will not be followed by a stand-alone Opinion; instead, regulatory changes are being implemented as part of existing RMTs. CRD 2016-19 was published on 24/05/2019.

Overview of RMTs through which amendments were/will be made:

- 1. Part 21 through RMT.0251 Phase II, completed see Commission Implementing Regulation (EU) 2022/203;
- 2. Part-M, Part-ML, Part-CAO and Part-CAMO through RMT.0278 and RMT.0521 in progress;
- 3. Part-145 through RMT.0251 Phase II, completed see Regulation (EU) 2021/1963;
- 4. Part-ARA and Part-ORA (Aircrew) through RMT.0599, completed see Regulation (EU) 2020/2193;
- 5. Part-ARO and Part-ORO (Air operations) through RMT.0392 in progress;
- 6. Part-ADR-AR and Part-ADR-OR through RMT.0591 in progress;
- 7. Part-ATM/ANS.AR and Part-ATM/ANS.OR through RMT.0719 (Part-MET), completed see Regulation (EU) 2021/1338;
- 8. Part ATCO-AR and Part ATCO-OR through RMT.0668 not yet started; and
- 9. AMC 20-8 through RMT.0643, completed see EDD 2020/010/R of 23/07/2020.

Status	Ongoing	
Status		
Sls	SI-0041 Effectiveness	of safety management
SRs	n/a	
ICAO ref.	ICAO Annex 19 Chapte	r 5 and Appendix 3
Other ref.	n/a	
Dependencies	RMT.0251 RMT.0278 RMT.0521 RMT.0392 RMT.0591 RMT.0668	
Affected stakeholders	Air operators - All, Airc operators, ATM/ANS pr	rew, MOs (Part-145), ATOs, Production organisations, CAMOs, ADR oviders, ATCO TOs
Affected regulation(s)	n/a	
Strategic level	Standard	Strategic priority n/a
Harmonisation	No	

		WOR	KING METHOD			
Owner SM.1 - Safety Intelligence & Performance department						
SubT	Development		Impact Assessment(s)			
	by EASA	Light			NPA - Public	
PLANNING MILESTONES						
SubT	Initiation	Consultation	Opinion	<b>Commission IR</b>	Decision	



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

Address relevant elements of 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.

This first cycle will propose changes to the Implementing and Delegated acts in all domains where EU rules mandate a Management System (SMS), to assess and implement changes to ICAO Annex 19 Third edition, expected to become applicable in 2026.

Status	Ongoing		
Sls	SI-0041 Effectiveness of safety ma SI-3004 Integration of HF/HP princ	nagement ciples into the organisation's management	
SRs	n/a		
ICAO ref.	ICAO Annex 19 ICAO State Letter AN 8/3-23/18		
Other ref.	EASA BIS 'Safety Management'		
Dependencies	n/a		
Affected stakeholders	NCAs, national supervisory authori POA holders, CAMOs, ADR operato	ties (NSAs), air operators - all, flight crews, MOs, ATOs, rs, ATM/ANS providers, ATCO TOs	
Affected regulation(s)	n/a		
Strategic level	Standard	Strategic priority n/a	
Harmonisation	No		

		WOF	KING METHOD		
Owner	FS.0 - Flight Standard	ls Director's office			
SubT	Development	Impa	Impact Assessment(s)		
1	To be determined at a later stage		To be determined at a later stage		
		PLANN	IING MILESTONES		
SubT	Initiation	Consultation	Opinion	<b>Commission IR</b>	Decision
1	<tbd></tbd>	<tbd></tbd>	<tbd></tbd>	<tbd></tbd>	<tbd></tbd>

#### SPT.0057 Safety management implementation and international cooperation

Promote the common understanding of safety management and human factors/human performance principles within and outside Europe, share lessons learned and encourage progress and harmonisation, through active participation in the Safety Management International Collaboration Group (SMICG) and dissemination of safety promotion material to support effective safety management system (SMS) and state safety programme (SSP) implementation, including, but not limited to, the below deliverables and material addressing the EU context.

The latest SMICG deliverables include:

- Safety Manager's Role In SMS & brochure
- 2022 Industry Day on "SMS and resilience"
- 2023 Industry Day on "Benefits and challenges of SMS assessments"
- Change Management at the State Level & brochure
- SMS Factsheet for Design, Manufacturing, and Production Organizations (brochure)
- SSP Factsheet: Planning and Conducting Surveillance Based on Risk Profiling and Performance Monitoring
- Risk-Based and Performance-Based Oversight Guidance
- Safety Oversight Following the Implementation of SMS
- SSP Assessment tool 2nd Edition, revision 1 (June 2023)

Forthcoming SMICG material:

- SSP and SMS Interfaces
- Tool and Guidance for Evaluating Inspector SMS Competency
- Guidance for Implementing or Improving Voluntary Reporting at State Level

Latest EASA material:

2023 EASA safety week: recordings and material at <a href="https://www.easa.europa.eu/community/topics/safety-week-2023-summary">https://www.easa.europa.eu/community/topics/safety-week-2023-summary</a>

SIB 2023-05 'Risks Emerging During Summer 2023' at <u>https://ad.easa.europa.eu/ad/2023-05</u> and <u>https://www.easa.</u> europa.eu/community/topics/summer-2023

Updated EASA Management System assessment tool including Part-CAMO, Part-145 and Part 21: <a href="https://www.easa.europa.eu/document-library/general-publications/management-system-assessment-tool">https://www.easa.europa.eu/document-library/general-publications/management-system-assessment-tool</a>

Status	Ongoing
Sls	SI-0041 Effectiveness of safety management SI-3001 Senior management competence and commitment to HF/HP principles SI-3002 Evaluating the adverse impact of culture on human performance SI-9003 Insufficient consideration of flight crew human factors in the continued airworthiness process of the type design
SRs	n/a
Reference(s)	EASA BIS 'Safety Management'
Dependencies	MST.0001, MST.0002, MST.0028, RMT.0251
Affected stakeholders	All
Strategic level	Strategic
Strategic priority	EPAS Volume   §3.1.2
Owner	FS.0 - Flight Standards Director's office

Deliverable(s)	Timeline	
Produce Guidance / training material / best practices	Continuous	

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## SPT.0126 Integrating the flight data monitoring (FDM) programme with safety risk management (SRM)

Produce good practice for integrating the FDM programme with the operator's SRM, with a focus on risk assessment and on supporting flight crew training.

Status	Ongoing		
Sls	SI-0041 Effectiveness of safety management		
SRs	n/a		
Reference(s)	GASP SEIs (industry) - Mitigate contributing factors to CFIT, LOC-I, MAC, RE, and RI accidents and incidents		
Dependencies	EVT.0009 MST.0003 SPT.0077 SPT.0112 (completed in 2022)		
Affected stakeholders	Aircraft Operators - CAT - Aeroplanes, Aircraft Operators - CAT - Helicopters - offshore		
Strategic level	Strategic		
Strategic priority	EPAS Volume I §3.1.2		
Owner	SM.1 - Safety Intelligence & Performance department		

EXPECTED OUTPUT		
Deliverable(s)	Timeline	
Update EOFDM document 'Breaking the silos'	2024-Q4	



#### MST.0001 Member States to give priority to the work on SSPs

As regards the implementation and maintenance of the SSP, Member States shall in particular:

- ensure the effective implementation of the authority requirements and address deficiencies in oversight capabilities, as a prerequisite for the effective SSP implementation;
- ensure the effective coordination among State authorities that have a role to play in safety management;
- ensure that inspectors have the appropriate competencies to support the evolution towards risk- and performancebased oversight;
- ensure that policies and procedures are in place for risk- and performance-based oversight, including a description of how an SMS is accepted and regularly monitored;
- consider civil-military coordination aspects where relevant for State safety management activities, with a view to identifying where civil-military coordination and cooperation will need to be enhanced to meet the SSP objectives;
- establish policies and procedures for safety data collection, analysis, exchange and protection, in accordance with Regulation (EU) No 376/2014;
- establish a process to determine SPIs at State level addressing outcomes and processes;
- ensure that an approved SSP document is made available and shared with the other Member States and EASA;
- ensure that the SSP is regularly reviewed and that its effectiveness is regularly assessed.

Status	Ongoing
Sls	SI-0041 Effectiveness of safety management
SRs	n/a
Reference(s)	n/a
Dependencies	MST.0028
Affected stakeholders	All
Owner	Member States

EXPECTED OUTPUT		
Deliverable(s)	Timeline	
SSP document made available	2021	
SSP effectively implemented	2025	



#### MST.0002 Promotion of SMS

Member States should encourage the dissemination and implementation of safety promotion material developed by the European Safety Promotion Network, the SMICG and other relevant sources of information as regards safety management.

The latest SMICG deliverables include:

- Safety Manager's Role In SMS & brochure
- 2022 Industry Day on 'SMS and resilience'
- 2023 Industry Day on 'Benefits and challenges of SMS assessments'
- Change Management at the State Level & brochure
- SMS Factsheet for Design, Manufacturing, and Production Organizations (brochure)
- SSP Factsheet: Planning and Conducting Surveillance Based on Risk Profiling and Performance Monitoring
- Risk-Based and Performance-Based Oversight Guidance
- Safety Oversight Following the Implementation of SMS
- SSP Assessment tool 2nd Edition, revision 1 (June 2023)

Forthcoming SMICG material:

- SSP and SMS Interfaces
- Tool and Guidance for Evaluating Inspector SMS Competency
- Guidance for Implementing or Improving Voluntary Reporting at State Level

Latest EASA material:

- 2023 EASA safety week: recordings and material at https://www.easa.europa.eu/community/topics/safety-week-2023-summary
- SIB 2023-05 'Risks Emerging During Summer 2023' at <u>https://ad.easa.europa.eu/ad/2023-05</u> and <u>https://www.easa.europa.eu/community/topics/summer-2023</u>
- Updated EASA Management System assessment tool including Part-CAMO, Part-145 and Part 21: <u>https://www.easa.europa.eu/document-library/general-publications/management-system-assessment-tool</u>

Status	Ongoing	
Sls	SI-0041 Effectiveness of safety management SI-8044 Ineffective safety management systems	
SRs	n/a	
Reference(s)	n/a	
Dependencies	MST.0001 SPT.0057	
Affected stakeholders	All	
Owner	Member States	
EXPECTED OUTPUT		

Deliverable(s)	Timeline	
Guidance / training material / best practices	Continuous	

## MST.0003 Member States should maintain a regular dialogue with their national aircraft operators on flight data monitoring (FDM) programmes

(a) Making the professionals concerned aware of the European Operators FDM Forum (EOFDM): Member States shall publish on their websites, as part of the SMS-related information, general information on the EOFDM activities.

(b) Promoting FDM good practices

Member States that have 10 or more operators running an FDM programme should organise a workshop (physical meeting or teleconference) dedicated to the EOFDM good practice documents with the FDM specialists at these operators. This workshop does not need to be repeated.

Ongoing
SI-0041 Effectiveness of safety management
n/a
n/a
EVT.0009
Aircraft Operators - CAT - Aeroplanes, Aircraft Operators - CAT - Helicopters - offshore
Member States

EXPECTED OUTPUT	
Deliverable(s)	Timeline
Information on the EOFDM published in the SMS section of the MSs' websites 2024-Q3	
Detailed report of the workshop 2024-Q3	

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#### MST.0026 SMS assessment

Without affecting any of the obligations stemming from the SES ATM Performance Scheme, Member States should make use of the EASA management system assessment tool to support risk- and performance-based oversight. Member States should provide feedback to EASA on how the tool is used for the purpose of standardisation and continual improvement of the assessment tool.

Member States should regularly inform EASA about the status of their compliance with the SMS requirements and about the SMS performance of their industry.

Note 1: The new version of the EASA management system assessment tool was published in 2023 and includes Part-CAMO, Part 21 and Part-145.

Status	Ongoing
Sls	SI-0041 Effectiveness of safety management
SRs	n/a
Reference(s)	EASA Management system assessment tool
	EASA BIS 'Safety Management'
Dependencies	MST.0001 MST.0032
Affected stakeholders	Air operators - CAT and NCC, CAMOs, ATOs, AeMCs, ADR operators, MOs (Part-145), DOA holders, POA holders
Owner	Member States

Note 2: The use of the tool and the need for updates are discussed with the SM TeB.

EXPECTED OUTPUT	
Deliverable(s)	Timeline
Provide feedback on the use of the management system assessment tool Continuous with and on the status of MS (SMS) compliance annual reporting	

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#### MST.0028 Member States to establish and maintain a State Plan for Aviation Safety

Member States shall ensure that a State Plan for Aviation Safety (SPAS) is maintained and regularly reviewed. The SPAS shall:

- describe how the plan is developed and endorsed, including collaboration with different entities within the State, with industry and other stakeholders\*,
- include safety objectives, goals, and indicators\*, and
- reflect the EPAS actions as applicable to the State.
- \* unless these elements are described/included in the SSP document

#### Member States

- shall ensure that their SPAS is made available to the relevant stakeholders, and
- are encouraged to share their SPAS with the other Member States and with EASA.

#### State Safety Risk Management (SRM):

As part of their State SRM process Member States shall identify the main safety risks affecting their national civil aviation safety system and define the necessary actions to mitigate those risks. In doing so, Member States shall consider the results of the European SRM process for the various aviation domains considered within of their State SRM process. Member States shall document the main safety risks and actions in their SPAS. In addition, the SPAS shall consider how to measure the effectiveness of the risk mitigation actions.

#### Results of the European SRM process to be considered in State SRM:

The European top key risk areas are identified in the EASA Annual Safety Review, per domain. The top safety issues are identified in the European domain Safety Risk Portfolios, included in EPAS Volume III.

Member States shall review those key risk areas and safety issues to determine which ones are relevant to their aviation safety system. Such review shall be performed at least annually. The results of such review shall be documented to show how these were used within State SRM and justify where key risks and top safety issues identified as part of EU SRM were not considered relevant within State SRM.

Status	Ongoing
Sls	SI-0041 Effectiveness of safety management
SRs	n/a
Reference(s)	ICAO Annex 19 and GASP 2023-2025 Goal 3 'Implement effective State Safety Programmes'
	ICAO Doc. 10161 Appendix A 'ORG Roadmap':
	<ul> <li>GASP SEI-11 (States) - Strategic collaboration with key aviation stakeholders to enhance safety in a coordinated manner</li> </ul>
	<ul> <li>GASP SEI-18 (States) - Availability of safety data and safety information to support safety management activities at the national level</li> </ul>
	<ul> <li>GASP SEI-19 (States) - Acquisition of resources to increase the proactive use of risk modelling capabilities</li> </ul>
	<ul> <li>GASP SEI-20 (States) - Strategic collaboration with key aviation stakeholders to support the proactive use of risk modelling capabilities</li> </ul>
	• GASP SEI-21 (States) - Advancement of safety risk management at the national level
	<ul> <li>EASA Annual Safety Review 2023</li> </ul>
	EPAS Volume III 2024 edition
Dependencies	MST.0001

Affected stakeholders All

Owner	Member States	
	EXPECTED OUTP	UT
Deliverable(s)		Timeline
Initial SPAS establis	shed	2021-Q4
SPAS reviewed i.a.w. EPAS Vol. II 2023 edition 2024-Q1		2024-Q1
SPAS reviewed i.a.w. EPAS Vol. II 2024 edition 2025-Q1		2025-Q1

#### MST.0043 Improvement of data quality in occurrence reporting

The objective of the task is to help Member States and the Agency in data-driven decision-making to improve aviation safety.

To this end, Member States should promote the benefits of good data quality in occurrence reports. They should also organise workshops or similar events with the industry and general aviation, so that they understand better what information is required by the national competent authorities for the analysis of occurrence reports. For this, the already published ECCAIRS coding guidance Chapter 2 should be used as a reference.

Status	New
Sls	n/a
SRs	n/a
Reference(s)	Regulation (EU) No 376/2014
	ECCAIRS Coding Guidance (Chapter 2)
Dependencies	n/a
Affected stakeholders	EASA, National Competent Authorities, Industry
Owner	Member States

EXPECTED OUTPUT	
Deliverable(s)	Timeline
Promote good data quality in occurrence reports through safety campaigns, leaflets, circulars	2026
Organise workshops or similar events to interact directly with the stakeholders regarding data quality in occurrence reports	2026





#### RES.0036 Risk assessment tool

The risk assessment tool shall provide a logical process to analyse a proposed new system (product/concept of operations) and establish an adequate level of confidence that the operation can be conducted with an acceptable level of risk.

The use of model-based risk assessment methods for aviation application should be investigated, covering the development of abstract models for expert knowledge capture, the identification of hazards and their mitigation, the use of quantitative analyses as well as the performance of numerical simulations.

All types of threats associated with a specified hazard, the relevant design, and the proposed operational mitigation measures for a specific operation shall be considered.

This research action has two phases:

- The first phase concerns the drafting of the technical specifications for a tender to develop the risk assessment tool. This phase started in 2021-Q2 and will end in 2024-Q1. This project is funded by Horizon Europe under the 2nd Research Contribution Agreement with the European Commission.
- The second phase, which is the development of the tool itself is expected to start in 2024-Q2 and to end in 2026-Q2. This project is proposed to be taken over by the SAB AG002 in coordination with the Clean Aviation CONCERTO project.

Status	Ongoing
Sls	n/a
SRs	n/a
Referencies	Risk Assessment Tool Technical Specifications (https://www.easa.europa.eu/en/ research-projects/risk-assessment-tool-technical-specifications-rat)
Dependencies	n/a
	Design organisations, aircraft operators - all, air navigation services providers (ANSPs), ADR operators, NCAs
Owner	SM.2 - Strategy & Programmes department

EXPECTED OUTPUT	
Deliverable(s) Timeline	
Tender technical specifications (first phase) 2024-Q1	
Risk assessment tool (second phase) 2026	



## **1.3** Human factors and human performance

#### Issue/rationale

#### Refer to EPAS Volume I Section 3.1.3 'Manage human factors and human performance'

Human factors and human performance are strategic priorities. As new technologies and concepts of operations emerge on the market and the complexity of the aviation system continuously increases, it is of key importance to properly address human factors and human performance in terms of both limitations and their contribution to delivering safety, as part of the safety management implementation.

The health, well-being and fitness of aviation personnel are intrinsically linked to the resilience of the aviation system. Risks in the area of medical fitness have increased during the COVID-19 crisis. Those risks have an impact on the performance of key personnel in the aviation system due to their effect on mental or physical state, which are influenced by multiple factors.

#### What we want to achieve

Ensure continuous improvement in safety management activities as related to human factors and human performance.

Exploit new advances in medicines and health monitoring.

Harmonise MED and FTL requirements where this ensures fair competition or facilitates the free movement of goods, persons and services.

#### How we monitor improvement

Feedback from the ABs and the Human Factors Collaborative Analysis Group (HF CAG).

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



#### 1.3.1 General

#### **SPT.0115 Provide Member States with a basis for training their staff in human factors**

The task involves expanding the scope of the existing human factors competency framework for inspectors to cover all categories of regulatory staff. This competency framework will then be promoted to Member States.

The task mitigates the risks incurred through the inadequate understanding, regulation and oversight of human factors.

Status	Ongoing
Sls	SI-3003 Human factors competence for regulatory staff
SRs	n/a
Reference(s)	ICAO Human Performance Manual (ICAO Doc 10151) ICAO Safety Management Manual (ICAO Doc 9859) EASA BIS 'Human Factors competence for regulatory staff'
Dependencies	MST.0037
Affected stakeholders	NCAs
Strategic level	Strategic
Strategic priority	EPAS Volume I §3.1.3
Owner	SM.1 - Safety Intelligence & Performance department

EXPECTED OUTPUT		
Deliverable(s)	Timeline	
Produce Safety promotion material	2024-Q1	



#### **SPT.0129** Review and recommend methods of design and management of procedures

The objective of this task is to improve the design and use of procedures, ensuring safe, technically correct and standardised work throughout the aviation system. The technical content will be a review of currently available methods of design and management of procedures. This will produce recommendations on which methods to use and in which organisational and operational contexts. This content will then be converted into safety promotion material for EASA stakeholders, taking a layered approach to build on the basic techniques and tailoring these for different audiences.

Status	Ongoing
Sls	SI-3007 Design and use of procedures
SRs	n/a
Reference(s)	ICAO Human Performance Manual (ICAO Doc 10151) ICAO Safety Management Manual (ICAO Doc 9859 EASA BIS 'Design and Use of Procedures'
Dependencies	n/a
Affected stakeholders	Air operators - all, ATOs (Aircrew), FSTD operators, MOs (Part-145 & Part-CAO), CAMOs, MTOs (Part-147), ATM/ANS providers, U-space service providers, ADR operators, groundhandling service providers (GHSPs), NCAs
Strategic level	Strategic
Strategic priority	EPAS Volume I §3.1.3
Owner	SM.1 - Safety Intelligence & Performance department
	EXPECTED OUTPUT

Deliverable(s)	Timeline
Checklist, article, social media promotion	2025



# **SPT.0130** Facilitate the production of learning material to effectively inform audiences that procedure following does not automatically equate to safety

The objective of this task is to produce learning material to effectively inform audiences that procedure following does not automatically equate to safety. Safety emerges from systematic interactions (people, artefacts, training, etc.), and, consequently, increased focus should be aimed at adaptation skills and defensive operating techniques, ultimately fostering team resilience. To prevent over-reliance on procedures, it is important to stimulate the industry to focus on increasing human and systematic resilience. This means that training regarding human performance variabilities in complex operational conditions must go beyond procedural compliance.

Status	Ongoing
Sls	SI-3007 Design and use of procedures
SRs	n/a
Reference(s)	ICAO Human Performance Manual (ICAO Doc 10151) ICAO Safety Management Manual (ICAO Doc 9859 EASA BIS 'Design and Use of Procedures'
Dependencies	SPT.0129
Affected stakeholders	Air operators - all, ATOs (Aircrew), FSTD operators, MOs (Part-145 & Part-CAO), CAMOs, MTOs (Part-147), ATM/ANS providers, U-space service providers, ADR operators, groundhandling service providers (GHSPs), NCAs
Strategic level	Strategic
Strategic priority	EPAS Volume   §3.1.3
Owner	SM.1 - Safety Intelligence & Performance department
	EXPECTED OUTPUT

EXPECTED OUTPUT	
Deliverable(s)	Timeline
Learning package, podcast/ videocast, article, social media promotion	2025



# SPT.0131 Undertake a project to identify better applied root cause analysis for organisations conducting investigations into procedural non-compliance

To reduce procedural non-compliances, the objective of this action is to provide technical guidance for organisations investigating occurrences. The task deliverables should help users to ask more and better questions related to procedural non-compliance. The root cause analysis results should make it easier for industry safety practitioners to effectively identify causes of procedural non-compliance and rapidly implement solutions. Most importantly, the deliverables must include useable tools and procedures that can empower organisations to identify and address the cultural issues that may lead to procedural non-compliance.

Status	Ongoing			
Sls	SI-3007 Design and use of procedures			
SRs	n/a			
Reference(s)	ICAO Human Performance Manual (ICAO Doc 10151) ICAO Safety Management Manual (ICAO Doc 9859 EASA BIS 'Design and Use of Procedures'			
Dependencies	SPT.0057			
Affected stakeholders	Air operators - all, ATOs (Aircrew), FSTD operators, MOs (Part-145 & Part-CAO), CAMOs, MTOs (Part-147), ATM/ANS providers, U-space service providers, ADR operators, groundhandling service providers (GHSPs), NCAs			
Strategic level	Strategic			
Strategic priority	EPAS Volume I §3.1.3			
Owner	SM.1 - Safety Intelligence & Performance department			
	EXPECTED OUTPUT			
Deliverable(s)	Timeline			

2025

Podcast/ videocast, article, social media promotion



### MST.0037 Foster a common understanding and oversight of human factors

The task includes some preparatory activities which will be performed by EASA with the support of the Human Factors Collaborative Analysis Group (HF CAG) in terms of:

- development of guidance and tools for the assessment of competence of regulatory staff before and after training;
- guidance for the appropriate level of human factors competence for human factors trainers;
- development of promotion material to be provided as guidance to Member States and encourage its implementation.

Such guidance and tools will be provided to the Member States' NCAs to organise the implementation of the competence framework, and plan and deliver the training to the regulatory staff concerned.

Status	Ongoing
Sls	SI-3003 Human factors competence for regulatory staff SI-3004 Integration of HF/HP principles into the organisation's management
SRs	n/a
Reference(s)	ICAO Human Performance Manual (ICAO Doc 10151) ICAO Safety Management Manual (ICAO Doc 9859 EASA BIS 'Human Factors competence for regulatory staff'
Dependencies	SPT.0115
Affected stakeholders	NCAs
Owner	Member States

EXPECTED OUTPUT	
Deliverable(s)	Timeline
Implementation of the human factors' competency framework	2024-Q4

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### 1.3.2 Flight time limitations

 RMT.0492
 Development of FTL rules for CAT operations of emergency medical services by aeroplanes (AEMS)

This task includes two work packages:

Subtask 1, dedicated to the development of harmonised and state-of-the-art rules for AEMS;

<u>Subtask 2</u>, dedicated to reflecting the recommendations from the 2019 report on the 'Effectiveness of Flight Time Limitation (FTL)' in the provisions applicable to FTL for CAT operations.

Status	Ongoing		
Sls	SI-0039 Fatigue (FTL)		
SRs	FRAN-2013-053		
ICAO ref.	n/a		
Other ref(s)	n/a		
Dependencies	n/a		
	Air operators - CAT aeroplane, flight crews		
	Commission Regulation (EU) No 965/2012		
Strategic level	Strategic	Strategic priority	EPAS Volume I Section 3.1.3
Harmonisation	No		

		WORKING METHOD	
Owner	FS.2 - Air Operations & Aerodrome		
SubT	Development	Impact Assessment(s)	Consultation
1	By EASA with external support	Detailed	NPA - Public
2	By EASA	Light	NPA - Focused

	PLANNING MILESTONES					
SubT	Initiation	Consultation	Opinion	<b>Commission IR</b>	Decision	
1	ToR RMT.0492 18/04/2012	NPA 2017-17 30/10/2017	2025	2026	2026	
2		NPA 2023-103	n/a	n/a	2023/023/R 19/12/2023	

# **RMT.0493** Update and harmonisation of the FTL rules for CAT by aeroplanes for air taxi and single-pilot operations

Develop harmonised and state-of-the-art-rules for air taxi and single-pilot operations taking into account operational experience and recent scientific evidence.

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Status	Ongoing		
Sls	SI-0039 Fatigue (FTL)		
SRs	n/a		
ICAO ref.	n/a		
Other ref(s)	n/a		
Dependencies	n/a		
Affected stakeholders	CAT aeroplane operators, flight crews		
Affected regulation(s)	Commission Regulation (EU) No 965/2012		
Strategic level	Strategic	Strategic priority	EPAS Volume I Section 3.1.3
Harmonisation	No		

FS.2 - Air Operations & Aerodromes department			
Development	Impact Assessment(s)	Consultation	
By EASA with external support	Detailed	NPA - Public	
]	Development	Development Impact Assessment(s)	

	PLANNING MILESTONES					
SubT	Initiation	Consultation	Opinion	Commission IR	Decision	
	ToR RMT.0429 and RMT.0493 21/08/2012	NPA 2017-17 30/10/2017	2025	2026	2026	

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### **RMT.0494** FTL rules for helicopter commercial operations

Establish harmonised and state-of-the-art rules for helicopter commercial air transport operations (CAT) and commercial specialised operations (SPO).

Status	Ongoing		
Sls	SI-8016 Pilot fatigue		
SRs	n/a		
ICAO ref.	n/a		
Other ref(s)	EASA research project on FRMS in commercial helicopter operations (CAT, SPO)		
Dependencies	n/a		
Affected stakeholders	CAT, commercial SPO helicopter operators, flight crews		
Affected regulation(s)	Commission Regulation (EU) No 965/2012		
Strategic level	Standard	Strategic priority n/a	
Harmonisation	No		

	WORKING METHOD				
Owner	Owner FS.2 - Air Operations & Aerodromes department				
SubT Development		Impact Assessment(s)	Consultation		
	By EASA with external support	Light	NPA - Public		

	PLANNING MILESTONES					
SubT	Initiation	Consultation	Opinion	Commission IR	Decision	
	2024-Q3	2025	2026	2027	2027	

### **RMT.0495** FTL rules for aeroplane commercial operations other than CAT

Establish harmonised and state-of-the-art rules for aeroplane commercial operations other than CAT.

The RMT is subject to further assessment of the issue and its impacts, therefore its status is 'on hold'.

Status	On hold	
Sls	SI-3005 Fatigue and quality sleep	
SRs	n/a	
ICAO ref.	n/a	
Other ref(s)	n/a	
Dependencies	n/a	
Affected stakeholders	Commercial SPO operators with aeroplanes, fligh	nt crews
Affected regulation(s)	Commission Regulation (EU) No 965/2012	
Strategic level	Standard	Strategic priority n/a
Harmonisation	No	

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		WOR	KING METHOD			
Owner	er FS.2 - Air Operations & Aerodromes department					
SubT	Development		Impact Assessment(s)		Consultation	
	To be determined at a later stage		determined ter stage	To be determined at a later stage	l	
		PLANN	PLANNING MILESTONES			
SubT	Initiation	Consultation	Opinion	<b>Commission IR</b>	Decision	
	<tbd></tbd>	<tbd></tbd>	<tbd></tbd>	<tbd></tbd>	<tbd></tbd>	



### SPT.0116 Webinar/Roadshow dedicated to FRM

Supporting the implementation of appropriate fatigue risk management (FRM) or a fatigue risk management system (FRMS) by operators and their oversight by competent authorities through the organisation of webinars/workshops/ conferences on specific topics to share information and best practices.

In March 2021, the first webinar on FRMS in cargo operations was organised..

Refer to <a href="https://www.easa.europa.eu/newsroom-and-events/events/1st-webinar-fatigue-risk-management-cargo-and-demand-operations">https://www.easa.europa.eu/newsroom-and-events/events/1st-webinar-fatigue-risk-management-cargo-and-demand-operations</a>

Another workshop is planned for 2024-Q1.

Status	Ongoing	
Sls	SI-0039	Fatigue (FTL)
SRs	n/a	
Reference(s)	EASA BIS 'Aircrew	/ Fatigue'
Dependencies	SPT.0117 SPT.0118	
Affected stakeholders	FTL/FRM inspecto	ors at NAAs and operators' FRM/rostering personnel and aircrew
Strategic level	Standard	
Strategic priority	n/a	
Owner	FS.2 - Air Operati	ons & Aerodromes department

EXPECTED OUTPUT		
Deliverable(s)	Timeline	
Organise workshop	2024-Q1	



### SPT.0117 Assist NCAs in developing competencies for FTL/FRM oversight

EASA conducts visits to the requesting Member State and meets with the responsible personnel from the NCA and from the operators under their oversight to determine the status of the FTL/FRM implementation and the necessary improvements.

Status	Ongoing
Sls	SI-0039 Fatigue (FTL)
SRs	n/a
Reference(s)	EASA BIS 'Aircrew Fatigue'
Dependencies	SPT.0116 SPT.0118
Affected stakeholders	FTL/FRM inspectors at NCAs and operators' FRM/rostering personnel, Flight Crew, Cabin Crew
Strategic level	Standard
Strategic priority	n/a
Owner	FS.2 - Air Operations & Aerodromes department

EXPECTED OUTPUT		
liverable(s)	Timeline	
SA missions to Member States	Continuous	



### SPT.0118 Develop practical guides, promotion material and e-learning content on aircrew fatigue

Development of written and video material containing explanatory material, examples, FAQs and recommendations. Delivered so far:

- IFTSS (individual flight time specification scheme) Evaluation Form in 2018;
- FTL/FRM Inspector's checklists (1st and 2nd part) in 2019;
- FTL/FRM Practical Guide Issue 1 in 2019;
- FTL/FRM inspector's checklists (3rd part) in 2022.

Status	Ongoing
Sls	SI-0039 Fatigue (FTL)
SRs	n/a
Reference(s)	EASA BIS 'Aircrew Fatigue'
Dependencies	SPT.0116 SPT.0117
Affected stakeholders	FTL/FRM inspectors at NAAs and operators' FRM/rostering personnel and aircrew
Strategic level	Standard
Strategic priority	n/a
Owner	FS.2 - Air Operations & Aerodromes department

Deliverable(s)	Timeline
FTL/FRM practical guide Issue 2	2024-Q2



### MST.0034 Oversight capabilities / focus area: flight time specification schemes

Member States shall ensure that NCAs have the required competence to approve and oversee the operators' flight time specification schemes; in particular, those that include fatigue risk management. NCAs should focus on the verification of the effective implementation of processes established to meet the requirements on operators' responsibilities and to ensure the adequate management of fatigue risks. NCAs should consider the latter when performing audits of the operators' management systems.

Feedback from Member States on the implementation of this action is normally obtained via EASA standardisation activities.

Status	Ongoing
Sls	SI-0039 Fatigue (FTL)
SRs	n/a
Reference(s)	n/a
Dependencies	n/a
	AOC holders (CAT), Aircrew
Owner	Member States

EXPECTED OUTPUT		
Deliverable(s)	Timeline	
Feedback on actions implemented to foster NCA's oversight capabilities	2024-Q4	



### **RES.0006** Effectiveness of the FTL rules

Collection, analysis and processing of historical and in-flight crew fatigue data for the purpose of supporting the continuous review of the effectiveness of the provisions concerning flight and duty time limitations and rest requirements as laid down in Regulation (EU) No 965/2012, and in particular for the second phase of the assessment:

- duties of more than 13 hours at the most favourable time of the day;
- duties of more than 11 hours for crew members in an unknown state of acclimatisation;
- duties including a high level of sectors (more than 6); and
- on-call duties such as standby or reserve followed by flight duties.

The first phase of the assessment for this RES action was completed (report published on 28/02/2019).

The second phase initially started with the publication of a call for tender on 04/10/2019. Due to the COVID-19 pandemic the actual start of the project was delayed to 2024-Q1, to ensure that the data collection campaign will reflect a 'normal' period for airline operations.

Status	Ongoing
Sls	SI-0039 Fatigue (FTL)
SRs	n/a
Referencies	https://www.easa.europa.eu/document-library/general-publications/ effectiveness-flight-time-limitation-ftl-report_
Dependencies	SPT.0116 SPT.0117 SPT.0118
Affected stakeholders	AOC holders, aircrews
Owner	SM.2 - Strategy & Programmes department

Deliverable(s)	Timeline		
Final report	2024-Q4		



### 1.3.3 Medical fitness

# RMT.0287 Regular update of Part-MED, of Part-ARA Subpart ARA.AeMC and ARA.MED, and of Part-ORA Subpart ORA.AeMC, as well as of the related AMC and GM

The objectives of RMT.0287 are to resolve consistency issues, fill regulatory gaps identified through implementation, as well as keep the requirements up to date with the new developments in the field of medicine in order to ensure that they are fit for purpose and can be implemented.

To facilitate the rulemaking process and to collect implementation feedback regarding the authority requirements, RMT.0287 was split in three subtasks:

Subtask 1, updating Part-MED, has been completed with the publication of Regulation (EU) 2018/1974 on 19/12/2018 and of Decision 2019/002/R on 28/01/2019;

Subtask 2a aims to update the medically relevant subparts of Part-ARA and Part-ORA;

<u>Subtask 2b</u> aims to address the numerous exemptions related to increasing the pilot age limit from 60 to 65 years for single-pilot commercial air transport operations in HEMS. The rulemaking task will explore the opportunity for raising the pilot age limit for single-pilot CAT operations in a gradual approach, starting with HEMS. It also takes into account the EASA study on age limitations for commercial air transport pilots.

After the completion of RMT.0287 Subtask 2b, this RMT will be closed. Future regular updates of aero-medical requirements will be included in RMT.0424.

Status	Ongoing		
Sls	SI-0049 Flight crew incapacitation		
SRs	HUNG-2019-003		
ICAO ref.	n/a		
Other ref(s)	EASA BIS 'Flight Crew Licences', subtask 'Pilot age' EASA Study 'Age limitations for commercial air transport pilots'		
	EASA report: "Effects on shift work and fatigue of HEMS pilots aged 60-65"		
	EASA report: "Extending age limits of HEMS pilots to 65 years — mental health and cognitive screening"		
Dependencies	n/a		
Affected stakeholders	Pilots, AOC holders (aeroplane and helicopter), a (AeMCs), aero-medical examiners (AMEs), NCAs	aero-medical centres	
Affected regulation(s)	Commission Regulation (EU) No 1178/2011		
Strategic level	Standard	Strategic priority n/a	
Harmonisation	No		

WORKING METHOD			
	DVIN		
	IK N IN		

	FS.3 - Aircrew & Medical department			
SubT	Development	Impact Assessment(s)	Consultation	
2a	By EASA	Light	NPA - Public	
2b	By EASA	EASA BIS 'Flight Crew Licences', subtask 'Pilot age'	NPA - Focused	

PLANNING MILESTONES					
SubT	Initiation	Consultation	Opinion	Commission IR	Decision
2a	RMT.0287 22/10/2012	NPA 2017-22 21/12/2017	05/2023 13/10/2023	2024-Q4	2024-Q4
2b	ToR RMT.0287 Issue 3, 31/05/2021	05/05/2022	05/2023 13/10/2023	2024-Q4	2024-Q4



### RMT.0424 Regular update of Part-MED

A standing rulemaking task allowing EASA to tackle non-controversial issues identified by industry and Member States and which should be corrected or clarified in Part-MED.

The objective of this rulemaking task is to regularly address miscellaneous issues of non-controversial nature to ensure that the requirements are fit for purpose, cost-effective, can be implemented, and are in line with the latest ICAO SARPs. In particular, regular updates are used to address non-complex and non-controversial issues raised by stakeholders.

As a result of the discussion with the Medical Expert Group(MEG), the medical assessors of the national competent authorities of the Member States and the industry medical representatives consider that it is not appropriate to merge the requirements of Annex IV (Part ATCO.MED) to Regulation (EU) 2015/340 and other parts of that Regulation which are relevant to the medical certification process in accordance with Annex IV (Part-MED) and Annex VI (Part-ARA) to Regulation (EU) No 1178/2011 under RMT.0424 as this does not constitute a regular update. The MEG suggested to reprioritise the original RMT.0707.

Status	Ongoing	
Sls	SI-0049 Flight crew incapacitation	
SRs	n/a	
ICAO ref.	n/a	
Other ref(s)	n/a	
Dependencies	n/a	
Affected stakeholders	Pilots, AeMCs, AMEs, NCAs	
Affected regulation(s)	Commission Regulation (EU) 2015/340 Commission Regulation (EU) No 1178/2011	
Strategic level	Standard	Strategic priority n/a
Harmonisation	No	

			WORKING METHOD		
Owner	FS.3 - Aircrew & Me	edical department			
SubT	Development	l	mpact Assessment(s)	Consultation	
1	By EASA with exter	rnal support L	ight	NPA - Public	
2	To be determined at a later stage		o be determined It a later stage	To be determined at a later stage	
		PL	ANNING MILESTONES		
SubT	Initiation	Consultation	o Opinion	Commission IR	Decision
1	ToR RMT.0424 09/10/2017	2025	2026	2027	2027
2		<tbd></tbd>	<tbd></tbd>	<tbd></tbd>	<tbd></tbd>



# RMT.0707 Medical regulation - combine Part-MED (Annex IV) of Commission Regulation (EU) No 1178/2011 and Part ATCO MED (Annex IX) of Commission Regulation (EU) 2015/340

RMT.0707 was deprioritised in EPAS 2019-2023 and the topic was added to the regular update task RMT.0424. However, following the discussion with the Medical Expert Group (MEG), the medical assessors of the National Competent Authorities (NCAs) of the Member States and the industry medical representatives in the MEG consider that it is not appropriate to merge the requirements of Annex IV (Part ATCO.MED) to Regulation (EU) 2015/340 and other parts of that Regulation which are relevant to the medical certification process in accordance with Annex IV (Part-MED), Annex VI (Part-ARA) and Annex VII(Part-ORA) to Regulation (EU) No 1178/2011 under the RMT.0424, as it is not a regular update. The MEG suggested to reprioritise the original RMT.0707.

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.

Following the update of Part-MED, many stakeholders are questioning EASA on why the ATCO relevant requirements are not aligned with the Part-MED requirements. Furthermore, with the pending update of subparts ARA.MED and ORA.AeMC of Annex VI (Part-ARA) and Annex VII(Part-ORA) to Regulation (EU) No 1178/2011 several authority requirements will be applicable only for the Aircrew aero-medical certification system and not for the ATCO aero-medical certification system. Moreover, currently AMEs and AeMCs require duplicate certifications on both Part-MED and Part ATCO.MED, which require a higher workload from the NCAs and additional burden on the AMEs and AeMCs.

Status	Ongoing	
Sls	SI-0049 Flight crew incapacitation	
SRs	n/a	
ICAO ref.	n/a	
Other ref(s)	n/a	
Dependencies	n/a	
Affected stakeholders	NCAs, AMEs, AeMCs, aircrew and ATCOs	
Affected regulation(s)	Commission Regulation (EU) 2015/340 Commission Regulation (EU) No 1178/2011	
Strategic level	Standard	Strategic priority n/a
Harmonisation	Yes - intended	

Consequently, having all requirements in one place will be easier to implement and keep up to date.

WORKING METHOD					
Owner	FS.3 - Aircrew & Medical department				
SubT	Development Impact Assessment(s) Consultation				
2	By EASA Light NPA - Focused		Light		
PLANNING MILESTONES					
SubT	Initiation	Consultation	Opinion	<b>Commission IR</b>	Decision
2	2024-Q2	2024-Q4	2025	2026	2026



### **RES.0041** Mental health of pilots and ATCOs

This research project assesses new medical developments in the early diagnosis as well as treatment of mental health conditions which could pose a safety risk to aviation and would consequently lead to pilot and air traffic controller (ATCO) unfitness or to the limitation of their medical certificate for safety purposes.

Currently, there are no specific, validated mental health assessment methods for aviation use, incorporating the specific operational needs, to address the issues identified. Research is needed to further detail the specific needs, and to develop and validate assessment methods or to assess the applicability of existing methods for use in the aviation environment.

The expected outcome of this research project will be as follows:

- evidence-based recommendations for updating the mental health requirements in Part-MED and Part ATCO.MED in line with the medical developments;
- evidence-based recommendations for mental health assessment methods suitable for aero-medical fitness assessments;
- an impact assessment of the recommended regulatory amendments;
- guidance material on the updates to the fitness assessment of applicants for aero-medical examiners and medical assessors;
- guidance material on mental health assessment and updates to the fitness assessment of applicants for peer support groups and trained peers involved in peer support programmes; and
- material (e.g. presentations of the results obtained under this contract and training material suitable for professional audiences) to support the management of the proposed amendments.

This project is funded by Horizon Europe under the 2nd Contribution Agreement with the European Commission.

Status	Ongoing	
Sls	n/a	
SRs	n/a	
Referencies	Mental Health	
Dependencies	n/a	
	Air operators, ATM/ANS providers, pilots, ATCOs, AeMCs, AMEs, NCAs	
Owner	SM.2 - Strategy & Programmes department	

EXPECTED OUTPUT			
Deliverable(s)	Timeline		
Final report	2024-Q2		



### **RES.0060** Pilot and ATCO aero-medical fitness – Cardiology

New treatments and diagnostic measures for cardiovascular diseases - <u>Pilots and ATCOs Cardiovascular evaluation</u> (CaVD-PACE)

The expected outcomes of this research project are:

- evidence-based recommendations for updating the cardiovascular requirements in line with the latest medical developments;
- an impact assessment of the recommended amendments to the cardiovascular requirements;
- guidance material for aero-medical examiners and medical assessors on the updates to the fitness assessment of applicants;
- material (e.g. presentation of the results obtained under this project and training material for professional audiences) to support the management of the proposed amendments; and
- risk management promotion material for aero-medical certificate holders to allow them to early detect and selfmanage their cardiovascular risk factors (CVRFs).

Note: This RES.0060 is not new, it was included in RES.0042 in the EPAS Vol. II 2023 edition.

Status	Ongoing	
Sls	n/a	
SRs	n/a	
Referencies	https://www.easa.europa.eu/en/research-projects/ new-treatments-and-diagnostic-measures-cardiovascular-diseases-pilots-and-atcos	
Dependencies	n/a	
Affected stakeholders	Authorities, AeMCs, AMEs, Pilots, ATCOs	
Owner	SM.2 - Strategy & Programmes department	

EXPECTED OUTPUT				
Deliverable(s) Timeline				
Final report 2025				



### **RES.0061** Pilot and ATCO aero-medical fitness - Diabetes mellitus

The expected outcomes of this research project are:

- evidence-based recommendations for updating the requirements related to diabetes mellitus in line with the latest medical developments;
- an impact assessment of the recommended amendments;
- guidance material for aero-medical examiners and medical assessors on the updates to the fitness assessment of applicants;
- material, e.g. presentation of the results obtained under this project and training material for professional audiences, to support the management of the proposed amendments; and
- risk management promotion material for aero-medical certificate holders to allow them to early detect and selfmanage their metabolic risk factors.

Note: This RES.0061 is not new, it was included in RES.0042 in the EPAS Vol. II 2023 edition.

Status	Ongoing	
Sls	n/a	
SRs	n/a	
Referencies	https://www.easa.europa.eu/en/research-projects/diabetes-mellitus-dm	
Dependencies	n/a	
	Authorities, AeMCs, AMEs, Pilots, ATCOs	
Owner	SM.2 - Strategy & Programmes department	

EXPECTED OUTPUT			
Deliverable(s) Timeline			
Final report	2025		



# RES.0058 Colour vision requirements in the new full glass cockpit environment and modern ATCO consoles

The project aims to assess the suitability of current colour vision requirements for pilots and ATCOs in modern working environments and will deliver two key outputs based on testing and measurements in the working environment:

- Assessment of the colour vision performance required to safely perform pilot and ATCO professional duties: the
  project will conduct a comprehensive assessment of the colour vision requirements for pilots and ATCOs in modern
  working environments. This assessment will consider the latest advancements in aviation technology, including full
  glass cockpit and ATM consoles. The assessment will identify the specific colour vision performance that is required
  for pilots and ATCOs to safely perform their professional duties.
- Identification of suitable testing methods and thresholds for pilots and ATCOs: The project will also identify suitable testing methods and thresholds for the colour vision assessment of pilots and ATCOs. This will involve evaluating the effectiveness of existing testing methods and thresholds and identifying any potential changes that may be required to ensure that they are suitable for modern working environments.

Through these outputs, the project will help to ensure that the colour vision assessment of pilots and ATCOs is based on the latest scientific evidence and that it is effective in identifying individuals who may have colour vision deficiencies that could impact their professional duties.

Overall, the required output of the project will be a comprehensive assessment of the colour vision requirements for pilots and ATCOs in modern working environments, as well as the identification of suitable testing methods and thresholds for colour vision assessment.

Status	New	
Sls	n/a	
SRs	n/a	
Referencies	https://www.easa.europa.eu/en/research-projects/vision	
Dependencies	n/a	
Affected stakeholders	Pilots, ATCOs, aeromedical examiners, authorities	
Owner	SM.2 - Strategy & Programmes department	

EXPECTED OUTPUT				
Deliverable(s) Timeline				
Final report 2027				

### **1.4 Oversight capabilities**

### Refer to EPAS Volume I Section 3.1.6.1 'Address deficiencies identified through standardisation'

The safety actions in this area aim to address issues that emerge from standardisation activities, with focus on the safety oversight capabilities of the Member States. The lack of effective oversight remains an issue, as shown by the number of standardisation findings related to the NCAs' performance as regards certification and oversight tasks. The magnitude of the issue varies across the technical domains, with the most relevant being Air Operations, Flight Crew Licensing, ATM/ANS and Aerodromes, Airworthiness (production and maintenance). The difficulties experienced by several authorities in properly discharging their oversight responsibilities in these domains is a concern also in the light of the size, scope and complexity of the aviation industry that some of them oversee.

Furthermore, while several NCAs have reached an appropriate and stable level of maturity, certain others continue to underperform and/or struggle in achieving sustainable improvements. Most notably, while progress has been made in the implementation of the authorities' management systems, the lack of effective oversight of (safety) management systems' undertakings, continues to be an area of concern in several domains.

### Issue/rationale

The authority requirements, introduced in the provisions developed in the first and second extension of the EASA's scope, define what Member States are expected to implement when performing oversight of the organisations under their responsibility. In particular, they introduced the concept of risk-based oversight with the objective of addressing safety issues while taking efficiency into account.

The following elements are considered enablers of a robust safety oversight system, expected to be in place according to the applicable requirements:

- 1. ability and determination to perform effective oversight;
- 2. ability to identify risks through a data collection and analysis process;
- 3. ability to mitigate the identified risks in an effective way, implying measurement of performance which would in turn lead to continuous improvement;
- 4. willingness and possibility to cooperate and exchange information with other NCAs;
- 5. ability to ensure the availability of adequate personnel, where 'adequate' includes the notion of sufficiently trained and properly qualified personnel; and
- 6. focus on the implementation of effective management systems in industry, wherever this is required by the applicable regulations in force.

### What we want to achieve

A robust system across Europe for capable and streamlined oversight, where each NCA has the capacity to properly discharge its oversight responsibilities, with particular focus on the management of safety risks, exchange of information and cooperation with other NCAs. To that end, the implementation of management systems by all organisations, as well as ensuring the availability of adequate personnel in NCAs, is an essential enabler.

### How we monitor improvement

The elements above are constantly monitored during the standardisation activities performed by the Agency. In addition, Member States' oversight capabilities are monitored on the basis of standardisation ratings.

### How we want to achieve it: actions

### MST.0032 Oversight capabilities / focus areas

(a) Availability of adequate personnel in NCAs

Member States shall ensure that adequate personnel are available to discharge their safety oversight responsibilities.

(b) Cooperative oversight in all sectors

Member States shall ensure that the applicable authority requirements are adhered to in all sectors. The objective is to ensure that each organisation's activities are duly assessed, known to the relevant authorities and that those activities are adequately overseen, either with or without an agreed transfer of oversight tasks.

NB: EASA will continue to support NCAs in the practical implementation of cooperative oversight, e.g. benefitting from the outcome of the trial projects conducted between the United Kingdom, Norway, France, the Czech Republic, as well as with exchanges of best practices and guidance.

(c) Organisations management system in all sectors

Member States shall foster the ability of NCAs to assess and oversee the organisations' management system in all sectors. This shall focus in particular on safety culture, the governance structure of the organisation, the interaction between the risk identification/assessment process and the organisation's monitoring process, the use of inspection findings and safety information such as occurrences, incidents, and accidents and, where applicable, flight data monitoring (FDM). This should lead NCAs to adapt and improve their oversight system.

Status	Ongoing	
Sls	SI-3001 Senior management competence and commitment to HF/HP principles SI-3004 Integration of practical HF/HP into the organisations management system SI-3011 Training effectiveness and competence Training effectiveness and competence	
SRs	n/a	
<b>Reference(s)</b> EASA Aviation Inspector Competencies Report ( <u>https://www.easa.europa.eu/er</u> document-library/general-publications/easa-aviation-inspector-competencies-r		
Dependencies	n/a	
Affected stakeholders All		
Owner	Member States	

EXPECTED OUTPUT		
Deliverable(s)	Timeline	
Initial SPAS issued 2021-Q4		
SPAS reviewed 2025-Q1		

In addition to the above, the following action is also relevant to oversight:

**RMT.0588** Aircraft continuing airworthiness monitoring - review of key risk elements

The full description of this action is included in Section 7.1.

### **1.5** Repository of Information

### Issue/rationale

### Refer to EPAS Volume I Section 3.4.2 'Digitalisation in Aviation Programme'

Article 74 of the Basic Regulation requires EASA to establish and manage a repository which aims at facilitating the exchange of information between NCAs, the European Commission (EC) and EASA.

### What we want to achieve

To establish a manageable and functional data repository encouraging the concept of cooperative oversight in the EU. To that end, it is important to manage the expectations, clarify the roles and responsibilities and foster the uniform implementation of Regulation (EU) 2023/2117 by all NCAs, the EC and EASA through a robust set of AMC and GM.

The new governance process established a Repository Steering Board (RSB) which will report to a Repository Steering Committee (RSC). These bodies will be consulted when the EASA is taking any decision regarding the operational management of the repository. The same bodies will be involved in the focused consultation of the draft AMC and GM.

### How we monitor improvement

The active use of the repository will be monitored through usage statistics, whereas the governance bodies will be consulted on the added benefit of the information exchanged within the EU through the repository.

### How we want to achieve it: actions

### **RMT.0732** Repository of aviation-related information (Article 74 of the Basic Regulation)

Article 74 of the Basic Regulation requires the Agency, in cooperation with the EC and the NCAs, to establish and manage a repository of information necessary to ensure effective cooperation between EASA and the NCAs concerning the exercise of their tasks relating to certification, oversight and enforcement under this Regulation.

Considering the huge quantity and complexity of information as well as the obligation to comply with data protection requirements, the EASA Management Board decided to set up a dedicated Task Force which falls under the Member States Advisory Body (MAB). The Task Force will focus on specifications per domain, the global architecture and the governance of the future platform.

The outcome of the first subtask of RMT.0732 was Opinion No 04/2022, which served as the basis for the adoption of Regulation (EU) 2023/2117, published on 13 October 2023.

The second subtask will involve the development of the associated AMC and GM supporting the application of Regulation (EU) 2023/2117.

Status	Ongoing		
Sls	n/a		
SRs	n/a		
ICAO ref.	n/a		
Other ref(s)	n/a		
Dependencies	n/a		
Affected stakeholders	Member States, EC, Accident/ind	ident Investigation Authori	ties
Affected regulation(s)	n/a		
Strategic level	Strategic	Strategic priority	EPAS Volume I Section 3.1.1.
Harmonisation	No		

	WORKING METHOD	
SM.0.1 - Strategy & Safety Management director's office		
Development	Impact Assessment(s)	Consultation
By EASA with external support	Light	NPA - Focused
	Development	SM.0.1 - Strategy & Safety Management director's officeDevelopmentImpact Assessment(s)

PLANNING MILESTONES					
SubT	Initiation	Consultation	Opinion	<b>Commission IR</b>	Decision
2	ToR RMT.0732 20/04/2020	2024-Q1	n/a	n/a	2024-Q3

# 2. Competence of personnel





# 2. Competence of personnel

### Issue/rationale

The availability of well-trained and competent aviation personnel is paramount to the safety and resilience of the aviation industry. Therefore, 'competence of personnel' is a level 1 strategic priority.

### Refer to EPAS Volume I Section 3.2 'Competence of personnel' for details.

### What we want to achieve

Ensure the continuous improvement of all aviation personnel competence by modernising the related regulatory framework, also with the introduction of new state-of-the-art training and assessment methodologies (e.g. CBTA).

### How we monitor improvement

Measurable improvements of aviation personnel competence at all levels through the collection of feedback from industry, NCAs and EASA standardisation.

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### 2.1 General

### 2.1.1 Career opportunities

### Issue/rationale

The aviation industry's ability to deliver safe and effective operations relies on having enough competent people who are operationally ready and fit for duty. The shortage of operational and technical staff has been identified as a safety issue in the EPAS Volume III as SI-5018. With many different industries seeking good quality staff, the problem requires action to ensure that we can attract new staff and retain the staff that are already working in the industry. For the latter, it is important that the industry creates organisations that staff want to work for and which manage their psychological safety and well-being. To attract new staff, it is important to promote the full range of careers to influence the future decisions of children and young people while also ensuring the widest possible diversity, equity and inclusion in the industry.

### What we want to achieve

To ensure the industry has a long-term supply of competent staff who are operationally ready and fit for duty while also ensuring stability in the workforce to retain experience over time.

### How we monitor improvement

Feedback from industry through the EASA Advisory Bodies and aviation colleges/universities and training organisations through surveys and questionnaires.

### How we want to achieve it: action



### **SPT.0107** Promotion of the full range of careers and opportunities in the European aviation industry

Help to address potential shortage of aviation professionals for the future European aviation system by promoting the full range of career opportunities that are available and by supporting the improvement of diversity and inclusion across the aviation community.

This covers the full range of aviation activities both on the ground and in the air.

Specific focus is needed to address already identified shortages in areas such as AMEs, instructors, flight examiners, maintenance, and ground personnel. However, an industry-wide approach is needed to promote careers within the entire aviation industry and to help portray aviation as a progressive industry seeking to attract and retain talent.

This task also supports some of the European aspects of the ICAO Next Generation of Aviation Professionals (NGAP) programme.

2022 deliverables:

- EASA involvement in Aviation4Girls event
- Co-organisation of Workshop on Diversity and Inclusion in ATM.

-	
Status	Ongoing
Sls	n/a
SRs	n/a
Reference(s)	ICAO NGAP Programme
Dependencies	n/a
Affected stakeholders	All
Strategic level	Standard
Strategic priority	n/a
Owner	SM.1 - Safety Intelligence & Performance department

EXPECTED OUTPUT			
Deliverable(s) Timeline			
Promotion online material and social media	Continuous		

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### 2.1.2 Language proficiency

### Issue/rationale

EASA considers language proficiency as an important aviation safety element and joins efforts with ICAO to streamline and harmonise language proficiency requirements (LPR)-related activities, as well as to optimise the support provided to Member States and the industry. LPRs are important not just for pilots and ATCOs but also for certain aerodrome personnel such as vehicle drivers, and this requirement has recently been reflected in the amendment of the Aerodrome Regulation with Regulation (EU) 2020/2148 on runway safety.

Building on the successful joint endeavours, ICAO and EASA conduct in close coordination a joint ICAO-EASA activity on LPR implementation.

The following additional points have been brought to the attention of EASA (some came directly from industry):

- The lack of standardisation in the assessment of language proficiency and the lack of standardisation in the outcome of the testing is an area of concern, such that the stated level of an English LP endorsement might not always be a reliable indicator of the holder's actual ability.
- Raw safety data shows only a very low number of incidents related to the lack of language proficiency, whilst a significant number of incidents are related to the lack of situational awareness because the radio communications were only in the local language.
- GA pilot organisations claim that the language proficiency tests are too demanding and not adapted to the GA environment.

### What we want to achieve

To increase safety by reducing the risk of ineffective communication or even miscommunication when pilots and/ or ATCOs are faced with an unexpected situation and need to use plain language.

In response to the above, EASA:

- intends to promote the use of the English language during pilot training for IR, CPL and ATPL, for ATCOs and for staff that operate at aerodromes;
- has initiated an analysis of the raw data to ensure that not only those incidents that are directly related to language proficiency are considered, but also those that show the lack of language proficiency in the chain of events;
- through NCA standardisation and with the feedback on performance provided by the technical Advisory Bodies (ABs), has started examining closely the tests that are provided in the different Member States; after a thorough analysis, EASA plans to promote selected best practices with a view to harmonising language proficiency testing methods;
- will support implementation of the language proficiency requirements for certain aerodrome personnel, i.e. persons intending to drive a vehicle on the manoeuvring area, to whom the language proficiency requirements from Regulation (EU) 2020/2148 apply.

EASA encourages Member States through safety promotion measures to make use of ICAO Doc 9835 'Manual on the Implementation of ICAO Language Proficiency Requirements'.

### How we want to achieve it: actions



# **SPT.0105** Language proficiency requirements — raise awareness on language proficiency requirements implementation, together with ICAO, the industry and the Member States

#### Subtask 1:

Raise awareness on LPR implementation (LPRI), establish good practices and facilitate proportionate LPRI, based on the operational needs, together with ICAO, the industry and the Member States for pilots (commercial and also in GA), ATCOs and aerodrome staff.

All relevant stakeholders and Member States to work together on the maintenance, monitoring and revision of LPRI; to promote the common understanding of LPRI as a safety issue, linked to human factors principles; share lessons learned; encourage progress and harmonisation and develop a good practice document to cope with operational, safety and standardisation needs.

#### Subtask 2:

Use of the English language during pilot training for IR, CPL and ATPL

Develop promotional material to encourage ATOs to conduct pilot training for CPL, ATPL and IR mainly in English language and/or English language training delivered in parallel with CPL, ATPL and IR training courses.

Status	Ongoing
Sls	SI-0054 Poor language proficiency causing communication breakdown
SRs	n /a
Reference(s)	n/a
Dependencies	MST.0033
Affected stakeholders	Member States, ANSPs, ATCOs, Training Organisations, aerodrome operators and GHSPs, pilot licence holders and students
Strategic level	Standard
Strategic priority	n/a
Owner	FS.3 - Aircrew & Medical department

EXPECTED OUTPUT			
Deliverable(s)	Timeline		
SubT 1 Guidance/good practices article, posters, webinar and video	2024-Q4		
SubT 2 Guidance/good practices article, posters and video	2024-Q4		

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### MST.0033 Language proficiency requirements - share best practices, to identify areas for improvement for the uniform and harmonised language proficiency requirements implementation

Member States should provide feedback to EASA on how the LPRI takes place, including ATOs that deliver training in English, for the purpose of harmonisation and uniform implementation.

Status	Ongoing
Sls	SI-0054 Poor language proficiency causing communication breakdown
SRs	n/a
Reference(s)	n/a
Dependencies	SPT.0105
	Member States, ANSPs, ATCOs, TOs, pilot licence holders and students
Owner	Member States

Note: EASA will collect such feedback at the opportunity of the various standardisation activities.

EXPECTED OUTPUT		
Deliverable(s)	Timeline	
Feedback on the implementation status	Continuous	

In addition to the above, the following RMTs are also relevant to language proficiency:

RMT.0194Modernisation and simplification of the European pilot licensing and training system and<br/>improvement of the supply of competent flight instructorsRMT.0678Simpler, lighter and better flight crew licensing requirements for general aviation

The full description of these RMTs is included in Section 2.2.

### 2.2 Flight crews

### Issue/rationale

New technologies and increasing automation are changing training needs for flight crew and new training devices are emerging. New aircraft types and technological advancements in virtual reality/artificial intelligence are revolutionising pilot training. Some of the new methods to optimise learning and recurrent training cannot be implemented in the context of the existing prescriptive regulatory framework.

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### What we want to achieve

Modernise the pilot training regulatory framework by:

- extending the use of EBT to other parts of the operator's training (or to training that directly affects the operator) and to other aircraft types (e.g. helicopters, business jets) allowing for a single training philosophy across the industry;
- implementing CBTA for all flight crew licences and ratings, allowing adequate supply of instructors, as well as ensuring the availability of competent personnel in NCAs, taking advantage of new technology and an increasingly data-driven approach to training;
- updating the FSTD qualification and oversight framework, thus giving more options to training organisations and air operators for selecting the most effective and efficient FSTD (i.e. matching the training task to the proper training device);
- establishing simpler and lighter r flight crew licensing requirements for general aviation.

### How we monitor improvement

Measurable improvements of flight crew initial and recurrent training through the collection of feedback from pilot training organisations, air operators, NCAs and EASA standardisation.

### RMT.0190 Requirements for relief pilots

The objective of this RMT is to review and, where necessary, revise the requirements related to experience, training, checking and CRM for cruise relief pilots and cruise relief co-pilots.

Status	Ongoing	
Sls	n/a	
SRs	FRAN-2011-010	
ICAO ref.	n/a	
Other ref(s)	n/a	
Dependencies	n/a	
Affected stakeholders	Pilots, ATOs, AOC holders	
Affected regulation(s)	Commission Regulation (EU) No 1178/2011 Commission Regulation (EU) No 965/2012	
Strategic level	Standard	Strategic priority n/a
Harmonisation	No	
	WORKING METHOD	
Owner EASA ES 3 - A	vircrew & Medical department	

Owner	EASA FS.3 - Aircrew & Medical department				
SubT	Development Impact Assessment(s) Consultation				
	By EASA with external support	Detailed	NPA - Public		

	PLANNING MILESTONES					
SubT	Initiation	Consultation	Opinion	<b>Commission IR</b>	Decision	
	ToR RMT.0190 02/11/2012	NPA 2014-25 04/11/2014	05/2023 13/10/2023	2024-Q4	2024-Q4	

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# **RMT.0194** Modernisation and simplification of the European pilot licensing and training system and improvement of the supply of competent flight instructors

#### Subtask 1:

The objectives of Subtask 1 are to improve the regulatory framework for instructors (Part-FCL Subpart J) as well as the supply of competent flight instructors, mainly in the General Aviation domain, by performing the following activities:

- review and revision of the CPL learning objectives (to make the CPL theory, a prerequisite for PPL flight instructors, more proportionate);
- comprehensive revision of Part-FCL Subpart J, including the introduction of CBTA methodologies in instructor training.

### Subtask 2:

The objectives for Subtask 2 are to modernise and simplify the pilot licensing and training system by:

- considering the recommendations from the ex post evaluation under EVT.0006 and the associated BIS;
- introducing/incorporating the latest ICAO Annex 1 and associated ICAO documents on the CBTA concept for the appropriate licences and ratings.

Status	Ongoing
Sls	SI-0009 Crew resource management (CRM) SI-3011 Training effectiveness and competence
SRs	n/a
ICAO ref.	n/a
Other ref(s)	EASA BIS 'Flight Crew Licences', subtask flight instructors
Dependencies	RMT.0587 RMT.0599 RMT.0678
Affected stakeholders	Pilots, flight instructors, flight examiners, ATOs, declared training organisations (DTOs), air operators
Affected regulation(s)	Commission Regulation (EU) No 1178/2011
Strategic level	Strategic Strategic priority EPAS Volume I Section 3.2
Harmonisation	No

	WORKING METHOD			
Owner				
SubT	Development	Impact Assessment(s)	Consultation	
1	By EASA with external support	Light	NPA - Public	
2	By EASA with external support	Detailed	NPA - Public	

	PLANNING MILESTONES				
SubT	Initiation	Consultation	Opinion	<b>Commission IR</b>	Decision
1	ToR RMT.0194 28/02/2020	2024-Q4	2025	2026	2026
2		2025	2026	2027	2027



### **RMT.0196** Update of the flight simulation training device requirements

The main objective of this rulemaking task is to include in the European provisions elements from ICAO Doc 9625 regarding the use of FSTDs in flight training, and thus enhance harmonisation with ICAO. The task will also address three SRs and aims to include the results and findings from the loss of control avoidance and recovery training (LOCART) and RMT.0581 working group. Harmonisation with the FAA should be considered.

Subtask 1 (Work Package 1) has been completed with the publication of Decision 2018/006/R on 03/05/2018.

<u>Subtask 2</u> (Work Package 2): the main objective of this subtask is the review of the technical requirements for training devices in order to:

(1) reflect their actual capability and technology advancements in support of introducing the 'task to tool' concept for aeroplanes and helicopters; and

(2) enable special conditions for other categories of aircraft.

Some activities initially planned for Subtask 3 are now part of Subtask 2. Particularly, under 'FCS training and simulation group' (FCSTS), the aim is to incorporate new EASA certification specifications for aeroplanes (CS-FSTD(A)) and helicopters (CS-FSTD(H)) into a single document (CS-FSTD).

<u>Subtask 3:</u> The main objective of this subtask is to enable the crediting of training for flight crews by using innovative training technologies, such as virtual reality. Additionally, it is aimed at developing more proportionate requirements for FSTD operators that operate only flight navigation and procedures trainers (FNPTs) and other simulation training tools, and at reviewing the initial qualification process of these FNPTs to transfer the responsibility to the training device manufacturer. Finally, the intention is to develop appropriate standards for new technologies, such as off-board instructor operating stations and secondary motion systems, also considering any special conditions developed in parallel to the rulemaking activity.

Status	Ongoing		
Sls	SI-0001 Icing in flight SI-0002 Icing on ground SI-0012 Wake vortex SI-0018 Clear air turbulence and mountain waves SI-3011 Training effectiveness and competence		
SRs	AUST-2017-001 FRAN-2012-045 FRAN-2016-006 RUSF-2013-002 SPAN-2011-020		
ICAO ref.	n/a		
Other ref(s)	n/a		
Dependencies	RMT.0194 RMT.0230 RMT.0587 RMT.0599 RMT.0678		
Affected stakeholders	Air operators, ATOs, DTOs, FSTD operators and manufactures, pilots, instructors, flight examiners NCAs		
Affected regulation(s)	Commission Regulation (EU) No 1178/2011		
Strategic level	Strategic Strategic priority	EPAS Volume I Section 3.2	
Harmonisation	Yes - ongoing		

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### **RMT.0196** Update of the flight simulation training device requirements

		WORKING METHOD				
	FS.3 - Aircrew & Medical department					
SubT	Development	Impact Assessment(s)	Consultation			
2	By EASA with external support	Detailed	NPA - Public			
3	By EASA with external support	To be determined at a later stage	NPA - Public			

	PLANNING MILESTONES						
SubT	Initiation	Consultation	Opinion	Commission IR	Decision		
2	ToR RMT.0196 15/07/2016	NPA 2020-15 16/12/2020	2024-Q3	2025	2025		
3		2026	2027	2028	2028		



## RMT.0587 Regular update of regulations regarding pilot training, testing and checking, and related oversight

A standing task that allows the Agency to table non-controversial issues identified by industry and Member States which should be corrected or clarified in Parts FCL, ORA and ARA of the Aircrew Regulation and in Subpart FC of Part-ORO of the Air Operations Regulation.

Subtask 1 has been completed with the publication of Regulation (EU) 2018/1065 on 30/07/2018 and of Decision 2018/011/R on 06/11/2018.

Subtask 2 has been removed as it was merged with RMT.0678 and will follow the RMT.0678 Subtask 2 timelines.

<u>Subtask 3</u> (current) will deal with a limited number of other non-controversial recommendations stemming from the GA and the Rotorcraft Safety Roadmaps and the EASA Sustainable Aviation Programme (ESAP) in consultation with the EASA ABs.

<u>Subtask 4 (next)</u>: Regular update of Part-FCL, Part-ARA, Part-ORA and Part-DTO and of the associated AMC and GM to meet new needs taking into account new input from Member States, stakeholders and SRs.

Status		Ongoing						
Sls SI-301		SI-3011	Training effectiven	ess and competence				
SRs		n/a						
ICAO ref	•	n/a						
Other ref(s)		n/a						
Dependencies		RMT.0194 RMT.0196 RMT.0392 RMT.0599 RMT.0678 RMT.0727 RMT.0735						
Affected stakeholders		Pilots, ins	tructors, examiner	rs, ATOs				
Affected regulation(s)		Commission Regulation (EU) No 1178/2011 Commission Regulation (EU) No 965/2012						
Strategic level		Standard			Strategic priority n/a			
Harmonisation		No						
			WOR	KING METHOD				
Owner	FS.3 - Aircrew	v & Medical department						
SubT	Developmen	t Impact Assessment(s)		t Assessment(s)	Consultation			
3	By EASA	Lig			focused consultation WS on 21-23/06/2022 NPA - Focused			
4	To be determined at a later stage		To be determined at a later stage		To be determined at a later stage			
			PLANN	ING MILESTONES				
SubT	Initiation		Consultation	Opinion	Commission IR	Decision		
3	ToR RMT.058 11/05/2016		NPA 2023-104 14/04/2023	05/2023 13/10/2023	2024-Q4	2024-Q4		
4			<tbd></tbd>	<tbd></tbd>	<tbd></tbd>	<tbd></tbd>		



#### **RMT.0599** Update of Subpart FC of Part-ORO (evidence-based training)

The objective of this task is the complete review of the provisions contained in Subpart FC of Part-ORO of the Air Operations Regulation whilst ensuring alignment between the Aircrew and the Air Operations Regulation as regards flight crew training requirements.

<u>Subtask 1</u> includes the introduction of evidence-based training (EBT) and competency-based training and assessment (CBTA) in the field of recurrent training (Subtask 1a) and other training-related implementation issues (Subtask 1b), such as better alignment of the requirements for operators and FCL helicopter training.

Subtask 1a has been completed with the publication of Regulations (EU) 2020/2036 on 09/12/2020 and 2020/2193 on 16/12/2020 as well as of Decision 2021/002/R on 01/03/2021.

Subtask 1b has been completed with the publication of Decision 2022/014/R on 19/08/2022.

<u>Subtask 2</u> will include the extension of EBT to other parts of the operator's training or to training that directly affects the operator (e.g. conversion course, command course, type rating training course), allowing for a single training philosophy within the operator. Subtask 2 will reflect the latest developments at ICAO level with regard to EBT and CBTA (e.g. ICAO Doc 9995, PANS TRG, competency-to-tool concept, etc).

<u>Subtask 3</u> will extend EBT to other aircraft types (e.g. helicopters, business jets) allowing for a single training philosophy across the industry. In addition, it will tackle other implementation issues of the training-related requirements brought to the attention of EASA.

Status	Ongoing
Sls	SI-0009 Insufficient Crew Resource Management (CRM) SI-0012 Wake vortex SI-0019 Handling and execution of go-arounds
	SI-0024 Windshear SI-3011 Training effectiveness and competence
SRs	FRAN-2009-007
	FRAN-2013-017
	FRAN-2013-018
	FRAN-2013-022
	FRAN-2013-032
	FRAN-2013-033
	FRAN-2013-035
	FRAN-2013-052
	FRAN-2014-005
	FRAN-2015-062
	GERF-2009-02
	GERF-2009-025
	IRLD-2014-003
	SPAN-2004-030
	SPAN-2012-066
	SWED-2011-004
	SWED-2012-006
	UNKG-2006-102
ICAO ref.	n/a
Other ref(s)	n/a
Dependencies	RMT.0196
	RMT.0400
	RMT.0681
Affected stakeholders	Pilots, flight instructors, flight examiners, ATOs, air operators
Affected regulation(s)	Commission Regulation (EU) No 965/2012
	Commission Regulation (EU) No 1178/2011

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<b>RMT.05</b>	Update of Subpart FC of Part-ORO (evidence-based training)		
Strategic	level Strategic	Strategic priority	EPAS Volume I Section 3.2
Harmonis	ation No		
		WORKING METHOD	
Owner	FS.3 - Aircrew & Medical departmer	nt	
SubT	Development	Impact Assessment(s)	Consultation
2	To be determined at a later stage	To be determined at a later stage	NPA - Public
3	To be determined at a later stage	To be determined at a later stage	NPA - Public
		PLANNING MILESTONES	

SubT	Initiation	Consultation	Opinion	Commission IR	Decision
2	2024-Q1	2025	2026	2027	2027
3	2024-Q4	2026	2027	2028	2028

#### **RMT.0678** Simpler, lighter and better flight crew licensing requirements for general aviation

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Review the different requirements which have been identified by the GA roadmap to cause problems for GA.

This task is divided into three subtasks:

Subtask 1 (Modular LAPL) has been completed with the publication of Regulation (EU) 2019/430 of 19/03/2019.

Subtask 2: topics deemed to be a priority, covering:

- new technologies used for training and certification requirements (i.e. electric propulsion);
- certain LAPL and PPL requirements, including provisions on touring motor glider (TMG), requirements of PPL(A) revalidation training flight, and alignment of helicopter type rating revalidation requirements in the context of PPL(H).

Subtask 3: miscellaneous topics, such as:

- mountain rating for helicopter;
- development of a 'light aircraft flight instructor (LAFI)' for LAPL training only;
- examiner's vested interests in the context of GA;
- review of class & type ratings requirements;
- further review of different LAPL and PPL requirements; and
- language proficiency requirements for GA pilots.

Status	Ongoing		
Sls	n/a		
SRs	ITAL-2020-001		
ICAO ref.	n/a		
Other ref(s)	n/a		
Dependencies	RMT.0194 RMT.0196 RMT.0230 RMT.0587 RMT.0731		
Affected stakeholders	Pilots, flight examiners, NCAs, ATOs, DTOs		
Affected regulation(s)	Commission Regulation (EU) No 1178/2011		
Strategic level	Strategic	Strategic priority	EPAS Volume I Section 3.2
Harmonisation	No		

	VORKING METHOD	
FS.3 - Aircrew & Medical department		
Development	Impact Assessment(s)	Consultation
By EASA	Light	NPA - Public
To be determined at a later stage	To be determined at a later stage	NPA - Public
	FS.3 - Aircrew & Medical department Development By EASA	DevelopmentImpact Assessment(s)By EASALight

PLANNING MILESTONES					
SubT	Initiation	Consultation	Opinion	<b>Commission IR</b>	Decision
2	ToR RMT.0678 01/09/2016	NPA 2020-14 14/12/2020	05/2023 13/10/2023	2024-Q4	2024-Q4
3		<tbd></tbd>	<tbd></tbd>	<tbd></tbd>	<tbd></tbd>



#### SPT.0012 Promotion of the new European provisions on pilot training

The objective of this task is to support aeroplane and helicopter operators in organising training and checking effectively by:

- sharing good practices on the performance of line checks while exploring and presenting different approaches by NCAs;
- informing operators how to promote CRM training and EBT tailored to the needs of an operator and its pilots (with focus on the feedback from the operators on CRM training and EBT);
- promoting how familiarisation with aerodromes/heliports can be done while sharing best practices, including line training in different blocks for different kinds of situations (main capital airports, specific heliports, congested areas, off airfield night landings) and organising general/additional sign-off required for each specific block, etc.;
- sharing good practices in tracking due dates for training/checking;
- supporting the implementation of ED Decision 2022/014/R (Update of ORO.FC review of crew training provisions.)

The objective is to complement the new regulatory package on UPRT and EBT with relevant safety promotion material. The safety promotion material for EBT includes support and guidance for the implementation of EBT mixed (ED Decision 2015/027/R) and following the publication of Implementing Regulation (EU) 2020/2036 on 11/12/2020 and the related ED Decision 2021/002/R, it also includes support and guidance material for the EBT baseline.

Oversight guidance for the transition to mixed EBT implementation is available at: https://www.easa.europa.eu/oversight-guidance-transition-ebt-mixed-checklist

4 EBT Webinars have now been held and all the promotional material can be found on the Air Ops Community Site:

https://www.easa.europa.eu/community/topics/evidence-based-training

Status	Ongoing	
Sls	SI-0009 Insufficient Crew Resource Management (CRM) SI-0012 Wake vortex SI-0018 Clear air turbulence and mountain waves SI-0024 Windshear	
SRs	n /a	
Reference(s)	BIS on Administrative Burden for Small Helicopter Operators - ED Decision 2015/027/R and EASA Opinion No 08/2019 https://www.easa.europa.eu/sites/default/files/dfu/EBT-Checklist. pdf (Version 03, 2020-Q3) - EASA EBT website: https://www.easa.europa.eu/en	
Dependencies	RMT.0599	
Affected stakeholders	Pilots, instructors, flight examiners, ATOs, air operators, Member States	
Strategic level	Standard	
Strategic priority	n/a	
Owner	FS.3 - Aircrew & Medical department	

The EASA EBT manual can be found at https://www.easa.europa.eu/en/downloads/137656/en.

EXPECTED OUTPUT	
Deliverable(s)	Timeline
Safety promotion material, including webinars	2022-2024



#### SPT.0111 Flight examiner manual

Enhance among the examiners certified in the EASA Member States the application and harmonisation of standards and best practices to ensure that an applicant is qualified by a comparable level of competence, including knowledge, skills and attitude.

Through reliable and objective testing and checking guidance, foster the achievement of optimal outcomes in the interest of effectiveness, efficiency, fairness and transparency.

Foster the development of a common training programme for the standardisation of examiners among all EASA Member States' NCAs.

This SPT is intended to:

- maintain the EASA flight examiner manual (FEM) which provides guidelines for flight examiners on the conduct of examinations with a view to improving examiner standardisation and fairness at EU level;
- successively extend the scope of the EASA FEM to address balloon and sailplane pilot examiners;
- provide recommendations to NCAs on the usefulness of using common, standardised forms; and
- a common notification procedure(s) for examiners with a Part-FCL examiner certificate conducting a test, check or assessment of competence of a Part-FCL licence holder whose licence has been issued by an NCA other than their own.

The initial version of the EASA FEM was published in November 2021: https://www.easa.europa.eu/document-library/general-publications/flight-examiners-manual-fem.

In 2023, update 1 of the Flight Examiner Manual (FEM) (helicopters) was delivered: https://www.easa.europa.eu/en/document-library/general-publications/flight-examiners-manual-fem

Status	Ongoing	
Sls	SI-3011 Training effectiveness and competence	
SRs	n/a	
Reference(s)	Evaluation report on the implementation of the Aircrew Regulation, Part-FCL Subpart K (requirements for Examiners involved in pilot testing and checking)	
Dependencies	SPT.0110	
Affected stakeholders	NCAs, flight examiners	
Strategic level	Standard	
Strategic priority	n/a	
Owner	SM.1 - Safety Intelligence & Performance department	

EXPECTED OUTPUT	
Deliverable(s)	Timeline
Produce EASA Flight Examiner Manual (FEM) Update 2 (sailplanes and balloons)	2024-Q1
Recommendations to NCAs	Continuous



## MST.0036 PPL/LAPL learning objectives in the 'Meteorological Information' part of the PPL/LAPL syllabus

Member States should develop proportionate learning objectives in the 'Meteorological Information' part of the PPL/ LAPL syllabus.

Such learning objectives should be of a basic, non-academic nature and address key learning objectives in relation to:

- practical interpretation of ground-based weather radar, strengths and weaknesses;
- practical interpretation of meteorological satellite imagery, strengths and weaknesses;
- forecasts from numerical weather prediction models, strengths and weaknesses.

Note: This MST was expected to be completed in 2023.

It will be formally closed and removed from the EPAS once sufficient feedback on implementation is collected by the Agency.

Status	Ongoing
Sls	n/a
SRs	n/a
Reference(s)	EASA BIS 'Weather Information to Pilots (GA and Rotorcraft) EASA 'Weather Information to Pilots' Strategy Paper
Dependencies	n/a
	NCAs, PPL/LAPL holders, ATOs
Owner	Member States

EXPECTED OUTPUT		
Deliverable(s)	Timeline	
Learning objectives, with related question bank 2023-Q4		
Feedback on implementation	2023-Q4	



#### **RES.0055** Training media allocation: Simulator vs. actual flying

The expected outcome of the project is to provide evidence to support a potential update of the initial pilot training requirements towards a safer, more efficient, and more sustainable regulatory framework, considering the ICAO and EASA dimensions.

The research is expected to provide an evaluation of the existing initial flight training requirements (as per Regulation (EU) No 1178/2011), from ab initio to the commercial pilot licence to identify whether certain training objectives, which today are addressed on the aircraft, can be met via the use of FSTD with an equivalent or even better training output.

The research project will also feed future streams of RMT.0196 on the update of the regulatory provisions for FSTD qualification and their use.

This project is funded by Horizon European under the 3rd Contribution Agreement with the European Commission.

Status	New
Sls	SI-3011 Training effectiveness and competence
SRs	n/a
Reference(s)	https://www.easa.europa.eu/en/research-projects/train
Dependencies	n/a
	Pilots, ATOs, authorities
Owner	SM.2 - Strategy & Programmes department

EXPECTED OUTPUT	
Deliverable(s)	Timeline
Final report	2026

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## 2.3 Cabin crew

This section is maintained as a placeholder for future actions.

## 2.4 Aviation maintenance personnel Part-147

#### Issue/rationale

Until the publication of Regulation of (EU) 2023/989, the use of distance learning by Part-147 organisations for the purpose of basic knowledge and aircraft type training was not possible as the training locations are part of the approval. This Regulation introduced clear and rational paths for expanding the licence categories by Part-66 licence holders. Part-147 needs to be revised to align with the new provisions in Part-66 introduced with Regulation (EU) 2023/989 and to improve its structure and readability.

#### What we want to achieve

Ensure the continuous improvement of all aviation maintenance personnel competence.

Part-147: The introduction of new methods and technologies will lead to a level playing field and will improve the efficiency, quality and safety of maintenance training. Additionally, this way, the training provided by approved maintenance training organisations will be at a similar level and the examinations will be better controlled. Moreover, it may result in an increased number of young people choosing to embark on maintenance careers, which may help tackle the expected shortage of aviation maintenance personnel in the near future.

#### How we monitor improvement

The EASA ABs regularly provide feedback on the effectiveness of the actions in terms of efficiency/proportionality and level playing field.

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



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

Complete review of Part-147 (not performed since its first issue in 2003) and resolution of the areas of special interest identified in EVT.0002:

- Optimisation of the structure of the basic knowledge syllabus and its impact on the training courses and examinations
- Language proficiency for students in training courses
- Mechanisms to reduce or even eliminate the examination cheating and fraud/conflict of interest within Part-147 organisations; in particular, a final assessment performed by the NCA.

This task will also address new training/teaching technologies for aviation maintenance personnel staff as relevant to Part-147, to set up the framework for:

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

Status	Ongoing			
Sls	-	SI-3008 Knowledge development and sharing SI-3011 Training effectiveness and competence		
SRs	n/a	n/a		
ICAO ref.	n/a			
Other ref(s)	EVT.0002 Evaluation report related to the EASA maintenance licensing system and maintenance training organisations (02/03/2018)			
Dependencies	RMT.0255 (completed)			
Affected stakeholders	AMTOs (Part-147), AML applicants and ho	olders, NCAs		
Affected regulation(s)	Commission Regulation (EU) No 1321/20	14		
Strategic level	Strategic	Strategic priority	EPAS Volume I Section 3.2.4	
Harmonisation	No			

			WORKING METHOD		
Owner	FS.1 - Maintenance				
SubT	Development		Impact Assessment(s)		onsultation
	By EASA with exter	nal support	Light		PA - Public
		PL	ANNING MILESTONES		
SubT	Initiation	Consultation	Opinion	Commission IR	Decision
	ToR RMT.0544 14/08/2019	NPA 2023-10 04/12/2023	2025	2026	2026



#### MST.0035 Oversight capabilities/focus area: fraud cases in Part-147

Member States should focus on the risk of fraud in examinations, including by adding specific items in audit checklists and collecting data on the actual cases of fraud. They may exchange and share information as part of collaborative oversight.

Status	Ongoing
Sls	n/a
SRs	n/a
Reference(s)	EVT.0002 Evaluation report related to the EASA maintenance licensing system and maintenance training organisations (02/03/2018)
Dependencies	SPT.0106 (completed)
	AMTOs (Part-147), NCAs
Owner	Member States

EXPECTED OUTPUT	
Deliverable(s)	Timeline
Feedback on the implementation status	Continuous

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## 2.5 Personnel involved in ATM/ANS

#### Issue/rationale

RMT. 0668 concerns the maintenance of Regulation (EU) 2015/340, which comprehensively addresses different areas of the ATCO licensing system.

#### What we want to achieve

Besides the constant endeavour to update the training and qualification requirements considering the scientific and technological progress, there is a need for enhancement and simplification of the ATCO licensing system targeting better performance and resilience, providing flexibility to respond to new technological developments and operational needs. RMT.0668 aims at further harmonising the initial training qualification output to handle complex and dense air traffic situations and to enhance the qualification requirements for instructors and assessors by setting performance standards using the principles of competency-based training and assessment (CBTA), which is also the ICAO preferred route to the licensing of all aviation personnel. It also enables the utilisation of virtual training and completes the implementation of the common European ATCO licensing system to include the acceptance of military and third-country certification.

#### How we monitor improvement

Through regular standardisation activities and feedback on the effectiveness of the activities provided by the EASA ABs.

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#### **RMT.0668** Regular update of air traffic controller licensing rules (IRs and AMC and GM)

This task concerns the maintenance of Regulation (EU) 2015/340, which comprehensively addresses different areas of the ATCO licensing system. Besides the constant endeavour to update the training and qualification requirements considering the scientific and technological progress, there is a need for enhancement and simplification of the ATCO licensing system identified by several EU initiatives targeting better performance and resilience, providing flexibility to respond to new technological developments and operational needs. This RMT is also intended to complete the implementation of the common European ATCO licensing system to include the acceptance of military and third-country certification.

In response to those needs, the planned activities are grouped in the following subtasks:

<u>Subtask 1:</u> under this Subtask, EASA will introduce a controlled mechanism of crediting of training, experience or other qualifications of military ATCOs for the purpose of obtaining ATCO licences under Regulation (EU) 2015/340.

Subtask 2: under this Subtask, EASA will:

- introduce simplifications resulting from the rating/rating endorsements survey conducted by the Agency in 2019, and clarify the existing rules based on implementation feedback;
- provide enhanced mobility options for instructors, assessors and student ATCOs, and facilitate dynamic cross-border sectorisation;
- simplify and update the initial training requirements resulting from the work of the EUROCONTROL ATCO Common Core Content Task Force coordination.

<u>Subtask 3:</u> under this Subtask, EASA will introduce a mechanism for the recognition of third-country ATCO licences under Regulation (EU) 2015/340.

Subtask 4: under this Subtask, EASA will:

- harmonise the initial training qualification output to handle complex and dense air traffic situations and to enhance the qualification requirements for instructors and assessors by setting the required performance standards using the principles of competency-based training and assessment (CBTA), which is also the ICAO preferred route to the licensing of all aviation personnel;
- enable the utilisation of virtual training proposals stemming from the COVID-19 RNO project.

Status	Ongoing			
Sls	SI-3011 Training effectiveness and comp	etence		
SRs	n/a			
ICAO ref.	n/a			
Other ref(s)	n/a	/a		
Dependencies	RMT.0681			
Affected stakeholders	ATM/ANS service providers, NCAs, ATCOs,	ATCO TOs, AMEs, A	eMCs	
Affected regulation(s)	Commission Regulation (EU) 2015/340			
Strategic level	Strategic Strategic priority EPAS Volume I Section 3.2.3			
Harmonisation	No			

#### **RMT.0668** Regular update of air traffic controller licensing rules (IRs and AMC and GM)

	WORKING METHOD				
	ED.4 - Air Traffic department				
SubT	Development	Impact Assessment(s)	Consultation		
1	By EASA with external support	Light	NPA - Focused		
2	By EASA with external support	Light	NPA - Public		
3	By EASA with external support	Light	NPA - Public		
4	By EASA with external support	Light	NPA - Public		

	PLANNING MILESTONES				
SubT	Initiation	Consultation	Opinion	<b>Commission IR</b>	Decision
1	ToR RMT.0668 10/08/2017	n/a	06/2022 02/09/2022	2023/893 04/05/2023	2023/011/R 04/09/2023
2		NPA 2021-08 24/06/2021	06/2022 02/09/2022	2023/893 04/05/2023	2023/011/R 04/09/2023
3		NPA 2023-02 02/05/2023	2024-Q2	2024-Q4	2024-Q4
4		NPA 2023-02 02/05/2023	2024-Q2	2024-Q4	2024-Q4



#### RMT.0738 Next generation of air traffic controller licensing rules (IRs and AMC & GM)

This task aims to respond to the strategic priority to converge the training and performance of ATCOs to respond to the evolution of the European ATM landscape with dynamic cross-flight information region (FIR) operations, standardised operational procedures, and technological convergence.

Its objective will be to adapt the competence and training scheme to emerging technological advances. The deliverables of the SESAR Joint Undertaking (JU), the recommendations of the Wise Persons Group on the future of the Single European Sky, the proposal for the future architecture of the European airspace, and the ATCO fatigue study among others, will serve as sources of inspiration. The harmonisation of ATC systems which is expected to be achieved by the introduction of the new framework on the ATM Ground System will also contribute in that respect.

This task separates strategic initiatives from implementation activities and from scientific and technology-based updates regarding Regulation (EU) 2015/340.

The system-based, non-geographical ATCO qualification path may be created as an additional element of the current licensing scheme, which shall focus on the systems' capabilities and user requirements. Regulatory adaptations may be required to the current licensing scheme, including its training aspects, to transition towards a system-based approach.

While having identified the potential need for regulatory action, the exact scope and content of the rulemaking task requires further considerations. The task is therefore put on hold and the potential subtasks will be defined at a later stage.

Status	On hold		
Sls	n/a		
SRs	n/a		
ICAO ref.	n/a		
Other ref(s)	n/a		
Dependencies	RMT.0668, RMT.0681		
Affected stakeholders	ATM/ANS service providers, NCAs, ATCOs,	ATCO TOs, AMEs, A	eMCs
Affected regulation(s)	Commission Regulation (EU) 2015/340		
Strategic level	Strategic	Strategic priority	EPAS Volume I Section 3.2.3
Harmonisation	No		

		W	ORKING METHOD		
Owner	ED.4 - Air Traffic depa	artment			
SubT	Development		Impact Assessment(s)		Consultation
1	To be determined at a later stage		To be determined at a later stage		To be determined at a later stage
		PLA	NNING MILESTONES		
SubT	Initiation	Consultation	Opinion	Commission IR	Decision
1	<tbd></tbd>	<tbd></tbd>	<tbd></tbd>	<tbd></tbd>	<tbd></tbd>

# 3. Flight operations - aeroplanes





## 3. Flight operations - aeroplanes

Refer to EPAS Volume I Section 3.3.1 'Ensure operational safety in Commercial air transport (CAT) aeroplane operations (airlines and air taxi passenger/cargo) and NCC aeroplane operations

This chapter groups all the actions in the area of airline and air taxi passenger and cargo operations of EASA AOC holders with aeroplanes of a maximum take-off mass above 5 700 kg, with EASA-MS-registered complex aeroplanes conducting non-commercial operations (NCC), as well as specialised operations (SPO) involving aeroplanes of all mass categories.

## 3.1 CAT and NCC operations

The operational domains CAT and NCC with aeroplanes remain the primary focus of the EASA safety activities. For CAT operations with large aeroplanes and for NCC, sufficient safety and exposure data is available to enable the definition of specific safety performance metrics.

#### 3.1.1 Safety

#### Issue/rationale

The higher risk KRAs for CAT and NCC operations in terms of aggregated ERCS score are airborne collision, collision on runway, aircraft upset and runway excursion (cf. 2023 ASR Chapter 2.4).

The associated safety issues are described in the corresponding Safety Risk Portfolio (refer to EPAS Volume III in particular Chapter 4).

#### What we want to achieve

Increase safety by continuously assessing and improving risk controls to mitigate the risks in CAT and NCC operations.

#### How we monitor improvement

Continuous monitoring of the safety issues identified in the relevant Safety Risk Portfolios

How we want to achieve it: actions



#### SPT.0097 Promotion of the new European provisions on fuel/energy planning and management

The objective is to complement the new regulatory package on fuel/energy planning and management (RMT.0573 — completed) with relevant safety promotion material.

The three main tasks are the following:

- EASA fuel scheme manual,
- workshop and events,
- safety promotion leaflets, online material, video.

Two webinars were held in 2022 and all the material can be found on this page: <a href="https://www.easa.europa.eu/community/topics/fuel-management-new-rules">https://www.easa.europa.eu/community/topics/fuel-management-new-rules</a>

A third webinar was held on 28/03/2023, which can be found here: <u>https://www.youtube.com/watch?v=Yn\_VrdtAur8</u>

Further activities are planned in 2024.

Status	Ongoing
Sls	SI-0025 Fuel management
SRs	FRAN-2012-026 SPAN-2017-005
Reference(s)	n/a
Dependencies	RMT.0573
Affected stakeholders	AOC holders - CAT
Strategic level	Standard
Strategic priority	n/a
Owner	SM.1 - Safety Intelligence & Performance department

EXPECTED OUTPUT	
Deliverable(s)	Timeline
Safety promotion material	2024-Q4

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## SPT.0101 Development of new safety promotion material for high-profile safety issues in commercial air operations

Develop new safety promotion material on high-profile safety issues for commercial air operations. Such high-profile safety issues are to be determined from important risks identified through the SRM process, accidents/serious incidents, rulemaking tasks where support is needed to help industry with implementation (such as RMT.0379 on All-weather operations (AWO), completed in 2022) and additional input from EASA stakeholders.

Status	Ongoing
Sls	SI-0015 Entry of aircraft performance data SI-0042 Emergency evacuation SI-0043/SI-4010 Deconfliction between IFR and VFR flights
SRs	n/a
Reference(s)	n/a
Dependencies	n/a
Affected stakeholders	Aircraft Operators - CAT
Strategic level	Standard
Strategic priority	n/a
Owner	SM.1 - Safety Intelligence & Performance department

EXPECTED OUTPUT	
Deliverable(s)	Timeline
Produce safety promotion material	Continuous



#### MST.0019 Better understanding of the operators' governance structure

Member States' NCAs should foster a thorough understanding of the operators' governance structure. This should particularly apply in the area of group operations.

Aspects to be considered include:

- the extensive use of outsourcing;
- the influence of financial stakeholders; and
- controlling management personnel, where such personnel are outside the scope of approval.

EASA supported this MST with the publication of 'Guidance for the oversight of group operations' on 21/06/2022 and will publish further guidance by the end of 2023 /early 2024.

Member States are requested to implement the guidance to strengthen the standardised approach to the implementation of group operations.

Status	Ongoing
Sls	n/a
SRs	n/a
Reference(s)	Guidance for the oversight of group operations: https://www.easa.europa.eu/document-library/general-publications/ guidance-oversight-group-operations
Dependencies	n/a
Affected stakeholders	AOC holders (CAT)
Owner	Member States
	EXPECTED OUTPUT

Deliverable(s)	Timeline
Guidance material	2024-Q1

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#### MST.0024 'Due regard' for the safety of civil traffic

Member States must have due regard for the safety of civil aircraft and must have established respective regulations for national State aircraft.

Several EU Member States have reported an increase in incidents involving close encounters between civil and military aircraft, and more particularly an increase in non-cooperative international military traffic.

Considering such a 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 resulted in the issue of a number of recommendations for the Member States:

- fully apply the ICAO Manual on Civil-Military Cooperation in Air Traffic Management (Doc 10088);
- 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;
- support the development and harmonisation of civil-military coordination procedures for ATM at EU level and beyond if possible;
- report relevant occurrences to EASA; and
- facilitate/make primary surveillance radar data available in military ATC centres to civil ATC units; the objective of this action is to ensure that Member States follow up on the recommendations and provide feedback on the implementation.

EASA continues to monitor occurrences reported by Member States, with a view to considering the development of specific actions (e.g. Conflict zone SIB).

In addition, the military invasion by the Russian Federation into the territory of Ukraine triggered aviation safety risks affecting commercial aviation. For those risks EASA, in close cooperation with the Member States and industry developed a dedicated Safety Risk Portfolio 'Review of Aviation Safety Issues arising from the war in Ukraine'. The related safety issues are now included within the Safety Risk Portfolio 'Systemic and Conjunctural'. It . Member States are invited to continue assessing the relevance of those safety risks and related actions within their SSPs.

Member States should also encourage organisations under their oversight to assess the relevance of the safety issues listed in this Safety Risk Portfolio to their own operations and, where appropriate, capture them in their management systems so that any associated risks can be mitigated effectively.

Status	Ongoing	
Sls	n/a	
SRs	n/a	
Reference(s)	Safety Risk Portfolio - Review of Aviation Safety Issues arising from the war in Ukraine (EASA, Version 1 - April 2022)	
Dependencies	MST.0001	
	AOC holders (CAT), aircraft operators (NCC), ATC providers	
Owner	Member States	

EXPECTED OUTPUT	
Deliverable(s)	Timeline
Report to EASA on related incidents and actions taken	Continuous

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#### **RES.0016** Fire risks caused by portable electronic devices on board aircraft

Research work aimed at the full characterisation of the fire risks associated with the transport of large portable electronic devices (PEDs) in aircraft, notably of those stored in the cargo compartment in checked-in luggage; this encompasses theoretical and experimental work to deepen the knowledge related to the inception and propagation of PED-originated fire as well as devising efficient and cost-effective means for its detection and suppression.

Status	Ongoing
Sls	SI-0027 Carriage and transport of lithium batteries
SRs	n/a
Reference(s)	n/a
Dependencies	n/a
	Aircraft Operators - CAT
Owner	SM.2 - Strategy & Programmes department

EXPECTED OUTPUT	
Deliverable(s)	Timeline
Final report	2024-Q1

#### **RES.0030** Cabin air quality — chronic exposure to contamination events

Investigation of the potential health risks (notably for flight and cabin crews) that might evolve from long-term exposure to low-dose cabin air contamination events and their possible mitigation; this should encompass the collection and analysis of combined samples of contaminants cocktails and ultra-fine particles and the evaluation of their effects by comparison with epidemiological data; aggregation with currently ongoing and past research work towards a more comprehensive, robust and validated picture between levels of contamination of cabin air and potential health impacts.

Status	Ongoing
Sls	n/a
SRs	n/a
Reference(s)	CENT/TC 436 Cabin Air Quality on commercial aircraft
Dependencies	n/a
Affected stakeholders	
Owner	SM.2 - Strategy & Programmes department

EXPECTED OUTPUT	
Deliverable(s)	Timeline
Final report	2024-Q4



#### **RES.0044 PEDs** — lithium battery fire/smoke risk in the aircraft cabin

Identify, determine and assess through tests the risks related to the carriage of PEDs carried by passengers and crew in the aircraft cabin.

Provide experimental evidence for the establishment of limits (power output and quantity) to the transport of PEDs and study the effects of an increase/decrease in the risks.

Reduce the consequences of events caused by PEDs by better understanding the causes and consequences and developing patterns.

Determine cabin and cockpit tolerances and identify solutions both at aircraft and battery level.

Develop new and improve existing emergency procedures for cabin crews. Identify needs for safety promotion for passengers and ways to support operators in assessing the related risks.

Status	Ongoing	
Sls	SI-0027 Carriage and transport of lithium batteries	
SRs	n/a	
Reference(s)	n/a	
Dependencies	n/a	
	Aircraft operators, NCAs, accident investigation boards	
Owner	SM.2 - Strategy & Programmes department	

EXPECTED OUTPUT	
Deliverable(s)	Timeline
Final report	2025

#### **RES.0054** Detection of lithium batteries using airport security screening equipment

The main objective of the project is to evaluate the feasibility of the detection of lithium batteries transported as checked baggage using the security screening equipment and processes in operation at airports. The project should investigate what are technical, operational and regulatory solutions to support safety-related requirements without affecting the performance of security operations as well as identify the main limitations, constraints and financial cost elements for their implementation at European airports. The project shall also study potential developments of technology and solutions for application to other transport scenarios (e.g. cargo, cabin baggage).

This project is funded by Horizon European under the 2nd Contribution Agreement with the European Commission.

Status	New		
Sls	SI-0027 Carriage and transport of lithium batteries		
SRs	n/a		
Reference(s)	https://www.easa.europa.eu/en/research-projects/ detection-lithium-batteries-using-security-screening-equipment		
Dependencies	n/a		
Affected stakeholders	seholders Aircraft Operators - CAT, Aerodrome Operators, Groundhandling services providers, NCAs		
Owner	EASA SM.2		

EXPECTED OUTPUT	
Deliverable(s)	Timeline
Final report	2024-Q2



## EVT.0013 Evaluation of the rules for commercial, small-size aeroplane operators under Part-CAT and Part-SPO

Based on stakeholder requests made through the EASA candidate issue register, an evaluation task on the analysis of the proportionality of the rules for commercial, small-size aeroplane operators under Part-CAT and Part-SPO is proposed. The objective of the task is to analyse the relevance in terms of proportionality of the rules for small aeroplane operators and of the potential administrative burden and inefficiencies they cause.

Ongoing	
n/a	
n/a	
n/a	
EVT.0010 Evaluation on helicopter operations (completed)	
Air operators - CAT and SPO	
FS.2 - Air Operations & Aerodromes department	

EXPECTED OUTPUT	
Deliverable(s)	Timeline
Evaluation report	2026

In addition to the above, the following actions are relevant for the safety of CAT and NCC operations with aeroplanes:

RES.0010	Ice detection
RES.0017	Icing hazard linked to super cooled large droplets (SLD)

The full description of these actions is included in **Chapter 6**.

SPT.0103 Development of new safety promotion material on high-profile air traffic management safety issues

Refer to **Chapter 8** for the detailed description of this action.

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

The full description of these actions is included in **Section 9.1**.



#### 3.1.2 Level playing field

#### Issue/rationale

The applicable provisions may need to be harmonised within the EU as well as with the main international trading partners to ensure fair competition and/or facilitate the free movement of goods, persons and services.

#### What we want to achieve

Harmonise the applicable requirements where this would ensure fair competition and/or would facilitate the free movement of goods, persons and services.

Remove obstacles for a well-functioning single market.

#### How we monitor improvement

Through feedback on the effectiveness of the activities provided regularly by the EASA ABs.

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

The section is included as a placeholder for future actions.

#### 3.1.3 Efficiency/proportionality

#### **Issue/rationale**

Passenger and cargo transport by airlines generates producer, consumer and wider economic benefits. Regulatory and administrative burden reduces these benefits and needs therefore to be fully justified by the corresponding benefits in terms of safety and/or environmental protection.

#### What we want to achieve

Ensure an efficient regulatory framework for airlines.

#### How we monitor improvement

Through feedback on the effectiveness of the activities provided regularly by the EASA ABs and CAT CAG.

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

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#### **RMT.0392** Regular update of the air operations rules

Seek the necessary updates to reflect technological and market developments, incorporate lessons learned from Air OPS standardisation inspections, and transpose the latest amendments to ICAO Annex 6 Parts I, II and III, as well as to ICAO Annex 18 and other relevant ICAO documents.

This task includes several work packages, covering different topics.

Subtask 1a covers the following topics:

- Alignment of extended diversion time operations (EDTO) (former RMT.0577) with the ICAO SARPs related to EDTOs and modernise the EASA ETOPS rules
- Review of some helicopter requirements in Part-SPA and other subparts in various annexes to Regulation (EU) No 965/2012
- Review of the authority requirements based on feedback from standardisation inspections
- Changes stemming from RMT.0681 regarding the alignment of the EASA Basic Regulation implementing rules and of the acceptable means of compliance & guidance material with Regulation (EU) No 376/2014 on occurrence reporting.

<u>Subtask 1b</u> covers the training of operations control personnel (flight operations officers/flight dispatchers), considering the transposition of the related ICAO SARPs. This subtask is being developed with the support of a group of experts nominated by industry and Member States.

<u>Subtask 1c</u> covers the development and issue of an ad hoc opinion to defer the applicability date of the requirements for locating an aircraft in distress in point CAT.GEN.MPA.210, following the deferral of the mandate in ICAO Annex 6. This subtask was completed with the publication of Commission Implementing Regulation (EU) 2022/2203 on 11/11/2022 (refer to Opinion No 05/2022 of 01/09/2022).

<u>Subtask 1d</u> covers the development and issue of an ad hoc decision to quickly transpose some amendments to the ICAO SARPs introduced by Amendment 17 to Annex 14 Volume I and Amendment 40 to Annex 6 Part II to enable GA aircraft to land at aerodromes without rescue and firefighting services. This subtask was completed with the publication of EASA Decision 2023/004/R of 28/03/2023.

<u>Subtask 1e</u> covers flight data monitoring (FDM) programme performance, as well as some further amendments resulting from feedback with the implementation of the air OPS requirements.

Subtask 2 will address the following topics:

- Operational requirements for flights related to design and production ('manufacturer flights') (former RMT.0348)
- Transposition of several amended ICAO SARPs, namely regarding flight data monitoring (FDM) programme performance, the 'erase' function of cockpit voice recorders (CVR), and airborne image recorders (AIR)
- Possible review of standard passenger weights (former RMT.0312) based on a survey to be commissioned by EASA
- Review of the definition of 'complex motor-powered aircraft' (CMPA)
- Review of the requirements for aircraft weighing to consider allowing alternative means to actual weighing
- General amendments

Subtask 3 will address the following topics:

- Review of the requirements applicable to group operations
- Requirements for maintenance check flights
- Operations and equipment for 'high-performance aeroplanes' (HPA) (former RMT.0414)
- Transposition of several amended ICAO SARPs, namely regarding the 'erase' function of cockpit voice recorders (CVR) and airborne image recorders (AIR)

This RMT will lead to changes at IR and at AMC and GM level.

Status	Ongoing
Sls	SI-9003 Insufficient consideration of flight crew human factors in the continued airworthiness process of the type design (Subtasks 1a and 2)

RMT.0392	Regular update of the a	air operations rule	s	
SRs	AAIB 2020-007 FRAN-2009-021 UNKG-2020-001	FRAN-2009-021		
ICAO ref.	SL AN 11/6.3.30- SL AN 11/32.3.14 SL AN 11/1.3.32-2 introducing Ame SL AN 11/6.3.31-2 introducing Ame SL AN 11/32.3.15 introducing Ame 016e) issued by I SL AN 11/32.3.16	SL AN 11/1.3.32-18/12 (EASA reference: SL 2018/12) issued by ICAO on 29 March 2018. SL AN 11/6.3.30-18/13 (EASA reference: SL 2018/13) issued by ICAO on 29 March 2018. SL AN 11/32.3.14-18/14 (EASA reference: SL 2018/14) issued by ICAO on 29 March 2018 SL AN 11/1.3.32-20/18 (EASA reference: SL 018e) issued by ICAO on 7 April 2020 introducing Amendment 44 to Annex 6 Part I. SL AN 11/6.3.31-20/31 (EASA reference: SL 031e) issued by ICAO on 8 April 2020 introducing Amendment 37 to Annex 6 Part II. SL AN 11/32.3.15-20/32 (EASA reference: SL 032e) issued by ICAO on 7 April 2020 introducing Amendment 23 to Annex 6 Part II. SL AN 11/32.3.15-20/32 (EASA reference: SL 032e) issued by ICAO on 7 April 2020 introducing Amendment 23 to Annex 6 Part III. AN 11/6.3.33-22/16 (EASA reference: SL 016e) issued by ICAO on 31 March 2022 introducing Amendment 40 to Annex 6 Part II. SL AN 11/32.3.16-22/13 (EASA reference: SL 013e) issued by ICAO on 31 March 2022 introducing Amendment 24 to Annex 6 Part III.		
Other ref(s)	n/a			
Dependencies	RMT.0230 RMT.0492 RMT.0573 RMT.0587	RMT.0599 RMT.0643 RMT.0681 RMT.0727	RMT.0728 RMT.0731 RMT.0735	
Affected stakeho	olders Aircraft operator	Aircraft operators - All, DOA holders, POA holders, NCAs		
Affected regulat	ion(s) Commission Reg	ulation (EU) No 965	/2012	

 Affected regulation(s)
 Commission Regulation (EU) No 965/2012

 Strategic level
 Strategic

 Harmonisation
 Yes – ongoing

		WORKING METHOD	
Owner	EASA FS.2 - Air OPS & Aerodromes department		
SubT	Development	Impact Assessment(s)	Consultation
1a	By EASA with external support	Light	NPA - Public
1b	By EASA with external support	Light	NPA - Public
1e	By EASA with external support	Light	NPA - Public
2	By EASA with external support	Light	NPA - Public
3	By EASA with external support	Light	NPA - Public

		PLANNING	MILESTONES		
SubT	Initiation	Consultation	Opinion	Commission IR	Decision
1a	ToR RMT.0392 07/10/2020	NPA 2022-11 20/12/2022 NPA 2023-03 12/05/2023	2025	2025	2025
1b		NPA 2023-01 24/04/2023	2025	2025	2025
1e		2024-Q1	n/a	n/a	n/a
2		2025	2026	2027	2027
3		2026	2027	2028	2028

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#### MST.0041 Harmonisation in Helicopter AOC approvals, procedures and documents

Member States should harmonise and, to the extent possible, simplify the application processes in the area of commercial operations with helicopters, including the use of common application forms and compliance lists with an indicative scope as follows:

- establish a harmonised process, a standardised checklist/guide for application for and changes to a helicopter AOC (OPS SPECs), with possible extension to CAMOs and ATOs;
- harmonise the process to add/remove a helicopter from the AOC;
- harmonise/standardise Member States' practices and development of a common application process (e.g. common application form for the removal of an item from the MEL);
- develop guidance on the implementation of the EFB provisions with regard to the versatility of helicopter operations.

The Agency will facilitate and support the development of this task with the Helicopter Expert Group, a Subgroup of the Air OPS TEB.

Status	Ongoing	
Sls	n/a	
SRs	n/a	
Reference(s)	BIS 'Administrative Burden for Small Helicopter Operators'	
Dependencies	n/a	
	Aircraft Operators - CAT - Helicopters, ATOs (aircrew), CAMOs, NCAs	
Owner	Member States	

EXPECTED OUTPUT	
Deliverable(s)	Timeline
Paper to promote the simplification processes, including use of common application forms, compliance lists, etc.	2025
Paper to harmonise the AOC issue/change process (with interface to CAMO and ATOs)	2025
Paper to harmonise the process to add/remove an aircraft from the AOC	2025
Paper to harmonise the process in implementation of the EFB provisions	2025
Paper to harmonise the process of a common application form for approval/removal of an item from the MEL	2025

In addition to the above, the following action is relevant to efficiency/proportionality as regards CAT operations with aeroplanes and NCC operations:

#### RMT.0499 Regular update of CS-MMEL

The full description of this action is included in **Chapter 6**.



## 3.2 Specialised operations aeroplanes

Note: For SPO helicopters, please refer to Chapter 4.

#### Issue/rationale

Operators other than CAT or NCC (e.g. operators that conduct SPO operations with aeroplanes either under Part-SPO<sup>1</sup> or Part-NCO<sup>2</sup>) make an important contribution to the aviation's overall role in modern economies. There is thus a need for an efficient regulatory framework.

In 2022 the number of accidents and serious incidents were equal or lower than the average of the preceding decade for all operation types except aerial survey, animal herding/ mustering, and calibration operations. In 2022, 14 out of the 18 serious incidents and accidents were in parachute drop and sailplane towing operations. There were no accidents or serious incidents in aerial advertising, aerial observation, agricultural, and photography operations.

As regards KRAs for specialised operations that involve aeroplanes, , it can be stated that aircraft upset was the most likely type of accident to which accidents and serious incidents escalated / could have escalated for the period 2018-2022 (52 occurrences out of 122). Aircraft upset also presented the highest safety risk in the domain. While 27 occurrences escalated to/ could have escalated to excursion, the safety risk was much lower than the safety risks associated with terrain collision, airborne collision and obstacle collision in flight. With only 10 occurrences out of 122, terrain collision presented however the second highest safety risk for the domain (cf. ASR 2023).

#### What we want to achieve

Increase safety by continuously assessing and improving risk controls to mitigate the key risks.

#### How we monitor improvement

Continuous monitoring of the safety issues identified in the data portfolio and related Safety Risk Portfolio for specialised operations with aeroplanes.

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

<sup>1</sup> Annex VIII to Commission Regulation (EU) No 965/2012.

<sup>2</sup> Annex VII to Commission Regulation (EU) No 965/2012.



#### SPT.0121 Improving the safety of parachuting operations

Create and deliver safety promotion material to improve the safety of parachuting aircraft operations by both highlighting the most common causes of accidents in this domain and providing good practices/operational procedures that can help to mitigate the most important risks.

Status	Ongoing
Sls	SI-4023 Risks associated with parachuting operations
SRs	n/a
Reference(s)	BIS 'Parachuting Operations'
Dependencies	n/a
Affected stakeholders	NCAs, SPO/NCO operators engaged in parachuting operations, skydiving centres and air sport federations (skydiving), ATOs, DTOs, pilot licence holders and student pilots, ANSPs, ATCOs
Strategic level	No
Strategic priority	n/a
Owner	SM.1 - Safety Intelligence & Performance department

EXPECTED OUTPUT	
Deliverable(s)	Timeline
Produce safety promotion material	2024-Q2

## 4. Rotorcraft



## 4. Rotorcraft

#### Refer to EPAS Volume I Section 3.3.2 'Ensure operational safety in rotorcraft operations'

This chapter groups all the actions in the area of rotorcraft operations and provides links to rotorcraft-related actions in the domains of crew training, design, manufacture and maintenance, in line with EASA's **Rotorcraft Safety Roadmap**<sup>3</sup>.

#### Issue/rationale

The Rotorcraft Safety Roadmap aims to significantly reduce the number of rotorcraft accidents and incidents, and focuses on traditional/conventional rotorcraft including GA rotorcraft where the number of accidents is recognised to be higher. It focuses on safety and transversal issues that need to be tackled through actions in various domains, including training, operations, initial and continuing airworthiness, environment, and facilitation of innovation.

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

This area includes three types of operations that involve certified helicopters:

- CAT flights conducted by EASA AOC holders and using certified or validated helicopters. This section brings together CAT helicopter operations for both onshore flights and includes HEMS, air ambulance, air taxi or sightseeing, and those flights to offshore oil, gas and renewable energy installations;
- SPO involving certified or validated helicopters, such as sling load, advertisement, and photography with an EASA member state as the state of operator or state of registry; and
- Non-commercial operations involving certified or validated helicopters, with an EASA member state as the state of operator or state of registry. This section includes particularly training flights.

<sup>3 &</sup>lt;u>https://www.easa.europa.eu/download/Events/Rotorcraft%20Safety%20Roadmap%20-%20Final.pdf</u>

## 4.1 Safety

In 2022, there were 10 fatal accidents, 37 non-fatal accidents, and 13 serious incidents in helicopter operations (all types).

The number of fatal accidents in 2022 has been higher than the average of the preceding decade, whereas the number of non-fatal accidents has remained stable and the number of serious incidents lower than the 10-year average. The number of fatalities in 2022 (24) was higher than the preceding decade average (20), and the number of serious injuries in 2022 (11) was in line with this average (11.0).

In the last 5-year period (2018-2022) there were 93 fatalities in the identified accidents. Considering all accidents (fatal and non-fatal) gives a mean fatality rate of 0.43 fatalities per accident. Considering only fatal accidents, the mean fatality rate becomes 2.1 fatalities per accident. Since these figures are not normalised with traffic data, the number of occurrences should be interpreted cautiously, as the exact variation of helicopter flying activity at the European level over the past two years is difficult to assess.

The majority (76 %) of all accidents and serious incidents involved rotorcraft that performed non-commercial operations or specialised operations (representing 52 and 2 % respectively of all accidents and serious incidents).

The top three safety issues identified in the rotorcraft Safety Risk Portfolio, for all types of operation, are:

- SI-8031 Inadequate obstacle clearance during any flight phase
- SI-8024 Unanticipated Yaw/Loss of tail rotor effectiveness
- SI-8028 Inadequate airborne separation under VFR operations

#### What we want to achieve

Increase safety by continuously assessing and improving risk controls in the above areas. Increase efficiency by enabling the implementation of appropriate and proportionate regulations.

#### How we monitor improvement

Continuous monitoring of the safety issues identified in the relevant Safety Risk Portfolios (refer to EPAS Volume III, in particular chapters 2, 3 and 5).

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



## RMT.0708 Controlled flight into terrain prevention with helicopter terrain awareness warning systems (HTAWSs)

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 proposing the mandatory installation of HTAWS on board the helicopter for certain operations. HTAWS should only be required 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 visual flight rules (VFR) operations (night and day). For offshore helicopter operations, this also includes the involvement of the EASA Certification Directorate working with stakeholders on the evaluation of updated HTAWS standards.

Taking into account the different timelines for the development of HTAWS standards for onshore and offshore operations, two different subtasks are created:

Subtask 1a will cover offshore HTAWSs.

<u>Subtask 1b</u> will cover onshore HTAWSs. The development of this subtask is put on hold awaiting the finalisation of onshore HTAWS standards.

Status	Ongoing	
Sls	SI-8019 Impaired visibility conditions e SI-8031 Inadequate obstacle clearance	•
SRs	UNKG-2014-034 UNKG-2016-013	
ICAO ref.	n/a	
Other ref(s)	UK Safety Directive 2014/003	
Dependencies	n/a	
Affected stakeholders	Aircraft Operators - Helicopters	
Affected regulation(s)	Commission Regulation (EU) No 965/20	012
Strategic level	Strategic	Strategic priority EPAS Volume I Section 3.4.6
Harmonisation	No	

		WORKING METHOD	
	ner FS.2 - Air Operations & Aerodromes department		
SubT	Development	Impact Assessment(s)	Consultation
1a	By EASA with external support	Light	NPA - Focused
1b	By EASA with external support	Light	NPA - Focused

		PLANNIN	IG MILESTONES		
SubT	Initiation	Consultation	Opinion	Commission IR	Decision
1a	ToR RMT.0708 31/07/2019	2025	2025	2026	2027
1b		<tbd></tbd>	<tbd></tbd>	<tbd></tbd>	<tbd></tbd>

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#### RMT.0724 Improvement of operating information provided to rotorcraft flight crew

The objective of this RMT is to improve the operating information provided to rotorcraft flight crew in the aircrew operating manuals. This could be achieved by standardising the structure and approach used to present operational information in rotorcraft manuals, thereby improving the clarity of this information. This RMT will consider the current approach utilised in CS-25 AMC, and other initiatives such as the activity undertaken by Heli Offshore.

Status	Ongoing	
Sls	SI-8046 Deficiencies and inconsiste	encies in operating manuals
SRs	UNKG-2014-013 UNKG-2016-005 UNKG-2016-006	
ICAO ref.	n/a	
Other ref(s)	n/a	
Dependencies	n/a	
Affected stakeholders	Aircraft Operators - Helicopters	
Affected regulation(s)	n/a	
Strategic level	Standard	Strategic priority n/a
Harmonisation	No	

		WORKING METHOD		
Owner	CT.5 - Policy, Innovation & Knowledge department			
SubT	Development	Impact Assessment(s)	Consultation	
	By EASA	Detailed	NPA - Public	

	PLANNING MILESTONES					
SubT	Initiation	Consultation	Opinion	Commission IR	Decision	
	ToR RMT.0724 12/03/2021	<tbd></tbd>	n/a	n/a	<tbd></tbd>	

Safety workshops

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#### SPT.0093 Development of new safety promotion material for high-profile helicopter issues

In cooperation with the Vertical Aviation Safety Team (VAST) (previously 'IHSF'), develop new safety promotion material (leaflets, videos, tablet/smartphone applications, etc.) on subjects such as performance-based navigation, point in space, low-level IFR, bird strike, operational and passenger pressure management, aimed at pilots and owners of private helicopters. Such safety promotion material shall address the most important areas of rotorcraft safety as directed through the Rotorcraft Committee and the EASA Rotorcraft Strategy.

Status	Ongoing
Sls	SI-8030 Bird and other wildlife hazards SI-8038 External-sling-load-operations-related issues
SRs	n/a
Reference(s)	n/a
Dependencies	n/a
Affected stakeholders	Aircraft Operators - Helicopters
Strategic level	Standard
Strategic priority	n/a
Owner	ESPN-R

EXPECTED OUTPUT	
Deliverable(s)	Timeline
Leaflets, videos, webpages and/or tablet/smartphone applications	Continuous

#### SPT.0096 Organisation of an annual safety workshop

The European Safety Promotion Network Rotorcraft (ESPN-R) to organise a safety forum, in cooperation with the trade shows. This high-profile event promotes safe helicopter operations and fosters interactions within the community. The event theme changes every year.

Status	Ongoing	
Sls	all safety issues in the Safety Risk Portfolio for rotorcraft (refer to EPAS Volume III)	
SRs	n/a	
Reference(s)	European Safety Promotion Network Rotorcraft (ESPN-R) https://www.easa.europa.eu/en/domains/safety-management/safety-promotion/ european-safety-promotion-network-rotorcraft-espn-r	
Dependencies	n/a	
Affected stakeholders	Aircraft operators - helicopters, NCAs	
Strategic level	Standard	
Strategic priority	n/a	
Owner	ESPN-R	
	EXPECTED OUTPUT	
Deliverable(s)	Timeline	

Continuous

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#### SPT.0099 Helicopter hoist safety promotion

Develop Safety promotion material for helicopter hoists.

NB: Deliverables already available are shared via the EASA Community Rotorcraft and LinkedIn Group 'ESPN-R Hoist Operation Safety Promotion'.

Status	Ongoing
Sls	SI-8037 Hoist-operations-related issues
SRs	n/a
Reference(s)	LinkedIn group 'ESPN-R Hoist Operation Safety Promotion' https://www.linkedin.com/groups/8693588
Dependencies	n/a
Affected stakeholders	Aircraft Operators - Helicopters
Strategic level	Standard
Strategic priority	n/a
Owner	EASA SM.1

Deliverable(s)	Timeline	
Pilot guidance on hoist operations	2025	

#### MST.0015 Helicopter safety events

Member States' NCAs, in partnership with industry representatives, should organise helicopter safety events annually or every 2 years. The ESPN-R (previously EHEST), VAST (previously IHSF), NCA, Heli Offshore or other sources of safety promotion material could be freely used and promoted.

Status	Ongoing
Sls	all safety issues in the Safety Risk Portfolio for rotorcraft (refer to EPAS Volume III)
SRs	n/a
Reference(s)	n/a
Dependencies	n/a
	Aircraft Operators - Helicopters, NCAs
Owner	Member States

EXPECTED OUTPUT		
Deliverable(s)	Timeline	
Safety events	Continuous	

#### 4. ROTORCRAFT

#### **RES.0008** Integrity improvement of rotorcraft main gear boxes (MGBs)

Further to the investigation of the EC225 LN-OJF accident, the research aimed at identifying threats to the integrity of critical components of rotor drive systems and at developing methods for evaluating flaw-tolerant critical component designs. Specifically, this includes enhancements to the design of helicopter MGB and its attachments, to preclude separation of the mast and main rotor from the helicopter and to enable autorotation even in the event of major failure of the MGB components.

Status	Ongoing		
Sls	SI-9007(8001) Helicopter rotor and transmission system failures		
SRs	n/a		
Reference(s)	https://www.easa.europa.eu/en/research-projects/ integrity-improvement-rotorcraft-main-gear-box-mgb		
Dependencies	n/a		
Affected stakeholders	DOA holders - Helicopters		
Owner	SM.2 - Strategy & Programmes department		
	EXPECTED OUTPUT		
Deliverable(s)		Timeline	
Final report		2024-Q2	

# RES.0011 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.

Status	On hold	
Sls	n/a	
SRs	UNKG-2011-041	
Reference(s)	Cleansky 2 iGear project: Intelligent Gearbox for Endurance Advanced Rotorcraft	
	https://www.researchgate.net/publication/333827990_Vibration_analysis_under_varying_ operating_conditions_for_rotorcraft_gearbox_monitoring	
	UK MENtOR project: Methods and Experiments for NOvel Rotorcraft	
	https://gtr.ukri.org/projects?ref=EP%2FS013814%2F1	
Dependencies	n/a	
Affected stakeholders	Aircraft Operators - Helicopters, DOA and POA holders - Helicopters	
Owner	SM.2 - Strategy & Programmes department	
	EXPECTED OUTPUT	
Deliverable(s)	Timeline	
Final report	<tbd></tbd>	

#### 4. ROTORCRAFT

#### RES.0035 Helicopter underwater evacuation

The following objectives should be addressed under this topic:

- Evaluate the influence of being underwater on the required jettison force and operation of an underwater emergency exit or escape window.
- Determine the forces that human test subjects (covering the range of sizes from 5th percentile female to 95th percentile male) are capable of applying to jettison an underwater emergency exit or escape windows when underwater.
- Establish an appropriate maximum operating/jettison force for underwater emergency exits to ensure that these exits are operable in an emergency when underwater.
- Provide confirmation of the validity of the current CS-27 and CS-29 AMC material for compliance with the requirement 'the means of opening each emergency exit must be simple and obvious and may not require exceptional effort' for underwater emergency exits, or propose a future revision based on the technical findings of this research.
- Better quantify the underwater escape process from a capsized helicopter using a full complement of test subjects in the simulator, in both light and dark conditions.
- Determine whether the current expectation of a 60-second escape time is achievable under a range of conditions and possible seat configurations, using test subjects that are representative of the demographic of the European offshore population.
- Validate the current CS-27 and CS-29 requirements and AMC material related to occupant egress in the event of a capsize, or propose a future revision based on the technical findings of this research.

This project is funded by Horizon Europe under the 2nd Research Contribution Agreement with the European Commission.

Status	Ongoing	
Sls	SI-9009 (8039) Hazardous conditions following helicopter ditching	
SRs	AAIB 2016-016	
Reference(s)	Helicopter Underwater Escape #2 https://www.easa.europa.eu/research-projects/helicopter-underwater-escape-2	
Dependencies	n/a	
Affected stakeholders	Aircraft Operators - Helicopters, DOA holders, NCAs	
Owner	SM.2 - Strategy & Programmes department	
	EXPECTED OUTPUT	
Deliverable(s)	Timeline	

2024-Q4

Et a al	
Final	report

#### **RES.0039** Helicopter vortex ring state experimental research

The vortex ring state (VRS) is an aerodynamic condition for helicopters normally generated in nearly vertical or vertical descent when the relative upward air velocity equals the downward induced main rotor flow rate. This research should provide a better understanding of the VRS phenomenon on different types of helicopters, the analytical and simulation prediction methods, and flight test methods for its determination. Further, it should provide an indication of the effectiveness of alternative recovery manoeuvres such as the one proposed by Capt. Vuichard.

This research project is funded by Horizon Europe under the 2nd Research Contribution Agreement with the European Commission.

Status	Ongoing	
Sls	SI-8025 Vortex ring state	
SRs	n/a	
Reference(s)	n/a	
Dependencies	n/a	
	Aircraft Operators - Helicopters, DOA holders, NCAs	
Owner	SM.2 - Strategy & Programmes department	

EXPECTED OUTPUT	
Deliverable(s)	Timeline
Final report	2024-Q4

In addition to the above actions listed in this chapter, the following RMTs are directly relevant to rotorcraft safety:

RMT.0710	Improvement in the survivability of rotorcraft occupants in the event of a crash	
RMT.0711	Reduction in accidents caused by failures of critical rotor and rotor drive components through improved vibration health monitoring systems	
RMT.0725	Rotorcraft chip detection system	
RMT.0726	Rotorcraft occupant safety in the event of a bird strike	

The full description of these actions is included in Chapter 6.

In addition to the above actions listed in this chapter, the following SPTs are directly relevant to rotorcraft safety:

SPT.0111 Flight examiner manual

The full description of this action is included in **Chapter 2**.

SPT.0119 Promoting iConspicuity

The full description of this action is included in **Chapter 5**.

#### MST.0002 Promotion of SMS

The full description of this action is included in **Section 1.2**.

In addition to the above actions listed in this chapter, the following RES actions are directly relevant to rotorcraft safety:

**RES.0016** Fire risks caused by portable electronic devices on board aircraft

The full description of this action is included in **Chapter 3**.

RES.0031 Interoperability of different iConspicuity devices/systems

The full description of this action is included in **Chapter 5**.

**RES.0017** Icing hazard linked to super cooled large droplets (SLDs)

The full description of this action is included in **Chapter 6**.

RES.0028 Single-pilot operations risk assessment framework

The full description of this action is included in **Chapter 11**.

RES.0025 Assessment of environmental impacts - rotorcraft noise

The full description of this action is included in **Chapter 12**.

# 4.2 Level playing field

#### RMT.0318 Single-engine helicopter operations

Review the applicable regulations and the associated AMC and GM to re-evaluate the restrictions as regards the operation of single-engine helicopters over congested environments. Technological developments in hybrid propulsion that could have a positive impact on the performance of single-engine helicopters are anticipated in the next years and should be taken into consideration in the development of this task.

Status	On hold	
Sls	n/a	
SRs	n/a	
ICAO ref.	n/a	
Other ref(s)	n/a	
Dependencies	n/a	
Affected stakeholders	Air operators – Helicopters	
Affected regulation(s)	Commission Regulation (EU) No 965/2012	
Strategic level	Standard	Strategic priority n/a
Harmonisation	No	

			WORKING METHOD		
Owner	FS.2 - Air Operation	ns & Aerodromes	department		
SubT	Development		Impact Assessment(s)	Consultation	
	By EASA with exter	rnal support	Light	NPA - Focused	
			PLANNING MILESTONES		
SubT	Initiation	Consultatio	opinion	<b>Commission IR</b>	Decision
	ToR RMT.0318 01/02/2018	<tbd></tbd>	<tbd></tbd>	<tbd></tbd>	<tbd></tbd>

# 4.3 Efficiency/proportionality

#### SPT.0127 Supporting small helicopter operators in implementing m anagement systems effectively

The objective of this task is to provide support to small helicopter operators to implement management systems effectively with the following indicative scope:

- promote good practices and examples on how to organise the implementation of a safety management system, including change management, risk assessments, examples of safety key performance indicators, etc.;
- promote good practices and examples on how to organise the implementation of a compliance monitoring system, including good practices in root-cause analysis, simpler internal audit checklist systems, etc.;
- promote good practices and examples on how to organise digital record-keeping, etc.

n/a
n/a
BIS 'Administrative Burden for Small Helicopter Operators'
RMT.0392
Aircraft operators - Helicopters
Standard
n/a
SM.1 - Safety Intelligence & Performance department

EXPECTED OUTPUT		
Deliverable(s) Timeline		
Safety promotion material	2024	

#### 4. ROTORCRAFT



# SPT.0128 Support helicopter operators in developing improved organisational processes and procedures

The objective of this task is to provide support to helicopter operators in the development of internal organisational processes and procedures, including the following areas:

- Development and promotion of typical standard operating procedures (SOPs) and checklists as a basis which will have to be further tailored to the specific needs/risks of the operators. More concretely, this includes the development of practical guidance material which will guide the operators through the identification of their risks (related to their envisaged operations). Subsequently, the guidance material will provide information on how to develop an adequate risk assessment on the basis of which suitable SOPs and checklists can be developed. Typical SOPs could include thematic hazard lists, possibly with some common controls/compensating measures. However, they would need to be further tailored to the needs/risks of the operators.
- Development and promotion of guidance on how an operator verifies the validity of a certificate/approval for certified subcontractors and how to appropriately ensure compliance with the applicable requirements and that relevant hazards are considered. Promotion of examples of contracts for subcontracting CAMO/Part-145 approvals.
- Development and promotion of guidance related to EFB operations and the related approval process.

Status	Ongoing	
Sls	n/a	
SRs	n/a	
Reference(s)	BIS 'Administrative Burden for Small Helicopter Operators'	
Dependencies	n/a	
	Aircraft operators - Helicopters	
Strategic level	Standard	
Strategic priority	n/a	
Owner	SM.1 - Safety Intelligence & Performance department	

EXPECTED OUTPUT	
Deliverable(s)	Timeline
Safety promotion material	2024-Q4

The following RMTs are directly relevant to rotorcraft efficiency/proportionality:

**RMT.0494** Flight time limitation rules for helicopter operations

The full description of this action is included in **Section 1.3.2**.

RMT.0392 Regular update of the air operation rules

The full description of this action is included in Section 3.1.3.

# 5. General Aviation



# 5. General Aviation

#### Refer to EPAS Volume I Section 3.3.3 'Ensure operational safety for General Aviation'

This chapter covers non-commercial operations with aeroplanes that have a MTOM below 5 700 kg, as well as all operations with sailplanes and balloons. Operations with rotorcraft (commercial and non-commercial) for all types of rotorcraft are addressed in Chapter 4.

Addressing safety risks in GA in a proportionate and effective manner remains a strategic priority within the EPAS. GA in Europe maintains a stable activity, involving 10 times more aircraft and airfields than CAT. GA has been since its dawning the cradle for innovation and recruitment of young professionals (ATCOs, mechanics, pilots, etc.) and a means to connect people across Europe.

The ASR 2023 provides further insights and key statistics into safety outcomes in GA, including on accidents, serious incidents, fatalities, serious injuries and KRAs. Safety issues associated with non-commercially operated small aeroplanes, sailplanes and balloons respectively are further described in EPAS Volume III (refer to Chapters 6, 7 and 8).

The persisting high number of fatalities in GA accidents shows that further efforts are required to mitigate the risks leading to those fatalities; these are explained on the following pages.

## 5.1 Safety

This section is further subdivided per type of GA aircraft, to mirror the structure of the Safety Risk Portfolios in EPAS Volume III.

#### 5.1.1 General Aviation - transversal

#### Issue/rationale

This section addresses system-wide or transversal issues that affect GA as a whole and are common to NCO aeroplanes, sailplanes and balloons. 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 the 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 the safety issues identified in the Safety Risk Portfolios for non-commercially operated small aeroplanes, as well as for sailplanes and balloons (refer to EPAS Volume III).

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

#### MST.0025 Improvement in the dissemination of safety messages

Member States should increase their engagement in and dissemination of safety promotion and training material by their competent authorities, associations, flying clubs, and insurance companies, targeting flight instructors and/or pilots. This can be done through means such as being part of the pan-EASA Member State GA Season Opener/Closing by hosting local events/workshops and promoting the material developed through the Safety Promotion Network (SPN) on the most important safety issues for General Aviation.

This activity considers EASA safety promotion deliverables.

Note: This MST was expected to be completed in 2023.

It will be formally closed and removed from the EPAS once sufficient feedback on implementation is collected by the Agency.

Status	Ongoing
Sls	all safety issues in the Safety Risk Portfolios for NCO small aeroplanes, sailplanes and balloons (refer to EPAS Volume III)
SRs	n/a
Reference(s)	n/a
Dependencies	SPT.0125
Affected stakeholders	GA
Owner	Member States

EXPECTED OUTPUT	
Deliverable(s)	Timeline
Organise safety workshops and safety days/evenings	2023-2024

#### **MST.0027** Promotion of safety culture in GA

Member States' NCAs should include in their State safety management activities provisions to facilitate and promote safety culture (including just culture) in GA in order to foster positive safety behaviours and encourage occurrence reporting.

EASA will support this MST by providing promotion material and guidance to support Member States in that task.

Safety promotion video published in 2022 can be found on the EASA Youtube Channel under

GA Season Opener Day 1 - Be Ready and Fly Safely Introduction - YouTube

Status	Ongoing
Sls	all safety issues in the Safety Risk Portfolios for NCO small aeroplanes, sailplanes and balloons (refer to EPAS Volume III)
SRs	n/a
Reference(s)	n/a
Dependencies	n/a
Affected stakeholders	
Owner	Member States

Owner

EXPECTED OUTPUT	
Deliverable(s)	Timeline
Provisions to facilitate and promote safety culture as part of the SSP/SPAS	Continuous

#### MST.0038 Airspace complexity and traffic congestion

Member States should consider 'airspace complexity' and 'traffic congestion' as safety-relevant factors in airspace changes affecting uncontrolled traffic, including the changes along international borders.

This MST was expected to be completed in 2023. Note:

> It will be formally closed and removed from the EPAS once sufficient feedback on implementation is collected by the Agency.

Status	Ongoing
Sls	SI-2025 Airspace infringement SI-4010 Airborne separation
SRs	n/a
Reference(s)	European Action Plan for Airspace Infringement Risk Reduction (EAPAIRR) BIS 'Airborne collision risk'
Dependencies	SPT.0120
	Pilots, aircraft operators — all, NCAs, ANSPs
Owner	Member States

EXPECTED OUTPUT	
Deliverable(s)	Timeline
Best practices	2023-Q4
Feedback on implementation	2024-Q4

#### **RES.0031** Interoperability of different iConspicuity devices/systems

EASA, with the support of technical partners, should demonstrate and validate the feasibility of achieving interoperability of different iConspicuity devices/systems through a network of stations while respecting data privacy requirements.

Status	Ongoing
Sls	SI-8028 Inadequate airborne separation under VFR operation
SRs	n/a
Reference(s)	European Action Plan for Airspace Infringement Risk Reduction (EAPAIRR) EASA BIS 'Airborne collision risk'
Dependencies	RMT.0230 RMT.0519 SPT.0119
Affected stakeholders	Pilots, aircraft operators — all, NCAs, ANSPs, industry (e.g. avionics manufacturers)
Owner	CT.2 - General Aviation & VTOL (Vertical Take-Off and Landing) department
	EXPECTED OUTPUT
Delivere ble(e)	Time line

Deliverable(s)	Timeline
Final report	2024-Q1

#### SPT.0119 Promoting iConspicuity

The concept of iConspicuity has to be understood as the 'in-flight capability' to transmit position and/or to receive, process and display information about other aircraft, airspace, weather or support navigation in real time with the objective of enhancing pilots' situational awareness.

The objective of this task is to:

- facilitate the installation of iConspicuity devices in all aircraft that have been granted an EASA TC;
- promote their use by airspace users at an affordable cost for them;
- support the initiatives that enhance the interoperability and performance of iConspicuity devices/systems, and take into consideration the spectrum congestion.

SI- SRs AL AL AL AL FR FR IRI NE SW Reference(s) BIS Dependencies RE RE	-0043 Deconfliction of IFR and VFR traffic -4010 Airborne separation UST-2008-002 UST-2016-001 UST-2016-002 UST-2016-003 UST-2016-004 RAN-2015-057 RAN-2016-100 LD-2014-017 ETH-2018-003 WTZ-2016-002
AL AL AL FR FR IRI NE SV Reference(s) BIS Dependencies RE	UST-2016-001 UST-2016-002 UST-2016-003 UST-2016-004 RAN-2015-057 RAN-2016-100 LD-2014-017 ETH-2018-003
Dependencies RE RE	V 12-2010-002
RE	S 'Airborne collision risk'
RN	ES.0021 ES.0031 ES.0032 MT.0230 MT.0519
Affected stakeholders Pil	lots, aircraft operators, NCAs, ANSPs, industry (e.g. avionics manufacturers)
Strategic level Sta	andard
Strategic priority n/a	/a
Owner SN	N.1 - Safety Intelligence & Performance department

EXPECTED OUTPUT	
Deliverable(s)	Timeline
Posters, videos, articles and social media promotion	2024-Q2



#### SPT.0120 Promoting good practices in airspace design

Promote good practices in airspace design that reduce 'airspace complexity' and 'traffic congestion' with the aim of reducing the risk of airborne collisions involving uncontrolled traffic.

Status	Ongoing
Sls	SI-2025 Airspace infringement SI-4010 Airborne separation
SRs	n/a
Reference(s)	European Action Plan for Airspace Infringement Risk Reduction (EAPAIRR) BIS 'Airborne collision risk'
Dependencies	MST.0038
Affected stakeholders	Pilots, aircraft operators, NCAs, ANSPs, industry (e.g. avionics manufacturers)
Strategic level	Standard
Strategic priority	n/a
Owner	SM.1 - Safety Intelligence & Performance department

EXPECTED OUTPUT	
Deliverable(s)	Timeline
Safety promotion material	2024-Q2

#### SPT.0125 Promotion of the most important safety issues for General Aviation

Safety promotion campaigns — before and after each flying season to help maintain skills and currency — based on highlighting the most important safety issues identified from the safety risk management process.

Coordinate with NCAs and industry partners to maximise the number of coordinated events and release of material in local languages.

Safety promotion material produced so far:

- Sunny Swift on weather briefing process (<u>https://www.easa.europa.eu/newsroom-and-events/news/</u> sunny-swift-weather-briefing-process)
- Briefing cards and decision making: (<u>https://www.easa.europa.eu/community/topics/briefing-cards</u>)
- Webinar on planning and decision-making in GA (<u>https://www.youtube.com/watch?v=4j8TDqJessI</u>)
- Winter Flying Article (https://www.easa.europa.eu/community/topics/winter-flying)
- EASA GA Update (https://www.easa.europa.eu/community/topics/easa-ga-stakeholders-updates).
- Annual Safety Review Top GA Risks (<u>https://www.easa.europa.eu/community/topics/</u> easa-annual-safety-review-general-aviation)
- Sunny Swift on Using a Glass Cockpit (<u>https://www.easa.europa.eu/community/topics/</u> lets-practise-using-glass-cockpit)
- Sunny Swift on Trim Runaway (https://www.easa.europa.eu/community/topics/trim-runaway)
- Sunny Swift on Staying in your Comfort Zone (Skills and experience) (<u>https://www.easa.europa.eu/community/</u> topics/sunny-swift-episode-37-stay-your-comfort-zone)
- Increased use of Technology in GA: <u>https://www.easa.europa.eu/community/topics/</u> embracing-future-techs-impact-ga-flying
- Case Study 1 Flysto: <u>https://www.easa.europa.eu/community/topics/</u> technology-pilots-video-1-easa-talk-flysto-aero-2023
- Case Study 2 Safesky: <u>https://www.easa.europa.eu/community/topics/</u> technology-pilots-video-2-easa-talk-safesky
- Case Study 3 BOM: https://www.easa.europa.eu/community/topics/technology-pilots-video-3-easa-talk-bom

Status	Ongoing
Sls	Refer to the SIs described in the Safety Risk Portfolios for NCO with small aeroplanes, sailplanes and balloons (refer to EPAS Volume III)
SRs	n/a
Reference(s)	n/a
Dependencies	n/a
Affected stakeholders	GA
Strategic level	Strategic
Strategic priority	EPAS Volume I § 3.3.3
Owner	SM.1 - Safety Intelligence & Performance department

EXPECTED OUTPUT	
Deliverable(s)	Timeline
Posters, videos, articles and social media promotion. Workshops, webinars events	Continuous



RMT.0230	Introduction of a regulatory framework for the operation of drones	Chapter 10
RMT.0287	Regular update of Part-MED of the Aircrew Regulation.	Section 1.3.3
RMT.0587	Regular update of regulations regarding pilot training, testing and checking and the related oversight	Chapter 2.2
RMT.0678	Simpler, lighter and better flight crew licensing requirements for general aviation	Chapter 2.2
RMT.0727	Alignment of Part 21 with Regulation (EU) 2018/1139 (including simple and proportionate rules for General Aviation)	Chapter 6
RMT.0424	Regular update of Part-MED	Section 1.3.3

In addition to the above actions, the following EPAS actions are directly relevant to GA (transversal):

#### Non-commercially operated small aeroplanes 5.1.2

#### What we want to achieve

Increase safety in non-commercially operated small-aeroplane operations.

#### How we monitor improvement

Continuous monitoring of the safety issues identified in the Safety Risk Portfolio for non-commercially operated small aeroplanes (refer to EPAS Volume III).

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

#### RMT.0687 **Regular update of CS-23**

The objective of this RMT is to regularly address miscellaneous issues of non-controversial nature, in order to ensure that the CS are fit for purpose, cost-effective, can be implemented in practice, and are in line with the latest ICAO SARPs. In particular, a regular update is used to incorporate SCs, certification memoranda and other material supporting the application and interpretation of existing CS as established by EASA during previous certification projects, and to address non-complex and non-controversial issues raised by stakeholders.

Under this RMT, EASA will regularly review the standards developed by ASTM for the application of CS-23 and incorporate into AMC & GM those which are considered to be suitable to provide means of compliance or guidance to the CS.

The last cycle was completed after publication of ED Decision 2023/002/R on 07/03/2023.

Status		Ongoing				
Sls		n/a				
SRs		n/a				
ICAO ref	•	n/a				
Other re	f(s)	n/a				
Depende	encies	n/a				
Affected	stakeholders	DA holders				
Affected	regulation(s)	n/a				
Strategic	: level	Standard		Stra	ntegic priority	n/a
Harmoni	isation	No				
			WORKING METH	OD		
Owner	EASA CT.5 - P	olicy, Innovation & Kn	owledge departme	nt		
SubT	Developmen	ıt	Impact Assessme	ent(s) Con	sultation	
	To be determ	nined at a later stage	Light	To b	be determined	at a later stage
			PLANNING MILEST	ONES		
SubT	Initiation	Consultatio	on Opinio	on Com	mission IR	Decision
	ToR RMT.068 09/08/2017	7 <tbd></tbd>	<tbd></tbd>	<tbd< td=""><td>&gt;</td><td><tbd></tbd></td></tbd<>	>	<tbd></tbd>

#### SPT.0088 Promote instrument flying for GA pilots

Launch a safety promotion campaign to promote the results of RMT.0677 on the easier access of GA pilots to IFR flying in order to ensure that the safety and efficiency benefits materialise across Europe and that the basic instrument rating is widely adopted in Europe.

Related 'Sunny Swift' promotion material:

https://www.easa.europa.eu/newsroom-and-events/news/sunny-swift-easier-and-safer-flying-ifr https://www.easa.europa.eu/newsroom-and-events/news/sunny-swift-weather-radar-information https://www.easa.europa.eu/newsroom-and-events/news/sunny-swift-taf-what-it-means-practice

Status	Ongoing
Sls	n/a
SRs	n/a
Reference(s)	n/a
Dependencies	RMT.0677
Affected stakeholders	GA
Strategic level	Standard
Strategic priority	n/a
Owner	SM.1 - Safety Intelligence & Performance department

EXPECTED OUTPUT	
Deliverable(s)	Timeline
Posters, videos, articles and social media promotion.	2024-Q2

### 5.1.3 Sailplanes

#### What we want to achieve

Increase safety in sailplane operations.

#### How we monitor improvement

Continuous monitoring of the safety issues identified in the Safety Risk Portfolio for sailplanes (refer to EPAS Volume III).

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

The section is included as a placeholder for future actions.

### 5.1.4 Balloons

#### What we want to achieve

Increase safety in balloon operations.

#### How we monitor improvement

Continuous monitoring of the safety issues identified in the Safety Risk Portfolios for balloons (refer to EPAS Volume III).

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

The section is included as a placeholder for future actions.

# 5.2 Efficiency/proportionality

#### Issue/rationale

This section provides references to the additional EPAS actions that are directly relevant to aeroplanes that have a MTOM below 5 700 kg, as well to the operations with sailplanes and balloons, where efficiency/proportionality is the main driver. Detailed information on each of those actions is included in the domain-specific EPAS chapter.

This section will also include regular-update RMTs in the GA domain.

#### What we want to achieve

Reduce the regulatory burden and cost for GA while improving the level of safety.

#### How we monitor improvement

The ABs regularly provide feedback on the effectiveness of the activities that aim to improve efficiency/ proportionality and ensure a level playing field.

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

The section is included as a placeholder for future actions.

The following two EPAS actions are directly relevant to GA efficiency/proportionality:

RMT.0678 Simpler, lighter and better flight crew licensing requirements for general aviation

The full description of this action is included in Section 2.2.

**RMT.0727** Alignment of Part 21 with Regulation (EU) 2018/1139 (including simple and proportionate rules for General Aviation)

The full description of this action is included in **Chapter 6**.

# 6. Design and production



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# 6. Design and production

#### **Refer to EPAS Volume I Section 3.3.4 'Ensure operational safety in initial and continuing airworthiness'**

This chapter includes all the actions that are relevant to design and production for the drivers 'safety', 'efficiency/ proportionality' and 'level playing field'.

## 6.1 Safety

#### Issue/rationale

Design and production improvements may limit the probability and/or severity 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 accidents. This does not necessarily mean that the technical failure was the direct cause of the accident, but that a system component failure was identified in the sequence of events in a number of serious incidents and accidents over the past years. The handling of technical failures in this context means the ineffective handling of a non-catastrophic technical failure by the flight crew. 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 design and production. Non-accident data will be also used for the analysis.

#### What we want to achieve

Increase safety by continuously assessing and improving risk controls related to design and production. Ensure an efficient regulatory framework for manufacturers. Harmonise the requirements where harmonisation ensures fair competition and/or facilitates the free movement of goods, persons and services

#### How we monitor improvement

Continuous monitoring of the safety issues identified in the relevant Safety Risk Portfolios (refer to EPAS Volume III, in particular Chapter 9).

The EASA ABs regularly provide feedback on the effectiveness of the actions in the area of efficiency/ proportionality and level playing field.

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



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

The objective of this task is to assess the need for an amendment of CS-25 to require applicants to perform an assessment of the effect of on-ground contamination of aircraft aerodynamic surfaces on take-off performance and on aircraft manoeuvrability and controllability.

Status	Ongoing		
Sls	SI-0002 Icing on ground		
SRs	FRAN-2009-001 FRAN-2014-006 RUSF-2013-001 SWED-2011-016		
ICAO ref.	n/a		
Other ref(s)	CS-25		
Dependencies	n/a		
Affected stakeholders	DOA holders		
Affected regulation(s)	n/a		
Strategic level	Strategic	Strategic priority	EPAS Volume I Section 3.3.4
Harmonisation	Yes - intended		

		WORKING METHOD	
Owner	wner CT.5 - Policy, Innovation & Knowledge department		
SubT	Development	Impact Assessment(s)	Consultation
	By EASA	Detailed	NPA - Public

		PLANN	ING MILESTONES			
SubT	Initiation	Consultation	Opinion	<b>Commission IR</b>	Decision	
	ToR RMT.0118 21/03/2017	NPA 2022-08 25/07/2022	n/a	n/a	2024-Q2	



#### 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 put forward by accident investigation boards on fuel tanks and occupant safety for helicopters certified before the update 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 to the ARAC by the FAA 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 to existing European fleets.

EASA will address these issues in two subtasks:

Subtask 1 will address crash-resistant fuel systems.

<u>Subtask 2</u> will address crash-resistant seats and structures. The decision to start this subtask is subject to an impact assessment.

Status	Ongoing		
Sls	n/a		
SRs	PORT-2020-001 SWTZ-2017-530		
ICAO ref.	n/a		
Other ref(s)	n/a		
Dependencies	n/a		
Affected stakeholders	DOA holders, POA holders, air operators	- helicopters	
Affected regulation(s)	Commission Regulation (EU) 2015/640		
Strategic level	Strategic	Strategic priority	EPAS Volume I Section 3.3.4
Harmonisation	No		

		WORKING METHOD			
Owner	er CT.5 - Policy, Innovation & Knowledge department				
SubT	Development	Impact Assessment(s)	Consultation		
1	By EASA	Detailed	NPA - Public		
2	By EASA	Detailed	To be determined at a later stage		
2	By EASA	Detailed	To be determined at a later s		

PLANNING MILESTONES						
SubT	Initiation	Consultation	Opinion	<b>Commission IR</b>	Decision	
1	ToR RMT.0710 16/12/2021	NPA 2022-10 11/11/2022	2024-Q2	2025	2025	
2		<tbd></tbd>	<tbd></tbd>	<tbd></tbd>	<tbd></tbd>	



# **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 has 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 with the existing legacy systems.

Status	Ongoing		
Sls	SI-9007 (8001) Helicopter rotor and trans	smission system failu	res
SRs	UNKG-2018-007		
ICAO ref.	n/a		
Other ref(s)	n/a		
Dependencies	n/a		
Affected stakeholders	DOA holders, POA holders		
Affected regulation(s)	Commission Regulation (EU) 2015/640		
Strategic level	Strategic	Strategic priority	EPAS Volume I Section 3.3.4
Harmonisation	No		

		WOR	KING METHOD		
Owner	r CT.5 - Policy, Innovation & Knowledge department				
SubT	Development Impact Assessment(s) Consultation				
	By EASA	Light			
		PLANN	ING MILESTONES		
SubT	Initiation	Consultation	Opinion	Commission IR	Decision
	ToR RMT.0711	NPA 2022-03		••••••	

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#### RMT.0725Rotorcraft chip detection system

Subtask 1 (CS-27 / CS-29) was completed with the publication of Decision 2021/016/R on 17/12/2021.

<u>Subtask 2</u> will consider the proportionate retrospective application of the currently applicable CS-27 and CS-29 to existing fleets and types that are not compliant with the latest specifications. The decision to start this subtask is subject to an impact assessment.

Status	On hold		
Sls	SI-9007 (8001) Helicopter rotor and transmission	system failures	
SRs	NORW-2018-004		
ICAO ref.	n/a		
Other ref(s)	BIS 'Rotorcraft'		
Dependencies	n/a		
Affected stakeholders	DOA holders, POA holders		
Affected regulation(s)	Commission Regulation (EU) 2015/640		
Strategic level	Standard	Strategic priority	n/a
Harmonisation	No		

	WORKING METHOD				
	CT.5 - Policy, Innovation & Knowledge department				
SubT	Development Impact Assessment(s) Consultation				
2	By EASA	Detailed	NPA - Public		

	PLANNING MILESTONES					
SubT	Initiation	Consultation	Opinion	Commission IR	Decision	
2		<tbd></tbd>	<tbd></tbd>	<tbd></tbd>	<tbd></tbd>	



#### RMT.0726 Rotorcraft occupant safety in the event of a bird strike

Since the 1980s there have been an increasing number of accidents involving rotorcraft bird strikes where the rotorcraft was not certified in accordance with the latest bird-strike protection provisions. This has resulted in a number of occurrences where rotorcraft bird impacts have had an adverse effect on safety. The objective of this RMT is to improve rotorcraft occupant safety in the event of a bird strike. This will be achieved by considering the development of new CS-27 provisions for bird strike based on the recommendations of the ARAC Bird Strike WG (rev. B) and also considering proportionate retrospective application of the currently applicable CS-27 and CS-29 to existing fleets and types that are not compliant with the latest provisions.

#### The RMT is split into subtasks:

2

Subtask 1 (provisions in CS-27) was completed with the publication of Decision 2021/016/R on 17/12/2021.

<u>Subtask 2</u> will consider the retrospective application of the currently applicable CS-27 and CS-29 specifications. The decision to start this subtask is subject to an impact assessment.

Status	On hold	
Sls	SI-8030 Bird and other wildlife hazard	
SRs	n/a	
ICAO ref.	n/a	
Other ref(s)	BIS 'Rotorcraft'	
Dependencies	n/a	
Affected stakeholders	DOA holders, POA holders	
Affected regulation(s)	Commission Regulation (EU) 2015/640	
Strategic level	Standard	Strategic priority n/a
Harmonisation	No	

	WORKING METHOD							
Owner	CT.5 - Policy, Innovation & Knowledge department							
SubT	Development	Impact Assessment(s) Consultation						
2	By EASA	To be	To be determined at a later stage					
	PLANNING MILESTONES							
SubT	Initiation	Consultation	Opinion	Commission IR	Decision			

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# RMT.0740 Regular update of Regulations (EU) 748/2012 and (EU) 2015/640 and associated AMC&GM and CS-26 to transpose ICAO SARPs

ICAO Council regularly adopts new Standards and Recommended Practices (SARPs) in the Annexes to the Chicago Convention (e.g. Annex 8 'Airworthiness of Aircraft', Annex 6 'Operation of Aircraft' and Annex 19 'Safety Management'), which may need to be transposed in Commission Regulations (EU) No 748/2012 and (EU) 2015/640 and the associated acceptable means of compliance (AMC) and guidance material (GM), as well as in CS-26 as relevant for the newly adopted SARPs.

The objective of RMT.0740 is to maintain and increase the level of safety and ensure the recognition by third countries of certificates issued in accordance with the above Regulations by transposing ICAO SARPs. This will be done after an assessment of the changes proposed by ICAO. This RMT is a permanent vehicle to address newly adopted airworthiness SARPs, except those related to continuing airworthiness.

# Note: When the transposition of the Annex 8 new SARPs requires the amendment of CS-23, CS-25, CS-27 and CS-29, this will be made through RMT.0687, RMT.0673 and RMT.0128 when no dedicated rulemaking task exists.

Status		New			
Sls		n/a			
SRs		n/a			
ICAO ref	F.	For subtask 1:			
		• Annex 8 to the Chicago Convention, Thirteen Edition, July 2022 and Corrigendum No.1, 12 August 2022, applicable from 3 November 2022;			
		• SL AN 3/5.14-22/23 issued by ICAO on 8	April 2022 (Amendment 109 to Annex 8)		
Other re	ef(s)	n/a			
Dependencies n/a		n/a			
		DOA holders, POA holders, aircraft operators and Member States' national competent authorities			
Affected	l regulation(s)	Commission Regulation (EU) No 748/2012 Commission Regulation (EU) 2015/640			
Strategi	c level	Standard	Strategic priority n/a		
Harmon	isation	Yes – ongoing			
		WORKING METHO	)		
Owner	CT.5 - Policy,	Innovation & Knowledge department			
SubT	Developmen	t Impact Assessment	(s) Consultation		
1	By EASA	Light	NPA - Focused		

	PLANNING MILESTONES					
SubT	Initiation	Consultation	Opinion	Commission IR	Decision	
	ToR RMT.0740 11/04/2023	NPA 2023-105 27/06/2023	2024-Q2	2025	2025	



#### **RMT.0741** Take-off performance parameters and position errors - large aeroplanes

Mitigate, using on-board design means of protection, the risk of large aeroplane accidents or incidents caused by the use of erroneous take-off performance parameters, and by erroneous take-off positions. Such errors have the potential to result in runway excursions and aeroplane upsets, with subsequent loss of control and collision with terrain or obstacles.

Taking into account design solutions that have been developed by industry to date, this objective should be achieved through the introduction of design requirements aiming at detecting and preventing these errors by providing means to timely inform or alert the flight crew. Design requirements will be considered to address new large aeroplane designs. An analysis and impact assessment will be conducted to assess the feasibility and the benefit of design requirements applicable to existing (already type certificated) large aeroplane designs.

Status	New	
Sls	SI-0015 Entry of aircraft performance dat	a
SRs	CAND-2006-007	
	FRAN-2005-001	
	FRAN-2008-328	
	NETH-2007-004	
	NETH-2018-001	
	NETH-2018-002	
	NETH-2020-001	
	UNKG-2009-081	
ICAO ref.	n/a	
Other ref(s)	BIS 'Entry of Aircraft Performance Data'	
Dependencies	n/a	
Affected stakeholders	Design organisations dealing with large a Operators of large aeroplanes	eroplanes type design and installed equipment;
Affected regulation(s)	CS-25	
	CS-26	
	Commission Regulation (EU) 2015/640	
Strategic level	Strategic	Strategic priority EPAS Volume I Section 3.3.4.1
Harmonisation	No	

		WOR	KING METHOD		
Owner	CT.5 - Policy, Innovation & Knowledge department				
SubT	Development	Impa	Consultation		
	By EASA		Detailed		
		PLANN	ING MILESTONES		
SubT	Initiation	Consultation	Opinion	<b>Commission IR</b>	Decision
	ToR RMT.0741 30/08/2023	2024-Q4	2025	2025	2025



#### RES.0010 Ice detection

The icing phenomenon continues to pose a severe threat, in particular the super cooled large droplet (SLD) icing phenomenon. Pilots have little or no means to detect and/or avoid it, especially at night. A research project is ongoing in order to better detect the presence of SLD icing conditions and to develop equipment suitable to detect such a phenomenon.

Status	Ongoing
Sls	SI-0001 Icing in flight
SRs	n/a
Reference(s)	EU-funded project SENS4ICE https://www.sens4ice-project.eu/
Dependencies	RES.0017
	Aircraft operators - CAT, DOA holders
Owner	SM.2 - Strategy & Programmes department

EXPECTED OUT	IPUT
Deliverable(s)	Timeline
Final report	2024-Q1

#### **RES.0014** Air-data enhanced fault detection and diagnosis

Develop new methods for the verification and monitoring of complex flight control systems (e.g. flight control laws, air-data sensors) and investigate new techniques for fault detection and diagnosis and fault control (e.g. model-based, model-free methods and their combination).

These will serve to improve the EASA certification standards, and to prepare the evaluation of new designs proposed by aircraft manufacturers.

Status	Ongoing
Sls	SI-0001 Icing in flight SI-0002 Icing on ground
SRs	n/a
Reference(s)	n/a
Dependencies	n/a
	DOA holders, POA holders
Owner	SM.2 - Strategy & Programmes department

EXPECTED OUTPU	ти
Deliverable(s)	Timeline
Final report	2024-Q4



# **RES.0017** Means of compliance addressing icing hazard linked to super cooled large droplet (SLD) and glaciated (ice crystals) icing environment

The H2020-funded project ICE GENESIS shall provide the European aeronautical industry with a validated new generation of 3D icing engineering tools (numerical simulation tools and upgraded test capabilities), addressing EASA CS-25 App C, O and snow conditions for the design and certification of future regional, business and large aircraft, rotorcraft and engines. ICE GENESIS shall allow for weather hazards to be more precisely evaluated and properly mitigated thanks to adapted design or optimised protection through either active or passive means. Furthermore, ICE GENESIS shall pave the way for 3D digital tools to be used in the future as acceptable means of compliance by the regulatory authorities.

EASA is contributing to this research project in an advisory role.

The H2020-funded project MUSIC HAIC will complete the development of ice crystal icing (ICI) models, implement them in existing industrial 3D multidisciplinary tools, and perform extensive validation of the new ICI numerical capability through comparison of the numerical results with both academic and industrial experimental data. The need for the European aeronautical industry to use numerical simulation tools able to accurately predict ICI is paramount, especially regarding the development of new-generation engines (UHBR, CROR, ATP) which are expected to be even more sensitive to the ICI threat than current in-service engines and for which comparative analysis methods will not be applicable anymore.

Status	Ongoing
Sls	SI-0001 Icing in flight
SRs	n/a
Reference(s)	ICE GENESIS https://cordis.europa.eu/project/id/824310
	MUSIC HAIC https://cordis.europa.eu/project/id/767560
Dependencies	RES.0010
Affected stakeholders	AOC holders (CAT), DOA holders
Owner	SM.2 - Strategy & Programmes department

EXPECTED OUTPUT	
Deliverable(s)	Timeline
Final report	2024-Q1



#### **RES.0027** Sandwich-structured composites

This research project shall help obtain further insight and develop guidance for the consistent and standardised design and safe use of sandwich structures in aviation. The results of the research shall be used to further complement the Composite Materials Handbook 17 and to refine the applicable regulatory material for initial and continuing airworthiness.

Status	Ongoing
Sls	n/a
SRs	n/a
Reference(s)	Composite Material Handbook 17 (CMH-17)
Dependencies	n/a
Affected stakeholders	DOA holders, MOs (Part-145)
Owner	SM.2 - Strategy & Programmes department
	EXPECTED OUTPUT

Deliverable(s)	Timeline
Final report	2026



#### **RES.0037** Machine learning application approval

The project deals with the approval of machine learning (ML) technologies for systems intended for use in safety-related applications in all domains covered by Regulation (EU) 2018/1139 (the Basic Regulation).

The research results will be a set of reports identifying a set of methods and tools to address the following three important topics:

- Guarantees on machine-learning model generalisation
- Guarantees on data completeness and representativeness
- Guarantees on algorithm and model robustness

Along with the project, at least one real-scale aviation use case should be developed to demonstrate the effectivity and usability of the proposed methods and tools. Those use cases should be developed in a software and hardware environment, accessible remotely by EASA or through software package deliveries to EASA. The essential life cycle artefacts developed for the project to address the different steps of the W-shaped process should be made available to EASA.

This project is funded by Horizon Europe under the 2nd Research Contribution Agreement with the European Commission.

Status	Ongoing
Sls	n/a
SRs	n/a
Reference(s)	Machine Learning Application Approval (https://www.easa.europa.eu/research-projects/machine-learning-application-approval)
Dependencies	n/a
Affected stakeholders	DA holders
Owner	SM.0.1 - Strategy & Safety Management director's office

EXPECTED	ООТРОТ
Deliverable(s)	Timeline
Final report	2024-Q2



#### **RES.0043** Flight control systems verification and air-data fault detection

Develop new methods for the verification of complex flight control systems and for real-time error detection (via independent monitoring).

Assess new fault detection & diagnosis (FDD) and fault tolerant control (FTC) methods.

Status	Ongoing	
Sls	n/a	
SRs	n/a	
Reference(s)	n/a	
Dependencies	n/a	
	DOA holders, POA holders	
Owner	SM.2 - Strategy & Programmes department	
EXPECTED OUTPUT		

Deliverable(s)	Timeline
Final report	2024-Q4

#### **RES.0050** Aircraft certification using modelling and numerical simulations

Assess the use of effective modelling and simulation methods and tools for certification compliance demonstration.

The action is realised through a series of projects funded by industry or by the EU Horizon 2020 programme.

Rotorcraft Certification by Simulation (RoCS) aims to explore the possibilities, limitations, and guidelines for best practices for the application of flight simulation to demonstrate compliance with the airworthiness regulations related to helicopters and tilt rotors. The aim is to define a virtual engineering flight simulation process for the generation of evidence for the certification of rotorcraft. The objective is to establish, in collaboration with industry and regulators, the characteristics that a virtual flight simulation environment must have to be adequate to demonstrate compliance with the airworthiness standards in a safer, more economical, and more effective way than that which could be achieved through current flight test procedures.

The challenge is to develop, in agreement with the regulatory authorities, guidelines that define the part of the certification basis that could be substituted or complemented by flight simulation, as well as the metrics and methodology to assess simulation model and flight simulator cueing fidelity.

Status	Ongoing
Sls	n/a
SRs	n/a
Reference(s)	RoCs <u>https://cordis.europa.eu/project/id/831969</u> RoCs project website <u>https://www.rocs-project.org/</u>
Dependencies	n/a
Affected stakeholders	DOA holders, aircraft operators - all, ATOs (aircrews), NCAs
Owner	SM.2 - Strategy & Programmes department

EXPECTED OUTPU	т
Deliverable(s)	Timeline
Final report	2024-Q1



## 6.2 Level playing field

Rules may need to be harmonised within the EU as well as with the main international trade partners to either ensure fair competition and/or facilitate the free movement of goods, persons and services.

The section is maintained as a placeholder for future actions.

## 6.3 Efficiency/proportionality

With aircraft design evolving at a rapid pace, requirements for initial airworthiness and CSs need to be constantly reviewed and adjusted for cost-effectiveness and to keep pace with the technological advancements.

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

The objective of this RMT is to regularly address miscellaneous issues of non-controversial nature to ensure that the AMC and GM to Part 21 are fit for purpose, cost-effective, can be implemented, and are in line with the latest ICAO SARPs. In particular, regular updates are used to incorporate certification memoranda and other material supporting the application and interpretation of Part 21 as established by EASA during previous certification projects, and to address non-complex and non-controversial issues raised by stakeholders.

DOA: This subtask was completed with the publication of ED Decision 2021/001/R on 02/03/2021.

(ETOPS/EDTO): A single NPA will be published proposing to 'repatriate' the airworthiness elements, currently included in AMC 20-6, in the AMC and GM to Part 21, CS-25 and CS-E. This has been moved to RMT.0184.

Subtask 3: This subtask was renamed and will now deal with DOA and POA issues.

Status	Ongoing	
Sls	n/a	
SRs	NORW-2018-007	
ICAO ref.	n/a	
Other ref(s)	n/a	
Dependencies	n/a	
Affected stakeholders	DA holders, POA holders, NCAs, EASA (on a case-	by-case basis)
Affected regulation(s)	Commission Regulation (EU) No 748/2012	
Strategic level	Standard	Strategic priority n/a
Harmonisation	Yes - intended	

	WORKING METHOD				
	CT.5 - Policy, Innovation & Knowledge department				
SubT	Development	Impact Assessment(s)	Consultation		
2	By EASA	Light	NPA - Public		
3	By EASA	Light	NPA - Public		

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RMT.0031   Regular update of AMC & GM to Part 21						
	PLANNING MILESTONES					
SubT	Initiation	Consultation	Opinion	<b>Commission IR</b>	Decision	
2	ToR RMT.0031 - Issue 2 22/02/2023	2024-Q1	n/a	n/a	2024-Q4	
3		2024-Q1	2024-Q3	2025	2025	

# **RMT.0180** Turbine-engine endurance and initial maintenance inspection testing, and substantiation of piston-engine time between overhauls (TBO)

The objective of this RMT is to modernise the engine certification test requirements to:

- upgrade the turbine-engine endurance test specifications to take into account modern engine design characteristics;
- improve the level of confidence in the robustness of turbine-engine designs prior to entry into service, as well as, in some cases, the definition of initial maintenance inspection (IMI) intervals;
- ensure that EASA oversees the IMI tests and benefits from the knowledge gained;
- ensure the robust and harmonised substantiation of the TBO and of the maintenance programmes for piston engines; and
- ensure the greatest possible harmonisation with the related FAA regulations and certification policies.

Status	Ongoing	
Sls	n/a	
SRs	AUST-2009-011	
ICAO ref.	n/a	
Other ref(s)	RIA 08 1120	
Dependencies	n/a	
Affected stakeholders		
Affected regulation(s)	n/a	
Strategic level	Standard	Strategic priority n/a
Harmonisation	Yes - ongoing	

		WOR	KING METHOD			
Owner	CT.5 - Policy, Innovation & Knowledge department					
SubT	Development	Impact Assessment(s)		Consultation		
	By EASA	Light		NPA - Public		
PLANNING MILESTONES						
SubT	Initiation	Consultation	Opinion	<b>Commission IR</b>	Decision	
	ToR RMT.0180 07/05/2021	NPA 2023-06 21/06/2023	n/a	n/a	2024-Q2	



# RMT.0184 Regular update of CS-E

The objective of this RMT is to regularly address miscellaneous issues of non-controversial nature, in order to ensure that the CS are fit for purpose, cost-effective, can be implemented in practice, and are in line with the latest ICAO SARPs. In particular, a regular update is used to incorporate SCs, certification memoranda and other material supporting the application and interpretation of existing CS as established by EASA during previous certification projects, and to address non-complex and non-controversial issues raised by stakeholders.

ETOPS/EDTO: a new cycle is added with a single NPA to be published proposing to repatriate the airworthiness elements currently included in AMC 20-6, in the AMC & GM to Part 21, CS-25 and CS-E.

<b>.</b>				
Status	Ongoing			
Sls	n/a			
SRs	n/a			
ICAO ref.	n/a	ı/a		
Other ref(s)	n/a			
Dependencies	n/a			
Affected stakeholders	DA holders/PA holders - engines			
Affected regulation(s)	n/a			
Strategic level	Standard Strategic priority n/a			
Harmonisation	Yes - intended			

	WORKING METHOD						
	CT.5 - Policy, Innovation & Knowledge department						
SubT	Development	Impact Assessment(s)	Consultation				
1	By EASA	Light	NPA - Public				
2	By EASA	Light	To be determined at a later stage				
3	By EASA	Light	NPA - Focused				

	PLANNING MILESTONES					
SubT	Initiation	Consultation	Opinion	<b>Commission IR</b>	Decision	
1	ToR RMT.0184 27/07/2015	NPA 2021-13 20/11/2021	n/a	n/a	2023/020/R 18/12/2023	
2		2024-Q3	n/a	n/a	2025	



# RMT.0457 Regular update of CS-ETSO

The objective of this RMT is to regularly address miscellaneous issues of non-controversial nature, in order to ensure that the CS are fit for purpose, cost-effective, can be implemented in practice, and are in line with the latest ICAO SARPs. In particular, a regular update is used to incorporate SCs, certification memoranda and other material supporting the application and interpretation of existing CS as established by EASA during previous certification projects, and to address non-complex and non-controversial issues raised by stakeholders.

Status	Ongoing	
Sls	n/a	
SRs	n/a	
ICAO ref.	n/a	
Other ref(s)	n/a	
Dependencies	n/a	
Affected stakeholders	Design and production organisations	
Affected regulation(s)	n/a	
Strategic level	Standard	Strategic priority n/a
Harmonisation	No	

	WORKING METHOD					
	CT.5 - Policy, Innovation & Knowledge department					
SubT	Development	Impact Assessment(s)	Consultation			
2	By EASA	Light	NPA - Public			

		PLANN	ING MILESTONES			
SubT	Initiation	Consultation	Opinion	Commission IR	Decision	
2	RMT.0457 21/08/2015	2024-Q1	n/a	n/a	2024-Q4	



# RMT.0499 Regular update of CS-MMEL

The objective of this RMT is to regularly address miscellaneous issues of non-controversial nature, in order to ensure that the CS are fit for purpose, cost-effective, can be implemented in practice, and are in line with the latest ICAO SARPs. In particular, a regular update is used to incorporate SCs, certification memoranda and other material supporting the application and interpretation of existing CS as established by EASA during previous certification projects, and to address non-complex and non-controversial issues raised by stakeholders.

Among other topics, the next cycle (subtask 2) will introduce items covered by FAA Policy Letters, the limitation introduced by the SPI Implementing Regulation regarding transponder temporarily inoperative as well as an MMEL release for ROAAS systems.

Status	Ongoing			
Sls	n/a			
SRs	n/a			
ICAO ref.	n/a			
Other ref(s)	n/a	n/a		
Dependencies	RMT.0400	RMT.0400		
Affected stakeholders	Design organisations of complex motor-powered aircraft and other design organisations dealing with changes or STCs to these aircraft, design organisations of other than complex, motor-powered aircraft, NCAs			
Affected regulation(s)	n/a			
Strategic level	Standard	Strategic priority n/a		
Harmonisation	Yes - intended			

	WORKING METHOD					
	CT.5 - Policy, Innovation & Knowledge department					
SubT	Development	Impact Assessment(s)	Consultation			
2	By EASA	Light	NPA - Public			
3	By EASA	Light	NPA - Public			

		PLANNI	NG MILESTONES		
SubT	Initiation	Consultation	Opinion	Commission IR	Decision
2		2024-Q3	n/a	n/a	2025

2

2024-Q1



# RMT.0502 Regular update of CS for balloons

The objective of this RMT is to regularly address miscellaneous issues of non-controversial nature, in order to ensure that the CS are fit for purpose, cost-effective and can be implemented in practice. In particular, a regular update is used to incorporate SCs, certification memoranda and other material supporting the application and interpretation of existing CS as established by EASA during previous certification projects, and to address non-complex and non-controversial issues raised by stakeholders.

A new cycle has been created to publish the CS for hot airships, thus making related standards available to support the implementation of Part 21 Light. The Agency has certified hot airships in the past by means of special conditions.

<u></u>	0 · ·	
Status	Ongoing	
Sls	n/a	
SRs	n/a	
ICAO ref.	n/a	
Other ref(s)	n/a	
Dependencies	n/a	
Affected stakeholders	Balloon DA holders	
Affected regulation(s)	n/a	
Strategic level	Standard	Strategic priority n/a
Harmonisation	No	

	WORKING METHOD					
Owner	CT.5 - Policy, Innovation & Knowledge department					
SubT	Development	Impac	Impact Assessment(s)			
2	By EASA	Light	Light			
	PLANNING MILESTONES					
SubT	Initiation	Consultation	Opinion	<b>Commission IR</b>	Decision	

n/a

n/a

2025

2024-Q2



# RMT.0519 Regular update of CS-ACNS

The objective of this RMT is to regularly address miscellaneous issues of non-controversial nature, in order to ensure that the CS are fit for purpose, cost-effective, can be implemented in practice, and are in line with the latest ICAO SARPs. In particular, a regular update is used to incorporate SCs, certification memoranda and other material supporting the application and interpretation of existing CS as established by EASA during previous certification projects, and to address non-complex and non-controversial issues raised by stakeholders.

Status	Ongoing	
Sls	n/a	
SRs	n/a	
ICAO ref.	n/a	
Other ref(s)	ATM Master Plan Level 3 – Plan (2019): ITY-SPI – Surveillance performance and interoperability	
Dependencies	n/a	
Affected stakeholders	Aircraft operators, POA holders, D	OA holders, NCAs
Affected regulation(s)	n/a	
Strategic level	Standard	Strategic priority n/a
Harmonisation	No	

The next cycle will focus on updating the surveillance part of CS-ACNS.

		WOR	KING METHOD		
	•	ation & Knowledge dep			
SubT	Development	Impa	ct Assessment(s)	Consultation	
	By EASA	Light		NPA - Public	
		PLANN	ING MILESTONES		
ubT	Initiation	Consultation	Opinion	<b>Commission IR</b>	Decision
		2024-Q2			2025



# RMT.0673 Regular update of CS-25

The objective of this RMT is to regularly address miscellaneous issues of non-controversial nature, in order to ensure that the CS are fit for purpose, cost-effective, can be implemented in practice, and are in line with the latest ICAO SARPs. In particular, a regular update is used to incorporate SCs, certification memoranda and other material supporting the application and interpretation of existing CS as established by EASA during previous certification projects, and to address non-complex and non-controversial issues raised by stakeholders.

The currently ongoing update proposes amendments in the following areas:

- Item 1: Ditching survivability
- Item 2: Amendment of AMC 25.1309 Development assurance and AMC 20 references
- Item 3: Installed systems and equipment for use by the flight crew
- Item 4: Performance and handling characteristics in icing conditions
- Item 5: Brakes and braking systems certification tests and analysis
- Item 6: Oxygen equipment and supply
- Item 7: Air conditioning 'off' maximum time period
- Item 8: Cabin crew portable oxygen equipment
- Editorial corrections

ETOPS/EDTO: a single NPA, under RMT.0184, will be published proposing to repatriate the airworthiness elements, currently included in AMC 20-6, in the AMC & GM to Part 21, CS-25 and CS-E.

The last cycle was completed after publication of ED Decision 2023/021/R on 19/12/2023.

Status	Ongoing	
Sls	SI-9004-Limited application and inadequa	te oversight of development assurance
SRs	FRAN-2005-001 NETH-2007-004 SWED-2016-005	
ICAO ref.	n/a	
Other ref(s)	n/a	
Dependencies	n/a	
Affected stakeholders	DOA holders - large aeroplanes	
Affected regulation(s)	n/a	
Strategic level	Standard	Strategic priority n/a
Harmonisation	Yes - intended	

	WORKING METHOD						
Owner	CT.5 - Policy, Innovat	ion & Knowledge dep	artment				
SubT	Development	Impa	Impact Assessment(s) Consultation				
Current	To be determined at a later stage		To be determined at a later stage		To be determined at a later stage		
PLANNING MILESTONES							
SubT	Initiation	Consultation	Opinion	<b>Commission IR</b>	Decision		
Current	TOR RMT.0673 27/04/2015	<tbd></tbd>	<tbd></tbd>	<tbd></tbd>	<tbd></tbd>		



# RMT.0727 Alignment of Part 21 with Regulation (EU) 2018/1139 (including simple and proportionate rules for General Aviation)

The objective of this task is to revisit Part 21 in view of the new and amended provisions introduced by the Basic Regulation.

#### Subtask 1:

In the first phase of this RMT, EASA has developed proposals according to Article 140(3) of the Basic Regulation in relation to aircraft primarily intended for sport and recreational use. The objective of this subtask is to introduce simple rules that will allow the application of a proportionate approach for sport and recreational aircraft. It takes into account the various risk levels in GA in the initial airworthiness process with the aim of achieving a reduction in administrative burden and costs, while at the same time supporting GA innovation. The task includes the preparatory work done under RMT.0689 'Part 21 proportionality'.

#### Subtask 2:

In the second phase, EASA will develop proposals for the implementation of other amendments to Part 21 as required by the Basic Regulation, including rules required to ensure environmental compatibility.

Specific environmental requirements for novel technologies not covered by ICAO Annex 16 will be developed in a two-stage process, whereby the first stage will use technical specifications, collecting the necessary information to progress towards stage two, leading to a regulatory update.

#### Subtask 3:

In the third phase, EASA will address the certification of non-installed equipment (NIE). A concept for the certification of NIE was consulted with the affected stakeholders during 2023. Regulatory work will start in 2024. This subtask will also include the development of requirements for the CAW of NIE.

#### Subtask 4:

In a fourth phase, EASA will review the ETSO system in relation to the demonstration of design capabilities with a view to making it more proportional to the complexity and criticality of the various ETSO articles that are subject to certification.

Status	Ongoing		
Sls	n/a		
SRs	n/a		
ICAO ref.	n/a		
Other ref(s)	n/a		
Dependencies	RMT.0392 RMT.0587 RMT.0735		
Affected stakeholders	DOA holders, POA holders, operators, par	ticularly GA operato	ors, NCAs
Affected regulation(s)	Commission Regulation (EU) No 748/2012		
Strategic level	Strategic	Strategic priority	EPAS Volume I Section 3.3.4
Harmonisation	Yes - intended		

The regulatory approach for Subtask 2 is under development, thus no timelines are shown below.



# RMT.0727 Alignment of Part 21 with Regulation (EU) 2018/1139 (including simple and proportionate rules for General Aviation)

	WORKING METHOD						
Owner	CT.5 - Policy, Innovation & Knowledge department						
SubT	Development	Impact Assessment(s)	Consultation				
1	By EASA	Light	NPA - Focused				
2	By EASA	To be determined at a later stage	To be determined at a later stage				
3	By EASA	To be determined at a later stage	To be determined at a later stage				
4	By EASA	To be determined at a later stage	To be determined at a later stage				

	PLANNING MILESTONES					
SubT	Initiation	Consultation	Opinion	<b>Commission IR</b>	Decision	
1		NPA 2023-101	n/a	nla	EDD 2023/013/R 20/10/2023	
1		30/03/2023	II/d	n/a	2023/022/R 18/12/2023	
2		<tbd></tbd>	<tbd></tbd>	<tbd></tbd>	<tbd></tbd>	
3		2024-Q4	2025	2026	2026	
4		2025	2026	2026	2026	

# EVT.0007

Evaluation of Regulation (EU) No 748/2012 related to the airworthiness and environmental certification of aircraft and related products, parts and appliances, as well as for the certification of design and production organisations

The purpose of the EVT is to assess whether Regulation (EU) No 748/2012 is fit for the purpose it was developed based on the experience gained through its implementation.

This task will entail the evaluation of several aspects of the Regulation, including continued validity of type certificates issued by Member States on the basis of bilateral agreements with third countries (Article 3(a)(1) of Regulation (EU) No 748/2012).

Status	On hold
Sls	n/a
SRs	n/a
Reference(s)	n/a
Dependencies	n/a
	EASA Part 21 organisations (DOA holders, POA holders, ETSOA holders, etc.), NCAs
Owner	CT.5 - Policy, Innovation & Knowledge department

EXPECTED OUTPUT	
Deliverable(s)	Timeline
Evaluation report	<tbd></tbd>

# 7. Maintenance and continuing airworthiness management





# 7. Maintenance and continuing airworthiness management

# Refer to EPAS Volume I Section 3.3.4 'Ensure operational safety in initial and continuing airworthiness'

This chapter includes all the actions that are relevant to maintenance and continuing airworthiness management for the drivers 'safety', 'efficiency/proportionality' and 'level playing field'. The actions specifically addressing competence of aircraft maintenance personnel are included in **Section 2.4**.

# Issue/rationale

As in the case of design and manufacture improvements, maintenance improvements may reduce the probability and/or severity of technical failures. Many fatal accidents involve some sort of technical failure, often not properly managed during flight. This does not necessarily mean that the technical failure was the direct cause of the accident, but that a system component failure was identified in the sequence of events. Specific analysis work is ongoing to identify the systemic safety issues that may be present in the maintenance domain.

This chapter also addresses certain existing requirements that are either not efficient or not proportionate to the risks involved.

In terms of level playing field, the requirements may need to be harmonised within the EU as well as with the main international trade partners in order to either ensure fair competition and/or facilitate the free movement of goods, persons and services.

# What we want to achieve

Increase safety by continuously assessing and improving the risk controls related to maintenance and continuing airworthiness management. Increase proportionality and efficiency in the continuing airworthiness domain. Harmonise the requirements where this ensures fair competition and/or facilitates the free movement of goods, persons and services. Remove obstacles for a well-functioning single market.

# How we monitor improvement

Continuous monitoring of the safety issues identified in the relevant Safety Risk Portfolios (refer to EPAS Volume III, in particular Chapters 3 and 9).

The EASA ABs regularly provide feedback on the effectiveness of the actions in terms of efficiency/proportionality and level playing field.

# How we want to achieve it: actions



# 7.1 Safety

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

Introduce principles for increased robustness of the maintenance certification process to ensure that maintenance is certified by competent staff. This will be achieved by closing potential safety gaps and clarifying the roles and responsibilities of certifying staff, support staff and sign-off staff, both in line and base maintenance when two different licence (sub)categories are required to certify the maintenance conducted, based on the privileges of the licence (sub)categories.

Status	Ongoing		
Sls	n/a		
SRs	n/a		
ICAO ref.	n/a		
Other ref(s)	n/a		
Dependencies	n/a		
Affected stakeholders	MOs (Part-145)		
Affected regulation(s)	Commission Regulations (EU) No 1321/20	14	
Strategic level	Strategic	Strategic priority	EPAS Volume I Section 3.3.4
Harmonisation	No		

WORKING METHOD						
Owner	FS.1 - Maintenance & Production department					
SubT	Development	Impact Assessment(s)	Consultation			
	By EASA with external support	Light	NPA - Public			

PLANNING MILESTONES					
SubT	Initiation	Consultation	Opinion	<b>Commission IR</b>	Decision
	ToR RMT.0097 02/11/2011	NPA 2014-11 13/05/2014	2025	2026	2026



# RMT.0521 Airworthiness review process

Perform 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.

This RMT will in addition propose regulatory amendments to facilitate the transfer of aircraft within the EU.

Status	Ongoing		
Sls	n/a		
SRs	n/a		
ICAO ref.	n/a		
Other ref(s)	n/a		
Dependencies	n/a		
Affected stakeholders	Aircraft operators - all, CAMOs, NCAs		
Affected regulation(s)	Commission Regulation (EU) No 1321/2014 Commission Regulation (EU) No 748/2012		
Strategic level	Strategic	Strategic priority	EPAS Volume I Section 3.3.4
Harmonisation	No		

		WOR	KING METHOD			
	FS.1 - Maintenance & Production department					
SubT	Development Impact Assessment(s) Consultat					
	By EASA with external su			NPA - Public		
	PLANNING MILESTONES					
SubT	Initiation C	onsultation	Opinion	Commission IR	Decision	

Subl	Initiation	Consultation	Opinion	Commission IR	Decision	
	ToR RMT.0521 and 0522 07/05/2013	NPA 2015-17 05/11/2015	2024-Q3	2025	2025	



# RMT.0588 Aircraft continuing airworthiness monitoring - review of key risk elements (KREs)

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). The intention is, in particular, to:

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

Status	Ongoing	
Sls	n/a	
SRs	n/a	
ICAO ref.	n/a	
Other ref(s)	AMC3 M.B.303(b), GM1 M.B.303(b) and Appe	endix III to GM1 M.B.303(b)
Dependencies	n/a	
Affected stakeholders	CAMOs, NCAs	
Affected regulation(s)	n/a	
Strategic level	Standard	Strategic priority n/a
Harmonisation	No	

	WORKING METHOD				
Owner	Owner FS.1 - Maintenance & Production department				
SubT	Consultation				
	To be determined at a later stage	To be determined at a later stage	NPA - Public		
PLANNING MILESTONES					

SubT	Initiation	Consultation	Opinion	<b>Commission IR</b>	Decision	
		2027	n/a	n/a	<tbd></tbd>	



# SPT.0104 Develop new safety promotion material for high-profile mainten ance safety issues

Develop new safety promotion material for high-profile safety issues in the maintenance domain. Such high-profile safety issues are to be determined from important risks identified through the SRM process, accidents/serious incidents, and input from EASA stakeholders.

Status	Ongoing
Sls	safety issues in the airworthiness Safety Risk Portfolio (EPAS Vol. III)
SRs	n/a
Reference(s)	n/a
Dependencies	n/a
Affected stakeholders	Air operators - all, CAMOs, MOs (Part-145, and Part-CAO)
Strategic level	Standard
Strategic priority	n/a
Owner	SM.1 - Safety Intelligence & Performance department

EXPECTED OUTPUT	
Deliverable(s)	Timeline
Produce safety promotion material	Continuous

# SPT.0132 Best practices for the performance of critical maintenance tasks

The objective of this task is to share best practices how to minimise the risk of errors by mechanics resulting from misinterpretation and the general use of maintenance instructions during the performance of critical aircraft maintenance tasks. The task will look at how the maintenance organisation can supplement the maintenance instructions provided by the aircraft manufacturer to prevent credible errors and mishaps, and raise awareness and understanding on important steps and possible traps during the maintenance of these critical tasks.

Status	Ongoing
Sls	SI-3007 Design and use of procedures
SRs	n/a
Reference(s)	EASA BIS 'Design and Use of Procedures'
Dependencies	n/a
	MOs (Part-145, Part-CAO)
Strategic level	Standard
Strategic priority	n/a
Owner	FS.1 - Maintenance & Production department

EXPECTED OUTPUT			
Deliverable(s)	Timeline		
Guide, podcast/ videocast, article, social media promotion	2025		



# 7.2 Level playing field

# RMT.0096 Amendments (IRs and AMC & GM) in line with the process of granting foreign Part-145 approvals

The objective of this RMT is to modify existing or adopt additional AMC to Part-145, in order to address current shortcomings and inconsistencies when dealing with third-country maintenance organisations, i.e. located outside the territories of the Member States. Some of these amended AMC may also be applicable to the approval of organisations within the Member States.

In most of the cases, these proposals cover issues that have already been discussed with accredited NCAs working on behalf of the Agency or issues where the Agency has provided interpretation.

Status	Ongoing	
Sls	n/a	
SRs	n/a	
ICAO ref.	n/a	
Other ref(s)	n/a	
Dependencies	n/a	
Affected stakeholders		
Affected regulation(s)	Commission Regulation (EU) No 1321/2014	
Strategic level	Standard	Strategic priority n/a
Harmonisation	No	

WORKING METHOD					
vner FS.1 - Maintenance & Production department					
Development	Impact Assessment(s)	Consultation			
By EASA	Light	NPA - Public			
	Development	FS.1 - Maintenance & Production departmentDevelopmentImpact Assessment(s)	FS.1 - Maintenance & Production departmentDevelopmentImpact Assessment(s)ConsultationBy EASALightNPA - Public		

SubT	Initiation	Consultation	Opinion	Commission IR	Decision
	ToR RMT.0096 (145.023) 17/06/2008	NPA 2013-12 11/07/2013	n/a	n/a	2026



#### RMT.0278 Importing aircraft from other regulatory systems and review of Part 21 Subpart H

Develop criteria for importing aircraft from other regulatory systems and review Part 21 Subpart H, considering the recommendations from the ICAO Airworthiness Panel.

Status	Ongoing		
Sls	n/a		
SRs	n/a		
ICAO ref.	n/a		
Other ref(s)	n/a		
Dependencies	RMT.0521		
Affected stakeholders	Aircraft operators - all, CAMOs, NC	As	
Affected regulation(s)	Commission Regulation (EU) No 13. Commission Regulation (EU) No 748		
Strategic level	Strategic	Strategic priority	EPAS Volume I Section 3.1.6.2
Harmonisation	No		

			WORKING METHOD		
Owner	FS.1 - Maintenance				
SubT	Development Impact Asses		Impact Assessment(		
	By EASA with exter		Light	NPA - Public	
		Р	LANNING MILESTON	ES	
SubT	Initiation	Consultatio		<b>Commission IR</b>	Decision
	ToR RMT.0278				

2024-Q3

2025

2025

NPA 2016-08

07/09/2016

& RMT.0536

01/02/2013



# 7.3 Efficiency/proportionality

# RMT.0735 Regular update of the CAW regulation

The objective of this RMT is to regularly address miscellaneous issues of non-controversial nature to ensure that the CAW regulation is fit for purpose, cost-effective, can be implemented, and is in line with the latest ICAO SARPs. This regular-update RMT will also address the remaining outstanding items from RMT.0217 'CAMOs' and Part-145 organisations' responsibilities'.

Status	Ongoing	
Sls	n/a	
SRs	n/a	
ICAO ref.	n/a	
Other ref(s)	n/a	
Dependencies	RMT.0392 RMT.0587 RMT.0727	
Affected stakeholders	NCAs, AMOs, CAMOs, AMTOs, AML applicants and holders, combined airworthiness organisations (CAOs)	
Affected regulation(s)	Commission Regulation (EU) No 1321/2014	
Strategic level	Strategic Strategic priority EPAS Volume I Section 3.	.3.4
Harmonisation	No	

		WOR	KING METHOD		
Owner		& Production departme			
SubT	Development Impact Assessment(s) Consultation				
1	by EASA	Light	Light		
		PLANN	ING MILESTONES		
SubT	Initiation	Consultation	Opinion	<b>Commission IR</b>	Decision
	ToR RMT.0735				

In addition to the above the following action is directly relevant to maintenance and continuing airworthiness management:

MST.0035 Oversight capabilities/focus area: fraud cases in Part-147

The full description of these actions is included in **Section 2.4**.

# 8. Air traffic management/ air navigation services (ATM/ANS)





# 8. Air traffic management/ air navigation services (ATM/ANS)

# Refer to EPAS Volume I Section 3.3.5 'ATM/ANS'

# **Issue/rationale**

EASA is working towards harmonised rules based on ICAO SARPs, PANS and SUPPs that facilitate compliance with the essential requirements for ATM/ANS.

Following the adoption of the conformity assessment framework of certain ATM/ANS equipment (i.e. ATM/ ANS systems and ATM/ANS constituents) as well as the approval of organisations involved in its design or production, EASA will launch the monitoring of its implementation. In addition to that, EASA will regularly address the miscellaneous issues of non-controversial nature by dedicated regular-update rulemaking tasks, in order to ensure that the detailed specifications for ATM/ANS equipment are maintained fit for purpose, costeffective, enable relevant technological evolution, and are in line with the latest ICAO SARPs. In particular, this will incorporate special conditions and other material supporting the application and interpretation of existing detailed specifications as established by EASA during ongoing certification and declaration projects and will address issues raised by stakeholders.

#### What we want to achieve

The framework for the service provision of ATM/ANS was completed in January 2022 when the additional requirements introduced by Regulation (EU) 2020/469, namely concerning flight procedure design, ATS, and AIS/ AIM became applicable. In the coming years, EASA will focus on the maintenance of these requirements and on establishing enhanced processes to keep them up to date with the ICAO provisions in a timely manner.

ATM/ANS equipment is a key and integral element for the safe, interoperable and efficient operation of the European Air Traffic Management network (EATMN). It should enable full compatibility with airborne and spacebased systems through the appropriate allocation of performance requirements dependent upon the nature and risk of the activity concerned. The application of the new framework for ATM/ANS equipment would reduce the burden and enable savings for both manufacturers and ANSPs as well as for competent authorities. This mostly stems from synergies, economies of scale, increased commonality, and improved interoperability.

# How we monitor improvement

The key risk areas (KRAs) and underlying safety issues will continue to be monitored as part of the Safety Risk Portfolio for ATM and ANS, with the support of the ATM CAG. The EASA ABs regularly provide feedback on the efficiency/proportionality of the related actions.



# 8.1 Safety

The top key risk areas (KRAs) for the ATM/ANS domain are defined as follows (cf. 2023 ASR):

- **Collision on runway.** This includes all occurrences involving actual or potential runway collisions between an aircraft and another aircraft, vehicle or person that occur on the runway of an aerodrome or other designated landing area. This includes occurrences involving the incorrect presence of an aircraft, vehicle, or person on the protected area of a surface designated for the landing and take-off of aircraft. It does not include occurrences involving wildlife on the runway. In 2022 a slight majority (nine out of 16) of occurrences with the KRA collision on runway occurred during the take-off phase.
- Airborne collision. This includes occurrences involving actual or potential airborne collisions between aircraft, and occurrences involving an aircraft and other controllable airborne objects, such as drones, thereby excluding birds. Therefore, it includes all separation-related occurrences regardless of the cause. It does not include false TCAS/ACAS alerts caused by equipment malfunctions or loss of separation with at least one aircraft on the ground, which may be coded as runway or movement area collision if the occurrence meets the criteria. The occurrence with the highest ERCS score within the KRA airborne collision was an occurrence t hat happened at the transfer from one sector to the other.

Safety issues with medium to high SIPI scores in the area of ATM/ANS are the following (refer also to EPAS Volume III):

- SI-2014 Airborne conflict with an unmanned aircraft system' (UAS)
- SI-2006 Undetected occupied runway
- SI-2023 Mass diversions

# How we want to achieve it: actions

SPT.0103 Development of new safety promotion material for high-profile air traffic management safety issues

Develop new safety promotion material on high-profile safety issues for ATM. Such high-profile safety issues are to be determined from important risks identified from the SRM process, accidents/serious incidents and inputs from EASA stakeholders.

Status	Ongoing
Sls	SI-2026 Lack of effectiveness of safety management system
SRs	n/a
Reference(s)	n/a
Dependencies	n/a
Affected stakeholders	CAT
Strategic level	Standard
Strategic priority	EPAS Volume I §3.4.1
Owner	SM.1 - Safety Intelligence & Performance department

EXPECTED OUTPUT		
Deliverable(s)	Timeline	
Produce safety promotion material	Continuous	



# **RES.0032** Use of iConspicuity devices/systems in flight information services

EASA will investigate the use of iConspicuity devices/systems in air traffic management flight information services (ATM FIS), considering the 'net safety benefit' and the 'operational safety assessment' principles for the assessment of implementation issues and of possible benefits for search and rescue (SAR).

Status	Ongoing
Sls	SI-0043/SI-4010 Deconfliction between IFR and VFR flights
SRs	n/a
Reference(s)	European Action Plan for Airspace Infringement Risk Reduction (EAPAIRR) EASA BIS 'Airborne Collision Risk'
Dependencies	RES.0031
Affected stakeholders	Pilots, aircraft operators — all, NCAs, ANSPs, industry (e.g. avionics and ATM systems manufacturers)
Owner	CT.2 - General Aviation & VTOL (Vertical Take-Off and Landing) department
	EXPECTED OUTPUT

Deliverable(s)	Timeline
Final report	2024-Q3



# 8.2 Efficiency/proportionality

# RMT.0161 Conformity assessment – ATM/ANS

This RMT concerns the development of a harmonised and mutually recognised mechanism to attest compliance of ground equipment (i.e. ATM/ANS systems and ATM/ANS constituents, as well as safety-related aerodrome equipment used for the purpose of ATM/ANS) dependent upon their intended purpose (e.g. for the safe and seamless operation of the European Air Traffic Management network (EATMN) for all phases of flight).

The task has been divided into four subtasks as follows:

#### Subtask1:

The objective of this Subtask is to establish the related EU regulatory framework (delegated/implementing acts, Certification Specifications (CSs), AMC and GM) for the conformity assessment of ATM/ANS systems and ATM/ANS constituents in order to contribute to the safety and interoperability of the operation of the EATMN.

#### Subtask2:

The objective of this Subtask is to review the content of the repealed SES Interoperability framework previously established with Regulation (EU) 552/2004 and the related Implementing rules (e.g. automatic systems for the exchange of flight data IR (EC) 1032/2006, Coordinated allocation and use of Mode S IR (EC) No 262/2009, Surveillance Performance and Interoperability (SPI) IR (EC) No 1207/2011, etc.) and to adapt it to the new EASA regulatory framework concerning ATM/ANS ground systems (being developed under Subtask 1).

Subtasks 1 and 2 were completed with the publication of Commission Delegated Regulation (EU) 2023/1768 of 14 July 2023 and Commission Implementing Regulation (EU) 2023/1769 of 12 September 2023.

#### Subtask3:

This Subtask aims to establish the related AMC and GM supporting Subtask 1 deliverables and the first set of the EASA detailed specifications (DSs) based on the existing interoperability rules and Community Specifications (e.g. flight message transfer protocol).

Based on the operational execution of the regulatory process, Subtask 3 has been split in two 'waves' (A and B):

Wave A resulted in the publication, of 4 ED Decisions on 26 October 2023, as follows:

- ED Decision 2023/015/R 'Conformity assessment of ATM/ANS equipment | DS-GE.CER/DEC Issue 1 and DS-GE. SoC Issue 1'
- ED Decision 2023/016/R 'Conformity assessment of ATM/ANS equipment | AMC & GM to the Articles of Commission Delegated Regulation (EU) 2023/1768 Issue 1'
- ED Decision 2023/017/R 'Conformity assessment of ATM/ANS equipment | AMC & GM to Part-AUR.COM Issue 1 and AMC & GM to Part-AUR.SUR Issue 1'
- ED Decision 2023/018/R 'Conformity assessment of ATM/ANS equipment | Amendment to the AMC & GM to the ATM/ANS Regulation'

Wave B will result in a second batch of ED Decision expected for publication in 2024-Q1. This regulatory material will pertain to:

- the completion of the AMCs and GM associated with Commission Delegated Regulation (EU) 2023/17686 for the certification and declaration of ATM/ANS equipment; and
- the AMCs and GM associated with Commission Implementing Regulation (EU) 2023/17697 of 12 September 2023 for the approval of organisations involved in the design or production of ATM/ANS equipment (DPO approval).



RMT.0161	Conformity assessment – ATM/ANS
Status	Ongoing
Sls	n/a
SRs	DENM-2010-003
ICAO ref.	n/a
Other ref(s)	n/a
Dependencies	RMT.0476 RMT.0519 RMT.0524 RMT.0682 RMT.0719
Affected stakeho	<b>Iders</b> ATM/ANS providers; organisations involved in the design, production and maintenance of ATM/ANS systems, ATM/ANS constituents and safety-related aerodrome equipment used for the purpose of ATM/ANS; NCAs; ADR operators
Affected regulati	ion(s) Commission Implementing Regulation (EU) 2017/373 Commission Regulation (EU) No 139/2014
Strategic level	Strategic Strategic priority EPAS Volume I Section 3.3.5
Harmonisation	No

		WORKING METHOD	
	ED.4 - Air Traffic department		
SubT	Development	Impact Assessment(s)	Consultation
3	By EASA with external support	Light	NPA - Public

PLANNING MILESTONES					
SubT	Initiation	Consultation	Opinion	Commission IR	Decision
3B	ToR RMT.0161 14/02/2020	NPA 2023-05 14/06/2023	n/a	n/a	2024-Q1



# **RMT.0476** Regular update of the standardised European rules of the air

This RMT concerns the maintenance of Regulation (EU) No 923/2012. For better traceability and to ensure the necessary consistency with the evolution of the related EU regulatory framework and the ICAO SARPs and PANS, the RMT activities are split into subtasks:

#### Subtask 1

The objective is to amend the IRs and the AMC and GM with the first 'regular update' amendment containing noncontroversial modifications, which were initially consulted in late 2017 with the EASA ABs, and to address wake turbulence separation in relation to PANS-ATM Amendment 9. This subtask will also ensure the necessary consistency with Annex IV (Part-ATS) to Regulation (EU) 2017 /373 at AMC and GM level.

#### <u>Subtask 2</u>

The objective is to address amendments concerning controversial issues (radiocommunication failure and SID/STAR phraseologies).

#### Subtask 4

The objective is to introduce speed restrictions to avoid supersonic flights over land in Europe in order to protect citizens from unacceptable sonic booms from supersonic transport aeroplanes (SSTs) operating at supersonic speed.

#### Subtask 6 (new)

The objective of this subtask is to process the second comprehensive 'regular update' to the SERA IR and the AMC and GM resulting from various inputs, including but not limited to alignment with the ICAO framework as evolved by amendments included in relevant State Letters; the result addressing of the assessment of safety recommendation FRAN-2023-008 (MSAW), as well as the amendments necessary based on ICAO State Letters 22/47 (in flight weather contingencies) and 22/108 (FF-ICE).

Status	Ongoing		
Sls	n/a		
SRs	SPAN-2017-038		
ICAO ref.	Amendment 9 to PANS-ATM ICAO SL: ICAO references A	(ICAO Doc 4444) N 13/2.1-20/27, AN 13/2.1-22/30, 22/47 and 22/108	
Other ref(s)	n/a		
Dependencies	RMT.0733		
Affected stakeholders	Member States, NCAs/NSAs ADR operators, EASA	, ATM/ANS providers, airspace users (e.g. aircraft ope	rators),
Affected regulation(s)	Commission Implementing	Regulation (EU) No 923/2012	
Strategic level	Strategic	Strategic priority EPAS Volume I Sec	tion 3.3.5
Harmonisation	No		

		WORKING METHOD	
	ED.4 - Air Traffic department		
SubT	Development	Impact Assessment(s)	Consultation
1	By EASA with external support	Light	NPA - Public
2	By EASA with external support	Light	NPA - Public
4	By EASA with external support	Light	NPA - Public
6	By EASA with external support	Light	NPA - Public



RMT.0	)476 Regular upc	late of the standardise	ed European rules o	f the air	
		PLANNI	NG MILESTONES		
SubT	Initiation	Consultation	Opinion	<b>Commission IR</b>	Decision
1	ToR RMT.0476 18/08/2017	NPA 2022-04 25/05/2022	02/2023 18/08/2023	2024-Q1	2024-Q1
2		NPA 2022-04 25/05/2022	02/2023 18/08/2023	2024-Q1	2024-Q1
4		NPA 2022-04 25/05/2022	<tbd></tbd>	<tbd></tbd>	<tbd></tbd>
6		2024-Q3	2025	2025	2025

# RMT.0719 Regular update of air traffic management/air navigation services rules (IRs and AMC & GM)

This RMT concerns the maintenance of Regulation (EU) 2017/373 and associated AMC and GM, and addresses the authority, organisation and technical requirements for the provision of ATM/ANS services. It contains the following active subtasks:

<u>Subtask 2:</u> The objective of this subtask is to introduce a set of additional AMC and GM, which will be based on the SESAR Safety Reference Material, as regards the scope of the changes, the risk analysis process and the safety criteria determination by the providers of ATM/ANS services.

<u>Subtask 4b</u>: The objective is to maintain the ATM/ANS common requirements Regulation up to date, including alignment with the evolution of the ICAO regulatory framework, and coherent with the related evolving EU regulatory framework (e.g. ADR and AIR OPS rules). S ubtask 4b aims to align the ATM/ANS common requirements Regulation with the evolving ICAO provisions (in particular with Annex 4, Annex 10, Annex 11, Annex 15, PANS-ATM, and PANS-AIS) as well as introduce changes for regulatory consistency.

<u>Subtask 5:</u> The objective is to further develop the AMC and GM based on the regular monitoring of implementation through standardisation activities and regular feedback received from the EASA Advisory Bodies. This includes new AMC and GM for NAV providers to demonstrate that their equipment is regularly maintained and, where required, calibrated.

<u>Subtask 6:</u> The objective is to align the ATM/ANS common requirements Regulation and the related AMC and GM with the latest amendment of ICAO Annex 3, the new PANS-MET, and consequential changes introduced by Annex 15, PANS-AIM and PANS-ATM.

Status	Ongoing	
Sls	n/a	
SRs	n/a	
ICAO ref.	ICAO SL: Ref. ICAO references AN 2	13/2.1-20/27, AN 13/2.1-22/30, 22/47 and 22/108
Other ref(s)	n/a	
Dependencies	RMT.0681	
Affected stakeholders	ATM/ANS service providers, Netwo	ork Manager, aircraft operators, NCAs
Affected regulation(s)	Commission Implementing Regula	tion (EU) 2017/373
Strategic level	Standard	Strategic priority
Harmonisation	No	



# RMT.0719 Regular update of air traffic management/air navigation services rules (IRs and AMC & GM)

		WORKING METHOD	
	ED.4 - Air Traffic department		
SubT	Development	Impact Assessment(s)	Consultation
2	By EASA with external support	Light	NPA - Public
4b	By EASA with external support	Light	NPA - Public
5	By EASA	Light	NPA - Public
6	By EASA with external support	Light	NPA - Public

		PLANN	ING MILESTONES		
SubT	Initiation	Consultation	Opinion	Commission IR	Decision
2	RMT.0719 18/08/2017	NPA 2019-04 11/04/2019	n/a	n/a	2025
4b		NPA 2023-08 09/11/2023	2024-Q3	2024-Q4	2024-Q4
5		2024-Q3	n/a	n/a	2025
6		2024-Q2	2025	2025	2025



# RMT.0743 Regular update of AMC/GM associated to ATM/ANS ground equipment conformity assessment framework

Regular update of AMC/GM associated to ATM/ANS ground equipment conformity assessment framework

Status	New				
Sls	n/a				
SRs	n/a				
ICAO ref.	n/a	n/a			
Other ref(s)	n/a	n/a			
Dependencies	RMT.0161				
Affected stakeholders	ATM/ANS providers; organisations involved in the design, production and maintenance of ATM/ANS systems, ATM/ANS constituents and safety-related aerodrome equipment used for the purpose of ATM/ANS; NCAs				
Affected regulation(s)	ion(s) Commission Delegated Regulation (EU) 2023/1768 of 14 July 2023 Commission Implementing Regulation (EU) 2023/1769 of 12 September 20232023				
Strategic level	Standard	Strategic priority n/a			
Harmonisation	No				
	WORKING ME	тнор			
Owner ED 4 - Air Tra	ffic department				

Owner	ED.4 - Air Traffic department		
SubT	Development	Impact Assessment(s)	Consultation
1	To be determined at a later stage	To be determined at a later stage	To be determined at a later stage

		PLANNING	MILESTONES		
SubT	Initiation	Consultation	Opinion	Commission IR	Decision
1	2024-Q2	2025	n/a	n/a	2026



# **RMT.0744** Regular update of detailed specifications for ATM/ANS ground equipment

Regular update of detailed specifications for ATM/ANS ground equipment

Status		New						
Sls		n/a	n/a					
SRs		n/a	n/a					
ICAO ref	•	n/a						
Other re	f(s)	n/a						
Depende	encies	RMT.0161						
Affected stakeholders		•	, ATM/ANS coi	nstituents and sa	he design, productior afety-related aerodro	n and maintenance of me equipment used		
Affected	regulation(s)	n/a						
Strategio	c level	Standard			Strategic prior	<b>ity</b> n/a		
Harmoni	isation	No						
			WORKIN	G METHOD				
Owner	ED.4 - Air Tra	ffic department						
SubT	Developmen	t	Impact A	ssessment(s)	Consultation			
1	To be determined at a later stage		To be determinedTo be determinedat a later stageat a later stage					
			PLANNING	MILESTONES				
SubT	Initiation	Consult	ation	Opinion	Commission IR	Decision		
1	2024-Q2	2024-Q3	3	n/a	n/a	2025		



# IST.0002 Support the implementation of the ATM/ANS ground equipment conformity assessment framework

Following the adoption of the new ATM/ANS ground equipment conformity assessment framework with the associated AMC & GM and detailed specifications, a number of activities are planned to support the implementation of the new regulatory framework, including but not limited to:

- launching pilot certification projects of ATM/ANS ground equipment with volunteer organisations (i.e. design or production organisation of ATM/ANS ground equipment (DPO) ahead of the end of the transitional period;
- maintaining a high level of awareness through information sharing and various activities and addressing issues raised by stakeholders, as necessary;
- promoting the effective implementation of the conformity assessment framework and enabling relevant technological evolution by establishing a dedicated 'EASA ATM/ANS ground equipment webpage' on the EASA website.

Status	New
Sls	n/a
SRs	n/a
Reference(s)	n/a
Dependencies	n/a
	Design or production organisations of ATM/ANS equipment (DPOs), ATM/ANS providers, NCAs, the Agency
Owner	ED.4 - Air Traffic department

EXPECTED OUTPUT			
Deliverable(s)	Timeline		
Knowledge and information sharing on pilot certification projects 2024			
EASA ATM/ANS ground equipment web page	2024		

In addition to the above, the following RMTs are also relevant for ATM/ANS:

**RMT.0668** Regular update of the air traffic controller licensing rules (IRs and AMC and GM)

The full description of this action is included in Section 2.5.

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

The full description of this action is included in **Section 10.1**.

RMT.0524	Data link services
RMT.0624	Remote aerodrome air traffic services
RMT.0682	Implementation of the regulatory needs in support of the SESAR deployment
RMT.0731	New air mobility

The full description of these actions is included in **Chapter 11**.

# 9. Aerodromes and ground handling



# 9. Aerodromes and groundhandling

Refer to EPAS Volume I Section 3.3.6 'Ensure operational safety in aerodromes' operations (ADR) and groundhandling (GH)'

# 9.1 Aerodromes

This section addresses aerodrome (ADR) design and operations aspects, as well as ADR operators.

The actions in this chapter address safety, as well as efficiency/proportionality, in terms of developing and maintaining a legal framework commensurate with the complexity of the ADR activities and management of potential risks. This chapter also includes actions to ensure a level playing field on the basis of the regulatory requirements stemming from the Basic Regulation.

The actions in this chapter aim to maintain a high uniform level of safety in the Member States, ensuring compliance with the ICAO SAPRs and a harmonised approach, which is necessary in aerodrome operations where aerodrome design and operations are based on a global safety standard developed by ICAO. Since aerodrome safety is based on global safety standards, any amendments to ICAO SARPs and their transposition into the EU regulatory framework also has to take into account alignment of the applicability dates. This will support the free movement of services within the Member States and concurrently ensure convergence of rules at the global level.

This chapter also addresses the conformity assessment of safety-related aerodrome equipment; the related rulemaking work will be processed under RMT.0161. The objective is to develop a harmonised and mutually recognised mechanism to attest compliance, declaration and certification of safety-related aerodrome equipment in accordance with the applicable provisions of the Basic Regulation, and in particular Articles 3, 36 and 79 of that Regulation.

# How we monitor improvement

Continuous monitoring of the safety issues identified in the relevant Safety Risk Portfolios (refer to EPAS Volume III, in particular Chapters 2, 3 and 11).

The EASA ABs will provide feedback on the efficiency/proportionality of the related actions.

# 9.1.1 Safety

The top KRA for aerodrome- and ground-handling-related accidents and serious incidents in terms of aggregated ERCS score is ground damage, followed by collision on runway and excursion (cf. 2023 ASR).

The associated safety issues are described in the corresponding Safety Risk Portfolio (refer to EPAS Volume III, in particular Chapter 11).

# How we want to achieve it: actions

# 9. AERODROMES AND GROUNDHANDLING



# **RMT.0722** Provision of digital aeronautical data by aerodrome operators

Revision and update of Regulation (EU) No 139/2014 and of the related AMC and GM in order to include the provisions of Chapter 2 of ICAO Annex 14 and the provisions of ICAO Annex 15 with regard to the provision of digital aeronautical data by aerodrome operators.

Status	Ongoing		
Sls	n/a		
SRs	n/a		
ICAO ref.	ICAO Annex 14 and ICAO Annex 15		
Other ref(s)	ATM Master Plan Level 3 - Plan (2019): INF07 - Electronic Terrain and Obstacle Data (e-TOD) ATM Master Plan Level 3 - Plan (2019): ITY-ADQ - Ensure quality of aeronautical data and aeronautical information		
Dependencies	RMT.0719		
Affected stakeholders	ADR operators, AOC holders, ANSPs, NCAs		
Affected regulation(s)	Commission Regulation (EU) No 139/2014		
Strategic level	Strategic	Strategic priority	EPAS Volume I Section 3.3.1.2
Harmonisation	Yes - intended		

WORKING METHOD				
	ner FS.2 - Air Operations & Aerodromes department			
SubT	Development	Impact Assessment(s)	Consultation	
	By EASA	Detailed	NPA - Public	

PLANNING MILESTONES						
SubT	Initiation	Consultation	Opinion	<b>Commission IR</b>	Decision	
	ToR RMT.0722 14/04/2021	2024-Q3	2025	2026	2026	

# 9. AERODROMES AND GROUNDHANDLING



# SPT.0102 Development of new safety promotion material on high-profile aerodrome and groundhandling safety issues

Develop new safety promotion material on high-profile safety issues for aerodromes and groundhandling. Such high-profile safety issues are to be determined from important risks identified from the SRM process, accidents/ serious incidents, inputs from EASA stakeholders and groundhandling safety topics that have been defined by the Groundhandling Roadmap, including groundhandling safety topics stemming from the Basic Regulation.

Status	Ongoing	
Sls	All SIs (mitigate and monitor) in the ADR and GH Safety Risk Portfolio (refer to EPAS Vol. III Chapter 11)	
SRs	n/a	
Reference(s)	n/a	
Dependencies	n/a	
Affected stakeholders	ADR operators, groundhandling services providers (GHSPs), AOC holders, ANSPs, NCAs	
Strategic level	Strategic	
Strategic priority	EPAS Volume I § 3.3.6.1	
Owner	SM.1 - Safety Intelligence & Performance department	

EXPECTED OUTPUT		
Deliverable(s)	Timeline	
Safety promotion material	Continuous	

# RES.0040 Runway microtexture

Good aeroplane tyre braking friction on wet runways is of essential importance for the safe stop of aircraft. Poor runway microtexture has resulted in several landing overrun occurrences on wet surfaces. There are currently no acceptable methods for aerodromes to accurately assess the microtexture characteristics. The proposed research assesses the practical use and validity of high-resolution surface laser scanners to determine the runway microtexture characteristics. A better understanding of these characteristics can reduce the number of runway excursions.

This project is funded by Horizon Europe under the 2nd Research Contribution Agreement with the European Commission.

Status	Ongoing	
Sls	n/a	
SRs	n/a	
Reference(s)	Runway Micro Texture (RWYMT) (https://www.easa.europa.eu/en/research-projects/runway-micro-texture-rwymt)	
Dependencies	n/a	
	ADR operators, aircraft operators (CAT, NCC, NCO, SPO), DA holders, NCAs	
Owner	SM.2 - Strategy & Programmes department	

EXPECTED OUTPUT		
Deliverable(s) Timeline		
Final report	2025	

#### 9. AERODROMES AND GROUNDHANDLING



#### **RES.0045** Implementation of the 'triple one' concept for aerodromes

The 'triple one' concept refers to ways and means to enhance ground communication between pilots, ATC personnel and vehicle drivers during aircraft and vehicle operations on the manoeuvring area of aerodromes to increase the situational awareness of these actors. The overall objective of the 'triple one' concept is that in demanding environments associated with aerodrome operations on a runway, all participants accurately receive, understand and, where appropriate, correctly read back all ATC clearances and instructions.

The working definition of the 'triple one' concept can be therefore formulated as follows: 'one runway, one frequency, one language'.

The research project aims to:

- identify and understand the current application of the 'triple one' concept, the variations in use, as well as the rationale/reasoning behind each one of them, including the way in which each solution was implemented at local level, and at what cost and impact;
- provide EASA and the aviation stakeholders with the necessary understanding of the safety benefits and safety risks, as well as all the reasons for implementing or not the 'triple one' concept;
- provide policy options in relation to the 'triple one' concept that may be pursued to further reduce the risk of runway incursions at European aerodromes.

Status	Ongoing	
Sls	n/a	
SRs	n/a	
Reference(s)	n/a	
Dependencies	n/a	
Affected stakeholders	ADR operators, ANSPs, NCAs	
Owner	SM.2 - Strategy & Programmes department	
	EXPECTED OUTPUT	

Deliverable(s)	Timeline
Final report	2024-Q4



# 9.1.2 Level playing field

# **RMT.0746** Regular update of the aerodrome rules for the transposition of <u>ICAO SARPs amendments</u>

The objective of this rulemaking task is to regularly address miscellaneous issues of non-controversial nature to ensure that the requirements are fit for purpose, cost-effective, can be implemented, and are in line with the latest ICAO SARPs. In particular, regular updates are used to address non-complex and non-controversial issues raised by stakeholders.

Status	New		
Sls	n/a		
SRs	n/a		
ICAO ref.	Annex 14		
Other ref(s)	n/a		
Dependencies	n/a		
Affected stakeholders	ADR operators, NCAs		
Affected regulation(s)	Commission Regulation (EU) No 139/2014		
Strategic level	Standard	Strategic priority	n/a
Harmonisation	No		

		WOR	KING METHOD			
Owner	FS.2 -Air operations and aerodromes					
SubT	Development		Impact Assessment(s) Consultation			
1	To be determined at a later stage		To be determined at a later stage		To be determined at a later stage	
PLANNING MILESTONES						
SubT	Initiation	Consultation	Opinion	<b>Commission IR</b>	Decision	
1	2024	2025	2026	2027	2027	



# 9.1.3 Efficiency/proportionality

# **RMT.0161** Conformity assessment - establishment of a European certification/declaration system for safety-related aerodrome equipment

This RMT concerns the development of a harmonised and mutually recognised system of the Agency issuing certificates or accepting declarations related to safety-related aerodrome equipment as defined in the Basic Regulation (EU) 2018/1139 to attest compliance of such equipment, where it is used or intended to be used to contribute to the safe operation of aircraft at an aerodrome as specified in Article 36 of the Basic Regulation (EU) 2018/1139.

The RMT develops the necessary detailed implementing rules for the issuance of those certificates and, where relevant, the declarations to be made to this effect, as well as the certification specifications and guidance material that are needed to allow the applicant to demonstrate that the equipment complies with the detailed certification specifications established in accordance with the implementing acts developed in this RMT.

The task will be progressed through two subtasks as follows:

#### Subtask 4:

The objective of this Subtask is to establish the related EU regulatory framework as mandated by the Basic Regulation (EU) 2018/1139 (implementing acts, AMC and GM) to enable the Agency to issue certificates or to accept declarations of safety-related aerodrome equipment in order to contribute to the safe operation of aircraft at an aerodrome as specified in Article 36 of the Basic Regulation (EU) 2018/1139 and to ensure interoperability of aerodrome operations, as well as safe operation of aircraft at an aerodrome.

#### Subtask 5:

The objective of this Subtask is to develop and publish a first package of new certification specifications (CS) and related guidance material (GM) related to safety-related aerodrome equipment or to amend existing CS or GM related to safety-related aerodrome equipment. Those CS and GM are needed to allow the applicant to demonstrate that the safety-related aerodrome equipment complies with the detailed certification specifications established in accordance with the implementing acts developed under subtask #1 and developed under this subtask #2.

Subtask numbering shows continuation from RMT.0161 (refer to Chapter 8.2).

Status	Ongoing		
Sls	n/a		
SRs	n/a		
ICAO ref.	n/a		
Other ref(s)	Basic Regulation (EU) No 2018/1139		
Dependencies	n/a		
Affected stakeholders	Organisations involved in the design, production and maintenance of safety-related aerodrome equipment, ADR operators and NCAs		
Affected regulation(s)	Regulation (EU) 139/2014 Articles 35, 36 and 79		
Strategic level	Strategic	Strategic priority EPAS Volume   Section 3.3.6.2	
Harmonisation	No		

WORKING METHOD			
Owner	EASA FS2 - Air Operations & Aerodromes department		
SubT	Development	Impact Assessment(s)	Consultation
4	By EASA with external support	Light	NPA-Public
5	By EASA with external support	Light	NPA-Public



# 9. AERODROMES AND GROUNDHANDLING

RMT.0	RMT.0161Conformity assessment - establishment of a European certification/declaration system for safety-related aerodrome equipment						
			PLANNING	MILESTONES			
SubT	minere	ation	Consultation	Opinion	Commission IR	Decision	
4	ToR F 14/02	RMT.0161 2/2020	2024-Q1	2024-Q4	2025	2025	
5			<tbd></tbd>	<tbd></tbd>	<tbd></tbd>	<tbd></tbd>	

# 9. AERODROMES AND GROUNDHANDLING



# RMT.0591 Regular update of the aerodromes rules

The objective of this RMT is to regularly address miscellaneous issues of non-controversial nature, in order to ensure that the Aerodrome Regulation is fit for purpose, cost-effective and in line with the latest ICAO SARPs and the Basic Regulation.

This regular update addresses the Aerodrome Regulation and its AMC and GM, as well as the aerodrome design certification specifications (CS) and GM.

The current cycle encompasses the following deliverables:

- an ED Decision issuing the stand-alone CS and GM, the adoption of which is not dependent upon the adoption of the amendment to the implementing rules);
- an Opinion proposing amendments to the implementing rules;
- Note: This Opinion will also include the outcome of RMT.0681 regarding the alignment of implementing rules and acceptable means of compliance/guidance material with Regulation (EU) No 376/2014 Occurrence reporting;
- an ED Decision issuing the AMC/GM and CS/GM which are dependent upon the amendment to the implementing rules.

The first part of the current cycle (stand-alone CS/GM) is complete with the publication of ED Decision 2022/006/R on 29/03/2022.

Status	Ongoing	
Sls	n/a	
SRs	n/a	
ICAO ref.	n/a	
Other ref(s)	n/a	
Dependencies	RMT.0681	
Affected stakeholders	ADR operators, NCAs	
Affected regulation(s)	n/a	
Strategic level	Standard	Strategic priority n/a
Harmonisation	No	

	WORKING METHOD	
•	•	
Development	Impact Assessment(s)	Consultation
	Development	FS.2 - Air Operations & Aerodromes department Development Impact Assessment(s)

		PLANNI	NG MILESTONES		
SubT	Initiation	Consultation	Opinion	<b>Commission IR</b>	Decision
current cycle		NPA 2020-10 2020-11-17	04/2023 01/09/2023	2024	<tbd></tbd>



In addition to the above, the following actions are also directly relevant for ADR operators:

**RMT.0476** Regular update of the standardised European rules of the air

The full description of these actions is included in **Section 8.2**.

**RMT.0728** Development of requirements for groundhandling

The full description of this action is included in **Section 9.2**.

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

The full description of these actions is included in **Chapter 10**.

RMT.0624	Remote aerodrome air traffic services
RMT.0682	Implementation of the regulatory needs in support of the SESAR deployment
RMT.0731	New air mobility

The full description of these actions is included in **Chapter 11**.



# 9.2 Groundhandling & apron management services

This section addresses all aspects related to groundhandling safety and apron management services.

# 9.2.1 Safety

# Issue/rationale

This risk area includes all groundhandling - and apron-management-related issues (aircraft loading, de-icing, refuelling, ground damage, aircraft parking and marshalling, 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 collision on the runway. Baggage and cargo loading in passenger aircraft is the top safety issue based on the data portfolio. Apron management services are already regulated under Regulation (EU) 139/2014 on aerodrome safety, whereas ground handling safety is proposed to be regulated via a new Regulation that is currently being developed under RMT.0728.

# What we want to achieve

Increase safety by continuously assessing and improving risk controls to mitigate the risks in the area of ground handling safety and apron management services.

# How we monitor improvement

The key risk areas (KRAs) and underlying safety issues will continue to be monitored as part of the Safety Risk Portfolio for aerodromes and groundhandling (refer to EPAS Volume III Chapter 11), with the support of the Aerodromes and Groundhandling CAG. RMT.0728 on developing a regulatory framework for ground handling will consider all safety issues that are related to ground handling. The EASA ABs regularly provide feedback on the efficiency/proportionality of actions related to apron management services and on their effect on level playing field.

# How we want to achieve it: actions

# 9. AERODROMES AND GROUNDHANDLING



# **RMT.0728** Development of requirements for groundhandling

The objective of this RMT is to develop IRs and AMC & GM to ensure compliance with the essential requirements contained in Annex VII to the Basic Regulation. This will consider operational requirements, organisational requirements and authority requirements, as deemed necessary. Detailed objectives and actions are defined by the Groundhandling Roadmap which was subject to a focused consultation in the first quarter of 2019.

In addition, the task includes the items previously addressed in RMT.0705 and therefore also covers the development of requirements for:

- the establishment of the methods for the delivery, storage, dispending and handling of dangerous goods at the ADR; and
- ADR operators to train their personnel in the handling of dangerous goods, in the case the ADR operator is acting as a subcontractor (handling agent) of air operators.

Status	Ongoing	
Sls	All GH related SIs (mitigate and monitor) EPAS Vol. III Chapter 11)	in the ADR and GH Safety Risk Portfolio (refer to
SRs	GERF-2018-002 (BFU) Ground aircraft de-i	cing to be under regulatory authority
ICAO ref.	n/a	
Other ref(s)	n/a	
Dependencies	n/a	
Affected stakeholders	NCAs, GHSPs, ADR operators, aircraft ope	rators — all, groundhandling staff
Affected regulation(s)	Commission Regulation (EU) No 139/2014 Commission Regulation (EU) No 965/2012	
Strategic level	Strategic	Strategic priority EPAS Volume I Section 3.3.6.3
Harmonisation	No	

			WORKING METHOD			
Owner	FS.2 - Air Operatior	FS.2 - Air Operations & Aerodromes department				
SubT	Development		Impact Assessment(s)	Consultation		
	By EASA with external support		Detailed	tailed NPA - Focused		
	,					
			PLANNING MILESTONES			
SubT	Initiation	Consultatio	on Opinion	Commission IR	Decision	

In addition to the above, the following SPT is also directly relevant to groundhandling:

SPT.0102 Development of new safety promotion material for high-profile aerodrome and groundhandling safety issues

The full description of this action is included in **Section 9.1**.

# 10. Unmanned aircraft systems and manned VTOL-capable aircraft



# 10. Unmanned aircraft systems and manned VTOL-capable aircraft

# Refer to EPAS Volume I Section 3.4.3.1 'Establish a comprehensive EU regulatory framework for UAS and manned VTOL-capable aircraft'

Enabling the safe integration of UAS (also commonly called 'drones'), being a fast evolving and emerging market segment, as well as of (initially manned) VTOL-capable aircraft, also intended for urban air mobility (UAM) operations, continues to be a high-priority activity for EASA.

# 10.1 Safety

# Issue/rationale

Before the adoption of the Basic Regulation most of the EU Member States had adopted national regulations to ensure the safe operation of UASs with MTOMs below 150 kg. With the extension of the scope of the EU competence through the Basic Regulation to regulate UASs with MTOMs below 150 kg and the applicability of the EU requirements for the operation of UASs in the 'open' and 'specific' category (Commission Implementing Regulations (EU) 2019/947 and 2019/945), Member States are in the process of amending their national regulations. As of January 2024, all UAS operations in the 'open' category and all drone operators must fully comply with both EU Regulations.

These EU Regulations need to be complemented with additional actions to enable harmonisation of the rules at EU level. They are also linked with other EPAS actions (such as RMT.0731) and aim to enable standardised UAS operations as well as more complex UAS operations such as operations in urban environments (i.e. urban air mobility (UAM)).

In order to ensure safe UAS operations and mitigate the risks, it is important to manage the safe integration of UASs into the airspace. On airspace integration, the U-space<sup>4</sup> is a set of new services and specific procedures designed to support the safe, efficient and secure access to airspace for a large number of drones. EASA has prepared the world's-first U-space/UTM regulatory package (Commission Implementing Regulations (EU) 2021/664, 2021/665 and 2021/666, adopted by the European Commission on 22 April 2021). This package became applicable on 26 January 2023 and will enable the safe integration of UAS operations in urban environments.

# What we want to achieve

To create a level playing field in all EU Member States by 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. At the same time, to enable the safe integration of drones in the European airspace while maintaining a high and uniform level of safety.

# How we monitor improvement

The relevant EASA ABs regularly provide feedback on the effectiveness of the related activities.

# How we want to achieve it: actions

<sup>4</sup> The 'U-space' is the European name for unmanned traffic management (UTM).



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

Development of IRs (including implementing and delegated acts), AMC, GM and CS for UASs to implement Articles 55 to 57 of and Annex IX to the Basic Regulation.

The ToR have been updated by publishing Issue 4 on 19.12.2022 to reflect the further evolution of the approach defined by EASA and agreed with the relevant stakeholders.

There are three categories of UASs defined as follows:

- 'open' category: low-risk operation that does not require authorisation or declaration before flight;
- 'specific' category: medium-risk operation that requires authorisation or declaration before flight;
- 'certified' category: high-risk operation that requires a certification process.

To implement an innovative new set of rules for the three categories and to address U-space, six subtasks had initially been identified, of which Subtasks A and B were completed between 2019 and 2022. A new Subtask G is added with this edition.

As concerns Subtask A related to unmanned aircraft system operations in the 'open' and 'specific' categories, the introduction of standard scenarios (STSs) by amending the implementing and delegated acts for the 'open' and 'specific' category is covered by RMT.0729.

For the maintenance of Regulations (EU) 2019/945 and 2019/947 and the AMC and GM developed under Subtasks A, two dedicated RMTs are included in the EPAS. Refer to RMT.0729 and RMT.0730.

The regular update of the U-space Regulation will be addressed by the new RMT.0748.

Subtask C: Unmanned aircraft systems operations in the 'certified' category and urban air mobility

This addresses UAS operations in the 'certified' category and UAM. This subtask includes amendments to the IAW, CAW, FCL, AIR OPS, ADR and ATM/ANS Regulations for three types of operations:

- Operations Type #1: instrument flight rules (IFR) operations of UASs for the carriage of cargo in airspace classes A-C (ICAO airspace classification) and taking off from and/or landing at aerodromes that fall under the Basic Regulation.
- Operations Type #2: operations of UASs taking off and/or landing in a congested (e.g. urban) environment using predefined routes in the U-space airspace (part of the operation could be in a non-congested, e.g. rural, environment). These include operations of unmanned VTOL-capable aircraft carrying passengers (e.g. air taxis) or cargo (e.g. goods delivery services).
- Operations Type #3: same as for Type #2 operations with VTOL-capable aircraft with a pilot on board, including operations outside the U-space airspace. While this task will also consider emerging technologies such as electric and hybrid propulsion as integral part of the drones' design, the dedicated RMT.0731 will address in particular the CAW aspects related to these technologies.

<u>Subtask D:</u> Certification Specifications for unmanned aircraft systems (CS-UAS and CS-Light UAS), Certification Specifications for VTOL-capable aircraft (CSVTOL), and CS-ETSO.

EASA will issue new CSs for UAS (CS-UAS and CS-Light UAS), including AMC with safety objectives for the airworthiness of civil UAS.

In addition, to complement the regulatory framework for VTOL-capable aircraft, EASA will introduce the new CS-VTOL, as well as amend the Certification Specifications for European Technical Standard Orders (CS-ETSO) regarding equipment that is installed on UAS or used to operate UAS.

<u>Subtask E</u>: Airspace usage requirements and air traffic management/air navigation services interoperability requirements

EASA will produce an Opinion proposing to amend Regulation (EU) No 1332/2011 and other ATM/ANS regulations, as applicable, regarding airspace integration; the related Decisions with the AMC and GM will then follow. Another Decision will amend the Certification Specifications and Acceptable Means of Compliance for Airborne Communications, Navigation and Surveillance (CS-ACNS).



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

Subtask F: Environmental protection

Environmental protection is planned to be addressed in a two-phased approach. EASA will use special conditions (SCs) to propose the first set of requirements. Once experience is gained, the regulatory framework will be adapted as necessary.

<u>Subtask G:</u> Certification Specifications for vertiport design (CS-VPT-DSN) and Certification Specifications for aerodrome design (CS-ADR-DSN)

EASA will issue Decisions to create Certification Specifications for vertiport design (CS-VPT-DSN) based on the 'Prototype Technical Design Specifications for Vertiports' and to amend the Certification Specifications for aerodrome design (CS-ADR-DSN).

Status	Ongoing					
Sls	SI-2014 Airborne Collision with U	nmanned Aircraft System (UAS)				
SRs	ITAL-2017-001					
ICAO ref.	n/a					
Other ref(s)	n/a					
Dependencies	RMT.0727 RMT.0731					
Affected stakeholders	MTOs; UAS CAMOs; maintenance (manned aircraft); providers of air and other ATM network functions	nercial); NCAs; flight crews; remote pilots; UAS MOs; UAS licence holders; UAS manufacturers; other airspace user r traffic management/air navigation services (ATM/ANS) s (including U-space service providers (USSP) and commo rs; air traffic services (ATS) personnel; ADR operators; ociations				
Affected regulation(s)	Commission Delegated Regulatio Commission Implementing Regul Commission Implementing Regul Commission Implementing Regul Commission Implementing Regul Commission Regulation (EU) No 1 Commission Regulation (EU) No 7 Commission Regulation (EU) No 7 Commission Regulation (EU) No 9 Commission Regulation (EU) No 1	ation (EU) 2017/373 ation (EU) 2019/947 ation (EU) 2021/1338 ation (EU) 2021/664 ation (EU) No 923/2012 .178/2011 .39/2014 48/2012 165/2012				
Strategic level	Strategic	Strategic priority EPAS Volume I Section 3.4.3				
Harmonisation	No					
	WORKING	METHOD				

	ED.0.3 - Drones section		
SubT	Development	Impact Assessment(s)	Consultation
С	By EASA with external support	Detailed	NPA - public
D	By EASA with external support	Light	NPA - public
E	By EASA with external support	Detailed	NPA - public
F	By EASA with external support	Light	NPA - public
G	By EASA with external support	Light	NPA - public



RMT.0	0230	Introductio	n of a regulatory fram	ework for the ope	ration of drones	
			PLANN	ING MILESTONES		
SubT	Initia	tion	Consultation	Opinion	<b>Commission IR</b>	Decision
C1	22/12 Issue	MT.0230 2/2016 4 /2022	NPA 2022-06 30/06/2022	03/2023 31/08/2023	<tbd></tbd>	<tbd></tbd>
C2			2025	2026	<tbd></tbd>	<tbd></tbd>
С3			2024-Q1	n/a	n/a	2024-Q3
C4			2024-Q1	n/a	n/a	2024-Q3
C5			2025	n/a	n/a	2026
C6			2026	2027	<tbd></tbd>	n/a
С7			2027	n/a	n/a	2028
D1			2025	n/a	n/a	2026
D2			2025	n/a	n/a	2026
D3			2025	n/a	n/a	2025
D4	_		<tbd></tbd>	n/a	n/a	<tbd></tbd>
E1			<tbd></tbd>	<tbd></tbd>	n/a	<tbd></tbd>
E2			<tbd></tbd>	2025	n/a	<tbd></tbd>
E3			<tbd></tbd>	<tbd></tbd>	n/a	<tbd></tbd>
E4			<tbd></tbd>	<tbd></tbd>	n/a	<tbd></tbd>
F1			<tbd></tbd>	n/a	n/a	<tbd></tbd>
F2			<tbd></tbd>	n/a	n/a	<tbd></tbd>
F3			<tbd></tbd>	n/a	n/a	<tbd></tbd>
G1			<tbd></tbd>	n/a	n/a	<tbd></tbd>
G2			<tbd></tbd>	n/a	n/a	<tbd></tbd>

### Note:

For the correlation between the NPA numbers and the respective subtasks, please refer to the annex to the Terms of Reference (ToR) for RMT.0230 (Issue 4 published on 19/12/2022).



# RMT.0729 Regular update of Regulations (EU) 2019/945 and 2019/947 (drones in the 'open' and 'specific' categories)

The objective of this RMT is to regularly address miscellaneous issues to ensure that the UAS Regulations are fit for purpose, cost-effective, and in line with the latest ICAO SARPs and the Basic Regulation.

# Subtask 2 (current cycle):

This subtask will address inconsistencies and lessons learned identified by the stakeholders during the application of Regulations (EU) 2019/945 and 2019/947.

Status		Ongoing					
Sls		SI-2014 Airborne Collision with Unmanned Aircraft System (UAS)					
SRs		ITAL-2017-001					
ICAO ref	•	n/a					
Other re	f(s)	n/a					
Depende	encies	RMT.0730					
Affected	stakeholders	UAS operators (private and commercial); NCAs; flight crews; remote pilots; UAS MOS; UAS MTOs; UAS CAMOs; maintenance licence holders; UAS manufacturers; other airspace users (manned aircraft); providers of air traffic management/air navigation services (ATM/ANS) and other ATM network functions (including U-space service providers (USSP) and common information service (CIS) providers; air traffic services (ATS) personnel; ADR operators; general public; model aircraft associations					
Affected	regulation(s)	Commission Delegated Regulation (EU) 2019/945 Commission Implementing Regulation (EU) 2019/947					
Strategic	: level	Strategic Strategic priority EPAS Volume I Section				ne   Section 3.4.31	
Harmoni	isation	No					
			WORKING	METHOD			
Owner	ED.0.3 - Dron	les section					
SubT	Developmen	nt Impact Assessment(s)		Cor	sultation		
2 By EASA with		n external support	Detailed			NPA	A - Public
			PLANNING M	ILESTONES			
SubT	Initiation	Consultatio	on (	Opinion	Commissio	n IR Dec	islon
2	RMT.0729 26/07/2019	2025-Q1	-	2025-Q4	2026-Q4	n/a	



# RMT.0730 Regular update of the AMC and GM to Regulations (EU) 2019/945 and 2019/947 (drones in the 'open' and 'specific' category)

The objective of this RMT is to regularly address miscellaneous issues to ensure that the UAS Regulations are fit for purpose, cost-effective, and in line with the latest ICAO SARPs and the Basic Regulation. It aims at general improvements of the AMC and GM to Regulations (EU) 2019/947 and 2019/945.

Predefined risk assessments (PDRAs) and recognition of industry standards in support of the specific operations risk assessment (SORA) methodology.

Considering the novelty of the topic and the need to gain experience while achieving harmonisation in the implementation of the UAS Regulations, EASA will publish on its website guidelines providing useful information for the stakeholders. When the material is considered mature, an NPA and the resulting Decision will be published.

<u>Subtask 2:</u> Additional PDRAs, AMC and GM for STSs (Regulations published under RMT.0729) and for the definition of geographical zones; general improvement of the related AMC and GM and recognition of industry standards.

Subtask 2 has been partially completed with the publication of NPA 2021-09. Since the proposed amendments affecting the verification of design of drones were controversial, it was decided to split the Decision in two parts. On 7 February 2022, Decision 2022/002/R was published, including all the amendments which do not affect the demonstration of compliance with the design of drones. On 20 October 2023 Decision 2023/12/R was published with the remaining AMC and GM. This completes Subtask 2.

<u>Subtask 3:</u> The Joint Authorities for Rulemaking on Unmanned Systems (JARUS) plan to publish in 2024-Q1 updates to the SORA, and 3 new PDRAs, following a JARUS public consultation. Unless major objections are raised by EASA or by EU stakeholders during the JARUS consultation, EASA plans to integrate that proposal into the EU UAS regulations. In that case, EASA will consult the ABs on the regulatory material before doing so.

<u>Subtask 4:</u> This subtask will produce guidelines for publication on the EASA website to make the material available to stakeholders in a timely manner. The NPA and the Decision will be published later when the material is considered mature. It will include additional PDRAs, general improvements to the related AMC and GM, and recognition of additional industry standards. Guidelines on the design verification process have been published and more are under development.

Status	Ongoing		
Sls	SI-2014 Airborne Collision wi	th Unmanned Aircraft System (	UAS)
SRs	n/a		
ICAO ref.	n/a		
Other ref(s)	n/a		
Dependencies	n/a		
Affected stakeholders	MTOs; UAS CAMOs; mainten (manned aircraft); providers and other ATM network func	of air traffic management/air n tions (including U-space servic viders; air traffic services (ATS)	ufacturers; other airspace users avigation services (ATM/ANS) e providers (USSP) and common
Affected regulation(s)	Commission Delegated Regu Commission Implementing R		
e	<u></u>	· · · ·	
Strategic level	Strategic	Strategic priority	EPAS Volume I Section 3.4.3



# RMT.0730 Regular update of the AMC and GM to Regulations (EU) 2019/945 and 2019/947 (drones in the 'open' and 'specific' category)

		WORKING METHOD	
	ED.0.3 - Drones section		
SubT	Development	Impact Assessment(s)	Consultation
2	By EASA with external support	Light	NPA - Focused
3	By EASA with external support	Light	NPA - Focused
4	To be determined at a later stage	To be determined at a later stage	To be determined at a later stage

	PLANNING MILESTONES							
SubT	Initiation	Consultation	Opinion	<b>Commission IR</b>	Decision			
2	RMT.0730 26/07/2019	NPA 2021-09 14/07/2021	n/a	n/a	2022/002/R 09/02/2022 2023/012/R 20/10/2023			
3		2024-Q2	n/a	n/a	2024-Q3			
4		<tbd></tbd>	<tbd></tbd>	<tbd></tbd>	<tbd></tbd>			



# RMT.0748 Regular update of the U-space regulatory framework

Regular update of the U-space regulatory framework, Commission Implementing Regulation (EU) 2021/664 (U-space), Commission Implementing Regulation (EU) 2021/665 (Part-ATS), Commission Implementing Regulation (EU) 2021/666 (Rules of the air), and related AMC/GM

Status		New					
Sls n/a							
SRs		n/a					
ICAO ref.	,	n/a					
Other re	f(s)	n/a					
Depende	encies	RMT.0230					
Affected stakeholders Affected regulation(s)		UAS operators (private and commercial); NCAs; flight crews; remote pilots; UAS MOs; UAS MTOs; UAS CAMOs; maintenance licence holders; UAS manufacturers; other airspace users (manned aircraft); providers of air traffic management/air navigation services (ATM/ANS) and other ATM network functions (including U-space service providers (USSP) and common information service (CIS) providers; air traffic services (ATS) personnel; ADR operators; general public; model aircraft associations					
		Commission Implementing Regulation (EU) 2021/664 Commission Implementing Regulation (EU) 2021/665 Commission Implementing Regulation (EU) 2021/666					
Strategic	level	Strategic		Strat	egic priority	EPAS Vol	ume I Section 3.4.3
Harmoni	sation	No					
			WORKI	NG METHOD			
Owner	EASA ED.0.3						
SubT	Developmen	t	Impact	Assessment(s)			Consultation
To be determine at a later stage						To be determined at a later stage	
			PLANNIN	G MILESTONES			
SubT	Initiation	Consul	tation	Opinion	Commiss	sion IR	Decision
1	2024-Q1	2025		<tbd></tbd>	<tbd></tbd>		<tbd></tbd>



# IST.0003 Support the implementation of the U-space Regulatory Framework

The Agency together with MS Focal points for the U-space Regulatory Framework implementation has established a task force with the aim of sharing and developing best practices for U-space service providers (USSPs) and single common information service providers (SCISPs) certification. In addition, this task force is developing best practises for the airspace risk assessment (ARA) process, supported by EUROCONTROL. The ARA needs to be conducted by the Member States before establishing and designating U-space airspace in their airspace. The task force works also on best practices and guidance material on how the interactions/interfaces between the main U-space stakeholders (USSPs/SCISPs/ATS providers) should take place. The main deliverables of the task force will be frequently asked questions, checklists, application forms, compliance matrices, and guidelines that will be made available on the design of UAM route in order to foster common principles on rules for VTOL route design, have a common approach to the concept of operations, share best practices for VTOL trajectories, and lay down principles on how to identify regional characteristics. The quidelines are planned for publication in 2024.

In addition, based on the outcome of the discussions within the task force, the Agency may consider the deliverables and guidelines to improve the content of the already published AMC/GM as part of the regular update RMT.

Moreover, in order to support the common understanding of the U-space regulatory framework as well as of the already published AMC/GM, the Agency will organise dedicated webinars and workshops together with Member States, industry and other relevant stakeholders.

Finally the Agency will also aim to provide support, as applicable, to the European Research and Demonstration Projects on U-space conducted under SESAR 3JU or to nationally lead projects.

Status	New
Sls	n/a
SRs	n/a
Reference(s)	n/a
Dependencies	RMT.0230-B
Affected stakeholders	UAS operators (private and commercial); NCAs; flight crews; remote pilots; UAS MOs; UAS MTOs; UAS CAMOs; maintenance licence holders; UAS manufacturers; other airspace users (manned aircraft); providers of air traffic management/air navigation services (ATM/ANS) and other ATM network functions (including U-space service providers (USSP) and common information service (CIS) providers; air traffic services (ATS) personnel; ADR operators; general public; model aircraft associations
Owner	SM.1 - Safety Intelligence & Performance department

EXPECTED OUTPUT	
Deliverable(s)	Timeline
FAQs, check-lists, application forms, compliance matrices, guidelines	2024-Q2
Support to the European Research and Demonstration Projects on U-space conducted under SESAR 3JU or nationally lead	2025



# SPT.0091 European safety promotion on civil drones

- Coordinate European activities to promote the safe operation of drones to the general public.
- Promote the safe use of drones and the understanding of the drone rules to those undertaking commercial drone operations.
- Promote the design and certification aspects of drones.
- Promote activities to minimise the risk of drones impacting on airspace.

Material can be found on the EASA website under <u>https://www.easa.europa.eu/en/domains/civil-drones</u> as well as on the EASA Youtube Channel under <u>https://www.youtube.com/watch?v=l6xHV61jwGo&t=4s</u>

Status	Ongoing
Sls	SI-2014 Airborne Collision with Unmanned Aircraft System (UAS)
SRs	n/a
Reference(s)	n/a
Dependencies	RMT.0230
	UAS operators (private and commercial)
Strategic level	Strategic
Strategic priority	EPAS Volume I §3.4.3.1
Owner	SPN

EXPECTED OUTPUT				
Deliverable(s) Timeline				
Posters, videos, articles and social media promotion Continuous				



# **RES.0038** Standards Evaluation Project supporting European Regulations for Drones

The European Commission, with the support of EASA, is developing the EU regulatory framework for UAS operations. Regulations (EU) 2019/945 and 2019/947 (the UAS Regulations) lay down the requirements for UAS operations in the 'open' and 'specific' category. Regulation (EU) 2021/664 (the U-space Regulation) lays down the requirements for the U-space. The UAS Regulations became applicable on 31 December 2020 while the U-space Regulation became applicable on 26 January 2023.

The European UAS Standards Coordination Group (EUSCG), led by EASA, developed the Rolling Development Plan for UASs (U-RDP), listing more than 800 standards, developed by standardisation bodies from different parts of the world.

In 2019, the Innovation and Networks Executive Agency (INEA) funded the AW-Drones project with the aim of contributing to the safe use of UASs by supporting the ongoing EU regulatory process for the identification of technical standards and procedures. In particular, the AW-Drones project assessed the standards listed in the U-RDP with regard to maturity, coverage, cost of compliance, environmental impact, impact on EU industry competitiveness, and social acceptance. The assessment, however, did not include the evaluation of the technical content to determine whether the standards are adequate to meet the safety objective of the provisions of the related regulations.

This research project shall now complement the analysis with the technical assessment of the standards.

This project is funded by Horizon Europe under the 2nd Research Contribution Agreement with the European Commission.

Status	Ongoing
Sls	n/a
SRs	n/a
Reference(s)	UAS Standards (https://www.easa.europa.eu/research-projects/uas-standards)
Dependencies	n/a
	UAS operators, UAS design organisations, UAS MOs, ANSPs, NCAs
Owner	SM.2 - Strategy & Programmes department

EXPECTED OUTPUT					
Deliverable(s)	Timeline				
Final report	2024-Q2				

In addition to the above, the following RMT is also relevant:

RMT.0731 New air mobility

The full description of this action is included in **Chapter 11**.

# **11. New technologies** and concepts



# 11. New technologies and concepts

# Refer to EPAS Volume I Section 3.4 'Safe and sustainable integration of new technologies and concepts'

This chapter addresses the safe and sustainable integration of new technologies and innovative solutions into the aviation system, with the exception of unmanned aircraft systems and manned VTOL-capable aircraft, which are addressed in Chapter 10.

While many of the technologies and innovations emerging in the aviation industry bear significant potential to further improve the level of safety and/or efficiency, the EPAS gives due consideration to the safety issues deriving from new technologies, new operational concepts or novel business models.

In the ATM domain, SESAR covers the development of new technologies for a better management of Europe's airspace as well as their contribution to the achievement of the SES goals and safety targets.

### What we want to achieve

Facilitate emerging technologies and innovative concepts, while ensuring their safe integration into the European aviation system.

# 11.1 Safety

# 11.1.1 New business models

# **Issue/rationale**

Managing current and future safety risks arising from new and emerging business models is a strategic priority.

This section addresses risks related to new and emerging business models arising from the increased complexity of the aviation industry, the number of interfaces between organisations, their contracted services and regulators, as well as the increasing number of 'new entrants' with limited past exposure to the aviation system. Some new business models are emerging: the increased demand for flying in the cities, the increased digitalisation of aviation systems, the introduction of more autonomous vehicles, platforms starting for single-pilot operations, completely autonomous cargo aircraft, combined with the need to reduce emissions coming from aviation. These will challenge the way authorities regulate and oversee the aviation system. NCAs should work better together, and EASA should evaluate whether the existing safety regulatory system adequately addresses current and future safety risks arising from new and emerging business models. As part of its pre-application services to industry, EASA does not only assess technology and product maturity, but also starts looking at organisations (mainly design) and concept of operations maturity. Finally, upon the request of Member States, EASA has tasked a working group of NCAs to assess airlines' emerging 'new' business models and to identify related safety risks that they pose to the aviation system.

# What we want to achieve

Identify efficiency gains in regulatory developments necessary to address new business models through early discussion with stakeholders, be it at organisational or product level.

Increase safety by continuously assessing and mitigating the risks posed by new and emerging business models.



# How we monitor improvement

The EASA ABs regularly provide feedback on the effectiveness of the activities.

### How we want to achieve it: actions

# **RMT.0739** Introduction of extended minimum-crew operations (eMCO)

Industry is currently developing technologies to allow the safe operation of large passenger aeroplanes by a single pilot during the cruise phase of the flight (extended minimum-crew operations (eMCO)). The integration of such technological developments needs to be accompanied by all the necessary measures to ensure an equivalent or higher level of safety for such operations, such as the presence of an advanced cockpit design with workload alleviation means, the capability to cope with crew incapacitation, effective fatigue management, the prevention of security threats, and human factors, mental and psychological considerations.

This task aims to amend the current regulatory framework applicable to air operations and aircrew training to allow eMCO, while ensuring at least an equivalent level of safety to that ensured by today's multi-crew operations.

Status	Ongoing				
Sls	n/a				
SRs	n/a				
ICAO ref.	n/a				
Other ref(s)	n/a	n/a			
Dependencies	RES.0028				
Affected stakeholders	Pilots, aircraft operators (CAT), aircraft mar	nufacturers, NCAs, A	ANSPs		
Affected regulation(s)	Commission Regulation (EU) No 1178/2011 Commission Regulation (EU) No 965/2012				
Strategic level	Strategic	Strategic priority	EPAS Volume I Section 3.4.7		
Harmonisation	No				

			WORKING METHOD		
Owner	FS - Flight Standar				
SubT	Development		Impact Assessment(s)		Consultation
	By EASA with exte		Detailed		NPA - Public
		F	LANNING MILESTONES		
SubT	Initiation	Consultatio		<b>Commission IR</b>	Decision
	RMT.0739	2025	2026	2027	2027



# RMT.0742 Artificial intelligence trustworthiness

Development of an implementing or delegated regulation for the AI trustworthiness framework in response to the future EU AI Act Title III Chapter 2, development of associated set of generic AI-related AMC and GM, and implementation of the necessary adaptations to domain-specific regulatory material for aviation domains identified in future the EU AI Act Article 81 (Amendment to Regulation (EU) 2018/1139 for the domains of airworthiness (Articles 17 and 19), ATM/ANS (Articles 43 and 47) and unmanned aircraft), as well as for other affected domains (e.g. aerodromes).

Status	New		
Sls	n/a		
SRs	n/a		
ICAO ref.	n/a		
Other ref(s)	EASA AI Roadmap 2.0 EASA Concept Paper: guidance fo Issue 02	or Level 1 & 2 machine learnin	g applications - Proposed
Dependencies	RES.0028		
Affected stakeholders	Member States, NCAs, NSAs, DO. and UAS operators, pilots, CAMC training organisations, ADR oper aerodromes.	s and MOs, OiDPM, ATM/ANS	providers, ATCOs, USSPs,
Affected regulation(s)	(EU) No 748/2012, (EU) 2019/945 (EU) No 1178/2011, (EU) 2015/34		
Strategic level	Strategic	Strategic priority	EPAS Volume I Section 3.4.2
Harmonisation	Yes – intended		
	WORKING	i METHOD	

		WORKING METHOD	
Owner	EASA SM0.1		
SubT	Development	Impact Assessment(s)	Consultation
1	By EASA	Light	NPA - Public
2	By EASA with external support	Light	NPA - Public
3	By EASA with external support	Light	NPA - Public
4	By EASA with external support	Light	NPA - Public

PLANNING MILESTONES					
SubT	Initiation	Consultation	Opinion	Commission IR	Decision
1	2024-Q1	2025	2026	2026	n/a
2		2025	n/a	n/a	2026
3		2025	2026	2027	2027
4		2027	2027	2027	n/a



# **RMT.0747** Higher Airspace Operations

The objective of this RMT is to enable safe, secure and sustainable higher-airspace operations in the European Union through the implementation of Option 1 of the 'EASA HAO Roadmap' and the implementation of the Preparatory Action from the European Parliament and the Commission.

Note: Following the request by a number of MAB representatives in November 2023, the Agency will launch the rulemaking task by the end of 2025, with the publication of ToR for the task. In the meantime, the Agency will progress the preparatory actions, as mandated by the Commission and the European Parliament.

Status	New		
Sls	n/a		
SRs	n/a		
ICAO ref.	n/a		
Other ref(s)	n/a		
Dependencies	RMT.0065, RMT.0728		
Affected stakeholders	All		
Affected regulation(s)	The list is not exhaustive:		
	• Regulation (EU) 2018/1139		
	• Regulations (EU) 549/2004, 550/ basis thereof	2004, 551/2004 and implementing rules adopted on t	
	<ul> <li>Commission Implementing Regulation (EU) 2019/945</li> </ul>	gulation (EU) 2019/947 and Commission Delegat	
	• Commission Regulation (EU) No	748/2012	
	<ul> <li>Commission Regulation (EU) No</li> </ul>	1321/2014	
	<ul> <li>Regulation (EU) 2015/340</li> </ul>		
	<ul> <li>Commission Regulation (EU) No</li> </ul>	1332/2011	
	<ul> <li>Commission Regulation (EU) No</li> </ul>	923/2012	
	<ul> <li>Commission Implementing Regulation</li> </ul>	lation (EU) 2017/373	
	<ul> <li>Commission Implementing Regulation</li> </ul>	lation (EU) 2019/123	
	<ul> <li>Commission Regulation (EC) No</li> </ul>	2150/2005	
	<ul> <li>Commission Regulations (EU) 11</li> </ul>	78/2011	
	<ul> <li>Commission Regulations (EU) 96</li> </ul>	5/2012	
	<ul> <li>Commission Delegated Regulation (EU) 2022/1645</li> </ul>		
	<ul> <li>Commission Implementing Regulation</li> </ul>	lation (EU) 2023/203	
	• Certification Specifications (e.g.	CS 25 and CS 31)	
Strategic level	Strategic	Strategic priority EPAS Volume I §3.4.10	
Harmonisation	Yes – intended		

WORKING METHOD					
ED.4 - Air Traffic department					
Development Impact Assessment(s) Consultation					
By EASA				NPA - Public	
PLANNING MILESTONES					
Initiation	Consultation	Opinion	<b>Commission IR</b>	Decision	
2025	2026	2026	2027	<tbd></tbd>	
	Development By EASA Initiation	ED.4 - Air Traffic department  Development  By EASA  Detail  PLANNI  Initiation  Consultation	ED.4 - Air Traffic department         Development       Impact Assessment(s)         By EASA       Detailed         PLANNING MILESTONES         Initiation       Consultation       Opinion	ED.4 - Air Traffic department         Development       Impact Assessment(s)         By EASA       Detailed         PLANNING MILESTONES	



# **RES.0028** Extended minimum-crew operations (eMCOs) — single-pilot operations risk assessment framework

Development of the risk assessment framework to assess the main hazards associated with the proposed concepts for reduced crew operations or single-pilot operations, investigation of hazard mitigation, and means to perform compliance demonstration.

Status	Ongoing
Sls	n/a
SRs	n/a
Reference(s)	n/a
Dependencies	n/a
Affected stakeholders	Aircraft operators (CAT), flight crew, cabin crew, POA holders, DOA holders
Owner	SM.2 - Strategy & Programmes department
	EXPECTED OUTPUT

Deliverable(s)	Timeline	
Final report	2024-Q3	



# **RES.0065** Higher-airspace operations

In accordance with 'EASA HAO Roadmap, a number of research actions are necessary to feed the detailed impact assessment and gap analysis for the preparation of the NPA in the context of RMT.0747. Option 1 of the HAO Roadmap identifies priority research needs, notably:

- Literature review (total system approach);
- Assessment of safety risks;
- Assessment of environmental impact;
- Assessment of cyber-security risks;
- HAO and human health/medical aspects;
- MET and space weather forecast at high altitude;
- CNS needs and capacity at high altitude (including spectrum needs);
- Civil-military interface;
- Societal acceptance;
- Legal analysis of hybrid vehicles and legal competences issues.

This research task aims to address identified needs.

Status	New
Sls	n/a
SRs	n/a
Reference(s)	n/a
Dependencies	RMT.0747
Affected stakeholders	
Owner	EASA ED.4 - Air Traffic department

	PLANNING MILESTONES	
Starting date	Interim report	Final report
2024-Q2	2025-Q1	2026-Q1



# 11.1.2 New products, systems, technologies, and operations

# Issue/rationale

This section addresses the introduction of new designs, technologies or types of operation in a fast-changing environment with a need to reduce emissions coming from aviation and for which regulatory updates are needed. It also highlights some of the most relevant trends that will influence aviation in the years to come.

# What we want to achieve

Identify efficiency gains in regulatory developments necessary to address new designs, technologies, or types of operation through early discussion with stakeholders, be it at organisational or product level.

Manage the safe introduction of new products, systems, technologies and operations, and continuously assess and mitigate the safety risks posed by new designs, technologies, or types of operation.

# How we monitor improvement

The EASA ABs regularly provide feedback on the effectiveness of the activities.

# How we want to achieve it: actions



# RMT.0731 New air mobility

The current European regulatory framework for aviation safety has initially been designed for conventional fixedwing aircraft, rotorcraft, balloons and sailplanes. The existing framework relies on the active contribution of human beings, increasingly assisted by automation, be it on board or on the ground. Propulsion is mostly provided by piston or turbine engines using fossil fuels.

The introduction of new technologies and air transport concepts (from multi-modal to autonomous vehicles) requires revisiting this framework. The purpose of this RMT is to develop rules or amend existing ones, where necessary, to address new technologies and operational air transport concepts, with the objective of adapting the regulatory framework to the performance-based regulation (PBR) principles. A general principle that will govern this RMT is that future requirements should be technology-neutral, where possible, while ensuring legal certainty.

This RMT leads to different streams of activities. The first stream was defined in 2019 in the field of continuing airworthiness requirements for electric and hybrid propulsion, indicated here below as Subtask 1. Based on current certification projects where the regulatory framework needs to be adapted (except for initial airworthiness), two more streams are now foreseen: gyroplanes and tilt rotors after the BIS consultations. Airships is a candidate for a future stream after the BIS consultation.

Potentially, more streams to cover other future projects will be added, such as multi-modal aircraft (usually called flying cars).

### Subtask 1: Electric and hybrid propulsion

Continuing airworthiness requirements for electric and hybrid propulsion for all types of aircraft. It covers also conventional aircraft which are not addressed in the current CAW rules (gyroplanes, tilt rotors, and airships). The activities in the context of this subtask are coordinated with those of RMT.0230.

Notes: VTOL-capable aircraft electric propulsion aspects related to the ADR, ATM, FCL and AIR OPS domains are addressed through RMT.0230.

A first set of FCL and AIR OPS electric- and hybrid-propulsion-related requirements for other aircraft types are addressed through RMT.0678 (FCL) and RMT.0573 (AIR OPS - completed) respectively.

### Subtask 2: Gyroplanes

FCL and AIR OPS Regulations to be amended. Related to a current certification project of a gyroplane being also a road vehicle, this subtask will also cover the regulatory aspects of aircraft being multi-modal vehicles (road, sea).

### Subtask 3: Tilt rotors

FCL, FSTD and AIR OPS Regulations to be amended.

Subtask 3 will also address the topics previously included within RMT.0587 as relevant to the development of an ECQB for tilt-rotor pilot licences.

### Subtask 4: Airships

This new subtask will address the continuing airworthiness (CAW) rules (4A), aircrew rules (4B) and air operations rules (4C) for airships.

Status	Ongoing
Sls	n/a
SRs	n/a
ICAO ref.	n/a
Other ref(s)	BIS 'Electric and hybrid propulsion' BIS 'Road / gyroplanes' BIS 'Tilt rotors' BIS 'Airships'



RMT.0731	New air mobility		
Dependencies	RMT.0230 RMT.0255 (completed) RMT.0573 RMT.0678		
Affected stakeho	olders All		
Affected regulat	ion(s) Commission Regulation (El Commission Regulation (El Commission Regulation (El Commission Regulation (El	J) No 1321/2014 J) No 965/2012	
Strategic level	Strategic	Strategic priority	EPAS Volume I Section 3.4.3
Harmonisation	No		

### WORKING METHOD

Owner	SM.2 - Strategy & Programmes department

• milei				
SubT	Development	Impact Assessment(s)	Consultation	
1	By EASA	Light	NPA - Public	
2	By EASA with external support	Light	NPA - Public	
3	To be determined at a later stage	To be determined at a later stage	To be determined at a later stage	
4A	By EASA with external support	Light	NPA - Focused	
4B	By EASA with external support	Light	NPA - Focused	
4C	By EASA with external support	Light	NPA - Focused	

	PLANNING MILESTONES						
SubT	Initiation	Consultation	Opinion	<b>Commission IR</b>	Decision		
1	ToR RMT.0731 09/09/2020	NPA 2021-15 21/12/2021	2024-Q1	2025	2025		
2	ToR RMT.0731 - Issue 2 12/05/2021	NPA 2021-12 15/11/2021	2024-Q1	2025	2025		
3		n/a	n/a	n/a	n/a		
4A		2025	2026	2027	2027		
4B		2026	2027	2028	2028		
4C		2024-Q3	2025	2026	2026		



# **RES.0051** Electric and hybrid propulsion for regional and short-medium range aircraft transport categories

Assess the feasibility, the environmental benefits (including full life cycle assessment where appropriate) and the certifiability of the proposed designs for aircraft propulsion systems with integrated hybrid/electric engines and power generation architectures as well as subsystem enablers.

The action is realised through a series of projects funded by the EU Horizon 2020 programme:

- IMOTHEP (Investigation and Maturation of Technologies for Hybrid Electric Propulsion): The core of IMOTHEP is an integrated end-to-end investigation of hybrid-electric power trains for commercial aircraft, performed in close connection with the propulsion system and aircraft architecture. Aircraft configurations will be selected based on their potential for fuel burn reduction and their representativeness of a variety of credible concepts, with a focus on regional and short-to-medium range missions. The project will also address the infrastructures and tools required for HEP development, as well as the need for technology demonstrations or regulatory evolution.
- FUTPRINT50 (Future propulsion and integration: towards a hybrid-electric 50-seat regional aircraft): Addresses the need to accelerate disruptive technologies in aviation to ensure carbon neutral growth commitment from FlightPath2050. It will develop tools, technologies and aircraft-level analysis for key hybrid-electric technologies supporting the entry into service of a 50-seat class aircraft towards 2035.
- EASIER (Electric Aircraft System Integration Enabler): Challenges presented by aircraft electric propulsion require the development of new airborne technologies that enable expanding the electrification technology trend already impacting other areas, like ground transportation or the autonomous generation/usage of electricity from renewables, to efficient and economical air transportation.
- TRANSCEND (Technology Review of Alternative and Novel Sources of Clean Energy with Next-generation Drivetrains): Evaluates the environmental impact at aircraft and air transport level of alternative energy sources and novel propulsion technologies for aircraft with entry into service before 2050. In addition, TRANSCEND provides a TRL-based technology road map for promising propulsion technologies and a roadmap regarding economic viability and availability for the associated alternative energy sources.
- MAHEPA (Modular Approach to Hybrid-Electric Propulsion Architecture): The overall objective of MAHEPA is to bridge the gap between the research and product stage of a low-emission propulsion technology to meet the environmental goals for aviation towards the year 2050. Two variants of a low-emission, high-efficiency, serial-hybrid-electric propulsion architecture will be advanced to TRL 6: the first uses a hydrocarbon fuelled internal combustion engine and an electric generator as the primary power source, while in the second a hydrogen fuel cell is used to produce power showcasing the flexibility of the architecture.

This project is completed; MAHEPA project results are available under	https://mahepa.eu/result/.
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Status	Ongoing		
Sls	n/a		
SRs	n/a		
Reference(s)	IMOTHEP: https://cordis.europa.eu/project/id/875006, IMOTHEP project website FUTPRINT50: https://cordis.europa.eu/project/id/875551, EASIER: https://cordis.europa.eu/project/id/875504, TRANSCEND: https://cordis.europa.eu/project/id/864089, MAHEPA: https://cordis.europa.eu/project/id/723368; MAHEPA project website"		
Dependencies	n/a		
Affected stakeholders	Air operators, design organisations, NCAs		
Owner         SM.2 - Strategy & Programmes department			
	EXPECTED OUTPUT		
Deliverable(s)	Timeline		
Final report	2024-Q1		

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# **RES.0062** Digital transformation - case studies to prepare the evolution of aviation standards - data science applications

This project will cover the development of three case studies:

- Use of flight training data to support the application of evidence-based/competency-based training concepts and standards (evidence-based training (EBT)/competence-based training and assessment (CBTA)). The case study will encompass the development of comprehensive guidelines for moving towards the implementation of the EBT and CBTA concepts.
- Application of new analytical methods and techniques for fuel management (pre-flight/in-flight). The project will encompass the in-depth analysis of the benefits and constraints associated with state-of-the-art digital solutions for fuel management, considering the current safety issues reported, as well as the preparation of comprehensive documentation to support the proposed evolution of standards and regulatory requirements.
- Data models for enhancing the use of flight data for safety. The proposed case study shall investigate the development of comprehensive data models 'bridging' between the flight data sources and their use for the operator's safety-relevant processes and for industry-wide data exchange programmes.

Status	Ongoing
Sls	n/a
SRs	n/a
Reference(s)	https://www.easa.europa.eu/en/research-projects/ datapp-digital-transformation-case-studies-aviation-safety-standards-data-science
Dependencies	n/a
Affected stakeholders	design organisations, production organisations, aircraft operators – All, NCAs
Owner	SM.2 - Strategy & Programmes department
	EXPECTED OUTPUT

Note: This RES.0062 is not new, it was included in RES.0046 in the EPAS Vol. II 2023 edition.

EXPECTED OUTPUT	
Deliverable(s)	Timeline
Final report	2024-Q3



# **RES.0063** Digital transformation - case studies to prepare the evolution of aviation standards - modelling and simulation

The aim of the project is to explore a combination of methodologies that may be able to deliver practical and reliable flight load envelopes and load distributions, for designs of eVTOL propelled by several rotors, operated by fly-by-wire at different stages of the development lifecycle and in support of airworthiness certification activities.

The main challenge, compared to conventional aircraft, is to consider a large number of combinations of possible configurations, control laws, flight regimes, individual rotor speeds/accelerations, and possible failures/degraded conditions. It is impractical to explore all these combinations by flight testing. Modelling and simulation should significantly contribute to this activity.

The simulation model should adequately represent the complex aerodynamics of rotor interaction, including unsteady effects.

Status	Ongoing		
Sls	n/a		
SRs	n/a		
Reference(s)	https://www.easa.europa.eu/en/research-projects/ model-si-digital-transformation-case-studies-aviation-safety-standards-modelling		
Dependencies	ndencies n/a		
Affected stakeholders	s design organisations, production organisations, aircraft operators , NCAs		
Owner	SM.2 - Strategy & Programmes department		
	EXPECTED OUTPUT		
Deliverable(s)	Timeline		
Final report	2024-Q3		

Note: This RES.0063 is not new, it was included in RES.0046 in the EPAS Vol. II 2023 edition.



## **RES.0064** Digital transformation - case studies for aviation safety standards - virtualisation

The development of digital solutions for air transport encompasses the use of virtualisation technologies to manage approved aircraft parts, implementing the concept of a decentralised ledger collectively named as 'blockchain'. The use of blockchain technologies for the management of approved aircraft parts or components (along with the EASA Form 1 certificate) would impact on the whole lifecycle of such certificates, from their issuance by production organisations (POA holders) to the changes introduced by design or maintenance organisations. A regular issue faced by the different actors involved is whether the certificates are genuine and how to revoke when defects are identified or when cases of 'suspected un-approved parts' (SUP) are detected.

The proposed case study on the implementation of blockchain technologies shall address the potential benefits and constraints (including costs) considering the different stakeholders involved in the management of aircraft parts and components, by investigating different types of blockchains and different use cases for their implementation along the lifecycle of approved parts and components.

In the cases where the benefits are confirmed, the project shall also undertake the assessment of the main changes to be introduced in regulations, standards and working processes as well as the preparation of guidelines and supporting material for regulatory evolutions and the deployment of the related solutions.

Status	Ongoing
Sls	SI-0027 Carriage and transport of lithium batteries
SRs	n/a
Reference(s)	https://www.easa.europa.eu/en/research-projects/ virtua-digital-transformation-case-studies-aviation-safety-standards
Dependencies	n/a
Affected stakeholders	design organisations, production organisations, aircraft operators, NCAs
Owner	SM.2 - Strategy & Programmes department
	EXPECTED OUTPUT

Note: This RES.0064 is not new, it was included in RES.0046 in the EPAS Vol. II 2023 edition.

EXPECTED OUTPUT	
Deliverable(s)	Timeline
Final report	2024-Q3



# 11.1.3 SESAR deployment

# Issue/rationale

This section includes the relevant EPAS actions on the implementation of the regulatory enablers supporting the modernisation of the European ATM System and implementation of the Digital European Sky<sup>5</sup>.

Note: SESAR solutions that are relevant to the actions related to UASs only are included in **Chapter 10**.

The European-wide harmonised implementation of the operational improvements based on the SESAR solutions stemming from the European ATM MP<sup>6</sup>, the Airspace Architecture Study<sup>7</sup> as well as the associated Wise Persons Group<sup>8</sup> recommendations requires actions from many actors. The envisioned end result can only be achieved if all actions are taken in the right and well-coordinated order. Not only the synchronisation between regulatory and technical/operational evolution is key, but also interdependencies between various actions need to be respected and well synchronised, hence calling for an effective collaboration between all relevant stakeholders and Member States.

To address the need for effective collaboration and support of the SESAR Programme, work is ongoing in the frame of the ATM MP 2024 update campaign and aims to achieve a holistic alignment of the outcomes of the update campaign with th at of EPAS.

The holistic approach of the main planning tools in European aviation safety and ATM system will be considered as part of the mid-term review of the EPAS Vol I 2023-2025 edition.

# What we want to achieve

The rationale behind the following actions is to cater for the regulatory and implementation needs of the SESAR solutions stemming from the European ATM MP. The actions also take account of other new technological advancements such as, but not limited to, U-space technological solutions, virtualisation, cloud-based architecture, and remote tower operations, and aim to enable the use of new working methods, operational improvements and technologies to facilitate the safe and timely implementation of the Digital European Sky.

Interoperability, efficiency, civil-military cooperation and international coordination will form an integral part of EASA's work, which is not limited to the contribution to the ICAO GANP and GASP alignment. In addition, consolidated and coordinated implementation support activities that facilitate the operational improvements and accelerate market uptake of the mature ATM operational new concepts need to be further established.

# How we monitor improvement

EASA regularly receives feedback from the ABs on the effectiveness of the activities and monitors the implementation of the regulatory material through standardisation.

# How we want to achieve it: actions

<sup>5</sup> SESAR Joint Undertaking | Delivering the Digital European Sky (sesarju.eu)

<sup>6</sup> SESAR Joint Undertaking | European ATM Master Plan 2020 (sesarju.eu)

<sup>7 &</sup>lt;u>SESAR Joint Undertaking | Airspace Architecture Study - Full (sesarju.eu)</u>

<sup>8 &</sup>lt;u>2019-04-report-of-the-wise-persons-group-on-the-future-of-the-single-european-sky.pdf (europa.eu)</u>



## RMT.0524 Data link services

The objective of RMT.0524 is to ensure that the operational improvements associated with the safety and efficiency of the communication between ATCOs and pilots via data link are met. Considering the close link with the RMT.0161 activities, and to benefit from minimum changes to the data link Regulation, the task has been divided into the following subtasks:

<u>Subtask 1:</u> The objective of this subtask is to address the amendment of CS-ACNS in relation to data link services to support operators' requirements to have aircraft with automatic dependent surveillance-contract extended projected profile (ADS-C/EPP) capability.

The execution of Subtask 1 is subject to availability and the positive EASA assessment of supporting industry standards.

<u>Subtask 2:</u> The objective of this subtask was to review Regulation (EC) No 29/2009 (the SES interoperability Regulation) (implementing the repealed Regulation (EC) No 552/2004) to adapt it to the EASA framework. The resulting regulatory proposal was handled jointly with Subtask 2 of RMT.0161 and resulted in the publication of Commission Implementing Regulations (EU) 2023/1770, 2023/1771 and 2023/1772 of 12 September 2023.

<u>Subtask 3:</u> This subtask aimed to establish the related AMC and GM supporting the provisions introduced with the Subtask 2 deliverables. This subtask was completed with the publication of ED Decision 2023/017/R of 26 October 2023.

<u>Subtask 4:</u> This subtask aimed to establish the first set of the EASA detailed specifications (DSs) based on the existing interoperability DLS rules and the relevant DLS Community Specifications (e.g. based on ETSI EN 303 214). The resulting regulatory proposal was handled jointly with Subtask 3 of RMT.0161. This subtask was completed with the publication of Commission Delegated Regulation (EU) 2023/1768 and ED Decision 2023/015/R on 26 October 2023.

Status	Ongoing		
Sls	n/a		
SRs	n/a		
ICAO ref.	n/a		
Other ref(s)	ATM Master Plan Level 3 - Plan (2022): I	TY-AGDL - Initial ATC	air-ground data link services
Dependencies	RMT.0161 RMT.0519		
Affected stakeholders	NCAs, ANSPs, ADR operators, air operators - all, design organisations, production organisations, pilots and ATCOs		
Affected regulation(s)	Commission Implementing Regulation Commission Implementing Regulation Commission Regulation (EU) No 965/20 Commission Regulation (EC) No 29/200 Commission Regulation (EU) No 1332/2	EU) 2017/373 12 9	
Strategic level	Strategic	Strategic priority	EPAS Volume I Section 3.4.6
Harmonisation	No		

		WOR	KING METHOD		
Owner	ED.4 - Air Traffic de	partment			
SubT	Development	Impa	ct Assessment(s)		Consultation
1	By EASA	Light			NPA - Public
		PLANN	ING MILESTONES		
SubT	Initiation	Consultation	Opinion	<b>Commission IR</b>	Decision
1		NPA 2023-07 07/07/2023	n/a	n/a	2023-Q4



# **RMT.0624** Remote aerodrome air traffic services

The development and introduction of new technologies enables the provision of aerodrome ATS (aerodrome ATC service or aerodrome FIS) from geographically independent locations/facilities that are equipped with visual surveillance systems instead of direct visual observation. EASA has delivered and successively maintained regulatory material supporting the provision of remote aerodrome ATS, and intends to continue its effort to this end in the future. This task is temporarily put on hold; it is expected that it will be reactivated once relevant further technological and operational developments to be considered would be identified.

SRs       n/a         ICAO ref.       n/a         Other ref(s)       ATM Master Plan (Level 3 Edition 2022) action AOP14.1 (Remote Tower Servi AOP14.2 Multiple Remote Tower Module         Dependencies       n/a         Affected stakeholders       NCAs, ANSPs, ADR operators         Affected regulation(s)       Commission Implementing Regulation (EU) 2017/373 Commission Regulation (EU) No 923/2012 Commission Regulation (EU) No 139/2014 Regulation (EU) 2018/1139         Strategic level       Strategic	Status	Ongoing		
ICAO ref.       n/a         Other ref(s)       ATM Master Plan (Level 3 Edition 2022) action AOP14.1 (Remote Tower Servi AOP14.2 Multiple Remote Tower Module         Dependencies       n/a         Affected stakeholders       NCAs, ANSPs, ADR operators         Affected regulation(s)       Commission Implementing Regulation (EU) 2017/373 Commission Regulation (EU) No 923/2012 Commission Regulation (EU) No 139/2014 Regulation (EU) 2018/1139         Strategic level       Strategic	Sls	n/a		
Other ref(s)       ATM Master Plan (Level 3 Edition 2022) action AOP14.1 (Remote Tower Servi AOP14.2 Multiple Remote Tower Module         Dependencies       n/a         Affected stakeholders       NCAs, ANSPs, ADR operators         Affected regulation(s)       Commission Implementing Regulation (EU) 2017/373 Commission Implementing Regulation (EU) No 923/2012 Commission Regulation (EU) No 139/2014 Regulation (EU) 2018/1139         Strategic level       Strategic       Strategic priority       EPAS Volume	SRs	n/a		
AOP14.2 Multiple Remote Tower Module         Dependencies       n/a         Affected stakeholders       NCAs, ANSPs, ADR operators         Affected regulation(s)       Commission Implementing Regulation (EU) 2017/373 Commission Implementing Regulation (EU) No 923/2012 Commission Regulation (EU) No 139/2014 Regulation (EU) 2018/1139         Strategic level       Strategic       Strategic priority       EPAS Volume	ICAO ref.	n/a		
Affected stakeholdersNCAs, ANSPs, ADR operatorsAffected regulation(s)Commission Implementing Regulation (EU) 2017/373 Commission Implementing Regulation (EU) No 923/2012 Commission Regulation (EU) No 139/2014 Regulation (EU) 2018/1139Strategic levelStrategicStrategic priorityEPAS Volume	Other ref(s)		•	ote Tower Services) and
Affected regulation(s)Commission Implementing Regulation (EU) 2017/373 Commission Implementing Regulation (EU) No 923/2012 Commission Regulation (EU) No 139/2014 Regulation (EU) 2018/1139EPAS VolumeStrategic levelStrategicStrategic priorityEPAS Volume	Dependencies	n/a		
Commission Implementing Regulation (EU) No 923/2012 Commission Regulation (EU) No 139/2014 Regulation (EU) 2018/1139EPAS VolumeStrategic levelStrategicStrategic priorityEPAS Volume	Affected stakeholders	NCAs, ANSPs, ADR operators		
	Affected regulation(s)	Commission Implementing Regulation ( Commission Regulation (EU) No 139/202	EU) No 923/2012	
Harmonisation No	Strategic level	Strategic	Strategic priority	EPAS Volume I Section 3.4.6
	Harmonisation	No		

		WOR	KING METHOD		
Owner	ED.4 - Air Traffic depa				
SubT	Development	Impa	Impact Assessment(s)		
	To be determined at a later stage	To be	To be determined at a later stage		To be determined at a later stage
		PLANN	ING MILESTONES		
SubT	Initiation	Consultation	Opinion	Commission IR	Decision
		<tbd></tbd>	<tbd></tbd>	<tbd></tbd>	<tbd></tbd>



### RMT.0682 Implementation of the regulatory needs in support of the SESAR deployment

The objective of the task is the development of the regulatory enablers, as required to facilitate the safe, efficient, interoperable and timely deployment of the operational improvements based on the SESAR solutions stemming from the European ATM MP, the AAS, as well as the associated WPGR recommendations. The ATM MP update campaign and the holistic alignment of the EPAS and new ATM MP foresee consequential amendment of this task to further support the SESAR Programme.

For this purpose, this task addresses those issues which are not covered by other specific RMTs.

The objective of the initial subtask is detailed as follows:

<u>Subtask 1:</u> To amend the applicable EU regulatory framework (in particular Regulation (EC) No 1322/2011 (ACAS Regulation)) to permit the operation of aeroplanes equipped with either ACAS II version 7.1 or ACAS Xa within the European airspace and to amend Regulation (EU) 2018/1048 (the PBN Regulation) to address identified PBN operational issues.

Status	Ongoing				
Sls	n/a				
SRs	n/a				
ICAO ref.	n/a				
Other ref(s)	This RMT considers the recommendations stemming from the WPGR and the AAS and supports eight of the EOCs of the ATM MP				
Dependencies	RMT.0161				
Affected stakeholders	Providers of ATM/ANS services (ANSPs); air operators — all; ADR operators; aircraft and system/equipment manufacturers; Member States; NCAs (including military); POA holders; Tos, Network Manager; the Agency				
Affected regulation(s)	Commission Implementing Regulation (EU) 2017/373 Commission Implementing Regulation (EU) 2018/1048 Commission Regulation (EU) No 1332/2011				
Strategic level	Strategic	Strategic priority	EPAS Volume I Section 3.4.6		
Harmonisation	No				

WORKING METHOD					
Owner	ED.4 - Air Traffic department				
SubT	Development	Impact Assessment(s)	Consultation		
1	By EASA with external support	Light	NPA - Public		

PLANNING MILESTONES								
SubT	Initiation	Consultation	Opinion	Commission IR	Decision			
1	ToR RMT.0682 10/12/2019	NPA 2023-04 26/05/2023	2024-Q1	2024-Q4	2024-Q4			



# 11.1.4 All-weather operations (AWOs)

# Issue/rationale

AWOs are currently addressed by regulations in the following aviation domains: airworthiness, air operations, aircrew, aerodromes, ATM/ANS, as well as in the standardised European rules of the air (SERA). The existing provisions in these domains have been recently amended to better address technological advancements, align with the ICAO SARPs (e.g. ICAO Annex 6 amendments introducing lower category (CAT) II and CAT III minima and the concept of operational credits, in particular for operations with vision systems), increase the consistency of the provisions across the different domains, carry out cross-domain risk assessments, ensure that better weather information is provided to pilots, as well as harmonise with the FAA and other regulators.

Work continues to further mitigate the risks of weather-related occurrences.

# What we want to achieve

The European industry should be enabled to take full advantage of the safety and economic benefits generated through new technologies and operational experience.

# How we monitor improvement

Continuous monitoring of the safety issues identified in the relevant Safety Risk Portfolios (refer to EPAS Volume III, in particular Chapters 2, 3 and 4).

The EASA ABs regularly provide feedback on the effectiveness of the related activities.

# How we want to achieve it: actions

This section is maintained as a placeholder for future actions.



## **11.2 Efficiency/proportionality**

#### RMT.0737 Enabling electronic personnel licensing in Europe

The strategic goal of this RMT is to introduce electronic personnel licences (EPLs) (referred to as 'Digital Licenses for Aviation Pilots -(dLAP)' in past EPAS editions) for flight and cabin crews, air traffic controllers (ATCOs) and Part-66 aircraft maintenance licence holders which will be harmonised across Europe and will be globally accepted, based on compliance with the applicable ICAO SARPs.

The specific objective of this RMT is to develop requirements for the implementation of EPLs in the EU regulatory framework in order to:

1. enable the issue, display, validation and verification of an EU EPL on self-contained visual mobile electronic devices (the EPL will be optional to the hard-copy paper licence; nevertheless, the Member States' NCAs will have an obligation to accept valid EPLs issued by other Member States);

2. ensure security, confidentiality, data protection, integrity, authentication, and accessibility of the EPL;

3. guarantee interoperability of the EPL between different issuing and verifying NCAs and other affected stakeholders;

4. transpose ICAO Annex 1 SARPs related to the EPL (Amendment 178 to ICAO Annex 1) into the relevant EU regulations.

In order to transpose these ICAO SARPs into the EU regulatory framework, amendments to the following regulations are envisaged:

- Regulation (EU) No 1178/2011, Regulation (EU) 2018/395 and Regulation (EU) 2018/1976 with regard to aircrews;
- Regulation (EU) 2015/340 with regard to ATCOs;
- Regulation (EU) No 1321/2014 on the continuing airworthiness of aircraft and aeronautical products, parts and appliances, and on the approval of organisations and personnel involved in these tasks.

Status	Ongoing		
Sls	n/a		
SRs	n/a		
ICAO ref.	Amendment 178 to ICAO Annex 1		
Other ref(s)	n/a		
Dependencies	n/a		
Affected stakeholders	NCAs; pilots, including remote pilots; cabin crews; instructors; examiners; training organisations; aircraft operators; aero-medical examiners (AMEs); aero-medical centres (AeMCs); air traffic controllers (ATCOs); Part-66 aircraft maintenance licence holders		
Affected regulation(s)	Commission Implementing Regulation Commission Regulation (EU) 2015/340 Commission Regulation (EU) No 1178/2 Commission Regulation (EU) No 1321/2 Commission Regulation (EU) 2018/395	011	
Strategic level	Strategic	Strategic priority	EPAS Volume I Section 3.4 .2
Harmonisation	Yes - ongoing		
	WORKING METH	IOD	
Owner FS.3 - Aircrew	v & Medical department		

SubTDevelopmentImpact Assessment(s)ConsultationBy EASA with external supportLightNPA - Public



RMT.C	)737	Enabling electro	onic personnel licensir	ng in Europe		
			PLANNING	MILESTONES		
SubT	Initia	ation	Consultation	Opinion	Commission IR	Decision
	ToR I 20/0	RMT.0737 9/2022	2024-Q1	2025-Q1	2026-Q1	2026-Q1

#### **RES.0056** New intelligence solutions exploiting big data technologies and data science

Provision of a mature reference platform for exploitation of big data technologies and data science solutions by aviation stakeholders.

Maturation and validation of a series of new intelligence solutions, methods and/or tools.

Enhancement and augmentation of the intelligence solutions at the disposal of EASA, the EU Member States and the European aviation sector to fulfil their respective missions and duties in the field of aviation safety risk management, security, cyber-security, environmental protection, operational efficiency, and training.

Extension of the 'Data4Safety' platform to other domains and use by a larger community of users.

This project is funded by Horizon European under the 3rd Contribution Agreement with the European Commission.

Status	New
Sls	n/a
SRs	n/a
Reference(s)	https://www.easa.europa.eu/en/research-projects/bigdata
Dependencies	n/a
	NCAs , Air operators - All
Owner	SM.2 - Strategy & Programmes department

EXPECTED OUTPUT	
Deliverable(s)	Timeline
Final report	2026

# 12. Environmental protection



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# 12. Environmental protection

#### **Refer to EPAS Volume I Section 3.5 'Environment'**

Environmental protection and sustainability are key challenges for the aviation industry, Member States, the European Commission and EASA. Sustainable aviation is to a large degree also depending on combatting climate change and reducing the effects of aircraft noise and air pollution on human health. This needs to be considered in the global context in order to ensure a level playing field for European industry to remain competitive in a rapidly changing world. Environmental standards are key to achieving this.

EASA helps tackle the challenge of ensuring a cleaner, quieter and more sustainable future for the aviation system, including supporting the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA).

The information below concerns the status of environmental standards. For the full picture, including stakeholder actions and market-based measures, see the European Aviation Environmental Report (EAER)<sup>9</sup>, which provides an overview of the historic, current and forecast environmental performance of the European aviation sector.

In February 2019, the ICAO Committee on Aviation Environmental Protection (CAEP) agreed on a new nvPM emissions standard and proposed improvements to the existing noise, aircraft engine emissions and aeroplane  $CO_2$  emissions standards and guidance. As European environmental standards are defined by reference to ICAO standards, the agreed updates to the environmental standards as well as guidance will need to be incorporated into the European regulatory framework in order to be implemented in Europe.

The actions to implement the ICAO standards in Europe will be adjusted and detailed once the outcome of the ICAO adoption process is communicated in the final version of the ICAO State Letters.

## 12.1 Standards on noise, local air quality and climate change

#### Issue/rationale

Implement the ICAO Annex 16 Volume I, II and III standards in Europe.

#### What we want to achieve

Align:

- the Basic Regulation;
- the implementing rules (Regulation (EU) No 748/2012);
- the AMC and GM to the implementing rules; and
- CS-34, CS-36 and CS-CO<sub>2</sub>

with the ICAO SARPs and guidance material resulting from the latest CAEP work cycle.

#### How we monitor improvement

Continuous monitoring of the ICAO adoption process.

Continuous monitoring of the ICAO/CAEP work related to Annex 16 Volume I, II and III.

Monitoring of the aviation environmental impact through the EAER.

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

9 <u>2022 EAER</u>



#### **RMT.0514** Implementation of the CAEP amendments

This task deals with the implementation of the CAEP ICAO SARPs and will align:

- the Basic Regulation;
- the implementing rules (Regulation (EU) No 748/2012);
- the AMC and GM to the implementing rules; and
- CS-34, CS-36 and CS-CO<sub>2</sub>

with the ICAO SARPs and guidance material resulting from the CAEP work cycles.

The implementation of the CAEP/10 ICAO SARPs (RMT.0513 and RMT.0514) was finalised under Subtask 0 for the AMC and GM to Part 21 and for CS-34, CS-36 and CS-CO<sub>2</sub> through the publication of Commission Delegated Regulation (EU) 2019/897 on 03/06/2019, and of Decisions 2019/014/R, 2019/015/R and 2019/016/R on 01/08/2019.

Status	Ongoing		
Sls	n/a		
SRs	n/a		
ICAO ref.	Annex 16		
Other ref(s)	CS-34, CS-36, CS-CO <sub>2</sub>		
Dependencies	n/a		
Affected stakeholders	DOA holders, POA holders		
Affected regulation(s)	Commission Regulation (EU) No 748/2012 Regulation (EU) 2018/1139	2	
Strategic level	Strategic	Strategic priority	EPAS Volume I Section 3.5
Harmonisation	No		

Under Subtask 2, EASA will address the implementation of the CAEP/12 ICAO SARPs.

		WOR	KING METHOD		
Owner	-	ation & Knowledge depa			
SubT	Development	Impa	Impact Assessment(s)		Consultation
2	By EASA	Light		NPA – Public	
		PLANN	NG MILESTONES		
SubT	Initiation	Consultation	Opinion	Commission IR	Decision
2		NPA 2023-09 15/11/2023	2024-Q2	2025	2025



#### **RMT.0733** Environmental protection requirements for supersonic transport aeroplanes

This RMT will deal with the development of environmental protection certification requirements for supersonic transport (SST) aeroplanes, including landing-and-take-off (LTO) noise requirements and  $CO_2$  emissions requirements. In the absence of environmental protection standards from ICAO for the above-mentioned areas, the definition of environmental protection certification requirements for SST aeroplanes is based on the essential requirements for environmental compatibility set out in Article 9(2) of and in Annex III to the Basic Regulation.

EASA published Advance Notice of Proposed Amendment (A-NPA) 2022-05 on 25 May 2022 to present the initial concepts and preliminary draft requirements for LTO noise and  $CO_2$  emissions of SST aeroplanes. The feedback received during the consultation is used to further develop the approach for consideration at ICAO (CAEP/13) in the framework of future updates to ICAO Annex 16. Hence, the rest of the timeline is shown as 'tbd' below.

Depending on the progress of ICAO environmental rulemaking for supersonic aeroplanes this RMT may be reactivated in the future.

Status	On hold		
Sls	n/a		
SRs	n/a		
ICAO ref.	n/a		
Other ref.	n/a		
Dependencies	RES.0025 RMT.0727		
Affected stakeholders	SST aeroplane airframe and engine man States, NCAs	ufacturers, SST aeropl	ane operators Member
Affected regulation(s)	Commission Regulation (EU) No 748/201 Regulation (EU) 2018/1139	.2	
Strategic level	Strategic	Strategic priority	EPAS Volume I Section 3.5
Harmonisation	No		

		WORK	ING METHOD		
Owner	CT.4 - Environment & Propulsion Systems department				
SubT	Development		Impact Assessment(s) Consultation		
	By EASA	To be determined at a later stage		To be determined at a later stage	
		PLANNII	NG MILESTONES		
SubT	Initiation	Consultation	Opinion	<b>Commission IR</b>	Decision
	ToR RMT.0733 16/12/2021	A-NPA 2022-05 25/05/2022	<tbd></tbd>	<tbd></tbd>	<tbd></tbd>



#### **RES.0024** Assessment of environmental impacts — engine emissions

The objective of this research project is to improve the ICAO Annex 16 Volume II engine emissions sampling and measurement requirements for nvPM mass and number, and to propose more robust practices.

The work aims to:

1. analyse the relative share of aircraft fitted with engines not regulated for nvPM in operations and emissions at individual European aerodromes;

2. propose and test new or novel sampling designs and measurement techniques taking into account the latest technological advances;

3. measure gaseous emissions (e.g. NOx, HC, CO,  $CO_2$ ), smoke emissions, nvPM mass and number emissions, nvPM particle size for both regulated and non-regulated engines (e.g. small turbofan engines with a rated thrust below 26.7 kN, turboprop, turboshaft).

This research project is funded by Horizon 2020 under the 1st Research Contribution Agreement with the European Commission.

Status	Ongoing
Sls	n/a
SRs	n/a
Reference(s)	Environmental Research - Engine Emissions ( <u>https://www.easa.europa.eu/research-projects/environmental-research-engine-emissions</u> )
Dependencies	n/a
Affected stakeholders	DOA holders, air operators (CAT)
Owner	SM.2 - Strategy & Programmes department

Deliverable(s)	Timeline
Final report	2025



#### **RES.0025** Assessment of environmental impacts — rotorcraft noise

The objective of this project is the development of extended and more robust standards for the purpose of supporting the assessment of aircraft noise footprints.

The focus will be to:

Final report

- extend the Noise Related Annoyance, Cognition, and Health (NORAH) noise propagation modelling capabilities to account, for example, for urban environments, varied terrain and vegetation, and weather effects;
- enhance the NORAH source modelling capabilities, covering a wider range of flight conditions than that available in the noise database;
- prepare for the rotorcraft noise tests, including optimisation and update of the generic noise test plan to cover additional flight modes (e.g. hover), identification and prioritisation of the rotorcraft for the noise tests (including EVTOL) ensuring a good coverage of the European fleet, investigation of the availability and costs for renting rotorcraft and test sites;
- expand the helicopter types in the NORAH hemisphere repository by dedicated noise testing;
- implement the revised noise modelling methodology into a new software;
- validate the NORAH modelling method against benchmark data.

The project is funded by Horizon 2020 under the 1st Research Contribution Agreement with the European Commission.

Status	Ongoing	
Sls	n/a	
SRs	n/a	
Reference(s)	https://www.easa.europa.eu/research-projects/environmental-research-rotorcraft-noise	
Dependencies	n/a	
Affected stakeholders	DOA holders and organisations intending to develop new aircraft concepts (VTOL-capable aircraft, SST aeroplanes, etc.)	
Owner	SM.2 - Strategy & Programmes department	
	EXPECTED OUTPUT	
Deliverable(s)	Timeline	

2024-Q2



#### **RES.0049** Non-CO, emissions: assessment of climate impact and policy options

The objective of this project is the assessment of the climate impact of non-CO, emissions and the development of policy options.

It will entail the following:

- consolidation of scientific knowledge and reduction in uncertainties related to the impact of aviation non-CO, emissions on climate;
- support in the coordination of ongoing and planned research initiatives addressing the scientific knowledge gaps and the identified mitigation measures to the climate impact.
- enhanced quantification methods and tools used for non-CO<sub>2</sub> emissions inventories, environmental impact assessment and evaluation of policy options.

Ongoing projects funded by Horizon 2020.

Further projects planned under the Horizon Europe and the SESAR3 programmes:

ACACIA (https://www.acacia-project.eu/)

ALTERNATE (https://cordis.europa.eu/project/id/875538/reporting)

CLIMOP (https://www.climop-h2020.eu/)

Status	Onagina
Status	Ongoing
Sls	n/a
SRs	n/a
Reference(s)	n/a
Dependencies	n/a
	Aircraft manufacturers and OEMs, air operators, ANSPs, NCAs
Owner	SM.2 - Strategy & Programmes department

SM.2 - Strategy & Programmes department

EXPECTED OUTPUT	
Deliverable(s)	Timeline
Final report	2026



#### **RES.0052** Noise/emissions standards for supersonic aircraft

Develop a thorough understanding and detailed modelling methods for emissions, noise levels (including sonic boom), landing and take-off phases, and the global environmental impact of supersonic aircraft.

Contribute to the development of international standards for supersonic flights.

The action is realised through a series of projects funded by the EU Horizon 2020 programme; further information is available at:

SENECA project (https://cordis.europa.eu/project/id/101006742)

MOREandLESS (https://cordis.europa.eu/project/id/101006856)

Status	Ongoing	
Sls	n/a	
SRs	n/a	
Reference(s)	n/a	
Dependencies	n/a	
	Aircraft manufacturers and OEMs, air operators, NCAs	
Owner	SM.2 - Strategy & Programmes department	

EXPECTED OUTPUT	
Deliverable(s)	Timeline
Final report	2024-Q4

In addition to the above, the following RMT is also relevant:

**RMT.0727** Alignment of Part 21 with Regulation (EU) 2018/1139 (including simple and proportionate rules for General Aviation)

The full description of this action is included in **Chapter 6**.

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# **12.2 Market-based measures**

#### Issue/rationale

The adoption of the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) by ICAO in 2016 was the first time a single industry sector agreed to a global market-based measure in the field of climate action. It is forecast that CORSIA will mitigate between 460 and 2 000 million tonnes of  $CO_2$  emissions between 2021 and 2035, making CORSIA one of the largest carbon pricing instruments in the world in terms of greenhouse gas emissions coverage.

The CORSIA monitoring, reporting and verification system, which started on 1 January 2019, is important as it will establish the emissions baseline from which growth will be measured for the first carbon offsetting obligations in 2021.

#### What we want to achieve

Support the preparation of the CORSIA implementation through the development of standard methods and tools for the assessment of global emissions units and the related offsetting requirements.

#### How we monitor improvement

The EASA ABs regularly provide feedback on the effectiveness of the related activities.

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

#### **RES.0026** Market-based measures (ETS and CORSIA)

The objective of this research project is to extend and update the existing capabilities for the assessment of marketbased measures, e.g. EU Emissions Trading System (ETS) and ICAO CORSIA, notably to cater for new traffic data and forecasts, handling of novel scenarios and measures, ensuring their fitness for purpose and credibility for supporting critical policy-making both at European (European Commission, EU Member States) and international (ICAO) level.

Status	Ongoing	
Sls	n/a	
SRs	n/a	
Reference(s)	CORSIA States for Chapter 3 State Pairs ( <u>https://www.icao.int/environmental-protection/</u> CORSIA/Pages/state-pairs.aspx)	
	https://www.easa.europa.eu/research-projects/environmental-research-market-based- measures	
Dependencies	n/a	
Affected stakeholders	Air operators	
Owner	SM.2 - Strategy & Programmes department	

EXPECTED OUTPUT	
Deliverable(s)	Timeline
Final report	2024-Q1

# Appendixes



# Appendix A: Rulemaking and safety promotion deliverables published in 2023

#### Rulemaking deliverables:

ToRs

Reference	Title	Publ. date
ToR RMT.0711	Reduction in accidents caused by failures of critical rotor and rotor drive components through improved vibration health monitoring systems	07/02/2023
ToR RMT.0031	Regular update of the Initial Airworthiness Regulation and associated AMC and GM	22/02/2023
ToR RMT.0740	Regular update of Regulations (EU) 748/2012 and (EU) 2015/640 and associated AMC&GM and CS-26 to transpose ICAO SARPs	11/04/2023
ToR RMT.0741	Take-off performance parameters and position errors — large aeroplanes	30/08/2023
ToR RMT.0735	Regular update of the Continuing Airworthiness Regulation and associated AMC and GM	01/12/2023
ToR RMT.0739	Introduction of extended minimum-crew operations (eMCO)	20/12/2023

#### NPAs

Reference	Title	Task number
NPA 2023-01 24/04/2023	Regulatory framework on the conformity assessment of ATM/ANS systems and ATM/ANS constituents (ATM/ANS equipment) for the safe and seamless operation of the European ATM network	RMT.0392-1b
NPA 2023-02 02/05/2023	Training the next generation of ATCOs	RMT.0668-3/4
NPA 2023-03 12/05/2023	Extended diversion time operations (EDTO)	RMT.0392-1a
NPA 2023-04 26/05/2023	Introduction of ACAS Xa for operations in the single European sky (SES) airspace & PBN specifications for oceanic operations	RMT.0682-1
NPA 2023-05 14/06/2023	Acceptable means of compliance, guidance material and detailed specifications supporting the new regulatory framework on the conformity assessment of ATM/ANS systems and ATM/ANS constituents	RMT.0161-3 RMT.0524-3/4
NPA 2023-06 21/06/2023	Turbine-engine endurance and initial maintenance programme testing, and substantiation of piston-engine time between overhauls or replacements	RMT.0180
NPA 2023-07 07/07/2023	Datalink services	RMT.0524-1
NPA 2023-08 09/11/2023	Regular update of the air traffic management / air navigation services rules	RMT.0719
NPA 2023-09 15/11/2023	Implementation of the latest CAEP amendments to ICAO Annex 16 Volumes I, II and III	RMT.0514
NPA 2023-10 04/12/2023	Review of Part-147	RMT.0544



#### OPINIONS

Reference	Title	Task number Subtask(s)
Opinion No 01/2023	Regulatory framework on the conformity assessment of ATM/ANS systems and ATM/ANS constituents (ATM/ANS equipment) for the safe and seamless operation of the European ATM network	RMT.0161-3/4 RMT.0524-2
Opinion No 02/2023	Regular update of the standardised European rules of the air	RMT.0476-1/2
Opinion No 03/2023	Introduction of a regulatory framework for the operation of drones — Enabling innovative air mobility with MVCA, the initial airworthiness of UAS subject to certification, and the continuing airworthiness of those UAS operated in the 'specific' category	RMT.0230-C1
Opinion No 04/2023	Regular update of the aerodrome rules: Aerodrome safety and change of aerodrome operator   Occurrence reporting	RMT.0591-3
Opinion No 05/2023	Cruise relief co-pilots   Regular update of flight crew licensing and medical requirements   Better flight crew licensing requirements for general aviation	RMT.0190 RMT.0287-2a RMT.0287-2b RMT.0392-1a RMT.0587-3 RMT.0678-2

#### DECISIONS

Reference	Title	Туре	Task number Subtask(s)
2023/001/R 07/02/2023	Enhancement of the safety assessment processes for rotorcraft designs'   Regular update of the Certification Specifications for Small Rotorcraft (CS-27), and Large Rotorcraft (CS-29)		RMT.0128-1 RMT.0712
2023/002/R 07/03/2023	Regular update of the Certification Specifications for Normal- Category Aeroplanes	CS	RMT.0687-1
2023/003/R 28/03/2023	Provision of rescue and firefighting services for General Aviation flights	AMC	RMT.0392-1d
2023/004/R 28/03/2023	Provision of rescue and firefighting services for General Aviation flights	AMC	RMT.0392-1d
2023/005/R 31/03/2023	Guidance material on remote aerodrome traffic services – Issue 3	AMC	RMT.0624-1
2023/006/R 20/04/2023	AMC & GM to Part-TCO - Issue 1, Amendment 1	AMC	RMT.0736-1
2023/007/R 28/06/2023	Helicopter emergency medical service performance and public interest sites	AMC	RMT.0325
2023/008/R 13/07/2023	Management of information security risks - Development of acceptable means of compliance and guidance material to support the Part-IS regulatory package implementation	AMC	RMT.0720-2
2023/009/R 13/07/2023	Management of information security risks - Development of acceptable means of compliance and guidance material to support the Part-IS regulatory package implementation	AMC	RMT.0720-2



#### DECISIONS (cont.)

Reference	Title	Туре	Task number Subtask(s)
2023/010/R 13/07/2023	Management of information security risks - Development of acceptable means of compliance and guidance material to support the Part-IS regulatory package implementation		RMT.0720-2
2023/011/R 04/09/2023	Regular update of the air traffic controller licensing rules - Enhanced mobility options and streamlined qualifications for air traffic controllers	AMC	RMT.0668-1
2022/012/R 20/10/2022	Regular update of the AMC and GM to Regulations (EU) 2019/945 and 2019/947 (drones in the 'open' and 'specific' category)	AMC	RMT.0730-2
2022/013/R 20/10/2022	Acceptable means of compliance and guidance material to Annex Ib (Part 21 Light) to Regulation (EU) No 748/2012 and to the annexes to Regulation (EU) No 1321/2014	AMC	RMT.0727-1
2022/014/R 20/10/2022	Amendment to the Acceptable Means of Compliance and Guidance Material to Commission Regulation (EU) No 748/2012	AMC	RMT.0251-2b
2022/015/R 26/10/2022	Conformity assessment of ATM/ANS equipment   DS-GE.CER/DEC - Issue 1 and DS-GE.SoC - Issue 1	AMC	RMT.0161-3 RMT.0524-3
2022/016/R 26/10/2022	Conformity assessment of ATM/ANS equipment   AMC & GM to the Articles of Commission Delegated Regulation (EU) 2023/1768 - Issue 1	AMC	RMT.0161-3 RMT.0524-3
2022/017/R 26/10/2022	Conformity assessment of ATM/ANS equipment   AMC & GM to Part-AUR.COM — Issue 1 and AMC & GM to Part-AUR.SUR - Issue 1	AMC	RMT.0161-3 RMT.0524-3
2022/018/R 26/10/2022	Conformity assessment of ATM/ANS equipment   Amendment to the AMC & GM to the ATM/ANS Regulation	AMC	RMT.0161-3 RMT.0524-3
2022/019/R 02/11/2022	Review of Part-66   New training methods and new teaching technologies	AMC	RMT.0255-3
2023/020/R 18/12/2023	Regular update of CS-E	CS	RMT.0184-1
2023/021/R 19/12/2023	CS-25 Amendment 28	CS	RMT.0673
2023/022/R 18/12/2023	DS for Part 21 Light (DS-21LD) - Issue 1	DS	RMT.0727
2023/023/R 19/12/2023	Flight and duty time limitations and rest requirements for commercial air transport with aeroplanes - night duties and late finish duties	CS	RMT.0492



#### Safety promotion deliverables

Task number	Title	Link to published material
SPT.0087	Weather awareness for pilots	Sunny Swift on weather briefing process
		https://www.easa.europa.eu/newsroom-and-events/news/ sunny-swift-weather-briefing-process
		Winter Flying Article
		https://www.easa.europa.eu/community/topics/ winter-flying
		Webinar on planning and decision-making in GA https://www.youtube.com/watch?v=4j8TDqJessI
SPT.0088	Promote instrument flying for GA	Sunny Swift' promotion material
	pilots	https://www.easa.europa.eu/newsroom-and-events/news/ sunny-swift-easier-and-safer-flying-ifr
		https://www.easa.europa.eu/newsroom-and-events/news/ sunny-swift-weather-radar-information
		https://www.easa.europa.eu/newsroom-and-events/news/ sunny-swift-taf-what-it-means-practice
SPT.0114	Promote the availability of	Sunny Swift on weather briefing process
	enhanced meteorological information and uplink connectivity	https://www.easa.europa.eu/newsroom-and-events/news/ sunny-swift-weather-briefing-process
		Webinar on planning and decision-making in GA https://www.youtube.com/watch?v=4j8TDqJessI
		Cat Ops - All Weather Ops Summary Page with attached Guidelines <u>https://www.easa.europa.eu/community/topics/</u> <u>all-weather-operations-0</u>
		Increased use of Technology in Rotorcraft Ops
		https://www.easa.europa.eu/community/topics/ rotorcraft-safety-technologies-vast-report
		Increased use of Technology in GA
		https://www.easa.europa.eu/community/topics/ embracing-future-techs-impact-ga-flying
		Case Study 1 – Flysto
		https://www.easa.europa.eu/community/topics/ technology-pilots-video-1-easa-talk-flysto-aero-2023
		Case Study 2 – Safesky
		https://www.easa.europa.eu/community/topics/ technology-pilots-video-2-easa-talk-safesky

# Appendix B: Rulemaking deliverables planned in 2024

ToRs

Nr	Baseline quarter	Task number	Task title
1		RMT.0746	Regular update of the aerodrome rules for the transposition of ICAO SARPs amendments
2	1	RMT.0502	Regular update of CS for balloons
3	1	RMT.0599-2	Update of Subpart FC of Part-ORO (evidence-based training) - extend EBT to other parts of the operator's training
4	1	RMT.0742	Artificial Intelligence Trustworthiness
5	1	RMT.0748	Regular update of the U-space regulatory framework, Commission Implementing Regulation (EU) 2021/664 (U-space), Commission Implementing Regulation (EU) 2021/665 (Part-ATS), Commission Implementing Regulation (EU) 2021/666 (Rules of the air), and related AMC/GM
6	2	RMT.0707	Medical regulation - combine Part-MED (Annex IV) of Commission Regulation (EU) No 1178/2011 and Part ATCO MED (Annex IX) of Commission Regulation (EU) 2015/340
7	2	RMT.0743	Regular update of AMC/GM associated to ATM/ANS ground equipment conformity assessment framework
8	2	RMT.0744	Regular update of detailed specifications for ATM/ANS ground equipment
9	3	RMT.0494	FTL rules for helicopter commercial operations
10	4	RMT.0599-3	Update of Subpart FC of Part-ORO (evidence-based training) - extend EBT to other aircraft types

#### NPAs and other consultations:

Nr	Baseline quarter	Task number	Task title
1	1	RMT.0031-2/3	Regular update of AMC & GM to Part 21
2	1	RMT.0161-4	Conformity assessment - establishment of a European certification/ declaration system for safety-related aerodrome equipment
3	1	RMT.0230-C3	Introduction of a regulatory framework for the operation of drones
		RMT.0230-C4	Introduction of a regulatory framework for the operation of drones
4	1	RMT.0392-1e	Regular update of the air operations rules
5	1	RMT.0457	Regular update of CS-ETSO
6	1	RMT.0732	Repository of aviation-related information (Article 74 of the Basic Regulation)



#### NPAs and other consultations (cont.)

Nr	Baseline quarter	Task number	Task title
7	1	RMT.0737	Enabling electronic personnel licensing in Europe
8	2	RMT.0502	Regular update of CS for balloons
9	2	RMT.0519	Regular update of CS-ACNS
10	2	RMT.0719-6	Regular update of air traffic management/air navigation services rules (IRs and AMC & GM)
11	2	RMT.0730-3	Regular update of the AMC and GM to Regulations (EU) 2019/945 and 2019/947 (drones in the 'open' and 'specific' category)
12	3	RMT.0184	Regular update of CS-E
13	3	RMT.0476-6	Regular update of the standardised European rules of the air
14	3	RMT.0499	Regular update of CS-MMEL
15	3	RMT.0719-5	Regular update of air traffic management/air navigation services rules (IRs and AMC & GM)
16	3	RMT.0722	Provision of digital aeronautical data by the aerodrome operator
17	3	RMT.0731-4C	New air mobility
18	3	RMT.0735	Regular update of the CAW regulation
19	3	RMT.0744	Regular update of detailed specifications for ATM/ANS ground equipment
20	4	RMT.0194	Modernisation and simplification of the European pilot licensing and training system, and improvement of the supply of competent flight instructors
21	4	RMT.0707	Medical regulation - combine Part-MED (Annex IV) of Commission Regulation (EU) No 1178/2011 and Part ATCO MED (Annex IX) of Commission Regulation (EU) 2015/340
22	4	RMT.0727	Alignment of Part 21 with Regulation (EU) 2018/1139 (including simple and proportionate rules for General Aviation)
23	4	RMT.0741	Take-off performance parameters and position errors - large aeroplanes

#### **Opinions:**

Nr	Baseline quarter	Task number	Task title
1	1	RMT.0682-1	Implementation of the regulatory needs in support of the SESAR deployment
2	1	RMT.0728	Development of requirements for groundhandling
3	1	RMT.0731-1/2	New air mobility



#### **Opinions (cont.)**

Nr	Baseline quarter	Task number	Task title
4	2	RMT.0031-3	Regular update of the Initial Airworthiness Regulation and associated AMC and GM (DOA and POA issues)
		RMT.0514-2	Implementation of the CAEP amendments
5	2	RMT.0668-3/4	Regular update of air traffic controller licensing rules (IRs and AMC and GM)
6	2	RMT.0710-1	Improvement in the survivability of rotorcraft occupants in the event of a crash
6	2	RMT.0740-1	Regular update of Regulations (EU) 748/2012 and (EU) 2015/640 and associated AMC&GM and CS-26 to transpose ICAO SARPs
7	3	RMT.0196-2	Update of the flight simulation training device requirements
8	3	RMT.0278	Importing aircraft from other regulatory systems and review of Part 21 Subpart H
		RMT.0521	Airworthiness review process
9	3	RMT.0719-4b	Regular update of air traffic management/air navigation services rules (IRs and AMC & GM)
10	4	RMT.0161-4	Conformity assessment

#### Decisions:

Nr	Baseline quarter	Task number	Task title
1	1	RMT.0161-3	Conformity assessment
2	1	RMT.0476-1/2	Regular update of the standardised European rules of the air
3	2	RMT.0118	Analysis of on-ground wings contamination effect on take-off performance degradation
4	2	RMT.0180	Turbine-engine endurance and initial maintenance inspection testing, and substantiation of piston-engine time between overhauls (TBO)
5	2	RMT.0711	Reduction in accidents caused by failures of critical rotor and rotor drive components through improved vibration health monitoring systems
6	3	RMT.0230-C3	Introduction of a regulatory framework for the operation of drones
7	3	RMT.0230-C4	Introduction of a regulatory framework for the operation of drones
8	3	RMT.0730-3	Regular update of the AMC and GM to Regulations (EU) 2019/945 and 2019/947 (drones in the 'open' and 'specific' category)
9	3	RMT.0732-2	Repository of aviation-related information (Article 74 of the Basic Regulation)
10	4	RMT.0031-2	Regular update of AMC & GM to Part 21
11	4	RMT.0190	Requirements for relief pilots

Nr	Baseline quarter	Task number	Task title
12	4	RMT.0287-2a/b	Regular update of Part-MED, of Part-ARA Subpart ARA.AeMC and ARA. MED, and of Part-ORA Subpart ORA.AeMC, as well as of the related AMC and GM
13	4	RMT.0457-2	Regular update of CS-ETSO
14	4	RMT.0587-3	Regular update of regulations regarding pilot training, testing and checking and the related oversight
15	4	RMT.0668-3/4	Regular update of air traffic controller licensing rules (IRs and AMC and GM)
16	4	RMT.0678-2	Simpler, lighter and better flight crew licensing requirements for general aviation
17	4	RMT.0682-1	Implementation of the regulatory needs in support of the SESAR deployment
18	4	RMT.0719-4b	Regular update of air traffic management/air navigation services rules (IRs and AMC & GM)
19	4	RMT.0728	Development of requirements for groundhandling

# Appendix C: Overview of new actions, actions deleted, put on hold, or completed in 2023

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#### New:

Task number	Task title
IST.0002	Support the implementation of the ATM/ANS ground equipment conformity assessment framework
IST.0003	Support the implementation of the U-space Regulatory Framework
MST.0043	Improvement of data quality in occurrence reporting
RES.0054	Detection of lithium batteries using airport security screening equipment
RES.0055	Training media allocation: Simulator vs. actual flying
RES.0056	New intelligence solutions exploiting big data technologies and data science
RES.0057	New health safety measures in aircraft
RES.0058	Colour vision requirements in the new full glass cockpit environment and modern ATCO consoles
RES.0059	Impact of climate change on commercial air transport with aeroplanes - review of scientific works
RES.0065	Higher Airspace Operations
RMT.0740	Regular update of Regulations (EU) 748/2012 and (EU) 2015/640 and associated AMC&GM and CS-26 to transpose ICAO SARPs
RMT.0741	Take-off performance parameters and position errors - large aeroplanes
RMT.0742	Artificial Intelligence Trustworthiness
RMT.0743	Regular update of AMC/GM associated to ATM/ANS ground equipment conformity assessment framework
RMT.0744	Regular update of detailed specifications for ATM/ANS ground equipment
RMT.0745	Regular update of the CS for safety related ADR equipment
RMT.0746	Regular update of the aerodrome rules for the transposition of ICAO SARPs amendments
RMT.0747	Higher Airspace Operations
RMT.0748	Regular update of the U-space regulatory framework, Commission Implementing Regulation (EU) 2021/664 (U-space), Commission Implementing Regulation (EU) 2021/665 (Part-ATS), Commission Implementing Regulation (EU) 2021/666 (Rules of the air), and related AMC/GM

#### Deleted:

Task number	Task title	Reason	
MST.0029	Implementation of SESAR runway safety solutions	The MSTs were initially created to serve the alignment with the ATM Master Plan (MP).	
MST.0030	Implementation of the SESAR solutions aiming to reduce the risk of mid-air collisions enroute and in terminal manoeuvring areas	Considering the potential for an overlap with new ATM MP editions and to eliminate duplicate reporting obligations through LSSIP and EASA SIS, these MSTs are deleted. In the	
MST.0031	Implementation of the SESAR solutions aiming to facilitate safe instrument flight rule operations	future, EASA will perform an assessment of such solutions to determine where Member States will need to take action under the EPAS	

#### On hold:

Task number	Task title
EVT.0007	Evaluation of Regulation (EU) No 748/2012 related to the airworthiness and environmental certification of aircraft and related products, parts and appliances, as well as for the certification of design and production organisations
EVT.0012	Evaluation of Commission Regulation (EU) No 139/2014 (the aerodromes Regulation)
RES.0011	Helicopter, tilt rotor and hybrid aircraft gearbox health monitoring - in-situ failure detection
RMT.0318	Single-engine helicopter operations
RMT.0495	FTL rules for aeroplane commercial operations other than CAT
RMT.0624	Remote aerodrome air traffic services
RMT.0724	Improvement of operating information provided to rotorcraft flight crew
RMT.0725	Rotorcraft chip detection system
RMT.0726	Rotorcraft occupant safety in the event of a bird strike
RMT.0733	Environmental protection requirements for supersonic transport aeroplanes
RMT.0738	Next generation of air traffic controller licensing rules (IRs and AMC & GM)

#### Completed:

Task number	Task title
RES.0009	Helicopter offshore operations - new floatation systems
RES.0013	Quick recovery of flight recorder data
RES.0015	Vulnerability of manned aircraft to drone strikes
RES.0022	SESAR 2020 research projects aiming to safely integrate drones in the airspace
RES.0023	SESAR exploratory projects on U-space
RMT.0255	Review of Part-66
RMT.0325	Helicopter emergency medical services performance and public interest sites
RMT.0712	Enhancement of the safety assessment processes for rotorcraft designs
RMT.0720	Management of information security risks
RMT.0736	Regular update of the third-country operator Regulation
SPT.0083	Flight instruction
SPT.0087	Weather awareness for pilots
SPT.0106	Prevention, detection and mitigation of fraud cases in Part-147 organisations
SPT.0114	Promote the availability of enhanced meteorological information and uplink connectivity

Task number	Task title
RMT.0037	Regular update of CS-22
RMT.0128	Regular update of CS-27&29, and CS-VLR
RMT.0503	Regular update of CS-APU
RMT.0508	Regular update of CS-CCD
RMT.0509	Regular update of CS-FCD
RMT.0541	Regular update of aircraft type ratings for Part-66 aircraft maintenance licences
RMT.0605	Regular update of CS-LSA
RMT.0643	Regular update of AMC-20
RMT.0684	Regular update of CS-P
RMT.0688	Regular update of CS-SIMD
RMT.0690	Regular update of CS-STAN
RMT.0745	Regular update of the CS for safety related ADR equipment

#### Regular update RMTs without active cycle, removed from this edition:

# Appendix D: Overview of the Strategic Priorities

Chapter/Section	Chapter/Section description
Introduction ->	Build a (crisis-)resilient aviation system in Europe
Overall Strategic Direction	<ul> <li>build on lessons learned from COVID-19</li> </ul>
	<ul> <li>foster safety management implementation at State and industry level</li> </ul>
	<ul> <li>promote the establishment of an emergency/crisis management function as part of the SMS and the SSP</li> </ul>
3.1	Strategic priorities — SYSTEMIC SAFETY AND RESILIENCE
3.1.1	Manage risk interdependencies
3.1.1.1	Manage information security risks
3.1.1.2	Manage security risks with an impact on aviation safety
3.1.1.3	Manage the risks arising from conflict zones
3.1.1.4	Manage the risks arising from socio-economic factors
3.1.1.5	Manage public and aviation health safety (AHS) risks
3.1.1.6	Manage the impact of climate change on aviation safety
3.1.1.7	Manage the balance between aviation safety and other societal needs
3.1.1.7(a)	— Optimise frequency spectrum use and reduce safety impact (5G)
3.1.1.7(b)	— Optimise aerodrome surroundings and obstacle clearance
3.1.2	Improve safety by improving safety management
3.1.2.1	Achieve effective implementation of the SSP/SPAS in Member States
3.1.2.2	Achieve effective implementation of management systems (SMS) in industry
3.1.3	Manage human factors and human performance (all domains)
3.1.3.1	Address human factors and human performance issues — general
3.1.3.2	Exploit new advances in medicines and health monitoring
3.1.4	Civil-military coordination and cooperation
3.1.5	Capable and streamlined oversight
3.1.5(a)	<ul> <li>— Strengthen the oversight capabilities of NCAs</li> </ul>
3.1.5(b)	<ul> <li>Support NCAs' cooperative oversight: group operations, implementation of 'one CAMO' for airline business groups</li> </ul>
3.1.5(c)	— New organisation approvals under Article 65 of the BR (UAS/eVTOL/U-space)
3.1.6	Ensure a level playing field
3.1.6.1	Address deficiencies identified through standardisation
3.1.6.2	Remove obstacles for a well-functioning single market
3.1.6.2(a)	<ul> <li>— Support smooth aircraft movements within European registers</li> </ul>
3.1.6.2(b)	— Ensure uniform qualifications of staff certifying maintenance of components across Europe
3.2	Strategic priorities — COMPETENCE OF PERSONNEL
3.2.1	Cross-domain priorities
3.2.1.1	Improve the level of language proficiency in aviation
3.2.1.2	Facilitate the implementation of competency-based training assessment (CBTA)
3.2.2	Aircrew priorities (flight and cabin crews)
3.2.2.1	Data for training
3.2.3	Priorities for ATCOs and other personnel involved in ATM/ANS

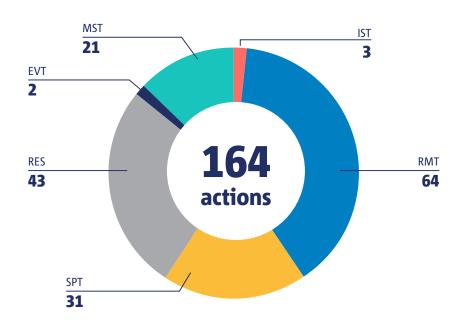


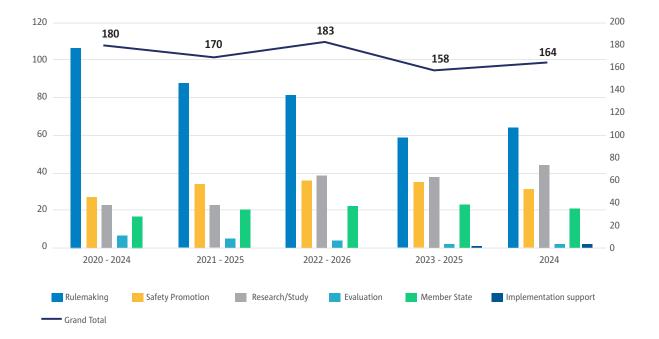
Chapter/Section	Chapter/Section description
3.2.4	Priorities for aviation maintenance personnel
3.2.4(a)	— Improve training and examinations for mechanics
3.2.4(b)	<ul> <li>Ensure that maintenance is certified by competent personnel (linked to B1/B2 support staff)</li> </ul>
3.2.5	Priorities for other aviation personnel (ADR/GH)
3.3	Strategic priorities — OPERATIONAL SAFETY
3.3.1	Ensure operational safety in CAT aeroplane operations (airlines and air taxi passenger/cargo) and NCC aeroplane operations
3.3.1.1	Address safety risks in CAT aeroplane and NCC aeroplane operations
3.3.1.2	Ensure availability of high-quality geo-data to support safe increases in traffic
3.3.1.3	Enable proportionate rules for 'business aviation' addressing the CAT/NCC boundary, including relation to environmental protection
3.3.2	Ensure operational safety in rotorcraft operations
3.3.3	Ensure operational safety in General Aviation (GA)
3.3.4	Ensure operational safety in initial and continuing airworthiness
3.3.4.1	Address safety risks in initial and continuing airworthiness
3.3.4.2	Improve safety assessment of human factors in aircraft certification
3.3.5	Ensure operational safety in air traffic management/air navigation services (ATM/ANS)
3.3.5.1	Address safety risks in ATM/ANS
3.3.5.2	Ensure the safety of ATM/ANS equipment
3.3.5.3	SES II+ implementation
3.3.6	Ensure operational safety in aerodrome operations (ADR) and ground handling (GH)
3.3.6.1	Address safety risks in ADR and GH
3.3.6.2	Create a certification system for aerodrome equipment
3.3.6.3	Create an EU regulatory framework for ground handling
3.4	SAFE AND SUSTAINABLE INTEGRATION OF NEW TECHNOLOGIES AND CONCEPTS
3.4.1	Artificial intelligence (AI) in Aviation Programme
3.4.2	Digitalisation in Aviation Programme
3.4.2.1	European electronic personnel licences (EPLs)
3.4.3	Innovative aerial Services and other mobility and operational concepts
3.4.3.1	Establish a comprehensive EU regulatory framework for UAS and manned VTOL-capable aircraft
3.4.3.2	Ensure safe U-space implementation
3.4.3.3	Ensure the safe integration of other air mobility and operational concepts
3.4.4	Virtual certification: modelling and simulation (M&S)
3.4.5	ATCOs — system-based licensing system
3.4.6	SESAR research and development for new ATM/ANS functionalities
3.4.7	Ensure the safe integration of extended minimum-crew operations (eMCOs)
3.4.8	Ensure the safe integration of new business models in air operations
3.4.8.1	Ensure transparent conditions for airline group operations
3.4.9	New propulsion technologies
3.4.9.1	Enable the safe integration of electric and hybrid propulsion technologies
3.4.9.2	Enable the safe integration of hydrogen-powered technologies
3.4.10	Ensure the safe integration of higher-airspace operations

Chapter/Section	Chapter/Section description
3.5	ENVIRONMENT
3.5.1	Facilitate the decarbonisation of the aviation system through Agency initiatives
3.5.2	Act towards sustainable aviation through environmental certification and standards
3.5.3	Act towards sustainable aviation through effective transversal actions at European level (implementation of Article 87 of the BR)
3.5.4	Act towards sustainable aviation through flight standards and ATM-related actions for increased operational efficiency

# Appendix E: Key indicators in terms of EPAS actions

This Appendix presents an overview on the number of actions detailed in Volume II, illustrating the distribution by EPAS action type, as well as by domain affected by these actions.





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This table provides an overview of the status of the BISs.

BIS title	Short description	Status for EPAS
BISs addressing e	emerging or cross-domain issues	
Entry of Aircraft Performance Data <sup>10</sup>	Safety issue related to the use of erroneous take-off parameters. RMT.0741 has been initiated with the objective of mitigating, using on- board design means of protection, the risk of large aeroplane accidents or incidents caused by the use of erroneous take-off performance parameters, and by erroneous take-off positions.	AB consultation between 31 March and 31 May 2023
Weather information to pilots - GA and Rotorcraft	The actions identified in this BIS are intended to encourage MS, users, and service providers to support and implement data and infrastructure solutions to facilitate the increased use of weather information devices and to consider such developments holistically with, for example, technology for sharing of 'conspicuity' information.	No new actions for the EPAS Vol. II 2024 edition
Airborne collision risk	The BIS addressed the safety issue on airborne collision risk. The outcome of the assessment is that a broader use of iConspicuity solutions and the improvement of their interoperability together with a better airspace utilisation and design, while ensuring compatibility with the U-space regulatory framework, should be at the heart of the strategy to define future actions.	No new actions for the EPAS Vol. II 2024 edition
Language Proficiency oversight and assessment	The BIS assesses the feasibility and benefits of establishing a common set of minimum criteria for language proficiency assessment and oversight of language assessment bodies, both for flight crews and ATCOs.	No new actions for the EPAS Vol. II 2024 edition
Human factors - competence for regulatory staff	The BIS addresses the need of regulatory staff to have specific HF competencies to be able to perform their duties in overseeing how effectively human factors are addressed within organisations, as this is a significant contributor in assuring a high level of safety.	No new actions for the EPAS Vol. II 2024 edition
	This BIS led to the inclusion of SPT.0115 'Provide Member States with a basis for training their staff in human factors' in EPAS 2021-2025.	
Human factors - design and use	The BIS analyses the safety issues with regard to the design, use and management of procedures in the aviation industry.	No new actions for the EPAS Vol. II
of procedures	Outcome: The following new EPAS actions were agreed after the AB consultation: SPT.0129, SPT.0130, SPT.0131 and SPT.0132, for the Vol. II 2023 edition.	2024 edition
Safety management	The BIS was updated in 2021; it focuses on better implementation support as well as oversight of the SSP and SMS.	No new actions for the EPAS Vol. II 2024 edition
ACAS RA Not Followed	This safety issue concerns with the encounters where flight crew did not follow the ACAS RA correctly to resolve the potential conflict and avoid the mid-air collision.	AB consultation: 13 March to 12 May 2023
	All actions are already launched (Safety promotion campaign executed, RMT.0499 with NPA in Q3/2023 and RMT.0599 with ED Decision published).	



BIS title	Short description	Status for EPAS
Aircrew		
Flight crew	The assessment addresses the supply of competent flight instructors.	No new actions
licences - flight instructors	Outcome: RMT.0194 Modernisation and simplification of the European pilot licensing and training system and improvement of the supply of competent flight instructors	for the EPAS Vol. II 2024 edition
Flight crew licences - pilot age	The assessment comes from the scientific study which recommends increasing the pilot age for commercial single-pilot operations for aeroplanes and helicopters from 60 to 65 years.	No new actions for the EPAS Vol. II 2024 edition
	Outcome: RMT.0287 Regular update of Part-MED of the Aircrew Regulation. The pilot age scope is limited to helicopters.	
Flight crew licences-	The assessment focused on competency-based training for the appropriate pilot licenses and ratings.	No new actions for the EPAS Vol. II
competency- based training	Outcome: RMT.0194 is ongoing and addresses the competency-based training for the appropriate pilot licences and ratings. The impact assessment will be part of the NPA.	2024 edition
Aircrew fatigue	The BIS on aircrew fatigue has three main objectives:	No new actions
(flight time limitations)	<ol> <li>Follow up on a scientific evaluation on the rules regulating flight time limitation.</li> </ol>	for the EPAS Vol. II 2024 edition
	<ol> <li>Strengthen fatigue risk management by operators and aircrews.</li> <li>Raise awareness of shared responsibilities.</li> </ol>	
Commercial Air T	ransport	
Crew interoperability	The BIS will analyse the opportunity for AOC holders to exchange air crew among the same holding/parent companies, in EASA Member States.	AB consultation foreseen in Q1 2024
Emergency evacuation	The BIS will review several studies and recommendations and, if needed, propose actions for operations and certification aspects.	No new actions for the EPAS Vol. II 2024 edition
lce in flight (CAT FW)	The BIS will analyse the safety issue 'Flight in adverse weather conditions for CAT FW'.	No new actions for the EPAS Vol. II 2024 edition
Weather information to pilots - CAT FW	This BIS includes actions to promote the availability of enhanced meteorological information, the up-link of that information to the cockpit, and to increase pilot awareness of the type-specific icing characteristics, and of the meteorological regimes in which the type may be more susceptible to icing.	No new actions for the EPAS Vol. II 2024 edition



BIS title	Short description	Status for EPAS
Rotorcraft		
Rotorcraft	The updated BIS Rotorcraft focuses on small helicopter operators, integrating the results of the evaluation on the administrative burden on small helicopter operators from the Air OPS Regulation and the related soft law (EVT.0010).	No new actions for the EPAS Vol. II 2024 edition
	This BIS addresses the evaluation recommendations in the context of existing actions and determines the need for new EPAS actions.	
	Outcome: The following new EPAS actions were agreed after the AB consultation: MST.0041, SPT.0127 and SPT.0128.	
	<i>Note:</i> <b>RMT.0318 Single-engine helicopter operations to operate over hostile and congested environment</b> will resume in a future date to be defined at a later stage, without further analysis after an internal EASA review.	
General Aviation		
Risks associated with parachute operations	A new BIS is planned on the safety in parachuting aircraft operations.	AB consultation foreseen for Q1 in 2024
Maintenance and	continuing airworthiness management	
Single CAMO for business group operators	To assess the case of operators forming part of a single business group, having one CAMO organisation managing the continuing airworthiness of all (or some) aircraft of all (or some) AOC holders in the group.	No new actions for the EPAS Vol. II 2024 edition
	Outcome: RMT.0734 One business group CAMO (completed)	
New products, sys	tems, technologies and operations	
Electric and hybrid propulsion	The BIS addresses electric and hybrid propulsion systems and the regulatory gap with the current regulations, certification specifications and procedures.	No new actions for the EPAS Vol. II 2024 edition
	Outcome: RMT.0731 New air mobility	
	Subtask 1 on continuing airworthiness related to introduction of new designs, technologies, and types of operation for which regulatory updates are needed (ToR published).	
Road / gyroplanes	The BIS addresses the regulatory gap in the continuing airworthiness, flight crew licensing and AIR OPS rules for gyroplane operations.	Work in progress on the flying cars
	<b>Outcome: RMT.0731 New air mobility, Subtask 2 'Gyroplanes'</b> (ToR published, scope: FCL requirements for private pilot licence and non-commercial operations)	(dual transport mode aircraft) and the rules to enable operations with CAT/SPO gyroplanes.
		AB consultation planned for Q1 2024.



BIS title	Short description	Status for EPAS
Tilt-rotors	Similar to gyroplanes, the current rules need to be updated to provide flight crew licensing and air operations requirements for tilt rotor.	No new actions for the EPAS Vol. II 2024 edition
	Outcome: RMT.0731 New air mobility, Subtask 3 'Tilt-rotors' (ToR published).	
	Note that this RMT is on hold due to structural measures (refer to Chapter 1).	
Airships	Similar to gyroplanes and tilt rotors, the current regulatory framework needs to be updated to enable airship operations.	AB consultation from 19 July to 17 September 2021.
	Outcome: RMT.0731 New air mobility, Subtask 4 'Airships'	
	Note that as part of the structured measures (refer to Chapter 1).:	ABs were informed on the outcome of the BIS on 7 September 2023.
	<ul> <li>the NPA for RMT.0731-4A CAW rules for airships is for 2025<sup>11</sup>;</li> </ul>	
	• the NPA for RMT.0731-4B Aircrew rules for airships is planned for 2026	
New business mo	dels	
Extended Minimum-Crew Operations in large aeroplanes	This BIS assesses the main challenges associated with the proposed concepts for extended minimum crew operations, investigating hazards and risk mitigation actions and means to perform compliance demonstration. At a later stage, single-pilot operations (SiPO) may be considered as well.	AB consultation from 27/09/2023 to 30/11/2023.
	Note: For this specific topic, RMT.0739 was added with the EPAS Vol II 2023 edition.	

<sup>11</sup> initially programmed for 2026 in the draft EPAS 2024 consultation

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