Draft European Plan for Aviation Safety (EPAS) 2022-2026

European Union Aviation Safety Agency, 01/07/2021

Volume II

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Rulemaking documents planned to be delivered in 2021 and 2022 are shown in the following format: yyyy/qn.

Rulemaking documents planned to be delivered in 2023 and beyond are shown in the following format: yyyy.

Early 2021 the Agency initiated a review of its rulemaking procedure aiming at increased efficiency and effectiveness, in terms of output and lead times. The annual resource programming exercise for the EASA Single Programming Document (SPD) 2022-2024 is currently ongoing and final figures are anticipated in Q3 2021. Subject to the above, and to ensure full consistency between the SPD and the EPAS 2022-2026, please note that planning milestones for the active EPAS RMT, RES, EVT and SPT actions included in this draft edition may be subject to further adjustments over the next months.. Please note however that the Advisory Bodies will be provided with an additional opportunity to review the final draft with any adjusted planning milestones, prior to its submission to the Management Board in December 2021.

5. Systemic safety & competence of personnel

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

The following icons are used to illustrate the various topics addressed in this chapter:


Safety management


Human performance


Competence of personnel


Accident investigation


Aircraft tracking


Rescue operations


Impact of security on safety


Standardisation

5.1 Safety management

Issue/rationale

Safety management is a strategic priority. Despite the fact that last years have clearly brought continued improvements in safety across every operational domain, recent accidents underline the complex nature of aviation safety, the importance of hazard identification and associated risk mitigation, and the significance of addressing human factor aspects. Authorities and aviation organisations should have agile (safety) management systems (SMS), implementing robust Safety Risk Management (SRM) principles and including whenever possible short-loop safety monitoring processes[1]. The situation with the COVID-19 pandemic illustrates that need across all domains.

These principles are strengthened through SMS implementation supported by ICAO Annex 19 and Regulation (EU) No 376/2014 (on the reporting, analysis and follow-up of occurrences).

What we want to achieve

— Implementation of a regulatory framework requiring that safety management is in place across all aviation domains, with proportionate requirements in the area of GA.

— Implementation of a regulatory framework for information security management. Improve the level of safety through effective implementation of safety management within authorities and organisations.

How we monitor improvement

Organisations and authorities shall demonstrate compliance, effective implementation, and safety performance. For ATM/ANS, this will be monitored as part of the ATM Performance and Charging Scheme. For the air operations, aircrew and aerodromes domains, it is proposed to start with collecting data on the status of compliance with organisation and authority requirements as relevant to safety management (see Volume I Section 4.2).

[1] With regard to air operations, the promotion of flight data monitoring is addressed in Section 6.1.1.6.

How we want to achieve it: actions

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 is processed in two phases: 1. Changes to Part-M linked to OPS (CAMOs) - Opinion No 06/2016 issued in May 2016 2. Changes to Part-145 and Part 21 - Opinion No 04/2020 issued in December 2020
Status	Ongoing
SIs/SRs	SI-0041 Effectiveness of Safety Management SI-3004 Integration of practical HF/HP into the organisation's management system SR UNKG-2010-072; SR UNKG-2011-018; SR UNKG-2015-001.
Reference(s)	n/a
Dependencies	RMT.0681, RMT.0720

Affected stakeholders	CAMOs, AMOs (Part-145), POA holders, DOA holders, ETSOA holders and CAs				
Owner	EASA FS.0	Flight Standards Director's Office			
Priority	Yes	**RM Procedure**	ST	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
1	MDM.055 19/07/2011	2013-19 10/10/2013	06/2016 11/05/2016	2019/1383 08/07/2019[2]	2020/002/R 13/03/2020
2		NPA 2019-05 17/04/2019	04/2020 21/12/2020	2021 Q4	2022 Q2

CHANGES SINCE LAST EDITION

n/a

[2] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv%3AOJ.L_.2019.228.01.0001.01.ENG&toc=OJ%3AL%3A2019%3A228%3ATOC

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

Alignment of IRs and AMC & 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[3] was published on 24/05/2019.

Overview of RMTs through which the changes were/are being made.

1. Part 21 to RMT.0251 Phase II, in progress - Opinion 04/2020 published on 21/12/2020
2. Part M, Part-ML, Part-CAO and Part-CAMO to RMT.0278 and RMT.0521, in progress;
3. Part 145 to RMT.0251 Phase II, in progress - Opinion 04/2020 published on 21/12/2020;
4. Part-ARA/Part-ORA (Aircrew) to RMT.0599, completed, see Regulation (EU)2020/2193
5. Part-ARO/Part-ORO (Air Operations) to RMT.0392, in progress
6. Part-ADR-AR/Part-ADR-OR to RMT.0591, in progress;
7. Part-ATM/ANS.AR/Part-ATM/ANS.OR to RMT.0719 (Part-MET), in progress - Opinion 01/2021 published on 22/02/2021;
8. Part ATCO-AR/Part ATCO-OR to RMT.0668, not started and
9. AMC 20-8 to RMT.0643, completed see EDD 2020/010/R of 23/07/2020.

Status	Ongoing
SIs/SRs	SI-0041 Effectiveness of safety management
Reference(s)	n/a
Dependencies	RMT.0251, RMT.0278, RMT.0521, RMT.0599, RMT.0591, RMT.0719, RMT.0668 and RMT.0643

Affected stakeholders	Air operators, pilots, MOs, ATOs, manufacturers[4], CAMOs, ADR operators, ATM/ANS providers and ATCO TOs				
Owner	EASA SM.1	Safety Intelligence & Performance Department			
Priority	No	**RM Procedure**	ST	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
	RMT.0681 30/09/2015	2016-19 19/12/2016	n/a	n/a	n/a

CHANGES SINCE LAST EDITION

Overview of RMTs and dependencies updated

[3] https://www.easa.europa.eu/sites/default/files/dfu/CRD%20to%20NPA%202016-19.pdf

[4] The term 'manufacturer' includes, depending on the case: production approval holder (POAH) and production organisation manufacturing without POA.

RMT.0706	**Update of 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.
Status	on hold
SIs/SRs	SI-0041 Effectiveness of safety management SI-3004 Integration of Practical HF/HP into the organisation's management system
Reference(s)	EASA BIS 'Safety Management'
Dependencies	n/a

Affected stakeholders	CAs, NSAs, air operators, pilots, MOs, ATOs, POA holders, CAMOs, ADR operators, ATM/ANS providers, and ATCO TOs				
Owner	EASA FS.0	Flight Standards Director's Office			
Priority	No	**RM Procedure**	tbd	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
	tbd	tbd	tbd	tbd	tbd

CHANGES SINCE LAST EDITION

Reference to BIS added

SPT.0057	**Safety Management implementation and international cooperation**
HF/HP	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)[5] and dissemination of safety promotion material to support effective SMS and SSP implementation, including, but not limited to, the below deliverables and material addressing the EU context. The latest SMICG deliverables include: — Revised Guidance on SMS for Small Organisations: Considerations for Regulators — Attitudes and Behaviours for effective SMS (brochure) — Revised SMS Integration guidance – Points to Consider — Revised SSP Assessment Tool (reflecting ICAO Annex 19 Amendment 1). Forthcoming SMICG material: — Effective Surveillance Following the Introduction of SMS — Management of Change at State Level: Considerations — Safety Manager's Role in SMS, including competency and training requirements — Performance-Based/Risk-Based Oversight — Updated Safety Management Terminology — Tool and guidance for evaluating inspector SMS competency Latest EASA material: — Guidance on Acceptable Level of Safety Performance (ALoSP), Safety Performance Management and Safety Assurance within the EU environment[6] — EASA Covid-19 Resources [7], including the Aviation Safety issues arising from the Covid-19 Pandemic and the role of operators' management systems in the Covid-19 recovery phase — SMS in CAMO: practical implementation (presentations and takeaways)[8]
Status	Ongoing
SIs/SRs	SI-0041 Effectiveness of safety management SI-3002 Impact of culture on human performance SI-3001 Senior management knowledge, competence and commitment to HF/HP
Reference(s)	EASA BIS 'Safety Management' GASP SEI-5 (Industry) Improvement of industry compliance with applicable SMS requirements
Dependencies	MST.0001, MST.0002, MST.0028, RMT.0251
Affected stakeholders	ALL
Owner	EASA FS.0 Flight Standards Director's Office

EXPECTED OUTPUT	
Deliverable(s)	**Timeline**
Guidance/training material/best practice	Continuous

CHANGES SINCE LAST EDITION
Title changed, list of deliverables updated, and scope extended to cover both SMS and SSP

[5] https://www.skybrary.aero/index.php/Safety_Management_International_Collaboration_Group_(SM_ICG)

[6] EASA publishes guidance on AloSP, Safety Performance Management and Safety Assurance | EASA (europa.eu)

[7] Coronavirus COVID-19 | EASA (europa.eu)

[8] SMS in CAMO: practical implementation | EASA (europa.eu)

SPT.0122	**Safe return to operations – Ramp up safely**

Safety promotion campaign to support safe ramp-up / return to operations.
Support the implementation of a resilient management system and deliver safety promotion material to address the most significant risks.

Status	New
SIs/SRs	Refer to the SIs described in revised COVID-19 Safety Risk Portfolio published in April 2021[9]
Reference(s)	n/a
Dependencies	MST.0039

Affected stakeholders	ALL	
Owner	EASA SM.1	Safety Intelligence & Performance Department

EXPECTED OUTPUT	
Deliverable(s)	**Timeline**
Guidance/training material/best practice	2021/2022

CHANGES SINCE LAST EDITION
n/a

[9] https://www.easa.europa.eu/document-library/general-publications/review-aviation-safety-issues-arising-covid-19-pandemic-0

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

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

— ensure effective implementation of the authority requirements and address deficiencies in oversight capabilities, as a prerequisite for effective SSP implementation,

— ensure effective coordination between State authorities having a role in safety management,

— ensure that inspectors have the right competencies to support the evolution towards risk- and performance-based 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 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 the SSP effectiveness is regularly assessed.

Status	Ongoing
SIs/SRs	SI-0041 Effectiveness of Safety Management
Reference(s)	ICAO Annex 19 and GASP 2020-2024 Goal 3 ‘Implement effective State Safety Programmes’ GASP SEI-13 — Start of SSP implementation at the national level GASP SEI-14 — Strategic allocation of resources to start SSP implementation GASP SEI-15 — Strategic collaboration with key aviation stakeholders to start SSP implementation GASP SEI-16 — Strategic collaboration with key aviation stakeholders to complete SSP implementation
Dependencies	MST.0028

Affected stakeholders	ALL
Owner	Member States

EXPECTED OUTPUT

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

CHANGES SINCE LAST EDITION

n/a

MST.0002 **Promotion of SMS**

HF/HP

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

The latest SMICG deliverables include:

- Revised Guidance on SMS for Small Organisations: Considerations for Regulators
- Attitudes and Behaviours for effective SMS (brochure)
- Revised SMS Integration guidance – Points to Consider
- Revised SSP Assessment Tool (reflecting ICAO Annex 19 Amendment 1).

Forthcoming SMICG material:

- Effective Surveillance Following the Introduction of SMS
- Management of Change at State Level: Considerations
- Safety Manager's Role in SMS, including competency and training requirements
- Performance-Based/Risk-Based Oversight
- Updated Safety Management Terminology
- Tool and guidance for evaluating inspector SMS competency

Latest EASA material:

- Guidance on Acceptable Level of Safety Performance (ALoSP), Safety Performance Management and Safety Assurance within the EU environment[10]
- EASA Covid-19 Resources, including the Aviation Safety issues arising from the Covid-19 Pandemic and the role of operators' management systems in the Covid-19 recovery phase
- SMS in CAMO: practical implementation (presentations and takeaways)[11].

Status	Ongoing
SIs/SRs	SI-0041 Effectiveness of Safety Management
Reference(s)	GASP SEI-5 (Industry) Improvement of industry compliance with applicable SMS requirements
Dependencies	MST.0001, SPT.0057
Affected stakeholders	ALL
Owner	Member States

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

CHANGES SINCE LAST EDITION
Revision of the task description

[10] EASA publishes guidance on AloSP, Safety Performance Management and Safety Assurance | EASA (europa.eu)

[11] SMS in CAMO: practical implementation | EASA (europa.eu)

MST.0026	**SMS assessment**
	Without prejudice to any 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 compliance with SMS requirements and SMS performance of their industry. Note that the EASA Management System assessment tool is under revision to include Continuing Airworthiness Management Organisations (CAMOs) – a draft version is available on request. A new editable version, which will include Part 21 and Part-145, will be available in 2022.
Status	Ongoing
SIs/SRs	SI-0041 Effectiveness of Safety Management
Reference(s)	EASA Management System assessment tool[12] EASA BIS 'Safety Management' GASP SEI-5 (Industry) Improvement of industry compliance with applicable SMS requirements
Dependencies	MST.0001, MST.0032
Affected stakeholders	Air Operations, Aircrew, Medical, Aerodromes
Owner	Member States

EXPECTED OUTPUT	
Deliverable(s)	**Timeline**
Feedback on the use of the tool Feedback on the status of SMS compliance (cf. § 4.2) and performance	Continuous with bi-annual reporting (April/October)

CHANGES SINCE LAST EDITION
Revision of the task description, reference to BIS added

[12] https://www.easa.europa.eu/document-library/general-publications/management-system-assessment-tool

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

Member States shall ensure that a SPAS is maintained and regularly reviewed. Member States shall identify in SPAS the main safety risks affecting their national civil aviation safety system and shall set out the necessary actions to mitigate those risks. In doing so, Member States shall consider the pan-European safety risk areas identified in EPAS for the various aviation domains as part of their SRM process and, when necessary, identify suitable mitigation actions within their SPAS. In addition to the actions, SPAS shall also consider how to measure their effectiveness. Member States shall justify why action is not taken for a certain risk area identified in EPAS.

The pan-European safety risk areas in the current EPAS edition are as follows:

— For CAT by aeroplane: aircraft upset in flight, runway safety[13], airborne conflict, ground safety, terrain collision, and aircraft environment.
— For rotorcraft operations: helicopter upset in flight and terrain collision and airborne collision .
— For GA: staying in control, coping with weather, preventing mid-air collisions and managing the flight.

In addition, the specific safety risks included in the COVID-19 safety risk portfolio shall be assessed and the State risk picture updated accordingly.

The SPAS shall:

— describe how the plan is developed and endorsed, including collaboration with different entities within the State, with industry and other stakeholders (unless this is described in the SSP document),
— include safety objectives, goals, indicators and targets (unless these are included in the SSP document),
— reflect the EPAS actions as applicable to the State, and
— identify the main safety risks at national level in addition to the ones identified in EPAS.

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

Status	Ongoing
SIs/SRs	SI-0041 Effectiveness of Safety Management
Reference(s)	ICAO Annex 19 and GASP 2020-2024 Goal 3 'Implement effective State Safety Programmes' GASP SEI-11 (States) — Strategic collaboration with key aviation stakeholders to enhance safety in a coordinated manner GASP SEI-17 (States) — Establishment of safety risk management at the national level (step 1) GASP SEI-18 (States) — Establishment of safety risk management at the national level (step 2) GASP SEI-19(States) — Acquisition of resources to increase the proactive use of risk modelling capabilities GASP SEI-20 (States) — Strategic collaboration with key aviation stakeholders to support the proactive use of risk modelling capabilities GASP SEI-21 (States) — Advancement of safety risk management at the national level SEIs (States) — Mitigate contributing factors to the risks of CFIT, LOC-I, MAC, RE, and RI
Dependencies	MST.0001
Affected stakeholders	ALL
Owner	Member States

EXPECTED OUTPUT

Deliverable(s)	**Timeline**
SPAS established	2021 Q4

CHANGES SINCE LAST EDITION

Revision of the task description to address the need to update the risk picture

[13] Runway excursions: refer also to SAF11 (Prevention of RWY Excursions) in the ATM MP's (Level 3 Ed 2018).

MST.0039	**Safety promotion to support ramp-up / safe return to operations**

Member States should manage a dedicated safety promotion campaign in support of safe ramp-up / return to operations, making use of the safety promotion campaigns and deliverables provided by EASA.

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Status	New
SIs/SRs	SIs described in the updated COVID-19 Safety Risk Portfolio published in April 2021[14].
Reference(s)	n/a
Dependencies	SPT.0122

Affected stakeholders	ALL
Owner	Member States

EXPECTED OUTPUT	
Deliverable(s)	**Timeline**
Guidance/training material/best practices	2021/2022

CHANGES SINCE LAST EDITION

n/a

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 mitigations, 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 mitigations for a specific operation shall be considered.

Status	New
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	Design organisations, air operators, ANSP, aerodrome operator, competent authority
Owner	EASA SM.2 Strategy & Programmes Department

PLANNING MILESTONES		
Starting date	**Interim Report**	**Final Report**
2021 Q2	n/a	2023 Q2

CHANGES SINCE LAST EDITION

n/a

[14] https://www.easa.europa.eu/document-library/general-publications/review-aviation-safety-issues-arising-covid-19-pandemic-0

5.2 Human factors and human performance

Issue/rationale

Human factors and the impact on human performance, as well as medical fitness are strategic priorities. As new technologies and/or operating concepts emerge on the market and the complexity of the system continues increasing, it is of key importance to properly assess human factors and human performance, in terms of both limitations and its contribution to delivering safety, as part of the safety management implementation.

The safety actions identified currently — related to aviation personnel — are aimed at updating fatigue risk management (FRM) requirements and contributing to mitigating safety issues in all domains such as personal readiness, flight crew perception or crew resource management (CRM) and communication, which play a role in improving safety across all aviation domains.

What we want to achieve

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

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 HF CAG.

How we want to achieve it: actions

5.2.1 General

SPT.0115	**Provide Member States with a basis for training their staff in Human Factors**
	Provides 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 against risks generated through the inadequate understanding, regulation and oversight of human factors.
Status	Ongoing
SIs/SRs	SI-3003 Human Factors competence for regulatory staff
Reference(s)	ICAO Human Performance Manual ICAO Safety Management Manual EASA BIS 'Human Factors competence for regulatory staff'
Dependencies	MST.0037
Affected stakeholders	EASA MS competent authorities and their staff
Owner	EASA SM.1 Safety Intelligence & Performance Department

EXPECTED OUTPUT	
Deliverable(s)	**Timeline**
Promotional material	2022

CHANGES SINCE LAST EDITION
n/a

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 Factor Collaborative Analysis Group (HF CAG) in terms of:

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

These guidance and tools will be provided to the MS competent authorities to organise the implementation of the competency framework, and plan and conduct the training for the respective regulatory staff.

Status	Ongoing
SIs/SRs	SI-3003 Human Factors Competence for Regulator Staff
Reference(s)	ICAO Human Performance Manual ICAO Safety Management Manual (ICAO 9859) EASA BIS 'Human Factors competence for regulatory staff'
Dependencies	SPT.0115
Affected stakeholders	EASA MS competent authorities and their staff
Owner	Member States

EXPECTED OUTPUT

Deliverable(s)	**Timeline**
Guidance for competency assessment of regulatory staff Guidance for competency for trainers	2023

CHANGES SINCE LAST EDITION

n/a

5.2.2 Flight time limitations

RMT.0492	**Development of FTL rules for CAT operations of emergency medical services by aeroplanes (AEMS)** Harmonised and state-of-the-art rules for AEMS. This RMT continues only in the field of EMS with aeroplanes (AEMS). Development of FTL for HEMS will be addressed through RMT.0494.
Status	Ongoing.
SIs/SRs	SI-0039 Fatigue SR FRAN-2013-053
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	CAT aeroplane operators conducting AEMS operations, flight crew				
Owner		EASA FS.2	Air Operations Department		
Priority	No	**RM Procedure**	ST/RMG	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
	RMT.0492 18/04/2012	2017-17 30/10/2017	2022 Q3	2023	2023

CHANGES SINCE LAST EDITION

SI/SR information updated

RMT.0493	**Update and harmonisation of FTL rules for CAT by aeroplane for air taxi operations and single-pilot operations taking into account operational experience and recent scientific evidence** Develop harmonised and state-of-the-art-rules for air taxi and single-pilot operations.
Status	Ongoing.
SIs/SRs	SI-0039 Fatigue
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	CAT aeroplane operators, flight crew				
Owner		EASA FS.2	Air Operations Department		
Priority	No	**RM Procedure**	ST/RMG	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
	RMT.0493 21/08/2012	2017-17 30/10/2017	2022 Q3	2023	2023

CHANGES SINCE LAST EDITION

SI/SR information updated

RMT.0494	**FTL rules for helicopter operations**
	Establish harmonised and state-of-the-art rules for helicopter commercial air transport operations (CAT).
Status	Not started.
SIs/SRs	n/a
Reference(s)	EASA research project on FRMS in helicopter operations (CAT, SPO, NCC)
Dependencies	n/a

Affected stakeholders	CAT, SPO, NCC helicopter operators, flight crew				
Owner	EASA FS.2	Air Operations Department			
Priority	No	**RM Procedure**	AP	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
	2022 Q3	2024	2025	2026	2026

CHANGES SINCE LAST EDITION

Change of scope to cover only CAT. National rules and operational experience have so far provided adequate fatigue risk mitigation in the case of SPO and NCC operations, with no evidence of systemic fatigue issues. In addition, the risk to European citizens from these operations is very low. On the other hand, changes to FTL rules have the potential to considerably increase compliance costs for operators. Finally, the activities covered are so diverse and specific that finding a common denominator in terms of organisation of work, duty patterns and fatigue risk models would be impossible.
Change of the rulemaking procedure from standard to accelerated procedure. Considering the specific and highly technical nature of the task, a focused consultation with affected stakeholders is preferable to the standard public consultation.
SI/SR information and references updated.

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.
Status	Deleted.
SIs/SRs	SI-3005 Fatigue and quality sleep
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	Commercial SPO operators with aeroplanes, flight crew				
Owner	EASA FS.2	Air Operations Department			
Priority	No	**RM Procedure**	ST/RMG	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
	2023 Q3	n/a	n/a	n/a	n/a

CHANGES SINCE LAST EDITION

This RMT is kept for traceability. It will be removed in the final EPAS. See Appendix C for further details.

SPT.0116	**IMPLEMENTATION SUPPORT: Webinar/Roadshow dedicated to FRM**
	Implementation of an appropriate FRM or FRMS In March 2021 a webinar on FRMS in cargo operations was organised. https://www.easa.europa.eu/newsroom-and-events/events/1st-webinar-fatigue-risk-management-cargo-and-demand-operations

Status	Ongoing
SIs/SRs	SI-0039 Fatigue
Reference(s)	EASA BIS 'Aircrew Fatigue'
Dependencies	SPT.0117; SPT.0118
Affected stakeholders	FTL/FRM inspectors at NAAs and operators' FRM/rostering personnel and aircrew
Owner	EASA FS.2 Air Operations Department

EXPECTED OUTPUT

Deliverable(s)	Timeline
Training material and webinars/live events	2021
Training material and webinars/live events	2023

CHANGES SINCE LAST EDITION

Reference to webinar added in task description, SI/SR information updated

SPT.0117	**IMPLEMENTATION SUPPORT: Assist CAs in developing competences for FTL/FRM oversight**
	EASA conduct visits to the requesting Member State and meet with the responsible personnel from the NAA and from the operators under their oversight to determine the status of FTL/FRM implementation and necessary improvements.

Status	Ongoing
SIs/SRs	SI-0039 Fatigue
Reference(s)	EASA BIS 'Aircrew Fatigue'
Dependencies	SPT.0116; SPT.0118
Affected stakeholders	FTL/FRM inspectors at CAs and operators' FRM/rostering personnel
Owner	EASA FS.2 Air Operations Department

EXPECTED OUTPUT

Deliverable(s)	Timeline
EASA Missions to MS	Continuous

CHANGES SINCE LAST EDITION

SI/SR information updated

SPT.0118	**Develop practical guides, promotional material and e-learning content for Aircrew Fatigue**

Development of written and video materials 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 (1&2 parts) in 2019;
- FTL/FRM Practical Guide Issue 1 in 2019.

Status	Ongoing
SIs/SRs	SI-0039 Fatigue
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
Owner	EASA FS.2 Air Operations Department

EXPECTED OUTPUT

Deliverable(s)	Timeline
FTL/FRM Inspector's checklist (3part)	2021
FTL/FRM Practical Guide Issue 2	2021
IFTSS Evaluation Form - update	2022

CHANGES SINCE LAST EDITION

SI/SR information updated

RES.0006	**Effectiveness of FTL rules**
HF/HP	Collection, analysis and processing of historical and in-flight crew fatigue data for purposes of supporting the continuous review of the effectiveness of the provisions concerning flight and duty time limitations and rest requirements as foreseen in Regulation (EU) No 965/2012; and in particular for the 2nd 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 is completed (report[15] published 28/02/2019). The second phase started with the publication of a call for tender[16] on 04/10/2019
Status	Ongoing.
SIs/SRs	SI-0039 Fatigue
Reference(s)	https://www.easa.europa.eu/document-library/general-publications/effectiveness-flight-time-limitation-ftl-report
Dependencies	SPT.0116; SPT.0117; SPT.0118
Affected stakeholders	CAT operators and aircrew
Owner	EASA SM.2 and FS.2 — Strategy & Programmes Department and Air Operations Department

PLANNING MILESTONES		
Starting date	**Interim Report**	**Final Report**
2nd assessment: 2021		2023

CHANGES SINCE LAST EDITION
SI/SR information updated

[15] https://www.easa.europa.eu/document-library/general-publications/effectiveness-flight-time-limitation-ftl-report

[16] Call for tender – Effectiveness of Flight Time Limitations – EASA.2019.HVP.11

5.2.3 Medical

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

The objectives of RMT.0287 are to solve the consistency issues, close the loopholes in the rules, as identified through the implementation experience, 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 in practice. In order to facilitate the rulemaking process and to collect implementation feedback regarding the authority requirements, RMT.0287 was split in 2 subtasks. Subtask 1, already finished, aimed to update the medical requirements included in Part-MED, and Subtask 2 aims to update the medically relevant subparts of Part-ARA and Part-ORA.

In addition, a new subtask (Subtask 2b) is added to address the numerous exemptions related to increasing the pilot age limit for a single-pilot commercial air transport operation in HEMS (helicopter emergency medical services) from 60 to 65 years. The task will explore the opportunity for raising the pilot age limit for single-pilot CAT operations in a gradual approach, starting with the HEMS. The task takes into account the EASA study on age limitations for commercial air transport pilots[17].

Status	Ongoing.
SIs/SRs	SI-0049 Flight Crew Incapacitation SR HUNG-2019-003
Reference(s)	EASA BIS 'Flight Crew Licenses', subtask 'Pilot age' EASA Study 'Age limitations for commercial air transport pilots'
Dependencies	n/a

Affected stakeholders	Pilots, holders of air operator's certificate (AOC) aeroplane and helicopter, aero-medical centres (AeMCs), aeromedical examiners (AMEs), and CAs				
Owner	EASA FS.3	Aircrew & Medical Department			
Priority	No	**RM Procedure**	See SubT/RMG	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
1 ST	RMT.0287 22/10/2012	2013-15 16/07/2013	No 09/2016 11/08/2016	2018/1974[18] 19/12/2018	2019/002/R 28/01/2019
2a ST	n/a	2017-22 21/12/2017	2023	2024	2024
2b AP	n/a	2022 Q1 (FoC[19])	2023	2024	2024

CHANGES SINCE LAST EDITION

RM Procedure updated.

[17] https://www.easa.europa.eu/sites/default/files/dfu/EASA_REP_RESEA_2017_1.pdf

[18] [3]https://eur-lex.europa.eu/legal-content/DE/TXT/?uri=CELEX:32018R1974

[19] Focused consultation.

RMT.0424 **Regular update of Part-MED of Commission Regulation (EU) No 1178/2011**

A 'standing task' allowing the Agency to table non-controversial issues identified by industry and Member States which should be corrected or clarified in Part-MED.

The objective of this RMT is to regularly address miscellaneous issues of non-controversial nature, in order to ensure that the rules 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 address non-complex and non-controversial issues raised by stakeholders.

Status	Ongoing
SIs/SRs	SI-0049 Flight Crew Incapacitation
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	Pilots, aero-medical centres (AeMCs), aeromedical examiners (AMEs), and CAs				
Owner	EASA FS.3	Aircrew & Medical Department			
Priority	Yes	**RM Procedure**	ST/RMG	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
	RMT.0424 09/10/2017	2023	2024	2025	2025

CHANGES SINCE LAST EDITION

n/a

RES.0041 **Mental health for pilots and ATCOs**

The mind is the most difficult 'system' to assess when looking at the essential needs for a pilot or an ATCO to discharge their tasks safely. Mental health conditions are very difficult to identify, especially in the case of intelligent individuals.

The research action shall assess and further detail the specific needs for the assessment of mental health conditions and develop and validate assessment methods to assess the applicability of existing methods applied in aviation.

Status	New
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	Air operators, Design organisations, competent authorities	
Owner	EASA SM.2	Strategy & Programmes Department

PLANNING MILESTONES

Starting date	Interim Report	Final Report
2021 Q3	n/a	2023 Q3

CHANGES SINCE LAST EDITION

n/a

RES.0042	**Pilot and ATCO fitness**

The research shall study three aspects of pilot and ATCO fitness:

Cardiology new treatment and diagnostic measures - new technologies have been released on the market providing improved curative or supportive treatments in terms of medication and supportive equipment; in order to have scientific evidence to amend the medical requirements and include the new developments in the current regulatory framework, a study aimed at the aviation environment is needed.

Diabetes mellitus (new solutions for pilots living with diabetes) - New diagnostic measures are being developed that allow reliable continuous blood glucose level monitoring; the research shall assess the possibility of their safe use in the aviation environment in order to alleviate the requirements for fitness in case of pilots with such pathology.

Monitoring pilot health during the active life and after retirement - The objective of the research is to evaluate if the specific risk factors are properly mitigated and what pathologies should be more closely monitored in order to ensure flight safety as well as a safe career for pilots. The research shall also evaluate the possibility of allowing pilots to be involved in CAT operations beyond their 65th birthday while maintaining at least the same level of safety.

Status	New
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	Pilots, ATCOs, competent authorities	
Owner	EASA SM.2	Strategy & Programmes Department

PLANNING MILESTONES		
Starting date	**Interim Report**	**Final Report**
2021 Q3	n/a	2024 Q3

CHANGES SINCE LAST EDITION
n/a

RES.0047	**Fitness to fly in commercial air transport operations of people living with HIV**

Assess the impact of HIV seropositivity, including the impact of the side effects of combination antiretroviral treatment, on the fitness to fly and general health and wellbeing of pilots holding a Class 1 medical certificate.

Status	New
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	Aeromedical centres, Aircraft Operators, Professional associations, CAs	
Owner	EASA SM.2	Strategy & Programmes Department

PLANNING MILESTONES		
Starting date	**Interim Report**	**Final Report**
2021 Q3	n/a	2024 Q2

CHANGES SINCE LAST EDITION
n/a

EVT.0011	**Evaluation on effectiveness of the provisions concerning support programmes, the psychological assessment of flight crew and the systematic and random testing of psychoactive substances**
	Having regard to Commission Regulation (EU) 2018/1042, amending Regulation (EU) No 965/2012, an evaluation of the effectiveness of the provisions concerning support programmes, the psychological assessment of flight crew and the systematic and random testing of psychoactive substances is envisaged to ensure the medical fitness of flight and cabin crew members. The report will be published in compliance with the regulatory deadline by August 2023.
Status	Not started
SIs/SRs	SI-0049 Flight Crew Incapacitation SI-3012 Staff support programmes
Reference(s)	n/a
Dependencies	n/a
Affected stakeholders	Air operators, pilots, CAs
Owner	EASA FS.2 Air Operations Department

EXPECTED OUTPUT

Deliverable(s)	**Timeline**
Evaluation report	2023

CHANGES SINCE LAST EDITION

n/a

5.3 Competence of personnel

Issue/rationale

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

The safety actions identified currently — related to aviation personnel — are aimed at introducing competency-based training for all licences and ratings. These actions play a role in improving safety across all aviation domains.

Rotorcraft:

EASA's Rotorcraft Safety Roadmap aims at significantly reducing the number of rotorcraft accidents and incidents and focuses on traditional/conventional rotorcraft including General Aviation (GA) rotorcraft. 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.

This chapter contains the actions in the area of training, existing and new training devices, simulators and new technologies available for training in line with EASA's Rotorcraft Safety Roadmap Training Safety work stream.

What we want to achieve

Ensure continuous improvement of all aviation personnel competence.

How we monitor improvement

Measurable improvement in aviation personnel competence at all levels (flight crew, cabin crew, maintenance staff and ATCOs).

How we want to achieve it: actions

5.3.1 General

SPT.0107	**Promotion of the full range of careers and opportunities in the European aviation industry**
	Help to address potential shortages of aviation professionals for the future European aviation system by promoting the full range of careers and opportunities that are available. 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 aero-medical examiners, instructors, flight examiners, maintenance and ground personnel. This task also supports some of the European aspects of the ICAO Next Generation of Aviation Professionals (NGAP) programme[20].
Status	Ongoing
SIs/SRs	n/a
Reference(s)	ICAO NGAP
Dependencies	n/a
Affected stakeholders	All
Owner	EASA SM.1 Safety Intelligence & Performance Department

EXPECTED OUTPUT	
Deliverable(s)	**Timeline**
Promotional web material and social media	Continuous

CHANGES SINCE LAST EDITION
n/a

5.3.2 Language proficiency (pilots and ATCOs)

Issue/rationale

EASA considers language proficiency as an important aviation safety element and joins efforts with ICAO, working together in order to streamline and harmonise language proficiency requirements (LPR) related activities, as well as to and optimise support to Member States and the industry.

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

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

— Whilst all pilots holding a CPL/an IR and an ATPL have an English LP endorsement on their licence of at least the LP level 4, experience has shown that many of the pilots seeking a job at airlines cannot pass a straightforward telephone interview and are therefore not successful in getting their first job as an airline pilot.

— GA pilot organisations claim that the language proficiency tests are too demanding and not adapted to the GA environment. Furthermore, GA organisations claim that the real advantage of the language proficiency examinations is for the language proficiency testing industry.

[20] https://www.icao.int/safety/ngap/Pages/NGAP-Programme.aspx

— Raw safety data shows only a very low number of incidents related to a lack of language proficiency, whilst a significant number of incidents are related to a lack of situational awareness because the radio communications were only in the local language.

— Pilot organisations claim that the CAs in different Member States have implemented different procedures to test language proficiency with the effect that in some countries it is easier or in other countries more difficult to obtain a language proficiency endorsement. (Some airlines have a Level 6 as a pre-entry requirement thus pushing pilots to search for an easy solution).

What we want to achieve

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

To react to the above:

— EASA intends to promote the use of the English language during pilot training for IR, CPL and ATPL.

— EASA has initiated an analysis of the raw data to ensure that not only those incidents that are directly related to language proficiency are included, but also those that show the lack of language proficiency in the chain of events.

— Through standardisation of CAs and with the feedback on performance of the technical advisory bodies, EASA has started to have a closer look at the tests that are provided in the different Member States. After a thorough analysis, EASA plans to promote selected best practices with the view to harmonising testing methods.

EASA encourages Member States through safety promotion measures to make use of ICAO Doc 9835.

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. 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 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
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	MST.0033
Affected stakeholders	Member States, ANSPs, ATCOs, training organisations, pilot licence holders and students
Owner	EASA FS.3 Aircrew & Medical Department and CAs

EXPECTED OUTPUT	
Deliverable(s)	**Timeline**
SubT 1 Guidance/good practice document	Continuous
SubT 2 Guidance/good practice document	Continuous

CHANGES SINCE LAST EDITION
n/a

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 that ATOs deliver training in English, for the purpose of harmonisation and uniform implementation. Note: EASA will collect such feedback at the opportunity of the various Standardisation activities.
Status	Ongoing
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	SPT.0105
Affected stakeholders	Member States, ANSPs, ATCOs, training organisations, pilot licence holders and students
Owner	Member States

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

CHANGES SINCE LAST EDITION
n/a

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

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

The full description for these RMTs is included in **Section 5.3.3 Flight crew**.

5.3.3 Flight crew

RMT.0190	**Requirements for relief pilots**
	Address the provisions for the use of relief pilots as regards experience, training, checking and CRM. Affected Regulations are Commission Regulation (EU)1178/2011 (Part-FCL) and (EU) No 965/2012.
Status	Ongoing.
SIs/SRs	SR FRAN-2011-010
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	Pilots, ATOs, and air operators				
Owner		EASA FS.3	Aircrew & Medical Department		
Priority	No	**RM Procedure**	ST/RMG	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
	RMT.0190 02/11/2012	2014-25 04/11/2014	2022 Q4	2023	2023

CHANGES SINCE LAST EDITION

Revision of the task description

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

The task objectives are:

— for Subtask 1 to improve the supply of competent flight instructors and extend the principles of threat and error management (TEM) in the training of the flight instructors and to all licenses and ratings; and

— for Subtask 2 to modernise and simplify the pilot licensing and training system by:

a. considering the recommendations from the ex post evaluation under EVT.0006 and the associated BIS;

b. introducing/incorporating the latest ICAO Annex 1 and associated ICAO documents on the competency-based training and assessment (CBTA) concept for the appropriate licences and ratings.

Status	Ongoing.
SIs/SRs	SI-0009 Crew resource management SI-3011 Training effectiveness and competence
Reference(s)	EASA BIS 'Flight Crew Licenses', subtask Flight instructors
Dependencies	RMT.0599

Affected stakeholders	Pilots, flight instructors, flight examiners, ATOs, DTOs, air operators				
Owner	EASA FS.3	Aircrew & Medical Department			
Priority	No	**RM Procedure**	ST/RMG	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
1	RMT.0194 28/02/2020	2022 Q1	2023	2024	2024
2	n/a	2024	2025	2026	2026

CHANGES SINCE LAST EDITION

Addition of dependencies

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

The main purpose 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 enhancing the alignment with ICAO. The task will also address three SRs and aims at including results and findings from the loss of control avoidance and recovery training (LOCART) and RMT.0581 working group results. Harmonisation with the FAA should be considered.

Subtask 1:
The main objective of Work Package 1 (WP 1) is to increase the fidelity of FSTDs by amending the CS-FSTD provisions to support the training up to the stall, as well as the new upset prevention and recovery training (UPRT) requirements as introduced in the EU regulatory framework through Regulation (EU) 2018/1974.
Subtask 2:
The main objective of Work Package 2A (WP2) is to introduce flexibility in the use of the best possible training tools including new technologies. This is done by identifying the device requirements 'FSTD capability signature' (FCS) based on analysing regulatory training task objectives, thus creating a clear link between FCL, OPS and CS-FSTD.
The main objective of Work Package 2B (WP2B) is to review the technical requirements for FSTDs to reflect their actual capability and technology advancement.
Subtask 3:
The main objective of Work Package3 (WP3) is to address any relevant and appropriate emerging issues relevant to CS-FSTD, including the feasibility for developing CS-FSTD requirements for power-lift/tilt rotor aircraft.

Status	Ongoing.
SIs/SRs	SI-0018 Clear air turbulence and mountain waves SI-0001 Icing in flight SI-0002 Icing in ground SI-3011 Training effectiveness and competence SI-0012 Wake Vortex SR AUST-2017-001; SR FRAN-2012-045; SR FRAN-2016-006; SR RUSF-2013-002; SR SPAN-2011-020.
Reference(s)	n/a
Dependencies	RMT.0188; RMT.0194; RMT.0230; RMT.0581; RMT.0599; RMT.0678

Affected stakeholders	Air operators, ATOs, DTOs, pilots, instructors, and flight examiners				
Owner	EASA FS.3	Aircrew & Medical Department			
Priority	Yes	**RM Procedure**	ST/RMG	**Harmonisation**	Yes

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
1	RMT.0196 15/07/2016	2017-13 25/07/2017	n/a	n/a	2018/006/R 03/05/2018
2A		2020-15 16/12/2020	2022 Q4	2023	2023
2B		2020-15 16/12/2020	n/a	n/a	2023
3		2024	2025	n/a	2026

CHANGES SINCE LAST EDITION

Task description udpated

RMT.0509 **Regular update of CS-FCD**

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 special conditions, 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.

This standing task does not yet have sufficient candidate issues for the next cycle

Status	Ongoing.
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	Design organisations of aircraft and other design organisations dealing with changes or supplemental type certificates to these aircraft				
Owner	EASA CT.5	Policy, Innovation & Knowledge Department			
Priority	No	**RM Procedure**	ST	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
current	RMT.0509 16/10/2019	2020-08 28/09/2020	n/a	n/a	2021 Q4
next		tbd	n/a	n/a	tbd

CHANGES SINCE LAST EDITION

n/a

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

A 'standing task' allowing the Agency to table non-controversial issues identified by industry and Member States which should be corrected or clarified in Part-FCL, ORO, ARA, and Part ORO ORO.FC.

Subtask 2:
Extraction of FCL related AMC/GM provisions to former FCL Balloon and Sailplanes requirements now moved to separate regulations. This subtask is merged with RMT.0678 and will follow the RMT.0678 subtask 2 timelines.

Subtask 3:
This part of the RMT will perform a review of the flight test rating requirements in the context of GA. It will also deal with a limited number of other non-controversial recommendations stemming for the GA and Rotorcraft Safety roadmaps in agreement with the Agency's advisory bodies priorities and EPAS.
Update of Part FCL, Part ORA, Part DTO to reflect the new regulatory provisions on the use of new technologies and engine types in pilot training.
It is also a placeholder for possible transposition of ICAO electronic pilot licencing provisions.

Subtask 4:
Regular update of Part FCL, Part ARA, Part ORA and Part DTO and AMC/GM to meet new needs and new inputs from Member States, stakeholders, safety recommendations and any other relevant topic.
The development of the ECQB for Airship will also be part of this Subtask 4.

Status	Ongoing
SIs/SRs	SI-3011 Training effectiveness and competence
Reference(s)	n/a
Dependencies	RMT.0194, RMT.0196, RMT.0599, RMT.0678

Affected stakeholders	Pilots, instructors, examiners and ATOs				
Owner	EASA FS.3	Aircrew & Medical Department			
Priority	No	**RM Procedure**	see SubT	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
1 (ST)	RMT.0587 11/05/2016	16/2016 30/11/2016	03/2017 11/05/2017	2018/1065 of 27/07/2018[21]	2018/011/R 06/11/2018
2 n/a		see RMT.0678	see RMT.0678	see RMT.0678	see RMT.0678
3(AP)		2021 Q3 (FoC[22])	2022 Q4	2023	2023
4 (ST)		n/a	n/a	n/a	2022 Q1

CHANGES SINCE LAST EDITION

n/a

[21] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32018R1065

[22] Focused consultation.

RMT.0599	**Update of Subpart FC of Part-ORO (evidence-based training)**
	A complete review of the provisions contained in ORO.FC (Annex III of Commission Regulation (EU) No 965/2012). Subtask 1: It includes the introduction of evidence-based training (EBT) and competency-based training and assessment (CBTA) in the field of recurrent training (part 1a) and other training-related implementation issues (part 1b), such as better alignment of operator and FCL helicopter training requirements. Subtask 2: It will include the extension of EBT to other parts of the operator's training (e.g. conversion course, type rating) allowing a single philosophy of training to the operator. Subtask 3: It will extend EBT to other aircraft types (e.g. helicopters, business jets) allowing a single philosophy of training across the industry. In addition, it will tackle other implementation issues on the training-related rules brought to the attention of EASA.
Status	Ongoing
SIs/SRs	SI-0009 Crew resource management SI-0019 Handling and execution of go-arounds SI-3011 Training effectiveness and competence SI-0012 Wake vortex SI-0024 Windshear SR FRAN-2009-007; SR FRAN-2013-017; SR FRAN-2013-018; SR FRAN-2013-022; SR FRAN-2013-032; SR FRAN-2013-033; SR FRAN-2013-035; SR FRAN-2013-052; SR FRAN-2014-005; SR GERF-2009-02; SR GERF-2009-025; SR IRLD-2014-003; SR SPAN-2004-030; SR SPAN-2012-066; SR FRAN-2015-062; SR SWED-2012-006; SR SWED-2011-004; SR UNKG-2006-102.
Reference(s)	n/a
Dependencies	RMT.0681, RMT.0196

Affected stakeholders	Pilots, flight instructors, flight examiners, ATOs and air operators				
Owner	EASA FS.3	Aircrew & Medical Department			
Priority	Yes	**RM Procedure**	ST/RMG	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
1a	RMT.0599 05/02/2016	2018-07 27/07/2018	08/2019 18/12/2019	2020/2036 09/12/2020[23] 2020/2193 16/12/2020[24]	2021/002/R 01/03/2021
1b		2019-08 14/06/2019	02/2021 28/05/2021	2022 Q2	2022 Q2
2		2023	2024	2025	2025
3		2024	2025	2026	2026

CHANGES SINCE LAST EDITION

Subtask 1a completed.

[23] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32020R2036

[24] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32020R2193

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

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

This task is divided into 3 subtasks:

Subtask 1:
Modular LAPL.

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

— New technologies training and certification requirements (i.e. electric propulsion);
— Certain LAPL and PPL requirements, including provisions on touring motor glider (TMG), and 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; and
— Examiner's vested interests in the context of GA.
— Review of class & type ratings requirements
— Further review of different LAPL and PPL requirements
— Language proficiency requirements for GA pilots

Status	Ongoing.
SIs/SRs	SR ITAL-2020-001
Reference(s)	n/a
Dependencies	RMT.0731, RMT.0230 (for new eVTOLs), RMT.0587, RMT.0194, RMT.0196

Affected stakeholders	Pilots, flight examiners and CAs, ATOs, DTOs				
Owner	EASA FS.3	Aircrew & Medical Department			
Priority	Yes	**RM Procedure**	see SubT[25]	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
1 (AP)	RMT.0678 01/09/2016	09/06/2017	08-2017 23/10/2017	2019/430 of 18/03/2019[26]	n/a
2 (ST)		2020-14 14/12/2020	2022 Q4	2023	2023
3 (ST)		2023	2024	2025	2025

CHANGES SINCE LAST EDITION

n/a

[25] Modular LAPL was processed through the procedure in accordance with Article 16 of the Rulemaking Procedure (accelerated procedure). For all other items, the standard rulemaking procedure will be applied.

[26] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32019R0430

SPT.0012	**Promotion of the new European provisions on pilot training**
HF/HP	The objective is to complement the new regulatory package on UPRT and EBT with relevant safety promotion material. The safety material for EBT includes support and guidance for the implementation of EBT mixed (ED decision 2015/027/R) and once the adoption of the Opinion 08/2019 is completed it will also include support and guidance for EBT baseline. Oversight guidance for the transition to mixed EBT implementation is available here: https://www.easa.europa.eu/oversight-guidance-transition-ebt-mixed-checklist
Status	Ongoing
SIs/SRs	SI-0018 Clear air turbulence and mountain waves; SI-0009 Crew resource management; SI-0012 Wake vortex; SI-0024 Windshear
Reference(s)	GASP SEI (States) - Mitigate contributing factors to LOC-I accidents and incidents ED Decision 2015/027/R and EASA Opinion 08/2019 https://www.easa.europa.eu/sites/default/files/dfu/EBT-Checklist.pdf (Version 03, Q3 2020)
Dependencies	RMT.0599
Affected stakeholders	Pilots, instructors, flight examiners, ATOs, and air operators, Member States
Owner	EASA FS.3 Aircrew & Medical Department

EXPECTED OUTPUT	
Deliverable(s)	**Timeline**
Safety promotion material	2021
Oversight guidance for the transition to mixed EBT implementation (update)	2021
EBT manual	2021 - 2023

CHANGES SINCE LAST EDITION
n/a

SPT.0110	**Standardisation of flight examiners**
	Improve harmonisation across the EASA Member States by providing support and guidance defining clear criteria and competences for examiners, depending on the different qualifications needed for different licences, and based on the needs from authorities and the industry. This is intended to strengthen the standardisation of examiners at EU level, fostering and facilitating the harmonisation of requirements, procedures and forms adopted at national level.
Status	Ongoing
SIs/SRs	SI-3011 Training effectiveness and competence
Reference(s)	Evaluation report on implementation of the Aircrew Regulation (Regulation (EU) No 1178/2011), Part FCL, Subpart K rules Examiners and evaluation on applicable rules for initial and recurrent pilot training, testing and checking.
Dependencies	SPT.0111
Affected stakeholders	CAs, Flight Examiners
Owner	EASA SM.1 Safety Intelligence & Performance Department

EXPECTED OUTPUT	
Deliverable(s)	**Timeline**
Promotional Web Material, Manuals, Guides, Standardised Forms and Checklists.	2021

CHANGES SINCE LAST EDITION
This SPT is planned to be completed in 2021.

SPT.0111 **Flight examiner manual**

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

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

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

This SPT will entail :

- developing the EASA flight examiner manual (FEM) that provides guidelines to flight examiners on the conduct of examinations with a view to improving the standardisation and fairness of examiners at EU level.
- providing recommendations to competent authorities on the usefulness of using common standardised forms and, in addition, 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 was issued by a CA other than their own.

Status	Ongoing
SIs/SRs	SI-3011 Training effectiveness and competence
Reference(s)	Evaluation report on implementation of EC Aircrew Regulation 1178/2011, Part FCL, Subpart K rules Examiners and evaluation on applicable rules for initial and recurrent pilot training, testing and checking.
Dependencies	SPT.0110

Affected stakeholders	CAs, Flight Examiners
Owner	EASA SM.1 Safety Intelligence & Performance Department

EXPECTED OUTPUT

Deliverable(s)	**Timeline**
EASA flight examiner manual	Continuous

CHANGES SINCE LAST EDITION

n/a

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 to 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.

Status	Ongoing
SIs/SRs	n/a
Reference(s)	EASA BIS 'Weather Information to Pilots (GA and Rotorcraft) EASA 'Weather Information to Pilots' Strategy Paper
Dependencies	n/a
Affected stakeholders	CAs, PPL/LAPL pilots, training organisations
Owner	Member States

EXPECTED OUTPUT	
Deliverable(s)	**Timeline**
Learning objectives, with related question bank	2022 Q4

CHANGES SINCE LAST EDITION
n/a

In addition to the above, the following RMT is relevant to competence of personnel (flight crew):

RMT.0688	**Regular update of CS-SIMD**

The full description for this action is included in **Chapter 9**.

In addition to the above, the following SPT is relevant to competence of personnel (GA):

SPT.0083	**Flight instruction**

The full description for this action is included in **Section 8.1.1**.

5.3.4 Cabin crew

RMT.0508	**Regular update of CS-CCD**

The full description for this action is included in **Chapter 9**.

5.3.5 Maintenance staff

Part-147:

At present, Part-147 excludes the use of distance learning for the purpose of basic knowledge and aircraft type training as the training locations are part of the approval. Part-66 allows the use of 'synthetic training devices', but does not define them. According to Appendix III to Part-66, 'Multimedia Based Training (MBT) methods may be used to satisfy the theoretical training element either in the classroom or in a virtual controlled environment (…)'; however, Appendix III to Part-66 does not define these methods, and no guidance exists on how to evaluate, validate and/or approve courses based on MBT methods.

What we want to achieve

Ensure continuous improvement of all aviation personnel competence.

Part-147: The introduction of the new methods and technologies will lead to a level playing field, raise the efficiency, quality and safety of maintenance training. Additionally, this way, the training provided amongst the approved maintenance training organisations will be at a similar level. Moreover, it may result in an increased number of young people choosing to engage in maintenance career, which may help to tackle the expected shortage of maintenance staff in the near future.

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

The specific objective of this task is to address some shortcomings identified on the maintenance licensing system linked to effectiveness and efficiency of the current requirements, namely:

— Type rating endorsement for the 'legacy aircraft';
— On-the-job-training (OJT);
— Deficit of practical skills for maintenance personnel; and
— Obsolescence of the Basic Knowledge syllabus.

This task will also address new training/teaching technologies for maintenance staff as relevant to Part-66, 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
SIs/SRs	SI-3011 Training effectiveness and competence
Reference(s)	n/a
Dependencies	RMT.0544

Affected stakeholders	Aircraft maintenance licence (AML) holders, approved maintenance training organisations (AMTOs), approved maintenance organisations (AMOs) and CAs				
Owner	EASA FS.1	Maintenance & Production Department			
Priority	Yes	**RM Procedure**	ST	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
	ToR RMT.0255 14/07/2014 Iss 1 14/08/2019 Iss 2	2020-12 01/12/2020	2022 Q1	2023	2023

CHANGES SINCE LAST EDITION

n/a

RMT.0541 **Regular update of aircraft type ratings for Part-66 aircraft maintenance licences**

Recurring regular update of references used for issuing type ratings in a harmonised way.

The next cycle has not yet been programmed.

Status	Ongoing.
SIs/SRs	SI-3011 Training effectiveness and competence
Reference(s)	n/a
Dependencies	RMT.0544, RMT.0731

Affected stakeholders	Aircraft maintenance licence (AML) holders, approved maintenance training organisations (AMTOs), approved maintenance organisations (AMOs) and CAs				
Owner	EASA FS.1	Maintenance & Production Department			
Priority	No	**RM Procedure**	ST	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
current	66.024 12/05/2009	2018-13 05/12/2018	n/a	n/a	2019/024/R 18/11/2019
next		tbd	n/a	n/a	tbd

CHANGES SINCE LAST EDITION

n/a

RMT.0544 **Review 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 eliminate or reduce the examination cheating and fraud/conflict of interest within Part-147 organisations; in particular, a final assessment performed by the NAA

This task will also address new training/teaching technologies for maintenance 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.
SIs/SRs	SI-3008 Knowledge development and sharing SI-3011 Training effectiveness and competence
Reference(s)	EVT.0002 - Evaluation report related to the EASA maintenance licensing system and maintenance training organisations (02/03/2018)
Dependencies	RMT.0255

Affected stakeholders		Approved maintenance training organisations (AMTOs), AML applicants and holders, and CAs			
Owner		EASA FS.1	Maintenance & Production Department		
Priority	No	**RM Procedure**	ST	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
	RMT.0544 14/08/2019	2022 Q1	2023	2024	2024

CHANGES SINCE LAST EDITION

n/a

SPT.0106	**Prevention, detection and mitigation of fraud cases in Part-147 organisations**
	EVT.0002, the report on the EU maintenance licensing and training system, denounced cases of fraud or cheating during the examinations. The action includes discussions with the CAs/industry on how to prevent, detect, mitigate and eliminate fraud cases.
Status	Ongoing
SIs/SRs	n/a
Reference(s)	EVT.0002 - Evaluation report related to the EASA maintenance licensing system and maintenance training organisations (02/03/2018)
Dependencies	MST.0035
Affected stakeholders	CAs, AMTOs
Owner	EASA FS.1 Maintenance & Production Department

EXPECTED OUTPUT

Deliverable(s)	Timeline
Leaflets, videos, web-pages and/or applications	2021

CHANGES SINCE LAST EDITION

This SPT is planned to be completed in 2021.

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
SIs/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
Affected stakeholders	CAs, AMTOs
Owner	Member States

EXPECTED OUTPUT

Deliverable(s)	Timeline
Feedback on the implementation status	Continuous

CHANGES SINCE LAST EDITION

n/a

5.3.6 Personnel involved in ATM/ANS

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

This RMT concerns the maintenance of Regulation (EU) 2015/340, which is comprehensively addressing different areas of the licencing of ATCOs. The need for enhancement and simplification of the ATCO licencing system has been identified by several EU initiatives targeting better performance and resilience, as well as the flexibility to respond to new technological developments and operational changes. In response to those needs, the planned activities are grouped in 5 Subtasks as follows:

Subtask 0:

The objective of this Subtask is an update of the training objectives in the ATCO basic and rating training syllabi in order to ensure maintenance and improvement of the harmonised initial training content by aligning it with EU regulations and ICAO provisions.

Subtask 1:
It aims at introducing 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:
Its objective is to:
- 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 air traffic controllers 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.

Subtask 3:
It aims at introducing a mechanism for the recognition of third country ATCO licences under Regulation EU 2015/340.

Subtask 4:
Its objective is to ensure the availability of a more harmonised initial training qualification output in order to handle complex and dense traffic situations, to enhance the qualification requirements for instructors and assessors and to enable the utilisation of virtual training proposals stemming from COVID-19 RNO project.

Subtask 5:
Its objective is to create a futureproof ATCO licensing scheme considering the recommendations of the Wise Persons Group on the future of the Single European Sky and the proposal for the future architecture of the European airspace, as well as corresponding SESAR deliverables.

*Instead of an NPA public consultation, the procedure in Article 15 or that in Article 16 of MB Decision No 18-2015 will be applied.
** During the Comitology process the two EASA Opinions are projected to result in a single EC proposal amending ATCO IR.

Status	Ongoing
SIs/SRs	SI-3011 Training effectiveness and competence
Reference(s)	This RMT may be affected by the recommendations stemming from the WPGR and the AAS.
Dependencies	RMT.0681

Affected stakeholders	ATM/ANS service providers; CAs, ATCO TOs; aero-medical examiners; aero-medical centres; ATCOs				
Owner	EASA ED.4	Air Traffic Department			
Priority	No	**RM Procedure**	see SubT	**Harmonisation**	No

RMT.0668 Regular update of air traffic controller licensing rules (IRs/AMC & GM) - continued

PLANNING MILESTONES					
SubT	**ToR**	**NPA***	**Opinion**	**Commission IR**	**Decision**
0 (AP)	RMT.0668 10/08/2017	02/09/2019*	n/a	n/a	2019/023/R 13/11/2019
1 (AP)		16/03/2020*	2022 Q1	2023 Q1	2023 Q1
2 (ST)		2021-08 24/06/2021	2022 Q2	2023**	2023
3 (ST)		2022 Q2	2023	2024	2024
4 (ST)		see SubT 3	see SubT 3	see SubT 3	see SubT 3
5 (ST)		2023	2024	2025	2025

CHANGES SINCE LAST EDITION

Revision of task description, Subtask 2, 4 and 5.

5.4 Aircraft tracking, rescue operations and accident investigation

Issue/rationale

The safety actions in this area are aimed at improving the location of an aircraft in distress and the availability and quality of data recorded by flight recorders.

What we want to achieve

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

How we monitor improvement

Number of investigated accidents or serious incidents in which flight data was not available.

How we want to achieve it: actions

RMT.0271	**In-flight recording for light aircraft**
	Assess the need for in-flight recording and make proportionate suggestions for categories of aircraft and types of operation covered by the air operations rules for which there is no flight recorder carriage requirement.
Status	Completed.
SIs/SRs	SR BELG-2015-001; SR FINL-2014-001; SR FRAN-2009-008; SR FRAN-2013-012; SR FRAN-2013-051 SR FRAN-2016-045; SR FRAN-2016-046; SR HUNG-2008-002; SR NETH-2012-001; SR NORW-2012-010; SR SPAN-2012-011; SR PORT-2018-003S; SR UNKG-2005-101; SR UNKG-2015-035
Reference(s)	n/a
Dependencies	n/a
Affected stakeholders	Operators (of aircraft not yet required to have flight recorders)
Owner	EASA FS.2 — Air Operations Department
Priority	No — **RM Procedure**: ST/RMG — **Harmonisation**: No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
	RMT.0271	2017-03	2019-02	2019/1387[27]	2021/005/R
	25/07/2014	03/04/2017	22/02/2019	01/08/2019	23/04/2021

CHANGES SINCE LAST EDITION

This RMT is kept for traceability. It will be removed in the final EPAS.

[27] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2019.229.01.0001.01.ENG

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

All IRs proposed in the context of activities of RMT.0400 were adopted with Commission Regulation (EU) 2015/2338; however, the AMC & GM for CAT.GEN.MPA.210 (Location of an aircraft in distress) in the rules for air operations have not yet been issued. In addition, it has been identified that amendments to certification specifications may be necessary to facilitate the implementation of CAT.GEN.MPA.210.

Subtask 1:
ED Decision 2015/021/R: this Decision modified some of the AMC and GM related to FDR and CVR serviceability (refer to CAT.GEN.MPA.195(b)). It also updated the performance specifications for two of the FDR parameters (refer to CAT.IDE.A.190), and clarified the scope of the performance specifications applicable to the CVR (refer to CAT.IDE.A.185 and CAT.IDE.H.185).

Subtask 2:
ED Decision 2015/030/R: this Decision completed the AMC and GM related to the serviceability of the CVR (refer to ORO.MLR.100 and CAT.GEN.MPA.195(b)), the preservation of the CVR recording after an accident or a serious incident (refer to CAT.GEN.MPA.195(a)), and the performance and installation of the long-range underwater locating device (see CAT.IDE.A.285(f)). It also clarified the applicability of the data link recording requirements (refer to CAT.IDE.A.195 and CAT.IDE.H.195).

Subtask 3:
ED Decision 2016/012/R: this Decision updated the AMC and GM related to the protection of the CVR in normal operation (see CAT.GEN.MPA.195(f)). It also introduced operational requirements for FDRs installed on aeroplanes and helicopters first issued with an individual CofA on or after 1 January 2023 (see CAT.IDE.A.190 and CAT.IDE.H.190). Finally, this Decision clarified the time intervals between two inspections of the FDR and CVR recordings (refer to CAT.GEN.MPA.195(b))

Subtask 4:
ED Decision 2017/023/R: this Decision provided AMC and GM for the implementing rule on aircraft tracking (CAT.GEN.MPA.205)

Subtask 5:
ED Decision 2021/008/R: this Decision provided the Certification Specifications, AMC and GM for the implementing rule on location of an aircraft in distress (CAT.GEN.MPA.210). The scope of this Decision encompasses air operations, initial airworthiness and air traffic management.

Status	Completed
SIs/SRs	SR CAND-1999-002; SR FINL-2012-003; SR FINL-2019-004; SR FRAN-2009-016; SR FRAN-2009-017; SR FRAN-2009-018; SR FRAN-2011-015; SR FRAN-2011-016; SR FRAN-2011-017; SR FRAN-2011-018; SR FRAN-2012-025; SR GREC-2006-047; SR NETH-2010-001; SR NETH-2011-015; SR UNKG-2008-020; SR UNKG-2009-091
Reference(s)	n/a
Dependencies	RMT.0499

Affected stakeholders	Aircraft operators and DOA holders				
Owner	EASA FS.2	Air Operations Department			
Priority	No	**RM Procedure**	ST	**Harmonisation**	No

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

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
1	OPS.090 26/09/2012	2013-26 20/12/2013	01/2014 06/05/2014	2015/2338 11/12/2015[28]	2015/021/R 12/10/2015
2		n/a	n/a	n/a	2015/030/R 17/12/2015
3		n/a	n/a	n/a	2016/012/R 12/09/2016
4		n/a	n/a	n/a	2017/023/R 14/12/2017
5		NPA 2020-03 19/02/2020	n/a	n/a	2021/008/R 31/05/2021

CHANGES SINCE LAST EDITION

This RMT is kept for traceability. It will be removed in the final EPAS.

RES.0013 **Quick recovery of flight recorder data**

Further to the MH370 accident and the adoption by ICAO of consequent SARPs, performance of an assessment of the feasibility for using wireless transmission solutions for timely recovery of flight recorder data – namely, flight parameters, audio and video images – in the follow-up to an accident; particular emphasis should be put on tackling prevailing open issues, such as those linked with the possible circumstances of an accident — loss of engine power, unusual aircraft attitude, aircraft complete destruction, accident in an oceanic area, the reliability and cost impact of the proposed solutions, their aptitude for usage in accident investigations as well as associated data privacy considerations.

Status	Ongoing
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	AOC holders (CAT), Aircraft OEM	
Owner	EASA SM.2	Strategy & Programmes Department

PLANNING MILESTONES

Starting date	Interim Report	Final Report
2020 Q1		2023 Q1

CHANGES SINCE LAST EDITION

n/a

[28] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32015R2338

5.5 Impact of security on safety

Issue/rationale

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

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

Managing the impact of security on safety is a strategic priority.

What we want to achieve

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

How we monitor improvement

Continuous assessment and mitigation of security threats

How we want to achieve it: actions

RMT.0720	**Management of information security risks**
	The specific objective of this task is to efficiently contribute to the protection of the aviation system from information security risks, and to make it more resilient to information security events and incidents. To achieve this objective, this Opinion proposes the introduction of provisions for the identification and management of information security risks which could affect information and communication technology systems and data used for civil aviation purposes, detecting information security events, identifying those which are considered information security incidents, and responding to, and recovering from, those information security incidents to a level commensurate with their impact on aviation safety. This RMT has been coordinated with the FAA and the TCCA.
Status	Ongoing
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	RMT.0251
Affected stakeholders	DOA holders and POA holders, Part-ORO air operators, aero-medical centres; operators of flight simulation training devices (FSTDs), U-space service providers and single common information service providers, apron management service providers, AOC holders (CAT), maintenance organisations, CAMOs, training organisations, ATM/ANS providers, aerodromes and Member States
Owner	EASA SM.1 Safety Intelligence & Performance Department
Priority Yes	**RM Procedure** ST **Harmonisation** No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
	RMT.0720 16/01/2019	NPA 2019-07 27/05/2019	03/2021 11/06/2021	2022 Q3	2022 Q3

CHANGES SINCE LAST EDITION

Task description and affected stakeholders updated

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

In response to the downing of Malaysian Airlines Flight 17 on 17 July 2014, there was a general consensus within the international community that improvements could be made in the way aviation stakeholders and States share information on risks arising from conflict zones.

As a consequence, the European Union has developed an airspace information alert system, the so-called 'Alerting System for Risks to civil aviation arising from Conflict Zones' in order to achieve more consistency in the advice offered to airlines and to protect the interest of EU citizens travelling inside and outside Europe. The EU Conflict Zone Alerting System has been now active since early 2016.
The more recent tragic incident with the downing the Ukraine International Airlines Flight 752 on 8 January 2020 demonstrated again the importance of information sharing and moreover risk assessments.

In this spirit, in close consultation with the European Commission, EASA envisages to establish a European Information Sharing and Cooperation Platform on Conflict Zones, the so-called Platform, the purpose of which includes the support to the existing EU Conflict Zone Alerting System and particularly the Integrated EU Aviation Security Risk Assessment Group in order to improve the availability and swiftness of relevant information exchange.

Status	Ongoing
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	ALL	
Owner	EASA SM.1	Safety Intelligence & Performance Department

EXPECTED OUTPUT

Deliverable(s)	**Timeline**
Information to Member States, Cooperation Platform	Continuous

CHANGES SINCE LAST EDITION

n/a

MST.0040 **Safety and security reporting**

Without prejudice to the obligations stemming from Regulation (EU) 376/2014, Member States' CAs should align their security reporting mechanisms with existing aviation safety reporting systems, in order to allow for an integrated approach to the management of related risks.

Status	New
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	RMT.0720

Affected stakeholders	All
Owner	Member States

EXPECTED OUTPUT

Deliverable(s)	**Timeline**
Reporting systems aligned	2022/2023

CHANGES SINCE LAST EDITION

n/a

RES.0012	**Cybersecurity: common aeronautical vulnerabilities database**

Develop a vulnerabilities database in order to collect, maintain and disseminate information about discovered vulnerabilities targeting major transport information systems. The project would include the identification of the type of information that this database would contain, how this database could be populated and how we can take advantage of the database in order to obtain an accurate landscape of cybersecurity risks. It should also include a 'prototype phase' with some initial population.

Status	Not started
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	ALL	
Owner	EASA SM.2	Strategy & Programmes Department

PLANNING MILESTONES		
Starting date	**Interim Report**	**Final Report**
2022 Q1 (tentative)	n/a	2024 Q1

CHANGES SINCE LAST EDITION
n/a

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 the required changes to aviation standards.

Status	Ongoing
SIs/SRs	n/a
Reference(s)	Aviation resilience to threats to GNSS - DG DEFIS — Defence Industry and Space call for tender (cf. tender notice[29])
Dependencies	n/a

Affected stakeholders	Pilots, aircraft operators, CAs, ANSPs, industry (e.g. avionics and ATM systems manufacturers)	
Owner	EASA SM.2	Strategy & Programmes Department

PLANNING MILESTONES		
Starting date	**Interim Report**	**Final Report**
2021 Q2	2022 Q4	2024 Q2

CHANGES SINCE LAST EDITION
Update of task title, description and references

[29] https://ted.europa.eu/udl?uri=TED:NOTICE:369183-2020:TEXT:EN:HTML

RES.0048 **Impact of security requirements on operational safety and performance**

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

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

Status	New
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	Air operators, Design organisations, Aviation Authorities		
Owner	EASA SM.2	Strategy & Programmes Department	

PLANNING MILESTONES

Starting date	Interim Report	Final Report
2021 Q4	n/a	2023 Q1

CHANGES SINCE LAST EDITION

n/a

5.6 Standardisation

The safety actions in this area are aimed at addressing issues emerging from standardisation activities, with focus on the safety oversight responsibilities of the Member States. The conclusions of the EASA 2019 SAR are also taken into account.

Issue/rationale

Authority requirements, introduced in the rules developed under the first and second extension of the EASA 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 with a consideration to efficiency.

The below elements are considered enablers of a robust safety oversight system, as they are expected to be in place according to the requirements in force:

1. ability and determination to conduct effective oversight[30];
2. ability to identify risks through a process to collect and analyse data;
3. ability to mitigate the identified risks in an effective way, implying measurement of performance and leading to continuous improvement;
4. willingness and possibility to exchange information and cooperate with other CAs;
5. ability to ensure the availability of adequate personnel, where 'adequate' includes the notion of sufficient training and proper qualification; and
6. focus on the implementation of effective management systems in industry, wherever required by the regulations in force.

What we want to achieve

A robust oversight system across Europe, where each CA is able to properly discharge its oversight responsibilities, with particular focus on management of safety risks, exchange of information and cooperation with other CAs. To that end, implementation of management systems in all organisations, as well as ensuring the availability of adequate personnel in CAs are essential enablers.

How we monitor improvement

The elements above are constantly monitored during the Standardisation activities conducted by the Agency. In addition, a number of indicators have been developed to measure the progress over time of point 6. above.

Volume I Section 4.1 proposes to monitor Member States' oversight capabilities and the status of compliance with management system (SMS) requirements in aviation organisations respectively.

How we want to achieve it: actions

[30] 'Oversight' means the verification, by or on behalf of the CA, on a continuous basis that the requirements of this Regulation and of the delegated and implementing acts adopted on the basis thereof, on the basis of which a certificate has been issued or in respect of which a declaration has been made, continue to be complied with (Basic Regulation, Article 3).

MST.0032	**Oversight capabilities/focus areas**

(a) Availability of adequate personnel in CAs

Member States shall ensure that adequate personnel is 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 CAs in the practical implementation of cooperative oversight, e.g. benefitting from the outcome of the trial projects conducted between the United Kingdom, Norway, France, 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 CAs 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. This should lead CAs to adapt and improve their oversight system.

Status	Ongoing. This MST is expected to completed by 2021Q4.
SIs/SRs	SI-3003 Human Factors competence for regulatory staff SI-3004 Integration of practical HF/HP into the organisation's management system SI-3011 Training effectiveness and competence
Reference(s)	ICAO Annex 19 and GASP 2020-2022 Goal 2 'Strengthen States' safety oversight capabilities' GASP SEI-4 & GASP SEI-10 — Strategic allocation of resources to enable effective safety oversight GASP SEI-5 — Qualified technical personnel to support effective safety oversight GASP SEI-6 — Strategic collaboration with key aviation stakeholders to enhance safety in a coordinated manner
Dependencies	n/a
Affected stakeholders	ALL
Owner	Member States

EXPECTED OUTPUT	
Deliverable(s)	**Timeline**
SPAS established	2021Q4

CHANGES SINCE LAST EDITION
n/a

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 for this action is included in **Chapter 10**.

5.7 Miscellaneous

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 Commission and the national competent authorities, to establish and manage a repository of information necessary to ensure effective cooperation between EASA and the national competent authorities 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 MAB. The Task Force will focus on specifications per domain, the global architecture and the governance of the future platform.

Status	Ongoing
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	Member States, European Commission, Safety Investigation Authorities				
Owner	EASA SM	Strategy & Safety Management Directorate			
Priority	No	**RM Procedure**	AP	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
	RMT.0732 20/04/2020	2022 Q3	2023	2023	2024

CHANGES SINCE LAST EDITION

n/a

6. Flight operations — aeroplanes

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

6.1 CAT & NCC operations

The operational domain CAT and NCC by aeroplane remains the greatest focus of the EASA safety activities. For CAT by large aeroplane and NCC, sufficient safety and exposure data is available in these domains to enable the definition of specific safety performance metrics (see Volume I **Section 4.2**).

6.1.1 Safety

This section includes a significant number of EPAS actions and therefore it is further subdivided into group actions per key risk area (KRA – see **Sections 6.1.1.1** to **6.1.1.5**) for which mitigation actions are included in the current EPAS. **Section 6.1.1.6** includes the safety actions that do not relate to any of the KRAs in particular.

The top three KRAs identified in the ASR 2021 for CAT and NCC operations with aeroplanes are listed below (refer to ASR 2021 Figure 24 and Table 7)**.**

CAT & NCC operations by aeroplane		
KRA 1	KRA 2	KRA 3
Airborne collision	Runway excursions	Aircraft upset

6.1.1.1 Aircraft upset in flight

Issue/rationale

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

Aircraft upset or loss of control is the key risk area ranking highest with regard to its cumulative risk score (see ASR 2021) related to fatal accidents in CAT and NCC operations with aeroplanes. It includes all occurrences involving actual or potential airborne collisions between aircraft, while both aircraft are airborne, and between aircraft and other airborne objects (excluding birds and wildlife). In 2020 the highest risk contributors were occurrences with loss of separation whilst performing a missed approach due to windshear encounter and several TCAS resolution advisories cases.

What we want to achieve

Increase safety by continuously assessing and improving risk controls to mitigate the risk of loss of control.

How we monitor improvement

Continuous monitoring of safety issues identified in the data portfolio and related SRP for CAT and NCC operations with aeroplanes (see ASR 2021 Table 7).

How we want to achieve it: actions

SPT.0109	**Raise of awareness of the risk posed by icing in-flight and potential mitigations**
	Help to mitigate the risk of accidents and other occurrences due to icing in-flight by raising awareness of this safety issue. This should include information on the situations where icing in-flight may occur and how flight crew can recognise some of the factors that might lead to accidents. Information should also be provided on the measures that operators and flight crew specifically can take to mitigate the risk of an accident occurring. Additional promotion and collaboration to establish the feasibility of forecasting 'Supercooled large drop and Ice Crystal'. An article on "Icing in Flight" was published on 11/12/2020 and can be consulted via that link: https://www.easa.europa.eu/community/topics/icing-flight Social media activity as follow up action is planned for 2021.
Status	Completed.
SIs/SRs	SI-0001 Icing in Flight
Reference(s)	GASP SEIs (industry) – Mitigate contributing factors to LOC-I accidents and incidents EASA BIS 'Weather Information to Pilots (CAT-FW)'.
Dependencies	n/a
Affected stakeholders	Aircraft operators, pilots, groundhandling service providers
Owner	EASA SM.1 Safety Intelligence & Performance Department

EXPECTED OUTPUT	
Deliverable(s)	**Timeline**
Safety Promotion Material	2021

CHANGES SINCE LAST EDITION
This SPT is kept for traceability. It will be removed in the final EPAS.

In addition, the below actions are also directly relevant for this key risk area:

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

The full description for these actions is included in **Chapter 9**.

6.1.1.2 Runway safety

Issue/rationale

This section deals with runway excursions, runway incursions and runway collisions, and is a strategic priority.

Runway excursion aeroplane includes all occurrences involving actual or potential situations, when an aircraft leaves the runway or movement area of an aerodrome or landing surface of any other predesignated landing area, without getting airborne. Runway excursion is the key risk area ranking second highest with regard to its cumulative risk score (see ASR 2021) related to fatal accidents in CAT and NCC operations with aeroplanes. In 2020 the highest risk contributors were occurrences with delayed rotation due to take-off incorrect centre of gravity and actual runway excursions.

Collision on runway covers collisions between an aircraft and another object (other aircraft, vehicles, etc.) or person that occur on a runway of an aerodrome or other predesignated landing area; it does not include collisions with birds or wildlife. Collision on runway is the key risk area ranking fourth with regard to its cumulative risk score (see ASR 2021) related to fatal accidents in CAT and NCC operations with aeroplanes.

What we want to achieve

Increase safety by continuously assessing and improving risk controls to mitigate the risk of REs and RIs.

How we monitor improvement

Continuous monitoring of safety issues identified in the CAT Aeroplanes, Aerodromes and Groundhandling as well as the ATM and ANS data portfolios (see ASR 2021 Tables 7, 33 and Table 36 respectively) and related SRPs in Volume III.

How we want to achieve it: actions

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

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

Status	Completed
SIs/SRs	SI-0002 Icing in ground SI-0006 Runway Surface Condition SR NORW-2011-011; SR SWED-2017-005; SR UNKG-2008-076.
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	Aeroplane Operators, POA holders, CAs				
Owner	EASA FS.2	Air Operations Department			
Priority	Yes	**RM Procedure**	ST/RMG	**Harmonisation**	Yes

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
	RMT.0296 (OPS.008(A)) 09/06/2015	2016-11 30/09/2016	2019-02 22/02/2019	2019/1387 01/08/2019[31]	2021/005/R 23/04/2021

CHANGES SINCE LAST EDITION

This RMT is kept for traceability. It will be removed in the final EPAS.

In addition, the below actions are also directly relevant for this key risk area:

RMT.0722	**Provision of aeronautical data by the aerodrome operator**
MST.0029	**Implementation of SESAR runway safety solutions**

The full description for these actions is included in **Chapter 12**.

[31] https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019R1387

6.1.1.3 Airborne collision (mid-air collisions)

Issue/rationale

Airborne collision includes all occurrences involving actual or potential airborne collisions between aircraft, while both aircraft are airborne, and between aircraft and other airborne objects (excluding birds and wildlife). . This also includes all separation-related occurrences caused by either air traffic control or cockpit crew, AIRPROX reports and genuine ACAS alerts. It does not include false ACAS alerts caused by equipment malfunctions, or loss of separation with at least one aircraft on the ground, which may be coded as ground damage if the occurrence meets the criteria and usage notes for those categories. Although there have been no CAT aeroplane airborne collision accidents in recent years within the EASA Member States, this key risk area has been raised by a number of Member States through the NoAs and also by some airlines, specifically in the context of the collision risk posed by aircraft without transponders in uncontrolled airspace. Airborne collision is the key risk area ranking highest with regard to its cumulative risk score (see ASR 2021) related to fatal accidents in CAT aeroplane and NCC operations. In 2020 the highest risk contributors were occurrences with loss of separation whilst performing a missed approach due to windshear encounter and several TCAS resolution advisories cases

What we want to achieve

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

How we monitor improvement

Continuous monitoring of safety issues identified in the data portfolio for CAT by aeroplane & NCC (see ASR 2021 Table 7).

How we want to achieve it: actions

SPT.0123	**Airborne Collision Avoidance System (ACAS) resolution advisories not followed by pilots**

Help to mitigate the risk of mid-air collision by providing safety promotion material and clear messages to pilots on the need to follow the instructions of the ACAS in high risk situations. This material will include posters, articles and a video to be developed in conjunction with Skybrary.

Status	New
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	All	
Owner	EASA SM.1	Safety Intelligence & Performance Department

EXPECTED OUTPUT

Deliverable(s)	**Timeline**
Safety Promotion material	2022

CHANGES SINCE LAST EDITION

n/a

MST.0024 **Loss of separation between civil and military aircraft**

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

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

Following discussions with the SM TeB in September 2020 difficulties were reported with the implementation of the related actions. Accordingly, this MST is proposed to be deleted.

This considers that High Seas airspace is not territorial airspace, hence national legislation does not apply. Also, ICAO SARPs apply to civil aircraft over the High Seas only, but not to State aircraft in military services or other State aircraft. States must have due regard for the safety of civil aircraft and must have established respective regulations for national State aircraft. Finally, the notion of 'loss of separation' is not adequate with regard to military aircraft

Status	Deleted
SIs/SRs	n/a
Reference(s)	ICAO Circular 330, which is expected to be replaced by ICAO Doc 10088 'Manual on Civil/Military Cooperation in Air Traffic Management'
Dependencies	MST.0001

Affected stakeholders	CAT
Owner	Member States

EXPECTED OUTPUT

Deliverable(s)	**Timeline**
Report	2021

CHANGES SINCE LAST EDITION

This MST is proposed to be deleted. It is included in this draft EPAS for traceability.

MST.0030	**Implementation of SESAR solutions aiming to reduce the risk of mid-air collision en-route and in terminal manoeuvring areas**
HF/HP	Member States should evaluate together with the ANSPs that are delegated to provide services in their airspace, the needs for implementing SESAR solutions related to enhanced Short Term Conflict Alerts (STCA)/enhanced safety nets[32] such as solutions #60 & #69. These SESAR solutions, designed to improve safety, should be implemented as far as it is feasible.
Status	Ongoing. This MST is expected to be completed in 2021Q4.
SIs/SRs	n/a
Reference(s)	ATM Master Plan Level 3 – Plan (2019): ATC02.9 – Enhanced STCA for TMAs
Dependencies	n/a
Affected stakeholders	ANSP
Owner	Member States

EXPECTED OUTPUT	
Deliverable(s)	**Timeline**
SPAS established	2021Q4

CHANGES SINCE LAST EDITION
n/a

6.1.1.4 Terrain collision

Issue/rationale

This risk area includes occurrence where an airborne aircraft collides with terrain, without indication that the flight crew was unable to control the aircraft. It includes instances when the flight crew is affected by visual illusions or degraded visual environment. It includes collision with water, flat terrain and elevated terrain.

What we want to achieve

Increase safety by continuously assessing and improving risk controls to mitigate the risk of controlled flight into terrain (CFIT).

How we monitor improvement

Continuous monitoring of safety issues identified in the data portfolio and related SRP for CAT aeroplanes & NCC (see ASR 2021 Table 7).

How we want to achieve it: actions

Following completion of the actions included under this section in EPAS 2018-2022, no further actions are included in this EPAS edition.

The section is maintained as a placeholder for future actions.

[32] More details about the related research projects can be found in https://www.atmmasterplan.eu/data/sesar_solutions.

6.1.1.5 Fire, smoke and pressurisation

Issue/rationale

This includes cases of fire, smoke, fumes or pressurisation situations that may become incompatible with human life. It includes occurrences involving fire, smoke or fumes affecting any part of an aircraft, in flight or on the ground, which is not the result of impact or malicious acts and covers fire/explosion (load/pax), fire/explosion (technical), as well as pressurasation, conditioning and contamination occurrences.

Uncontrolled fire on board an aircraft, especially when in flight, represents one of the most severe hazards in aviation. Aircraft depressurisations and post-crash fire are also addressed in this section, which looks at situations where the internal environment of the aircraft may become hazardous or even unsurvivable.

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

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

The issue of cabin air quality (CAQ) on board commercial aircraft is the subject of several investigations and research projects worldwide regarding the health and safety implications for crews and passengers.

Although representing a small proportion of CAQ events, contaminations by oil or aircraft fluids and their by-products are those that raise the utmost concerns. For this reason, the EC (DG MOVE) and EASA have launched a dedicated research project focusing on oil-related contamination. Other types of events, such as smell in cabin, are beyond the scope of such research.

What we want to achieve

Increase safety by continuously assessing and improving risk controls to mitigate the risk of fire, smoke and fumes.

How we monitor improvement

Continuous monitoring of safety issues identified in the data portfolio and related safety risk portfolio for CAT by aeroplane & NCC (see ASR 2021 Table 7).

How we want to achieve it: actions

RES.0003	**Research study on cabin and cockpit air quality**
	Investigation of cabin air contamination events induced by engine oil entering the bleed air system and their health implication. The work aims at demonstrating, on the basis of a sound scientific process, whether potential health implications may result from the quality of the air on board commercially operated large transport aeroplanes.
Status	Completed.
SIs/SRs	n/a
Reference(s)	https://www.facts.aero/
Dependencies	n/a
Affected stakeholders	CAT
Owner	EASA SM.2 and CT — Strategy & Programmes Department, Certification Directorate

PLANNING MILESTONES

Starting date	Interim Report	Final Report
2017	n/a	2021

CHANGES SINCE LAST EDITION

This task is kept for traceability. It will be removed in the final EPAS.

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 the checked-in luggage; this encompasses theoretical and experimental work to deepen the knowledge related to the inception and propagation of PED-originated fires as well as devising efficient and cost-effective means for their detection and suppression.

Status	Ongoing
SIs/SRs	SI-0027 Carriage and transport of lithium batteries
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	CAT	
Owner	EASA SM.2	Strategy & Programmes Department

PLANNING MILESTONES		
Starting date	**Interim Report**	**Final Report**
2020	n/a	2022

CHANGES SINCE LAST EDITION
n/a

RES.0030	**Cabin air quality – Chronic exposure to contamination events**
	Investigation of the potential health risks that might evolve from long-term exposure — notably for cockpit and cabin crews — to low-dose cabin air contamination events and their possible mitigations; 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
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	CAT operators and aircrew	
Owner	EASA SM.2 and CT	Strategy & Programmes Department Certification Directorate

PLANNING MILESTONES		
Starting date	**Interim Report**	**Final Report**
2021	n/a	2024

CHANGES SINCE LAST EDITION
n/a

RES.0044 **PED Fire risks when transported in aircraft cabin**

Identify the hazards related to the carriage of lithium batteries and PEDs by passengers in the aircraft cabin

Identify, determine and assess through a series of fire tests the safety risks posed by lithium batteries and PEDs transported in the cabin (differentiating them, where needed), clearly separating in the study the types of batteries (including and specifically addressing power banks) from PEDs. As part of this assessment, particularly study the risk of smoke penetration in the cockpit.

Assess and consider the risks of undeclared items brought on board by passengers (including e.g. fake marking in powerbanks)

Status	New
SIs/SRs	SI-0027 Carriage and transport of lithium batteries
Reference(s)	n/a
Dependencies	n/a
Affected stakeholders	Aircraft Operators, CAs, Accident Investigation Boards
Owner	EASA SM.2 Strategy & Programmes Department

PLANNING MILESTONES

Starting date	Interim Report	Final Report
2021 Q3	n/a	2023 Q4

CHANGES SINCE LAST EDITION

n/a

6.1.1.6 Miscellaneous

Issue/rationale

This section gathers the actions that do not relate to any of the KRAs listed **in Section 6.1.1.1 to 6.1.1.5.** They may involve different types of actions in the domain CAT by aeroplane & NCC operations. The need for having such a category was driven by the constant development of EPAS towards new safety areas. For example, standardisation in the OPS domain will continue to focus on the effective implementation of operators' flight time specifications schemes, particularly those including provisions subject to fatigue risk management. A dedicated MST action (MST.0034) has been included, following discussions with and agreement by the Air Ops TeB. Another example is the promotion of flight data monitoring, an essential component of the SMS for CAT aeroplane operators and CAT offshore helicopter operators. Several dedicated actions aim at enhancing the implementation of flight data monitoring.

What we want to achieve

To increase safety with a combination of actions that address more than one issue.

How we monitor improvement

The EASA ABs regularly provide feedback on the effectiveness of the activities.

How we want to achieve it: actions

SPT.0101	**Development of new safety promotion material on high-profile safety issues for commercial flight operations**
	Develop new safety promotion material on high-profile safety issues for commercial flight operations. 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
SIs/SRs	SI-0042 Emergency evacuation SI-0015 Entry of aircraft performance data
Reference(s)	n/a
Dependencies	n/a
Affected stakeholders	CAT
Owner	EASA SM.1 Safety Intelligence & Performance Department

EXPECTED OUTPUT	
Deliverable(s)	**Timeline**
Leaflets, videos, web pages and/or applications	Continuous

CHANGES SINCE LAST EDITION
n/a

SPT.0112	**Flight data monitoring (FDM) precursors of operational safety risks**
	Ensure the alignment of EOFDM precursors with the needs of operators and the evolution of the safety risks for large aircraft.
Status	Ongoing
SIs/SRs	n/a
Reference(s)	GASP SEIs (industry) – Mitigate contributing factors to CFIT, LOC-I, MAC, RE, and RI accidents and incidents
Dependencies	SPT.0113, MST.0003, EVT.0009 (completed)
Affected stakeholders	AOC holders (CAT) Aeroplanes
Owner	EOFDM EASA SM.1 Safety Intelligence & Performance Department

EXPECTED OUTPUT	
Deliverable(s)	**Timeline**
EOFDM precursors document updated	2022

CHANGES SINCE LAST EDITION
n/a

SPT.0113	**Flight data monitoring (FDM) analysis techniques**
	Produce good-practice documentation for operators on techniques to implement FDM events and measurements and to tailor FDM results for use by the SMS.
Status	Ongoing
SIs/SRs	n/a
Reference(s)	GASP SEIs (industry) – Mitigate contributing factors to CFIT, LOC-I, MAC, RE, and RI accidents and incidents
Dependencies	SPT.0112, EVT.0009 (completed)
Affected stakeholders	AOC holders (CAT) Aeroplanes
Owner	EOFDM EASA SM.1 Safety Intelligence & Performance Department

EXPECTED OUTPUT

Deliverable(s)	Timeline
Good-practice document	2021

CHANGES SINCE LAST EDITION

This SPT is planned to be completed in 2021.It will be removed in the final EPAS

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

a) Making the professionals concerned aware of the European operators FDM forum (EOFDM)
Member States shall publish on their website, as part of SMS-related information, general information on EOFDM activities.
Member States should organise an information event to present EOFDM good-practice documents to their CAT operators. Safety managers and FDM programme managers of all the operators concerned should be invited.

b) Promoting FDM good practice
Member States that have 10 or more operators running an FDM programme, should organise a workshop dedicated to EOFDM good-practice documents with the FDM specialists at these operators.

Status	Ongoing
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	EVT.0009 (completed)
Affected stakeholders	AOC holders (CAT)
Owner	Member States

EXPECTED OUTPUT

Deliverable(s)	Timeline
Information on EOFDM published in the SMS section of MS website	2021
Report of the information event	2021
Detailed report of the workshop	2022 Q2

CHANGES SINCE LAST EDITION

n/a

MST.0019	**Better understanding of operators' governance structure**

Member States' CAs should foster a thorough understanding of operators' governance structure. This should in particular apply in the area of group operations[33].

Aspects to be considered include:
- extensive use of outsourcing,
- the influence of financial stakeholders, and
- controlling management personnel, where such personnel are located outside the scope of approval.

Note: The Agency will support this MST by providing guidance on how to effectively oversee group operations based on an overall concept for the oversight of such operations. This will consider work ongoing at ICAO level (cross-border operations) and include continuing airworthiness management aspects. The timeline is amended accordingly.

Status	Ongoing
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	n/a
Affected stakeholders	AOC holders (CAT)
Owner	Member States

EXPECTED OUTPUT	
Deliverable(s)	**Timeline**
Guidance material	2021 Q4 / 2022 Q1

CHANGES SINCE LAST EDITION

n/a

[33] 'Group operations' refers to operations performed by a group of aircraft operators sharing the same management system or belonging to the same 'mother company'.

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

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

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

Status	Ongoing
SIs/SRs	SI-0039 Fatigue
Reference(s)	GASP SEI-5 — Qualified technical personnel to support effective safety oversight
Dependencies	n/a
Affected stakeholders	AOC holders (CAT)
Owner	Member States

EXPECTED OUTPUT

Deliverable(s)	Timeline
Report on actions implemented to foster capabilities	2022/2023

CHANGES SINCE LAST EDITION

Task description reviewed. Timeline reviewed to account for the impact of COVID-19.

EVT.0013	**Evaluation of the rules for commercial small aeroplane operations under Part-CAT and Part-SPO**
	Based on a request from the stakeholders through the EASA candidate issue register, an evaluation task on analysing the proportionality of the rules for commercial small aeroplane operations under Part-CAT and Part-SPO is proposed. The task is expected to analyse the relevance in terms of proportionality of the rules for small aeroplane operators and any administrative burden and inefficiencies they cause.
Status	Ongoing
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	EVT.0010 Evaluation on helicopter operations (completed)
Affected stakeholders	Commercial and specialised operators in EASA MS, operating non-complex aeroplanes (e.g. below 5.7 MTOW)
Owner	EASA FS.2 Air Operations Department

EXPECTED OUTPUT

Deliverable(s)	**Timeline**
Evaluation report	2024

CHANGES SINCE LAST EDITION

n/a

In addition to the above, the following actions are relevant for CAT by aeroplane & NCC operations safety:

RMT.0586	**Tyre pressure monitoring system**

The full description for these actions is included in **Chapter 9**.

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

The full description for these actions is included in **Chapter 5.1**.

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

Refer to **Chapter 11.1** for the detailed action description.

RMT.0379	**All-weather operations**

Refer to **Section 15.1.4** for the detailed action description.

6.1.2 Level playing field

Issue/rationale

Rules may need to be harmonised within the EU as well as with the main international trade partners in order to either ensure fair competition or facilitate the free movement of goods, persons and services.

What we want to achieve

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

How we monitor improvement

The EASA ABs regularly provide feedback on the effectiveness of the activities.

How we want to achieve it: actions

RMT.0573	**Fuel/energy planning and management**
	Review and update the EU fuel rules, taking into account ICAO amendments and a related SRs, and providing for operational flexibility. The RMT will also address a first set of OPS electric and hybrid propulsion-related requirements for other-than-complex motor-powered aircraft types that are not covered by RMT.0230.
Status	Ongoing
SIs/SRs	SI-0025 Fuel management SR FRAN-2012-026; SR SPAN-2017-005
Reference(s)	n/a
Dependencies	RMT.0731; RMT.0230; SPT.0097

Affected stakeholders	AOC holders				
Owner	EASA FS.2	Air Operations Department			
Priority	No	**RM Procedure**	ST/RMG	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
	RMT.0573 27/04/2015	2016-06 15/07/2016	02/2020 08/10/2020	2022 Q1	2022 Q1

CHANGES SINCE LAST EDITION

n/a

RMT.0695	**Non-ETOPS operations using performance class A aeroplanes with an MOPSC of 19 or less**
	The objective is to accommodate new business-jet aeroplanes operated by European CAT operators in the 180' non-ETOPS category.
Status	Completed
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	DOA holders, AOC holders (CAT)				
Owner	EASA FS.2	Air Operations Department			
Priority	No	**RM Procedure**	ST/RMG	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
	RMT.0695 15/12/2015	2017-15 25/09/2017	2019-02 22/02/2019	2019/1387 01/08/2019	2021/005/R 2021/006/R 23/04/2021

CHANGES SINCE LAST EDITION

This RMT is kept for traceability. It will be removed in the final EPAS.

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 with relevant safety promotion material.

The three main tasks are:

- EASA fuel scheme manual
- Workshop and events
- Safety promotion leaflets, website, video

Status	Ongoing
SIs/SRs	SI-0025 Fuel management
Reference(s)	n/a
Dependencies	RMT.0573

Affected stakeholders	AOC holders	
Owner	EASA SM.1	Safety Intelligence & Performance Department

EXPECTED OUTPUT

Deliverable(s)	**Timeline**
Safety Promotion material	2021-2022

CHANGES SINCE LAST EDITION

n/a

6.1.3 Efficiency/proportionality

Issue/rationale

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

The EASA ABs and the CAT CAG regularly provide feedback on the effectiveness of the activities.

How we want to achieve it: actions

RMT.0392	**Regular update of air operation rules**

Necessary update reflecting technological and market developments, incorporating lessons learned from OPS standardisation inspections and transposition of the latest amendments to ICAO Annex 6 Parts I, II and III.

This RMT includes the following topics developed in the first work package:

- Operational requirements for flights related to design and production ('manufacturer flights') **(former RMT.0348)**.
- Extended diversion time operations (EDTO) **(former RMT.0577)**. This subtask will consider alignment with the ICAO SARPs related to EDTO and modernise the EASA ETOPS rules.
- Transposition of the ICAO standards related to the training of operations control personnel (flight operations officers/flight dispatchers).
- Review of some helicopter rules in Part-SPA and other Subparts in various Annexes of Reg. (EU) No 965/2012.
- Review of the authority requirements based on feedback from standardisation inspections.

Further work will address operations and equipment for high-performance aeroplanes (HPA) **(former RMT.0414)**, review of standard passenger weights **(former RMT.0312)** based on a survey to be commissioned by EASA, transposition of new ICAO Annex 6 standards addressing flight recorders, and group operations.

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

Status	Ongoing.
SIs/SRs	SR FRAN-2009-021; SR UNKG-2020-001; SR AAIB 2020-007
Reference(s)	SL AN 11/1.3.25-12/10 (EASA reference: SL 010/2012) issued by ICAO on 4 April 2012. 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 III.
Dependencies	RMT.0230; RMT.0492; RMT.0573; RMT.0599; RMT.0643; RMT.0728; RMT.0731 and RMTs related to other regular updates in various domains (e.g. RMT.0673 'Regular update of CS-25'). The new rules on EDTO (replacing the ETOPS terminology) and those related to aircraft with electrical propulsion may have a future impact on the theoretical knowledge of pilots.

Affected stakeholders	All aircraft operators; DOA and POA holders; and CAs				
Owner	EASA FS.2		Air Operations Department		
Priority	No	**RM Procedure**	ST	**Harmonisation**	Yes

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
current	RMT.0392 07/10/2020	2022 Q1	2023	2024	2024

CHANGES SINCE LAST EDITION

n/a

RMT.0736	**Regular update of the Third-Country Operator regulation**

The task is based on the results of the Evaluation of the Third-Country Operation Regulation (EVT.008) finalised in 2020. The evaluation recommends initiating a regular update of Commission Regulation (EU) No 452/2014 to foster the risk-based approach in the processing and assessing of the compliance of third-country operators and hence improving the efficiency of EASA as a responsible authority for the implementation of the Regulation. The task will deal with cleaning, clarifying and removing inconsistencies and enhance the interrelationship with the EU Air Safety List both for the hard and soft laws.

Status	Ongoing
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	EVT.0008 (completed)

Affected stakeholders	Third-country operators				
Owner	EASA FS.2		Air Operations Department		
Priority	No	**RM Procedure**	AP	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
current	2021 Q2	2022 Q1 (FoC[34])	2022 Q3	2023	2023

CHANGES SINCE LAST EDITION

n/a

In addition to the above, the following action is relevant to efficiency/proportionality in CAT by aeroplane & NCC operations:

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

The full description for this action is included in **Chapter 9**.

[34] Focused consultation.

6.2 Specialised operations (SPO)

NB: For SPO helicopters, please refer to **Chapter 7**.

Issue/rationale

Operators other than CAT or NCC, e.g. conducting aeroplane SPO either under Part-SPO[35] or Part-NCO[36], make an important contribution to the aviation's overall role in modern economies. There is thus a need for an efficient regulatory framework.

An analysis per type of operation shows that the type of operations with the highest number of accidents and serious incidents, on average in the period 2009-2018 were:

— Parachuting operations;

— towing; and

— airshow/race

In 2019, the top SPO types in terms of accidents and serious incidents were parachute drop, airshow/race, towing and calibration flights[37].

The top three KRAs for aeroplane SPO are indicated below (refer to ASR 2021 Figure 15 and Table 10):

Specialised operations – aeroplanes		
KRA 1	KRA 2	KRA 3
Aircraft upset	Terrain collision	Airborne collision

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 safety issues identified in the data portfolio and related SRP for Specialised Operations Aeroplane.

How we want to achieve it: actions

[35] Annex VIII to Regulation (EU) 965/2012

[36] Annex VII to Regulation (EU) 965/2012

[37] Calibration flights are flights for the purpose of calibrating ground-based instrument approach support systems.

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
SIs/SRs	SI-4023 Parachuting operations
Reference(s)	n/a
Dependencies	n/a
Affected stakeholders	CAs, SPO/NCO operators engaged in parachuting operations, training organisations, pilot licence holders and students, ANSPs, ATCOs
Owner	EASA SM.1 Safety Intelligence & Performance Department

EXPECTED OUTPUT

Deliverable(s)	**Timeline**
Safety Promotion material	2022

CHANGES SINCE LAST EDITION

n/a

7. Rotorcraft

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**[38].

Issue/rationale

The Roadmap aims at significantly reducing 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 citizens. There is a need to further develop towards an efficient regulatory framework, considering technological advancements.

This area includes three types of operations involving certified helicopters:

— CAT operations, passenger and cargo conducted by EASA Member States' AOC holders, including passenger and cargo flights to and from offshore oil and gas installations in CAT;

— SPO (aerial work), such as advertisement, photography, with an EASA Member State as the State of operator or State of registry; and

— non-commercial operations with helicopters registered in an EASA Member State or for which an EASA Member State is the State of operator; this section includes in particular training flights.

7.1 Safety

In 2020 there were 4 fatal accidents, 24 non-fatal accidents and 18 serious incidents involving rotorcraft performing commercial air transport, specialised operations or non-commercial operations. The number of fatal accidents and non-fatal accidents in 2020 reduced by 50% in comparison with the average figures of the previous 10-year period (10.8 for fatal and 53.4 for non-fatal accidents), whereas the number of serious incidents was higher than the 10-year average (13.6). The number of fatalities (10) and serious injuries (3) in 2020 were also significantly lower than the preceding decade average. This significant drop in the number of occurrences should be interpreted cautiously, as the exact impact of the COVID-19 pandemic on the rotorcraft flying activity at European level is difficult to evaluate at present.

The vast majority (80%) of all accidents and serious incidents involved rotorcraft performing non-commercial operations or specialised operations. The top three key risk areas for each of the three types of operation are as follows:

[38] https://www.easa.europa.eu/download/Events/Rotorcraft%20Safety%20Roadmap%20-%20Final.pdf

CAT operations helicopters		
KRA 1	KRA 2	KRA 3
Aircraft upset	Terrain collision	Airborne collision

The aircraft upset accident scenario is still the top key risk area, both in terms of number of occurrences and aggregated risk. Terrain collisions, airborne collisions and obstacle collisions in flight form the other main key risk areas of the commercial air transport helicopters domain. Also, it should be highlighted that even if, over the 5-year timeframe considered, aircraft upset and terrain collision present the highest cumulated risk, airborne collision becomes the top key risk area if we consider only the last 3 years (2018-2020), due to the increase of fatalities caused by airborne collisions in 2018 (4 fatalities) and in 2019 (10 fatalities)..

SPO helicopters (aerial work)		
KRA 1	KRA 2	KRA 3
Aircraft upset	Terrain collision	Obstacle collision in flight

In SPO there were 1 fatal accident, 9 non-fatal accidents and 3 serious incidents in 2020, leading to 2 fatalities.

Non-commercial operations helicopters		
KRA 1	KRA 2	KRA 3
Aircraft upset	Terrain collision	Obstacle collision in flight

In non-commercial operations, there were 2 fatal accidents, 15 non-fatal accidents and 7 serious incidents in 2020, leading to 6 fatalities and 3 serious injuries.

The safety issues identified for all KRAs, for the different types of operation, are listed in the ASR 2021 (refer to Table 18 – CAT, Table 21 – SPO and Table 24 – Non-commercial operations).

Based on the data supporting the different portfolios, the following priority 1 key risk areas can be highlighted:

— **helicopter upset in flight** (loss of control)

This is key risk area with the highest priority in CAT helicopter operations and the most common accident outcome for SPO. The following actions contribute to mitigating risks in this area: RMT.0128, RMT.0709 and RMT.0711.

— **terrain collision and obstacle collision in flight**

This is the second priority key risk area for helicopter operations (CAT, SPO and non-commercial operations), although equipment is now fitted to helicopters in this domain that will significantly mitigate the risk of this outcome. Obstacle collisions is the second most common accident outcome in the CAT helicopters domain. This highlights the challenges of HEMS operations and their limited selection and planning for landing sites. Terrain collision and obstacle collision in flight are also the second most common outcomes for SPO. The following action contributes to mitigating risks in this area: RMT.0708.

In addition, from an airspace perspective, it is important to ensure that the airspace and routes design facilitate safe operations of helicopters which typically fly at low levels. Within SESAR 1, there have been solutions aiming to improve safety and efficiency of helicopter operations such as those supporting the establishment of low-level IFR routes[39].

What we want to achieve

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

How we monitor improvement

Continuous monitoring of safety issues identified in the specific data portfolios established for CAT helicopter operations, helicopter SPO and non-commercial operations (ref: ASR 2021 Chapter 3, Tables 18, 21 and 24).

The EASA ABs regularly provide feedback on the actions where efficiency/proportionality is the main driver.

How we want to achieve it: actions

[39] See SESAR solution # 113 from the SESAR Solution Catalogue: https://www.sesarju.eu/sites/default/files/documents/reports/SESAR_Solutions_Catalogue_2019_web.pdf

RMT.0120	**Helicopter ditching and water impact occupant survivability**
	This task aims at enhancing post-ditching and water impact standards for rotorcraft that could significantly enhance occupant escape and survivability. It will, in part, consider the recommendations arising from early work performed by the Joint Aviation Authorities (JAA) Water Impact, Ditching Design and Crashworthiness Working Group (WIDDCWG) and the Helicopter Offshore Safety and Survival Working Group (HOSSWG). In a first phase, EASA addressed amendments to CS-27/29. In a second phase, EASA is introducing amendment to Part-26/CS-26.
Status	Ongoing.
SIs/SRs	SR UK.CAA-2014-006; SR ESTO-2008-001; SR UNKG-2011-065; SR UNKG-2011-068; SR UNKG-2011-069; SR UNKG-2011-071; SR UNKG-2014-017; SR UNKG-2014-018; SR UNKG-2016-017; SR UNKG-2016-018; SR UNKG-2016-019; SR UNKG-2016-020; SR UNKG-2016-021; SR UNKG-2016-022; SR UNKG-2016-025; SR UNKG-2016-026.
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	DAHs and helicopter operators				
Owner	EASA CT.5	Policy, Innovation & Knowledge Department			
Priority	Yes	**RM Procedure**	ST/RMG	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
1	RMT.0120 24/10/2012	2016-01 23/03/2016	n/a	n/a	2018/007/R 25/06/2018
2		2020-16 23/12/2020	2021 Q3	2023	2023

CHANGES SINCE LAST EDITION

n/a

RMT.0325	**Helicopter emergency medical services' performance and public interest sites**
	To properly address the issues stemming from non-implementation or deviation from JAR-OPS 3 performance and public interest sites (PIS) provisions; in particular, performance in high mountains considering review of the safety level of HEMS flights at night following a UK Safety Directive.
Status	Ongoing
SIs/SRs	SR ITAL-2019-001
Reference(s)	UK Safety Directive 2014/003[40]
Dependencies	n/a

Affected stakeholders	Helicopter CAT operators, HEMS operators and approved maintenance organisations (Part-145)				
Owner	EASA FS.2	Air Operations Department			
Priority	No	**RM Procedure**	ST	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
	RMT.0325 26/03/2014	2018-04 18/06/2018	2022 Q3	2023	2023

CHANGES SINCE LAST EDITION

n/a

[40] https://publicapps.caa.co.uk/docs/33/SafetyDirective2014003.pdf

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

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

Status	Ongoing.
SIs/SRs	SR UNKG-2014-034; SR UNKG-2016-013
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	Helicopter operators				
Owner	EASA FS.2	Air Operations Department			
Priority	No	**RM Procedure**	AP	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
	31/07/2019	2023 Q2 (FoC[41])	2024	2025	2025

CHANGES SINCE LAST EDITION

Change of the rulemaking procedure from standard to accelerated. Considering the technical nature of the task and limited number of stakeholders affected, it is considered that a focused consultation is preferable to the standard public consultation.

[41] Focused consultation.

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
SIs/SRs	SR UNKG-2014-013; SR UNKG-2016-005; SR UNKG-2016-006
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	Rotorcraft operators				
Owner	EASA CT.5	Policy, Innovation & Knowledge Department			
Priority	No	**RM Procedure**	ST	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
	RMT.0724 12/03/2021	2023	n/a	n/a	2024

CHANGES SINCE LAST EDITION

Change of title in line with the ToR; SR list updated.

SPT.0082	**Support the development and implementation of flight crew operating manuals (FCOMs) for offshore helicopter operations**
	Provide support to manufacturers, if needed, in the development of FCOMs for different helicopter types, and support/encourage operators in their implementation.

Status	Ongoing
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	RMT.0724

Affected stakeholders	HE	
Owner	EASA SM.1	Safety Intelligence & Performance Department

EXPECTED OUTPUT

Deliverable(s)	Timeline
Report	2022

CHANGES SINCE LAST EDITION

n/a

SPT.0093	**Development of new safety promotion material on high-profile helicopter issues**
	In cooperation with the IHSF (International Helicopter Safety Foundation) , develop new safety promotion material (leaflets, videos, applications, etc.) on subjects such as performance-based navigation, point in space, low-level IFR, bird strike, operational and passenger pressure management, aimed at pilots and owners of private helicopters. Such safety promotion material shall address the most important areas of rotorcraft as directed through the Rotorcraft Committee and EASA Rotorcraft Strategy.
Status	Ongoing
SIs/SRs	SI-0045 Bird/wildlife strikes
Reference(s)	n/a
Dependencies	n/a
Affected stakeholders	HE
Owner	ESPN-R European Safety Promotion Network Rotorcraft

EXPECTED OUTPUT	
Deliverable(s)	**Timeline**
Leaflets, videos, web pages and/or applications	Continuous

CHANGES SINCE LAST EDITION
n/a

SPT.0094	**Helicopter safety and risk management**
	Review existing helicopter safety & risk management material to check consistency and update (when applicable) material to reflect new rules, standards and international good practice coming for example from IHSF and SMICG.
Status	Ongoing
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	n/a
Affected stakeholders	HE
Owner	ESPN-R European Safety Promotion Network Rotorcraft

EXPECTED OUTPUT	
Deliverable(s)	**Timeline**
Revised helicopter safety & risk management manuals and/or toolkits	2022

CHANGES SINCE LAST EDITION
n/a

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
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	n/a
Affected stakeholders	HE
Owner	ESPN-R European Safety Promotion Network Rotorcraft

EXPECTED OUTPUT	
Deliverable(s)	**Timeline**
Safety Workshop	Continuous

CHANGES SINCE LAST EDITION
n/a

SPT.0099	**Helicopter hoist safety promotion**
	Develop safety promotion material for helicopter hoists NB: 2019 deliverables already available are shared via the LinkedIn group[42]. The group is called 'ESPN-R Hoist Operation Safety Promotion'.
Status	Ongoing
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	n/a
Affected stakeholders	HE
Owner	EASA SM.1 Safety Intelligence & Performance Department

EXPECTED OUTPUT	
Deliverable(s)	**Timeline**
Safety Promotion material	2021
Pilot guidance to hoist operations	2022

CHANGES SINCE LAST EDITION
Another deliverable added.

42 https://www.linkedin.com/groups/8693588/

MST.0015	**Helicopter safety events**
	Member States' CAs, in partnership with industry representatives, should organise helicopter safety events annually or every two years. The EHEST, IHSF, CA, Heli Offshore or other sources of safety promotion materials could be freely used and promoted.
Status	Ongoing
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	n/a
Affected stakeholders	HE
Owner	Member States

EXPECTED OUTPUT	
Deliverable(s)	**Timeline**
Workshop	Continuous

CHANGES SINCE LAST EDITION
n/a

MST.0031	**Implementation of SESAR solutions aiming to facilitate safe instrument flight rules operations**
	Member States together with their ANSPs and their flight procedure designers (if different from ANSPs) should evaluate the possibility to establish a network of low-level IFR routes in their airspace to facilitate safe helicopter operations. These SESAR solutions, such as solution #113 that are designed to improve safety, should be implemented as far as it is feasible. See SESAR Solutions Catalogue2019 Third Edition: https://www.sesarju.eu/sites/default/files/documents/reports/SESAR_Solutions_Catalogue_2019_web.pdf
Status	Ongoing
SIs/SRs	n/a
Reference(s)	ATM Master Plan (Level 3 Ed 2019) action NAV12 (ATS IFR Routes for Rotorcraft Operations)
Dependencies	n/a
Affected stakeholders	HE
Owner	Member States

EXPECTED OUTPUT	
Deliverable(s)	**Timeline**
IFR routes/report	2025

CHANGES SINCE LAST EDITION
n/a

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

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 main gear box components.

Status	Ongoing
SIs/SRs	SR LN-OJF
Reference(s)	https://www.easa.europa.eu/research-projects/integrity-improvement-rotorcraft-main-gear-box-mgb
Dependencies	n/a

Affected stakeholders	HE	
Owner	EASA SM.2	Strategy & Programmes Department

PLANNING MILESTONES		
Starting date	**Interim Report**	**Final Report**
2020 Q2	n/a	2023 Q1

CHANGES SINCE LAST EDITION

n/a

RES.0009	**Helicopter offshore operations — new floatation systems**

Assessment of technical solutions for enhancing helicopter floatation at sea in view of heightening survivability following helicopter capsizes, which is the major event conducive to fatalities due to drowning.

Status	Ongoing
SIs/SRs	n/a
Reference(s)	https://www.easa.europa.eu/research-projects/helicopter-shore-operations-new-flotation-systems
Dependencies	n/a

Affected stakeholders	HE	
Owner	EASA SM.2	Strategy & Programmes Department

PLANNING MILESTONES		
Starting date	**Interim Report**	**Final Report**
2020 Q2	n/a	2023 Q2

CHANGES SINCE LAST EDITION

n/a

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
SIs/SRs	SR 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	HE	
Owner	EASA SM.2	Strategy & Programmes Department

PLANNING MILESTONES		
Starting date	**Interim Report**	**Final Report**
tbd	tbd	tbd

CHANGES SINCE LAST EDITION
n/a

RES.0035 **Helicopter under water 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 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.

Status	New
SIs/SRs	SR 2016-016
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	Helicopter operators, Design organisations, CAs	
Owner	EASA SM.2	Strategy & Programmes Department

PLANNING MILESTONES		
Starting date	**Interim Report**	**Final Report**
2021 Q1	n/a	2023 Q1

CHANGES SINCE LAST EDITION
n/a

RES.0039	**Vortex ring state prediction and recovery**

The research project shall pursue the following objectives:

- To determine the flight conditions in which the vortex ring state starts to develop for at least 3 different types of helicopters to support and evaluate the correctness of theoretical methods for prediction of the vortex ring boundaries.
- To evaluate the effectiveness of the 'Vuichard Recovery Technique' for at least 3 different types of helicopters.

Status	New
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	n/a
Affected stakeholders	Helicopter operators, Design organisations, CAs
Owner	EASA SM.2 Strategy & Programmes Department

PLANNING MILESTONES		
Starting date	**Interim Report**	**Final Report**
2021 Q3	n/a	2023 Q1

CHANGES SINCE LAST EDITION
n/a

In addition to the above RMTs, the following RMTs are directly relevant to rotorcraft safety:

RMT.0400	**Amendment of requirements for flight recorders and underwater locating devices**
RMT.0709	**Prevention of catastrophic accidents due to rotorcraft hoist issues**
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.0712	**Enhancement of the safety assessment processes for rotorcraft designs**
RMT.0713	**Human factors in rotorcraft design**
RMT.0725	**Rotorcraft chip detection system**
RMT.0726	**Rotorcraft occupant safety in the event of a bird strike**

The full description for these actions is included in **Chapter 9.**

RMT.0379	**All-weather operations**

The full description for this action is included in **Section 15.1.4.**

SPT.0110	**Standardisation of flight examiners**
SPT.0111	**Flight examiners manual**

The full description for these actions is included in Section 5.3.3

SPT.0109	**Raise of awareness of the risk posed by icing in-flight and potential mitigations**

The full description for this action is included in **Chapter 6**

MST.0002	**Promotion of SMS**

The full description for this action is included in Section 5.1

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

The full description for this action is included in **Chapter 6**

RES.0017	**Icing hazard linked to super cooled large droplet (SLD)**

The full description for this action is included in **Chapter 9**.

RES.0028	**Single pilot operations risk assessment framework**

The full description for this action is included in **Chapter 15**.

RES.0025	**Assessment of environmental impacts — rotorcraft noise**

The full description for this action is included in **Chapter 16**.

7.2 Level playing field

RMT.0318	**Single-engine helicopter operations**
	Review the applicable rules and the associated AMC and GM to re-evaluate restrictions on single-engine helicopters to operate over congested environment.
Status	Ongoing
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	Helicopter operators				
Owner	EASA FS.2	Air Operations Department			
Priority	No	**RM Procedure**	AP	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
	RMT.0318 06/02/2018	2023 (FoC[43])	2024	2025	2025

CHANGES SINCE LAST EDITION

In the previous EPAS edition this task was put on hold. Deliverables have now been planned.
Change of the scope to single engine helicopters, since restrictions on piston engine helicopters to operate over hostile environment are covered by RMT.0392.
Change of the rulemaking procedure from standard to accelerated. Considering the specific nature of the tasks and the limited number of stakeholders affected, a focused consultation is preferable to the standard public consultation.

[43] Focused consultation.

7.3 Efficiency/proportionality

EVT.0010	**Evaluation on helicopter operations**
	In compliance with the EASA Rotorcraft Safety Roadmap, an evaluation on small helicopter operations (criteria for defining small operation will be spelled out in the assessment) is foreseen to assess the administrative burden put on the operators and to identify proposals for simplification as well as reduction of the administrative burden and the cost for the operators. The evaluation report has been consulted with the EASA Advisory Bodies in 2021Q1 and will be uploaded on the EASA website.

Status	Completed
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	Helicopter operators, pilots and CAs	
Owner	EASA FS.2 and EASA CT.2	Air Operations Department; and General Aviation & VTOL Department

EXPECTED OUTPUT	
Deliverable(s)	**Timeline**
Evaluation report	2021

CHANGES SINCE LAST EDITION
This EVT is kept for traceability. It will be removed in the final EPAS

In addition to the above actions, the following RMTs are directly relevant to Rotorcraft efficiency/proportionality:

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

The full description for this action is included in **Section 0**.

RMT.0392	**Regular update of air operation rules**

The full description for this action is included in **Section 6.1.3.**

RMT.0128	**Regular update of CS 27 / 29**

The full description for this action is included in **Chapter 9.**

8. General Aviation

This Chapter covers GA non-commercial operations involving aeroplanes with MTOMs below 5 700 kg registered in an EASA Member State, as well as all operations with balloons and sailplanes.

GA remains a high priority for EASA and the EC.

GA in Europe is maintaining a stable activity involving 10 times more aircraft and airfields than CAT. GA has been since its origin the cradle for innovation and recruitment of young professionals (ATCOs, mechanics, pilots, etc.) and a means to connect people across Europe.

Recognising the importance of GA and its contribution to a safe European aviation system, EASA in partnership with the EC and other stakeholders has created the GA roadmap project in 2013, and has started in 2019 a new phase of the project called GA Roadmap 2.0.

With that, EASA is dedicating effort and resources to make GA safer and cheaper.

Addressing safety risks in GA in a proportionate and effective manner is a strategic priority. Between 2010 and 2019, accidents in Europe involving recreational aeroplanes, i.e. non-commercially operated small aeroplanes with MTOMs below 5 700 kg, led to between 91 and 132 fatalities per year, with an average of 106.8 fatalities per year for the preceding decade. These figures exclude fatal accidents involving micro light airplanes, gliders and balloons. As such, this sector of aviation has the highest average number of fatalities per year.

In 2020, there were 58 fatal accidents causing 97 fatalities involving recreational aeroplanes. 2020 shows a 7% reduction of fatal accidents compared to the 10-year average. The reduction in non-fatal accidents is 2% compared to the 10-year average. The number of serious incidents, however, was more than double in 2020 in comparison with the 10-year average. There were 9% fewer serious injuries than during the preceding decade.

There were 16 fatalities in sailplane operations in 2020. This is a significant decrease when compared to the 10-year average. The number of serious injuries is, however, a bit higher than the 10-year average. The COVID-19 pandemic has significantly affected sailplane operations. Specifically, during the period from March to May 2020, the flight operations were significantly reduced.

As concerns balloons, in 2020 there were 3 fatal accidents with 3 fatalities, 16 non-fatal accidents and 2 serious incidents. These figures are slightly below the average for the preceding decade.

Although it is difficult to precisely measure the evolution of safety performance in GA due to lack of consolidated exposure data (e.g. accumulated flight hours), the high number of these accidents shows that further efforts are required to mitigate risks leading to those fatalities; these are explained on the following pages.

Based on the data supporting the data portfolio and SRP for non-commercially operated small aeroplanes (MTOMs below 5 700 kg), the following top three KRAs can be highlighted (refer to ASR 2021 Table 13):

Non-commercially operated small aeroplanes		
KRA 1	KRA 2	KRA 3
Aircraft upset	Terrain collision	Obstacle collision in flight

The safety issue system reliability is the highest in terms of both number of occurrences and risk. A part of those occurrences contain engine failures and engine performance problems that force the aircraft to land.

In general, engine failure by itself is not an issue that should cause a fatal outcome as the glide ratio of general aviation aircraft is generally good and should enable pilots to find a suitable landing area, given their pre-flight preparation and sufficient altitude at the time of the failure. This issue has strong links to another safety issue called 'handling of technical failures'. The latter issue focuses on the pilot´s actions after the engine failure. Many of the accidents under this issue are fatal accidents, therefore high-risk score has been attributed. The safety issues of perception and situational awareness, decision-making and planning, and flight planning and preparation all relate to the handling of technical failures safety issue, which highlights that it is the pilot's actions that are either precursors or resulting actions in their attempt to recover the situation. These three HF/HP issues highlight the importance of planning each flight carefully and of anticipating various scenarios in the planning. Such scenario planning will enable the pilot to react correctly to the safety-critical situation and perhaps avoid a serious outcome — specifically loss of control situations.

The KRA showing the highest risk is aircraft upset. While runway excursions are common, there is a low risk of fatal or serious injuries associated with them.

The associated priority 1 safety issues are:

— Engine system reliability
— Inadvertent flight into IMC/scud flying
— Experience, training and competence of individuals
— Pre-flight planning and preparation
— Inflight decision making and planning
— Airborne conflict
— Handling of technical failures
— Engine system reliability

For **sailplanes**, the top three KRAs are indicated below (refer to ASR 2021 Figures 106 showing KRAs from the pilot perspective, Figure 107 and Table 30):

Sailplanes		
KRA 1	KRA 2	KRA 3
Aircraft upset	Terrain collision	Obstacle collision in flight

The area showing the highest risk is aircraft upset involving stalls, spins and other type of loss of control. Other areas of concern are terrain collisions where the aircraft is colliding with hills, mountains or other terrain, and obstacle collision in flight where the aircraft is hitting obstacles during take-off, approach and landing. The excursion risk area does not provide a high-risk score, even though it is high in numbers and results in substantial costs due to damage both during landings on the airfield and off-field landings. The airborne collision risk ranks lower, it predominantly exists around airfields and when several sailplanes are searching for lift in the same area.

The associated priority 1 safety issues are:

— approach path management;
— Airborne conflict;
— incomplete winch launches;
— system reliability; and
— in-flight decision-making and planning;

The top three KRAs in **balloon operations** are as follows (refer to ASR 2021 Figure 96 and Table 27):

Balloons		
KRA 1	KRA 2	KRA 3
Obstacle collision in flight	Balloon landings	Fire and smoke

KRAs bearing the highest risk are obstacle collision in flight and balloon landing. The analysis of data from accidents and serious incidents confirms that collisions with power lines and hard landings are events with a higher likelihood to cause injuries, and potentially fatalities, in ballooning operations.

The highest risk safety issues under the obstacle collision in flight key risk area, based on the coding of the occurrences, are:

— power line collisions;
— collision with buildings and trees; and
— control of flight path and inertia.

Power line collision events often overlap with the balloon landings as these collisions tend to occur in the final stages of the balloon flight. In some cases, the balloon collides with the power line after the landing has taken place.

8.1 Safety

This section is further subdivided to actions that are grouped per main safety issue (see 8.1.1 to 8.1.5). While the current EPAS may not include mitigation actions for each of those, the safety issue description is maintained to raise awareness.

8.1.1 Systemic enablers

Issue/rationale

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

What we want to achieve

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

How we monitor improvement

Continuous monitoring of safety issues identified in the data portfolios and SRP for non-commercially operated small aeroplanes as well as for sailplanes and balloons. (refer to ASR 2021 Tables 13, 30 and 27 respectively).

How we want to achieve it: actions

SPT.0083	**Flight instruction**
	Develop safety promotion material aimed at making more effective use of and maximising the safety benefits of biennial class rating revalidation check flights with examiners and refresher training with flight instructors, including differences between aircraft types.
Status	Ongoing
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	RMT.0678, RMT.0194

Affected stakeholders	GA	
Owner	EASA SM.1	Safety Intelligence & Performance Department

EXPECTED OUTPUT	
Deliverable(s)	**Timeline**
Safety Promotion material	2021

CHANGES SINCE LAST EDITION
This SPT is planned to be completed in 2021.It will be removed in the final EPAS

SPT.0125	**Promotion of the most important Safety Issues for General Aviation**
	Safety promotion campaigns prior to each flying season and following each season to help maintain skills and currency – based on highlighting the most important safety issues identified from the safety risk management process. Coordinate with CAs and industry partners to maximise the number of coordinated events and release of material in local languages.
Status	New
SIs/SRs	Refer to the SIs described for General Aviation in EPAS Volume III.
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	All	
Owner	EASA SM.1	Safety Intelligence & Performance Department

EXPECTED OUTPUT

Deliverable(s)	**Timeline**
Safety Promotion material Workshops and events	continuous

CHANGES SINCE LAST EDITION

n/a

MST.0025	**Improvement in the dissemination of safety messages**
	Member States should improve the dissemination of safety promotion and training material by their competent authorities, associations, flying clubs, insurance companies targeting flight instructors and/or pilots through means such as safety workshops and safety days/evenings. This should consider EASA Safety promotion deliverables and content.
Status	Ongoing
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	SPT.0125
Affected stakeholders	GA
Owner	Member States

EXPECTED OUTPUT	
Deliverable(s)	**Timeline**
Safety workshops and safety days/evenings	2021/2022

CHANGES SINCE LAST EDITION
Review of the task description, dependencies added

MST.0027	**Promotion of safety culture in GA**
	Member State CAs should include provisions to facilitate and promote safety culture (including just culture) in GA as part of their State safety management activities 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.
Status	Ongoing
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	n/a
Affected stakeholders	GA
Owner	Member States

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

CHANGES SINCE LAST EDITION
n/a

8.1.2 Staying in control

Issue/rationale

This section addresses subjects such as flying skills, pilot awareness and the management of upset or stall at take-off, in flight, or during approach and landing, flight preparation, aborting take-off and going around. Staying in control prevents loss of control accidents. Loss of control usually occurs because the aeroplane enters a flight regime outside its normal envelope, thereby introducing an element of surprise for the flight crew involved. Loss of control accidents are both frequent and severe.

With 618 higher-risk occurrences recorded in NCO in the period 2015 to 2019, aircraft upset, including loss of control, is the most significant key risk area for EASA Member States' non-commercial operations with aeroplanes with MTOMs below 5 700 kg with an EASA State of registry.

What we want to achieve

Increase safety by reducing the risk of loss of control accidents.

How we monitor improvement

Continuous monitoring of safety issues identified in the data portfolios and SRP for non-commercially operated small aeroplanes as well as for sailplanes and balloons (refer to ASR 2021 Tables 13, 30 and 27 respectively).

This concerns in particular the following safety issues:

— SI-4004 Training, experience, and competence of individuals

— SI-4001 Handling of technical failures

— SI-4003 Inflight decision making and planning

— SI-4017 Knowledge of aircraft systems and procedures

— SI-1306 Risk perception/complacency

— SI-4007 Pre-flight planning and preparation

— SI-4012 Aeroplane system reliability

How we want to achieve it: actions

Following completion of the actions included under this section in EPAS 2018-2022, no further actions are included in this EPAS edition. The section is maintained as a placeholder for future actions.

8.1.3 Coping with weather

Issue/rationale

This section addresses subjects such as entering IMC, icing conditions, carburettor icing, and poor weather conditions. Weather is an important contributing factor to GA accidents, often related to pilots underestimating the risks of changing weather conditions prior to take-off and during the flight, as weather deteriorates. Dealing with poor weather may increase pilot workload and affect situational awareness and aircraft handling. Decision-making can also be impaired, as a plan continuation bias may lead pilots to press on to the planned destination despite threatening weather conditions. In the future, the EASA work on weather information to pilots, currently focusing on CAT, will be extended to also include recommendations and possible actions for GA[44].

[44] https://www.easa.europa.eu/sites/default/files/dfu/EASA-Weather-Information-to-Pilot-Strategy-Paper.pdf

What we want to achieve

Increase safety by reducing the number of weather-related accidents.

How we monitor improvement

Continuous monitoring of safety issues identified in the data portfolios and SRP for non-commercially operated small aeroplanes as well as for sailplanes and balloons (refer to ASR 2021 Tables 13, 30 and 27 respectively).

How we want to achieve it: actions

SPT.0087	**Weather awareness for pilots**
	Produce safety promotion material (video) addressing subjects such as weather awareness, flight preparation, management and debrief, the use of flight information services (FIS), the benefits of using modern technology including cockpit weather information systems (including GPS integrated, mobile/4G connected apps, etc.), communication with air traffic control (ATC), inadvertent entry into IMC, TEM, and HF.
Status	Ongoing
SIs/SRs	SI-4015 Crosswind SI-0001 Icing in flight SI-4003 Inflight decision making and planning SI-4008 Intentional low flying SI-1306 Risk perception/complacency SI-4016 Turbulence
Reference(s)	GASP SEI (industry) - Mitigate contributing factors to LOC-I accidents and incidents
Dependencies	MST.0036 [PPL/LAPL learning objectives in the Meteorological Information part of the PPL/LAPL syllabus]

Affected stakeholders	GA	
Owner	EASA SM.1	Safety Intelligence & Performance Department

EXPECTED OUTPUT	
Deliverable(s)	**Timeline**
Safety Promotion Material	2022

CHANGES SINCE LAST EDITION
n/a

SPT.0088	**Promote instrument flying for GA pilots**
Safety	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
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	RMT.0677

Affected stakeholders	GA	
Owner	EASA SM.1	Safety Intelligence & Performance Department

EXPECTED OUTPUT	
Deliverable(s)	**Timeline**
Safety Promotion material	2022

CHANGES SINCE LAST EDITION
Revision of the task description - information on deliverables included

In addition to the above actions, the following SPT is directly relevant to Coping with Weather in GA:

SPT.0114	**Promote the availability of enhanced meteorological information and up-link connectivity**

The full description for this action is included in **Section 15.1.4**.

8.1.4 Preventing mid-air collisions

Issue/rationale

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

What we want to achieve

Increase safety by reducing the risk of MACs and airspace infringements in GA.

How we monitor improvement

Continuous monitoring of safety issues identified in the data portfolios and SRP for non-commercially operated small aeroplanes as well as for sailplanes and balloons. (refer to ASR 2021 Tables 13, 30 and 27 respectively).

How we want to achieve it: actions

SPT.0119	**Promoting iConspicuity**
	Facilitate installation of iConspicuity devices in all EASA aircraft and promote their use by airspace users at an affordable cost for them Support initiatives enhancing interoperability of iConspicuity devices/systems
Status	Ongoing
SIs/SRs	SI-4009 Deconfliction between IFR and VFR traffic SR AUST-2008-002; SR AUST-2016-001; SR AUST-2016-002; SR AUST-2016-003; SR AUST-2016-004; SR IRLD-2014-017; SR FRAN-2015-057; SR FRAN-2016-100; SR NETH-2018-003; SR SWTZ-2016-002.
Reference(s)	BIS 'Airborne collision risk'
Dependencies	RMT.0690, RMT.0230, RMT.0519
Affected stakeholders	Pilots, aircraft operators, CAs, ANSPs, Industry (e.g. avionics manufacturers)
Owner	EASA SM.1 Safety Intelligence & Performance Department

EXPECTED OUTPUT	
Deliverable(s)	**Timeline**
Promotional material	2020-2023

CHANGES SINCE LAST EDITION
n/a

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
SIs/SRs	SI-2025 Airspace infringement SI-4009 Deconfliction between IFR and VFR traffic
Reference(s)	European Action Plan for Airspace Infringement Risk Reduction (EAPAIRR) BIS 'Airborne collision risk'
Dependencies	MST.0038
Affected stakeholders	Pilots, aircraft operators, CAs, ANSPs, industry (e.g. avionics manufacturers)
Owner	EASA SM.1 Safety Intelligence & Performance Department

EXPECTED OUTPUT	
Deliverable(s)	**Timeline**
Promotional material	2020-2023

CHANGES SINCE LAST EDITION
n/a

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.
Status	Ongoing
SIs/SRs	SI-2025 Airspace infringement SI-4009 Deconfliction between IFR and VFR traffic
Reference(s)	European Action Plan for Airspace Infringement Risk Reduction (EAPAIRR) BIS 'Airborne collision risk'
Dependencies	SPT.0120 Promoting good practices in airspace design
Affected stakeholders	Pilots, aircraft operators, CAs, ANSPs
Owner	Member States

EXPECTED OUTPUT	
Deliverable(s)	**Timeline**
Best practice	2023

CHANGES SINCE LAST EDITION
n/a

RES.0021	**Research projects aiming to prevent mid-air collision risks**
	The following research activities are being addressed under the SESAR 2020 programme: — Enhanced rotorcraft and general aviation operations around airports (TMA) (PJ.01-06); — The final report[45] for PJ.01-06 was issued on 17.03.20. — Enhanced airborne collision avoidance for general aviation (PJ. 11-A4) – ACAS XP.
Status	Ongoing
SIs/SRs	n/a
Reference(s)	SESAR solution PJ.01-06 https://www.sesarju.eu/index.php/projects/ead; PJ.11-A4 https://www.sesarju.eu/sesar-solutions/airborne-collision-avoidance-general-aviation-and-rotorcraft-acas-xp
Dependencies	n/a
Affected stakeholders	GA
Owner	SESAR

PLANNING MILESTONES		
Starting date	**Interim Report**	**Final Report**
2016	n/a	2021 Q4 (for PJ.11-A4)

CHANGES SINCE LAST EDITION
n/a

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 network of stations while respecting data privacy requirements.
Status	Ongoing
SIs/SRs	n/a
Reference(s)	European Action Plan for Airspace Infringement Risk Reduction (EAPAIRR) EASA BIS 'Airborne collision risk'
Dependencies	RMT.0690, RMT.0230, RMT.0519, SPT.0119
Affected stakeholders	Pilots, aircraft operators, CAs, ANSPs, industry (e.g. avionics manufacturers)
Owner	EASA CT.2 General Aviation & VTOL Department

PLANNING MILESTONES		
Starting date	**Interim Report**	**Final Report**
2021 Q1	2021 Q4	2023 Q3

CHANGES SINCE LAST EDITION
n/a

[45] SESAR Joint Undertaking | PJ01 EAD - Final Project Report

8.1.5 Managing the flight

Issue/rationale

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

What we want to achieve

Reduce the number of fatalities and serious injuries in GA.

How we monitor improvement

Continuous monitoring of safety issues identified in the data portfolios and SRP for non-commercially operated small aeroplanes as well as for sailplanes and balloons (refer to ASR 2021 Tables 13, 30 and 27 respectively).

This concerns in particular the following safety issues:

— SI-4005 Approach path management on GA aeroplanes

— SI-4004 Training, experience and competence of individuals

— SI-4011 Fuel management

— SI-4001 Handling of technical failures

— SI-4003 Inflight decision making and planning

How we want to achieve it: actions

Following completion of the actions included under this section in EPAS 2018-2022, no further actions are included in this EPAS edition. The section is maintained as a placeholder for future actions.

8.2 Efficiency/proportionality

Issue/rationale

This section provides references to additional EPAS actions that are directly relevant to GA, where efficiency/proportionality is the main driver. Detailed information for each of those actions is included in the domain-specific EPAS chapter.

This section also includes 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 key risk areas and underlying safety issues will continue to be monitored as part of the SRPs for non-commercially operated small aeroplanes, sailplanes and balloons respectively.

The ABs regularly provide feedback on the effectiveness of the activities that aim at improving efficiency/proportionality and ensuring a level playing field.

How we want to achieve it: actions

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

The full description for this action is included in **Section 5.3**.

RMT.0502	**Regular update of CS for balloons**
RMT.0605	**Regular update of CS-LSA**
RMT.0690	**Regular update of CS-STAN**
RMT.0727	**Alignment of Part 21 with Regulation (EU) 2018/1139 (including simple and proportionate rules for General Aviation)**

The full description for these actions is included in **Chapter 9**.

9. Design and production

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

9.1 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 accident. 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. For example, the handling of technical failures ranks first in the list of safety issues identified in the CAT and NCC operations with aeroplanes data portfolio in 2020 (based on the aggregated ERCS score of those occurrences where this safety issue was present — see ASR 2021 Figure 24 and Table 7). 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 used for the analysis.

In terms of efficiency/proportionality, and 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 technological advancements.

In terms of level playing field, rules may need to be harmonised within the EU as well as with the main international trade partners in order to either ensure fair competition or facilitate the free movement of goods, persons and services.

What we want to achieve

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

How we monitor improvement

Continuous monitoring of safety issues identified in the data portfolios and SRPs for the different types of air operations (see ASR 2021 and EPAS Volume III). The EASA ABs regularly provide feedback on the effectiveness of actions in the area of efficiency/proportionality and level playing field.

RMT.0118	**Analysis of on-ground wings 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.
SIs/SRs	SI-0002 Icing on ground SR FRAN-2009-001; SR FRAN-2014-006; SR RUSF-2013-001; SR SWED-2011-016; SR UNKG-2003-060.
Reference(s)	CS-25
Dependencies	n/a

Affected stakeholders	DOA holders				
Owner	EASA CT.5	Policy, Innovation & Knowledge Department			
Priority	Yes	**RM Procedure**	ST	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
	RMT.0118 21/03/2017	2021 Q3	n/a	n/a	2022 Q3

CHANGES SINCE LAST EDITION

n/a

RMT.0453 **Aeroplane ditching survivability**

The objective is to amend the certification specifications for large aeroplanes in order to improve the survivability after a ditching.
Amendments should be proposed in the structure and cabin safety areas. EASA will take into account the related recommendations issued by the TACDWG (Transport Aircraft Crashworthiness and Ditching Working Group) to the FAA in 2018.

An impact assessment is ongoing to decide on the way forward.

Status	not started
SIs/SRs	SR UNST-2010-091
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	DAHs				
Owner	EASA CT.5	Policy, Innovation & Knowledge Department			
Priority	No	**RM Procedure**	ST/RMG	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
	tbd	tbd	n/a	n/a	tbd

CHANGES SINCE LAST EDITION

n/a

RMT.0586 **Tyre pressure monitoring system**

The specific objective of this RMT is to decrease the risk of a hazardous or catastrophic tyre failure of a large aeroplane that is caused by inadequate tyre inflation pressure. This can be achieved by requiring a means to minimise the risk that the inflation pressure of the tyres of large aeroplanes are below the minimum serviceable inflation pressure during operation.

For new designs, CS-25 has been amended to require applicants to provide a task in the instructions for continued airworthiness (ICA) that requires operators to perform tyre pressure checks at a suitable time interval, and/or by installing a system that monitors the tyre inflation pressures. It also envisaged to amend Part-26 and CS-26 to require the same objective to be implemented by operators of large aeroplanes, i.e. either by including in the aeroplane maintenance programme (AMP) tyre inflation pressure checks at a suitable time interval, or by installing a system that monitors the tyre inflation pressures.

The Agency issued a Decision amending CS-25 (Subtask 2) and plans to issue an opinion proposing to the EC an amendment of Part 26 (subtask 1). Once Part-26 is amended, the Agency will issue a second decision with the related CS-26 specifications to Part-26 (Subtask 1). Both subtasks are planned to be conducted in parallel (i.e. common NPA and the opinion on Part-26 in parallel with the Decision amending CS-25).

Status	Ongoing.
SIs/SRs	SR AUST-2013-008; SR UNKG-2002-14
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders		Aeroplane Operators			
Owner		EASA CT.5	Policy, Innovation & Knowledge Department		
Priority	No	**RM Procedure**	ST/RMG	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
1	30/05/2017	2020-05 06/03/2020	2021 Q3	2022 Q3	2022 Q3
2		n/a	n/a	n/a	2020/024/R 22/12/2020

CHANGES SINCE LAST EDITION

Update of task description

RMT.0686	**HP rotor integrity and loss-of-load (due to shaft failure)**
	The objective of this RMT is to review and amend CS-E 840 and CS-E 850 to address certification issues for new designs. Design improvement should help to enhance the overall safety in relation to bird ingestion, ditching, etc.
Status	Deleted.
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	DAHs				
Owner	EASA CT.5	Policy, Innovation & Knowledge Department			
Priority	No	**RM Procedure**	n/a	**Harmonisation**	n/a

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
	n/a	n/a	n/a	n/a	n/a

CHANGES SINCE LAST EDITION

This RMT is kept for traceability. It will be removed in the final EPAS. See Appendix C for further details.

RMT.0709	**Prevention of catastrophic accidents due to rotorcraft hoist issues**
	The current certification specifications relating to the certification of rotorcraft hoists do not provide sufficient clarity on what is required to achieve certification and are not being appropriately applied. In addition, some failure modes are not consistently taken into consideration, and this is reflected in in-service experience. A significant number of safety occurrences have been reported that are attributed to rotorcraft hoist issues. Improved industry standards will address some existing design shortfalls that have been identified. It shall, therefore, be considered how to integrate these standards into the certification specifications for rotorcraft hoists. These improvements in the standards relating to the certification of rotorcraft are expected to significantly reduce the risk of catastrophic accidents in human external cargo operations. This RMT will be harmonised with the FAA as far as practicable.
Status	Ongoing.
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	DOA holders, POA holders				
Owner	EASA CT.5	Policy, Innovation & Knowledge Department			
Priority	No	**RM Procedure**	ST	**Harmonisation**	Yes

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
	30/10/2020	2021 Q3	n/a	n/a	2022 Q3

CHANGES SINCE LAST EDITION

n/a

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 upgrade of the rules for emergency landing conditions and fuel system crash resistance, for new type designs in the 1980s and 1990s. In November 2015, a new task was assigned by the FAA for the ARAC to provide recommendations regarding occupant protection rulemaking in normal and transport category rotorcraft for older certification basis type designs. EASA participates to the Working Group and should consider the application of the outcome of this activity for application to the existing European fleet.

EASA will address these issues in two subtasks.

— Subtask 1 will address crash-resistant fuel systems.
— Subtask 2 will address crash-resistant seats and structures. The decision to start this subtask is subject to an impact assessment.

Status	Not started
SIs/SRs	SR PORT-2020-001; SR SWTZ-2017-530.
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	DOA and POA holders				
Owner	EASA CT.5	Policy, Innovation & Knowledge Department			
Priority	Yes	**RM Procedure**	ST	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
1	2021 Q3	2022 Q3	2023	2024	2024
2	tbd	tbd	tbd	Tbd	tbd

CHANGES SINCE LAST EDITION

n/a

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 to the existing legacy systems.

Status	Ongoing.
SIs/SRs	SR UNKG-2018-007
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	DOA and POA holders				
Owner	EASA CT.5	Policy, Innovation & Knowledge Department			
Priority	No	**RM Procedure**	ST	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
	RMT.0711 05/03/2020	2022 Q2	n/a	n/a	2023

CHANGES SINCE LAST EDITION

n/a

RMT.0713 **Human factors in rotorcraft design**

HF/HP

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

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

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

Status	Completed
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	DOA holders				
Owner	EASA CT.5	Policy, Innovation & Knowledge Department			
Priority	No	**RM Procedure**	ST	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
	RMT.0713 31/08/2018	2019-11 24/10/2019	n/a	n/a	2021/010/R 16/06/2021

CHANGES SINCE LAST EDITION

This RMT is kept for traceability. It will be removed in the final EPAS.

RMT.0725 **Rotorcraft chip detection system**

Subtask 1:
CS-27 and CS-29 require the installation of chip detectors to detect particles of ferromagnetic material that are released by elements of the rotor drive system as a result of damage or wear. Chip detectors provide a warning to the crew when particles of a sufficient size (or accumulation of particles) are detected and allow the crew to check the correct operation of the relevant drive system components. However, there is no explicit provision in the CS, nor detailed AMC, for consistently demonstrating that the chip detectors perform their intended function (i.e. particles are collected at a sufficient rate to provide the intended means of detection).

Subtask 2:
The task will also consider 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 decision to start this subtask is subject to an impact assessment.

Status	Ongoing.
SIs/SRs	SR NORW-2018-004
Reference(s)	BIS Rotorcraft
Dependencies	n/a

Affected stakeholders	DOA and POA holders				
Owner	EASA CT.5	Policy, Innovation & Knowledge Department			
Priority	No	**RM Procedure**	ST	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
1	RMT.0725 07/04/2020	2021-01 29/01/2021	n/a	n/a	2022 Q2
2	n/a	tbd	tbd	tbd	tbd

CHANGES SINCE LAST EDITION

n/a

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 two subtasks:

- Subtask 1 will address the provisions in CS-27, and
- Subtask 2 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	Ongoing.
SIs/SRs	n/a
Reference(s)	BIS Rotorcraft
Dependencies	n/a

Affected stakeholders	DOA and POA holders				
Owner	EASA CT.5	Policy, Innovation & Knowledge Department			
Priority	No	**RM Procedure**	ST	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
1	RMT.0726 08/09/2020	2021-02 25/02/2021	n/a	n/a	2022 Q2
2	n/a	tbd	tbd	tbd	tbd

CHANGES SINCE LAST EDITION

n/a

RES.0010	**Ice crystal detection**
	Ice crystal icing phenomenon is still posing a severe threat to high-altitude flying, in particular to new engine designs. Pilots have little or no means to detect and/or avoid it, especially at night. A research project is ongoing in order to better detect the presence of ice crystal icing and to develop equipment suitable to detect such a phenomenon.
Status	Ongoing
SIs/SRs	SI-0001 Icing in flight
Reference(s)	EU-funded project SENS4ICE https://www.sens4ice-project.eu/
Dependencies	RES.0017
Affected stakeholders	CAT
Owner	EASA SM.2 Strategy & Programmes Department

PLANNING MILESTONES		
Starting date	**Interim Report**	**Final Report**
2019 Q1	n/a	2022 Q4

CHANGES SINCE LAST EDITION
n/a

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). They will serve to improve EASA certification standards, and to prepare the evaluation of new designs proposed by the aircraft manufacturers.
Status	Planned
SIs/SRs	SI-0001 Icing in flight SI-0002 Icing in ground
Reference(s)	n/a
Dependencies	n/a
Affected stakeholders	CAT
Owner	EASA SM.2 Strategy & Programmes Department

PLANNING MILESTONES		
Starting date	**Interim Report**	**Final Report**
2021 Q3	tbd	2023 Q3

CHANGES SINCE LAST EDITION
n/a.

RES.0017 **Icing hazard linked to super cooled large droplet (SLD)**

Characterisation of phenomena (SLD icing) and analysis of impact/mitigation for safety in order to develop relevant airworthiness standards and means of compliance.
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 App C, O and snow conditions for the design and certification of future regional, business and large aircraft, rotorcraft and engines. ICE GENESIS shall permit 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 regulation authorities.
EASA is contributing to this research project in an advisory role.

Status	Ongoing
SIs/SRs	SI-0001 Icing in Flight
Reference(s)	EU-funded project ICE GENESIS, https://www.easa.europa.eu/research-projects/ice-genesis
Dependencies	n/a

Affected stakeholders CAT, DO

Owner EASA SM.2 Strategy & Programmes Department

PLANNING MILESTONES

Starting date	Interim Report	Final Report
2019 Q1	n/a	2022 Q4

CHANGES SINCE LAST EDITION

n/a

RES.0027 **Sandwich structured composites**

This research project shall help to develop further insight and 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 regulatory material for initial and continuous airworthiness. This project has a high priority from a safety and environmental perspective.

Status	Not started
SIs/SRs	n/a
Reference(s)	Composite Material Handbook 17 (CMH-17)
Dependencies	n/a

Affected stakeholders DO, MO

Owner EASA SM.2 Strategy & Programmes Department

PLANNING MILESTONES

Starting date	Interim Report	Final Report
2022 Q1	2022 Q4	2024 Q1

CHANGES SINCE LAST EDITION

n/a

RES.0037 **Machine Learning**

The research results will be a set of methods and tools with which EASA shall be enabled to streamline certification and approval processes by identifying concrete means of compliance to the learning assurance objectives of EASA guidance for machine learning applications (level 1, 2 and 3 as defined in EASA AI Roadmap), with a specific focus on Level 1B and Level 2.

The achieved medium-term effect shall be to alleviate some remaining limitations on the acceptance of machine learning applications in safety-critical applications.

Status	New
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	Design organisations, CAs	
Owner	EASA SM.2	Strategy & Programmes Department

PLANNING MILESTONES

Starting date	Interim Report	Final Report
2021 Q2	n/a	2023 Q2

CHANGES SINCE LAST EDITION

n/a

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	New
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	Aircraft manufacturers and OEMs	
Owner	EASA SM.2	Strategy & Programmes Department

PLANNING MILESTONES

Starting date	Interim Report	Final Report
2021 Q3	n/a	2024 Q2

CHANGES SINCE LAST EDITION

n/a

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 of by the EU Horizon 2020 programme, further information is available at:

RoCs project for helicopters and tiltrotors: https://www.rocs-project.org/

Status	New
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	Air operators, Training Organisations, Aviation Authorities
Owner	EASA SM.2 Strategy & Programmes Department

PLANNING MILESTONES

Starting date	Interim Report	Final Report
2020	n/a	2023 Q2

CHANGES SINCE LAST EDITION

n/a

9.2 Level playing field

RMT.0252 **Instructions for continued airworthiness (ICA)**

The objective of this RMT is to revisit the existing requirements on ICA as follows:

Subtask 1:
— Definition and identification of ICA (to be provided during the certification process);
— Completeness of ICA (during the certification process); and
— LOI of the CA (during the certification process).

Subtask 2:
— Availability of ICA (to owners, operators, MOs, etc.)

Subtask 3:
MRB scheduling Information (guidance on the MRB process) -> **cancelled**

Subtask 4:
— Acceptance/approval of ICAs by other than the authority.

Subtask 5:
— Certification maintenance requirements.

With regard to Subtasks 1, 2 and 4, EASA developed an NPA, which was published in 2018. Following the NPA public consultation, EASA developed Opinion No 07/2019 proposing amendments to Regulation (EU) No 748/2012 (Initial Airworthiness) and Regulation (EU) No 1321/2014 (Continuing Airworthiness).

Subtask 5 is completed with the amendment to CS-25 (ED Decision 2017/018/R issued on 30/08/2017).

Status	Completed
SIs/SRs	SR ICLD-2013-001; SR UNKG-2008-004.
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	DAHs and POA holders				
Owner	EASA CT.5	Policy, Innovation & Knowledge Department			
Priority	No	**RM Procedure**	ST/RMG	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
5	RMT.0252 15/05/2013	2016-15 23/11/2016	n/a	n/a	2017/018/R 30/08/2017
1,2,4		2018-01 29/01/2018	07/2019 18/12/2019	2021/699 28/04/2021[46]	2021/007/R 28/05/2021 2021/009/R 15/06/2021

CHANGES SINCE LAST EDITION

This RMT is kept for traceability. It will be removed in the final EPAS.

[46] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02012R0748-20210518

9.3 Efficiency/proportionality

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, in order to ensure that the AMC & GM to Part 21 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 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. ETOPS: a single NPA will be published proposing to repatriate the airworthiness elements, currently included in AMC 20-6, in AMC/GM to Part 21, CS-25, and CS-E.
Status	Ongoing
SIs/SRs	SR NORW-2018-007
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	Design and production organisations, CAs, the Agency (on a case-by-case basis)				
Owner	EASA CT.5	Policy, Innovation & Knowledge Department			
Priority	No	**RM Procedure**	ST	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
DOA issues	RMT.0031 15/12/2016	2020-04 05/03/2020	n/a	n/a	2021/001/R 01/03/2021
tbd		tbd			tbd

CHANGES SINCE LAST EDITION

n/a

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

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 special conditions, 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
SIs/SRs	SR UNKG-2013-008
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	Sailplane and powered sailplane manufacturers and other design organisations dealing with supplemental type certificates (STCs), repairs or changes to sailplanes or powered sailplanes.				
Owner	EASA CT.5	Policy, Innovation & Knowledge Department			
Priority	No	**RM Procedure**	ST	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
	RMT.0037 14/01/2016	2020-13 14/12/2020	n/a	n/a	2021 Q3

CHANGES SINCE LAST EDITION

n/a

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

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 special conditions, 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
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	DAHs; rotorcraft manufacturers and other design organisations dealing with supplemental type certificates (STCs), repairs or changes to rotorcraft.				
Owner		EASA CT.5	Policy, Innovation & Knowledge Department		
Priority	No	RM Procedure	ST	Harmonisation	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
Current	RMT.0128 29/09/2016	2021 Q3	n/a	n/a	2022 Q3
Next	n/a	tbd	n/a	n/a	tbd

CHANGES SINCE LAST EDITION

n/a

RMT.0180 **Turbine engine endurance and initial maintenance inspection testing, and piston engine time between overhauls substantiation**

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 exercises oversight of the IMI tests and benefits from the resulting knowledge;
- 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
SIs/SRs	SR AUST-2009-011
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders		DAHs			
Owner		EASA CT.5	Policy, Innovation & Knowledge Department		
Priority	No	**RM Procedure**	ST	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
	RMT.0180 07/05/2021	2022 Q3	n/a	n/a	2023

CHANGES SINCE LAST EDITION

Update of task description and title.

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 special conditions, 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: a single NPA will be published proposing to repatriate the airworthiness elements, currently included in AMC 20-6, in AMC/GM to Part 21, CS-25, and CS-E.

Status	Ongoing
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	Engine manufacturers				
Owner	EASA CT.5	Policy, Innovation & Knowledge Department			
Priority	No	**RM Procedure**	ST	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
Current	RMT.0184 27/07/2015	2021 Q3	n/a	n/a	2022 Q3
Next		2021 Q3	n/a	n/a	tbd

CHANGES SINCE LAST EDITION

n/a

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 special conditions, 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.

This standing task does not yet have sufficient candidate issues for the next cycle.

Status	Ongoing
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	Design and production organisation				
Owner	EASA CT.5	Policy, Innovation & Knowledge Department			
Priority	No	**RM Procedure**	ST	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
Current	RMT.0457 21/08/2015	2021-07 15/04/2021	n/a	n/a	2022 Q2
Next		tbd	n/a	n/a	tbd

CHANGES SINCE LAST EDITION

n/a

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 special conditions, 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.

This standing task does not yet have sufficient candidate issues for the next cycle.

Status	Ongoing
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	RMT.0400

Affected stakeholders	Design organisations of complex motor-powered aircraft and other design organisations dealing with changes or supplemental type certificates to these aircraft Design organisations of other-than-complex motor-powered aircraft				
Owner	EASA CT.5	Policy, Innovation & Knowledge Department			
Priority	No	**RM Procedure**	ST	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
current	RMT.0499 09/04/2018	2018-08 22/08/2018	n/a	n/a	2020/012/R 17/08/2020
next		tbd	n/a	n/a	tbd

CHANGES SINCE LAST EDITION

n/a

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 special conditions, 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.

This standing task does not yet have sufficient candidate issues to plan the next cycle.

Status	not started
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	Balloon DAHs				
Owner	EASA CT.5	Policy, Innovation & Knowledge Department			
Priority	No	**RM Procedure**	ST	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
	tbd	tbd	n/a	n/a	tbd

CHANGES SINCE LAST EDITION

n/a

RMT.0503 **Regular update of CS-APU**

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 special conditions, 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.

This standing task does not yet have sufficient candidate issues to plan the next cycle.

Status	not started
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	DAHs				
Owner	EASA CT.5	Policy, Innovation & Knowledge Department			
Priority	No	**RM Procedure**	ST	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
	tbd	tbd	n/a	n/a	tbd

CHANGES SINCE LAST EDITION

n/a

RMT.0508 **Regular update of CS-CCD (Certification Specifications for Cabin Crew Data)**

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 special conditions, 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.

This standing task does not yet have sufficient candidate issues to plan the next cycle.

Status	Ongoing
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	Design organisations of complex motor-powered aircraft and other design organisations dealing with changes or supplemental type certificates to these aircraft				
Owner		EASA CT.5	Policy, Innovation & Knowledge Department		
Priority	No	**RM Procedure**	ST	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
current	RMT.0508 10/09/2019	NPA 2019-13 17/12/2019	n/a	n/a	2020/015/R 09/10/2020
next		tbd	n/a	n/a	tbd

CHANGES SINCE LAST EDITION

n/a

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 special conditions, 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
SIs/SRs	n/a
Reference(s)	ATM Master Plan Level 3 – Plan (2019): ITY-SPI – Surveillance performance and interoperability
Dependencies	n/a

Affected stakeholders	Aircraft operators, POA holders, DOA holders, and CAs				
Owner	EASA CT.5	Policy, Innovation & Knowledge Department			
Priority	No	**RM Procedure**	ST	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
Current	RMT.0519 12/09/2015	2021-04 15/03/2021	n/a	n/a	2022 Q1
Next		tbd	n/a	n/a	tbd

CHANGES SINCE LAST EDITION

n/a

RMT.0605 **Regular update of CS-LSA**

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 special conditions, 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.
This standing task does not yet have sufficient candidate issues to plan the next cycle.

Status	Ongoing
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	LSA DAHs				
Owner	EASA CT.5	Policy, Innovation & Knowledge Department			
Priority	No	**RM Procedure**	ST	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
	RMT.0605 14/01/2016	tbd	n/a	n/a	tbd

CHANGES SINCE LAST EDITION

n/a

RMT.0643 **Regular update of AMC-20**

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 special conditions, 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.

Subtask 1:
AMC 20-152 on Airborne Electronic Hardware and AMC 20-189 on Management of Open Problem Reports; harmonised with the FAA

Subtask 2:
HIRF and lightning as well as Multi core processors

Status	Ongoing
SIs/SRs	n/a
Reference(s)	ATM Master Plan Level 3 – Plan (2019): NAV10 – RNP Approach procedures to instrument RWY
Dependencies	RMT.0673 (ST 3); RMT.0184 (ST 3); RMT.0031 (ST 3); RMT.0392 (ST 3)

Affected stakeholders	Manufacturers, maintenance organisations and air operators				
Owner	EASA CT.5	Policy, Innovation & Knowledge Department			
Priority	No	**RM Procedure**	ST	**Harmonisation**	SubT 1: Yes

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
1	RMT.0643 20/07/2015	2018-09 24/08/2018	n/a	n/a	2020/010/R 23/07/2020
2		2020-09 02/10/2020	n/a	n/a	2021 Q3

CHANGES SINCE LAST EDITION

n/a

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 special conditions, 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 Subtask is proposing amendments in the following areas:

Item 1: AMC 25 Subpart H: corrections of references in the correlation table;
Item 2: Turbo-propeller vibrations;
Item 3: Fabrication methods;
Item 4: Windshield – Failure conditions with structural effects;
Item 5: Cabin safety – references to FAA AC 25-17A 'Transport Airplane Cabin Interiors Crashworthiness Handbook'

ETOPS: a single NPA will be published proposing to repatriate the airworthiness elements, currently included in AMC 20-6, in AMC/GM to Part 21, CS-25, and CS-E.

Status	Ongoing
SIs/SRs	SR FRAN-2005-001; SR NETH-2007-004; SR SWED-2016-005
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders		Large aeroplane DAHs			
Owner		EASA CT.5	Policy, Innovation & Knowledge Department		
Priority	No	**RM Procedure**	ST	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
Current	RMT.0673 27/04/2015	2020-11 26/11/2020	n/a	n/a	2021 Q3
next		2021 Q3	n/a	n/a	2022 Q2

CHANGES SINCE LAST EDITION

n/a

RMT.0684 **Regular update of CS-P**

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 special conditions, 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.

This standing task does not yet have sufficient candidate issues to plan the next cycle.

Status	Ongoing
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	Propeller DAHs				
Owner	EASA CT.5	Policy, Innovation & Knowledge Department			
Priority	No	**RM Procedure**	ST	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
	tbd	tbd	n/a	n/a	tbd

CHANGES SINCE LAST EDITION

n/a

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 special conditions, 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.

This standing task does not yet have sufficient candidate issues to plan the next cycle.

Status	Ongoing
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders		DAHs			
Owner		EASA CT.5	Policy, Innovation & Knowledge Department		
Priority	No	**RM Procedure**	See SubT	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
1(DP)	RMT.0687 09/08/2017	2021 Q3	n/a	n/a	2022 Q3
2(DP)		tdb	n/a	n/a	tbd

CHANGES SINCE LAST EDITION

n/a

RMT.0688 **Regular update of CS-SIMD (Certification Specifications for Simulator Data)**

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 special conditions, 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.

This standing task does not yet have sufficient candidate issues to plan the next cycle.

Status	Ongoing
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	Applicants for aircraft type certificates for which the pilot type rating training makes use of approved full flight simulators (level B, C, D) or flight training devices for helicopters, and other applicants dealing with changes to an already approved definition of scope of validation source data				
Owner	EASA CT.5	Policy, Innovation & Knowledge Department			
Priority	No	**RM Procedure**	ST	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
current	RMT.0688 16/10/2019	2021-03 02/03/2021	n/a	n/a	2022 Q1
next		tbd	n/a	n/a	tbd

CHANGES SINCE LAST EDITION

n/a

RMT.0690	**Regular update of CS-STAN**
	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. This standing task does not yet have sufficient candidate issues to plan the next cycle.
Status	Ongoing
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	Operators other than airlines, AMOs (Part-145, Part-CAO and Part-M Subpart F), and maintenance engineers or mechanics				
Owner	EASA CT.5	Policy, Innovation & Knowledge Department			
Priority	No	**RM Procedure**	ST	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
Current	RMT.0690 09/06/2016	2021-06 07/04/2021	n/a	n/a	2022 Q1
Next		tdb	n/a	n/a	tbd

CHANGES SINCE LAST EDITION

n/a

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

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

The safety requirements for equipment, systems and installations contained in the CSs should be improved for small and large rotorcraft to reflect current best practice for safety assessment.
The FAA is also developing new rules for the safety assessment of rotorcraft and these changes will create significant standard differences between the EU and US regulations and are likely to result in a lower regulatory efficiency. The proposed RMT also aims at reviewing these changes to achieve harmonisation where possible.

Status	Ongoing
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	DAHs and POA holders				
Owner	EASA CT.5	Policy, Innovation & Knowledge Department			
Priority	No	**RM Procedure**	ST	**Harmonisation**	Yes

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
	RMT.0712 15/10/2018	2021 Q3	n/a	n/a	2022 Q3

CHANGES SINCE LAST EDITION

n/a

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

The objective of this RMT is to revisit Part 21 in view of the new and amended requirements introduced with the Basic Regulation. The focus of this task is to introduce simple rules that will allow the application of a proportionate approach for sports and recreational aircraft. It will take into account the various risk levels in GA in the initial airworthiness process, and is aiming at achieving a reduction of administrative burden and costs, while at the same time supporting GA innovation. The task will include the preparatory work done under RMT.0689 'Part 21 proportionality'.

Subtask 1:
In the first phase of this RMT, EASA will develop proposals required by Article 140 (3) of the Basic Regulation in relation to aircraft primarily intended for sports and recreational use.

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.

Subtask 3:
In a third phase, EASA will address all the other amendments required, including on the certification of non-installed equipment. The regulatory approach for phase 2 and 3 is under development, thus no timelines are shown below.
EASA will use different means of consultation, which is shown under Subtasks 1 to 3 corresponding to these phases.

Status	Ongoing
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	DOA and POA holders and CAs including EASA				
Owner	EASA CT.5	Policy, Innovation & Knowledge Department			
Priority	Yes	**RM Procedure**	See field 'SubT'	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
1: AP	RMT.0727 28/08/2019	2019/20 (FoC[47])	2021 Q3	2022 Q3	2022 Q3
2: ST		tbd	tbd	tbd	tbd
3: ST		tbd	tbd	tbd	tbd

CHANGES SINCE LAST EDITION

The regulatory approach for phase 2 and 3 is under development, thus no timelines are shown.

In addition to the above RMTs, the following RMT is directly relevant to design and production:

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

The full description for this action is included in **Chapter 10**.

[47] Focused consultation.

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**
	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	Ongoing
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	EASA Part 21 organisations (DOA and POA holders, ETSOA holders, etc.), CAs	
Owner	EASA CT.5	Policy, Innovation & Knowledge Department

EXPECTED OUTPUT

Deliverable(s)	**Timeline**
Evaluation report	tbd

CHANGES SINCE LAST EDITION

n/a

10. Maintenance and continuing airworthiness management

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.

Issue/rationale

As in the case of design and manufacture improvements, maintenance 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 accident. 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. 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 maintenance domain. Non-accident data will be used for the analysis.

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

In terms of level playing field, rules may need to be harmonised within the EU as well as with the main international trade partners in order to either ensure fair competition or facilitate the free movement of goods, persons and services.

What we want to achieve

Increase safety by continuously assessing and improving risk controls related to maintenance. Increase proportionality and efficiency in the continuing airworthiness field. Harmonise requirements where this ensures fair competition or facilitates the free movement of goods, persons and services.

How we monitor improvement

Continuous monitoring of safety issues identified in the data portfolios and the SRPs for the different types of air operations (see ASR 2021 and Volume III). The EASA ABs regularly provide feedback on the effectiveness of the actions in terms of efficiency/proportionality and level playing field.

10.1 Safety

RMT.0097	**Functions of B1 and B2 support staff and responsibilities**
	Introduce principles for increased robustness of the maintenance certification process eliminating potential 'safety gaps' by clarifying the roles and responsibilities of certifying staff, support staff and 'sign-off' staff, both in line and base maintenance.
Status	Ongoing
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	Part-145 MOs				
Owner	EASA FS.1	Maintenance & Production Department			
Priority	No	**RM Procedure**	ST/RMG	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
	RMT.0097 02/11/2011	2014-11 13/05/2014	2023	2024	2024

CHANGES SINCE LAST EDITION

n/a

RMT.0521	**Airworthiness review process**
	Performance of a full review of the airworthiness review process to introduce an improved framework to mitigate the risks linked to a faulty airworthiness review with potential safety consequences where the actual airworthiness status of the aircraft is below the standard. Affected Regulations are Regulation (EU) No 1321/2014 and Regulation (EU) No 748/2012.

Status	Ongoing
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	Air operators, CAMOs and CAs				
Owner	EASA FS.1	Maintenance & Production Department			
Priority	No	**RM Procedure**	ST/RMG	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
	RMT.0521/2 07/05/2013	2015-17 05/11/2015	2022 Q1	2023	2023

CHANGES SINCE LAST EDITION

Information on affected regulations added

RMT.0588	**Aircraft continuing airworthiness monitoring — review of key risk elements**
	Considering the implementation experience (including Standardisation feedback), the objective is to review the current principles specified in AMC3 M.B.303(b) 'Aircraft continuing airworthiness monitoring', and the related GM1 M.B.303(b) and Appendix III to GM1 M.B.303(b). In particular, to: — assess 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	Not started
SIs/SRs	n/a
Reference(s)	AMC3 M.B.303(b), GM1 M.B.303(b) and Appendix III to GM1 M.B.303(b)
Dependencies	n/a

Affected stakeholders	CAs, CAMOs				
Owner	EASA FS.1	Maintenance & Production Department			
Priority	No	**RM Procedure**	ST	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
	2023	2024	n/a	n/a	2025

CHANGES SINCE LAST EDITION

n/a

SPT.0104	**Develop new safety promotion material on high-profile maintenance safety issues**
	Develop new safety promotion material on high-profile safety issues in the maintenance domain. 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
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	Air operators, CAMOs and AMOs (Part-145, Part-CAO and Part-M Subpart-F)	
Owner	EASA SM.1	Safety Intelligence & Performance Department

EXPECTED OUTPUT

Deliverable(s)	**Timeline**
Leaflets, videos, web pages and/or applications	Continuous

CHANGES SINCE LAST EDITION

n/a

10.2 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 foreign 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 CAs working on behalf of the Agency or issues where the Agency has provided interpretation.
Status	Ongoing.
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	AMOs (Part-145)				
Owner	EASA FS.1	Maintenance & Production Department			
Priority	No	**RM Procedure**	ST	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
	RMT.0096 (145.023) 17/06/2008	2013-12 11/07/2013	n/a	n/a	2023

CHANGES SINCE LAST EDITION

n/a

RMT.0278 **Importing of aircraft from other regulatory systems and Part 21 Subpart H review**

Develop criteria for importing of aircraft from other regulatory systems and Part 21 Subpart H review, considering recommendations from the ICAO Airworthiness Panel.

Affected Regulations are Regulation (EU) No 1321/2014 and Regulation (EU) No 748/2012.

Status	Ongoing.
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	RMT.0521

Affected stakeholders		Air operators, CAMOs and CAs			
Owner		EASA FS.1	Maintenance & Production Department		
Priority	No	**RM Procedure**	ST/RMG	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
	RMT.0278 01/02/2013	2016-08 07/09/2016	2022 Q3	2023	2023

CHANGES SINCE LAST EDITION

Affected regulations, dependencies added and stakeholders updated

10.3 Efficiency/proportionality

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

The intent of this task is:

— to provide a consistent interpretation of the definition of 'parts & appliances' and other terms used in the various rules;

— to develop criteria for the acceptance of parts and appliances with different production background for installation in certified aircraft;

— to create a parts classification for commercial parts, allowing an installer to install commercial parts on a type-certified product without having to obtain parts manufactured under a POA. This proposal will also allow manufacturers to continue to use parts now categorised as commercial parts in their type designs. The added benefit of the proposal is to have the manufacturers identify for EASA approval the commercial parts they intend to use;

— to develop criteria for production and release of parts and appliances proportionate to the potential impact on safety as determined in the design certification process;

— to develop the draft amendments to Regulations (EU) Nos 748/2012 and 1321/2014 as necessary to incorporate the above concepts and integrate the existing alleviations for sailplanes and European light aircraft (ELA);

— to develop the necessary AMC and GM to accompany the amendments to the regulations;

— to develop AMC and GM to support the interpretation of the above-mentioned provisions in the Basic Regulation related to parts and appliances; and

— to elaborate the AMC and GM related to standard parts.

Status	Completed
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	RMT.0252

Affected stakeholders	DAHs, POA holders, aircraft operators, AMOs (Part-145, Part-CAO and Part-M Subpart F) and maintenance personnel				
Owner	EASA FS.1	Maintenance & Production Department			
Priority	No	**RM Procedure**	ST/RMG	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
	RMT.0018 01/11/2012	2017-19 14/12/2017	07/2019 18/12/2019	2021/699 28/04/2021[48]	2021/007/R 28/05/2021 2021/009/R 15/06/2021

CHANGES SINCE LAST EDITION

This RMT is kept for traceability. It will be removed in the final EPAS.

[48] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02012R0748-20210518

RMT.0734	**One continuing airworthiness management organisation (CAMO) for airline business groups**
	This RMT addresses barriers and inefficiencies that the current regulation creates to EU airline business groups. It would allow, in the case of operators forming part of a single airline group, to have one single CAMO managing the continuing airworthiness of all aircraft operated by the different AOC holders in the business group.
Status	Ongoing
SIs/SRs	n/a
Reference(s)	EASA BIS 'Single CAMO for business group operators'
Dependencies	n/a

Affected stakeholders	CAMOs, Business group operators, CAs				
Owner	EASA FS.1	Maintenance & Production Department			
Priority	Yes	**RM Procedure**	See SubT	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
DP	RMT.0734 05/01/2021	2021 Q3(FoC[49])	2021 Q3	2022 Q3	2022 Q3

CHANGES SINCE LAST EDITION

Title updated i.a.w. published ToRs.

RMT.0735	**Regular update of the CAW regulation**
	The objective of this RMT is to regularly address miscellaneous issues of non-controversial nature, in order to ensure that the CAW regulation is fit for purpose, cost-effective, can be implemented in practice and is in line with the latest ICAO SARPs. This regular update RMT will also address the remaining open items from RMT.0217 'CAMOs' and Part-145 organisations' responsibilities'.
Status	Ongoing
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	CAs, AMOs, CAMOs, AMTOs, AML applicants and holders, CAOs				
Owner	EASA FS.1	Maintenance & Production Department			
Priority	No	**RM Procedure**	ST	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
	2022 Q2	2023	2024	2025	2025

CHANGES SINCE LAST EDITION

n/a

[49] Focused consultation.

In addition to the above RMTs, the following RMT is directly relevant to maintenance and continuing airworthiness management:

RMT.0690	**Regular update of CS-STAN**

The full description for this action is included in **Chapter 9**.

Finally, the below actions are directly relevant to maintenance and continuing airworthiness management:

SPT.0106	**Prevention, detection and mitigation of fraud cases in Part-147 organisations**
MST.0035	**Oversight capabilities/focus area: fraud cases in Part-147**

The full description for these actions is included in **Section 5.3.5**.

11. Air traffic management/air navigation services (ATM/ANS)

Issue/rationale

The Agency is working towards harmonised rules based on ICAO SARPs that facilitates the compliance with the essential requirements for ATM/ANS.

In addition, the Agency is working on a proposal for a consistent framework that ensures the suitability for use of ATM/ANS systems and ATM/ANS constituents as well as aerodrome equipment and address it in a holistic manner the end-to end performance following the repeal of Regulation (EC) No 552/2004.

What we want to achieve

The complete framework for the provision of ATM/ANS will apply as from the beginning of 2022, when the amended Regulation (EU) 2017/373 as amended by Regulation (EU) 2020/469 will include the additional requirements concerning flight procedure design, ATS, AIS/AIM. Therefore, the Agency is working towards enhanced process to keep up-to-date rules with the ICAO provisions.

ATM/ANS systems and ATM/ANS constituents are key and integral elements to the safe, interoperable and efficient operations of the Single European Airspace System (SEAS)It should facilitate true compatibility with airborne and space-based systems through the appropriate allocation of performance requirements dependent upon the nature and risk of the particular activity concerned.. The application of the new framework for ATM/ANS systems and ATM/ANS constituents would decrease burdens and enable savings for both the manufacturers and the ANSPs as well as for the competent authorities. This mostly stems from synergies, economies of scale, increased commonality and improved interoperability.

How we monitor improvement

The key risk areas and underlying safety issues will continue to be monitored as part of the SRP for ATM and ANS, with the support of the ATM CAG. The EASA ABs regularly provide feedback on the efficiency/proportionality of the actions.

11.1 Safety

The top three KRAs for ATM/ANS are listed below (refer to ASR 2021 Figure 132 and Table 36)**.**

ATM/ANS		
KRA 1	KRA 2	KRA 3
Airborne collision	Runway collision	Runway excursion

Runway collision 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.

Airborne collision 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.

Runway excursion includes occurrences involving a veer off or overrun off the runway surface.

The safety issues with higher risk scores, based on the occurrence data and their risk classification, are:

- Deconfliction of IFR and VFR flights with one or more traffic uncontrolled. This involves ineffective deconfliction of IFR and VFR flights in airspace classes where one or more traffic could be uncontrolled (i.e., class D, E, and G), potentially resulting in AIRPROX events and airborne collisions;
- Undetected occupied runway involves runway incursions by an aircraft landing or taking-off on an already occupied runway. This could be due to air traffic controller monitoring, aerodrome design or other organisational factors;
- High energy runway conflict covers runway incursions where the aircraft has already reached a high level of kinetic energy when ATC becomes aware of the runway conflict, and the time available to the air traffic controller to prevent the collision is very short. This includes instances where the landing aircraft is close to the runway threshold or is already lined-up, in case of taking-off;
- Airspace infringement involves both unauthorised entry into notified airspace by aircraft which did not request nor obtain clearance from the controlling authority of that airspace, and entry under conditions that were not contained in the clearance;
- ACAS RA not followed refers to encounters where one or both of the aircraft's flight crew did not follow the instruction given by the ACAS resolution advisory (RA) to resolve the conflict and avoid a potential mid-air collision.
- Deconfliction with aircraft operating without transponder (due to failure or malfunction) refers to occurrences involving an aircraft with no-operative transponder or a dysfunctional one operating in an airspace where aircraft must be equipped with secondary surveillance radar (SSR) transponder.

How we want to achieve it: actions

SPT.0103	**Development of new safety promotion material on 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
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	n/a
Affected stakeholders	CAT
Owner	EASA SM.1 Safety Intelligence & Performance Department

EXPECTED OUTPUT	
Deliverable(s)	**Timeline**
Leaflets, videos, web pages and/or applications	Continuous

CHANGES SINCE LAST EDITION
n/a

RES.0032	**Use of iConspicuity devices/systems in Flight Information Services** EASA will investigate the use of iConspicuity devices/systems in ATM Flight Information Services (FIS), considering 'Net Safety Benefit' and 'Operational Safety Assessment' principles for the assessment of implementation issues.
Status	Ongoing
SIs/SRs	SI-4009 Deconfliction between IFR and VFR flights
Reference(s)	European Action Plan for Airspace Infringement Risk Reduction (EAPAIRR) EASA BIS 'Airborne Collision Risk'
Dependencies	RES.0031
Affected stakeholders	Pilots, aircraft operators, CAs, ANSPs, industry (e.g. avionics and ATM systems manufacturers)
Owner	EASA ED.4 Air Traffic Department

PLANNING MILESTONES		
Starting date	**Interim Report**	**Final Report**
2021 Q4	2022 Q1	2022 Q2

CHANGES SINCE LAST EDITION
n/a

11.2 Efficiency/proportionality

RMT.0161 **Conformity assessment**

RMT.0161 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 aerodrome equipment) 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 3 subtasks as follows:

Subtask 1: The objective of this subtask is to establish the EU regulatory framework and respective acts for conformity assessment of the ATM/ANS systems and ATM/ANS constituents as well as aerodrome equipment, in order to contribute to the safety and interoperability of the European ATM network operation.

Subtask 2: The objective of this subtask is to review the SES interoperability rules (implementing the repealed Regulation (EC) No 552/2004, 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.) to update and adapt them to the EASA framework.

Subtask 3: This subtask intends to establish the AMC/GM supporting the subtask 1 deliverables and the first set of EASA detailed specifications based on the existing interoperability rules and the Community Specifications (e.g. flight message transfer protocol).

*Instead of an NPA public consultation, the procedure in Article 15 or that in Article 16 of MB Decision No 18-2015 will be applied.

Status	Ongoing
SIs/SRs	SRs DENM-2010-003; NORW-2011-008
Reference(s)	n/a
Dependencies	RMT.0524; RMT.0682; RMT.0519[50]

Affected stakeholders	ATM/ANS providers, organisations involved in the design, production and maintenance of ATM/ANS systems and constituents, and CAs (including EASA), ADR operators				
Owner	EASA ED.4	Air Traffic Department			
Priority	Yes	**RM Procedure**	See SubT/RMG	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
1(ST)	RMT.0161 14/02/2020	2021 Q3	2022 Q2	2023	n/a
2(AP)		2022 Q2*	2022 Q4	2023	2023
3(AP)		2022 Q3*	n/a	n/a	2023

CHANGES SINCE LAST EDITION

n/a

[50] RMT.0161 is expected to be supplemented by RMT.0682 on the implementation of the regulatory needs in support of SESAR deployment, which will allow the establishment of additional detailed specifications applicable to ground systems and their constituents, whenever necessary. As regards the airborne constituents, RMT.0519 on regular update of CS-ACNS allows to set requirements and means of compliance for the aircraft manufacturing and modification industries with respect to ATM/ANS equipment to be installed on board the aircraft. In this case, RMT.0161 contributes to ensure interoperability between the airborne and ground equipment and to the total system performance.

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 EU and ICAO regulatory framework, the RMT activities should be split in 4 subtasks:

Subtask 1:
The objective is to amend the IR/AMC/GM with the first 'regular updates' amendment containing the non-controversial modifications, which were initially consulted in late 2017 with EASA Advisory Bodies and to address the 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/GM level.

Subtask 2:
The objective is to address amendments concerning the so-called controversial issues (radiocommunication failure and SID/STAR phraseologies).

Subtask 3:
The objective is to address 'AFIS phraseologies' as well as possibly revise the existing phraseology to be used in the so-called en-route FIS at AMC & GM level resulting from the introduction of AFIS-related requirements in the EU ATS regulatory framework stipulated in Regulation (EU) 2017/373 as amended by Regulation (EU) 2020/469.

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 SSTs operating at supersonic speed.

*Instead of an NPA public consultation, the procedure in Article 15 or that in Article 16 of MB Decision No 18-2015 will be applied.

Status	Ongoing
SIs/SRs	SR SPAN-2017-038
Reference(s)	This RMT may be affected by the recommendations stemming from the WPGR and the AAS. Amendment 9 to PANS-ATM (ICAO Doc 4444) ICAO SL: ICAO reference AN 13/2.1-20/27 - EASA reference 20/27
Dependencies	n/a

Affected stakeholders	Member States, CAs/NSAs, ATM/ANS providers, airspace users (e.g. aircraft operators), aerodrome operators and EASA				
Owner	EASA ED.4	Air Traffic Department			
Priority	Yes	**RM Procedure**	See SubT	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
1 (AP)	RMT.0476 18/08/2017	2021 Q4*	2022 Q2	2023	2023
2 (ST)		2021 Q4	2022 Q3	2023	2023
3 (ST)		2021-05 06/04/2021	n/a	n/a	2021 Q3
4 (AP)		2021 Q3*	2021 Q4	2022 Q4	2022 Q4

CHANGES SINCE LAST EDITION

n/a

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 addresses the authority, organisational and technical requirements for the provision of ATM/ANS services. It contains five subtasks as follows:

Subtask 0:
The objective is to maintain a high level of safety in the provision of air traffic management (ATM)/air navigation services (ANS).

Subtask 1:

The objective is to maintain the set of AMC & GM on Subpart-ATSEP up to date.

Subtask 2:
The objective is to introduce a set of additional AMC & GM, which are based on SESAR Safety Reference Material, as regards the scope of the change, the risk analysis process and the safety criteria determination by the providers of ATM/ANS.

Subtask 3
The objective is to:
a) include the 'space weather advisory', revise the template for METAR, change the content of tropical cyclone advisory and assess the function of space weather centres (SWXCs) as proposed by Amendment 78 to ICAO Annex 3; and
b) address the dissemination of world area forecast system (WAFS) SIGWX forecasts using the ICAO Meteorological Information Exchange Model (IWXXM), the training and competencies of personnel involved in the provision of aeronautical meteorological services and reflect the updated SIGMET examples based on Amendment 79 to ICAO Annex 3.

Subtask 4:
The objective is to maintain the set of ATS and AIS rules up-to-date, including alignment with the evolution of the ICAO regulatory framework (e.g. ICAO Annex 4, ICAO Annex 11, ICAO Annex 15 and PANS ANS, and PANS AIM). This subtask will be progressed in 2 steps:
- Subtask 4a will amend the AIS rules in order to address AWO concept and facilitate the GRF implementation;
- Subtask 4b will aim at alignment with the evolution of the ICAO regulatory framework.

Subtask 5:
The objective is to introduce a further set of implementing measures for NAV providers to demonstrate that their equipment is regularly maintained and, where required, calibrated. The main objectives of flight inspection/calibration are:
- to ensure quality of 'Signal-in-Space' parameters;
- to identify potential electromagnetic interference; and
- to confirm end-to-end interoperability.

Status	Ongoing
SIs/SRs	n/a
Reference(s)	This RMT may be affected by the recommendations stemming from the WPGR and the AAS.
Dependencies	RMT.0681

Affected stakeholders	ATM/ANS service providers, Network Manager, aircraft operators, CAs				
Owner	EASA ED.4	Air Traffic Department			
Priority	No	**RM Procedure**	see SubT	**Harmonisation**	No

RMT.0719	Regular update of air traffic management/air navigation services rules (IRs and AMC & GM) - continued

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
0(AP)	18/08/2017	20/12/2017	02/2018 08/03/2018	2020/469[51] 14/02/2020	2020/008/R 02/07/2020
1(AP)		01/07/2020	n/a	n/a	2020/020/R 07/12/2020
21(ST)		2019-04 11/04/2019	n/a	n/a	2021 Q3
3(AP)		08/05/2020	01/2021 22/02/2021	2021 Q4	2021 Q4
4a(ST)		2021 Q3	2022 Q1	2022 Q3	2022 Q3
4b(ST)		2022 Q1	2022 Q4	2023	2023
5(ST)		2022 Q1	n/a	n/a	2023

CHANGES SINCE LAST EDITION

Subtask 0 and 1 completed. Split of Subtask 4 into 2 steps (4a and 4b).

RMT.0723	**Regular update of the AMC & GM for SKPI (ATM performance IRs)**

Reference Period 3 (2020 to 2024)
The objective of this RMT is to provide up-to-date technical material regarding the implementation and measurement of the SKPI at the level of air navigation service providers (ANSPs) and the SPIs at both the State and ANSP level.
The material will be published as European Commission material, not as AMC and GM. Therefore, no Decision will be published by the Agency.

The timeline for the next reference period is not yet known.

Status	Ongoing
SIs/SRs	n/a
Reference(s)	Commission Regulation (EU) No 2019/317 of 11 February 2019
Dependencies	n/a

Affected stakeholders		ANSPs and CAs			
Owner		EASA SM.1	Safety Intelligence & Performance Department		
Priority	No	**RM Procedure**	ST	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
	29/06/2018	2019-10 19/09/2019	n/a	n/a	n/a

CHANGES SINCE LAST EDITION

n/a

In addition to the above, the following RMTs are also relevant for ATM/ANS:

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

The full description for this action is included in **Section 5.3**.

RMT.0519	**Regular update of CS-ACNS**

The full description for this action is included in **Section 9.3**.

RMT.0230	**Introduction of a regulatory framework for the operation of drones**
RMT.0524	**Data link services**
RMT.0624	**Remote aerodrome air traffic services**
RMT.0682	**Implementation of the regulatory needs in support of SESAR deployment**
RMT.0731	**New air mobility**
SPT.0108	**Promotion of the new European provisions on performance-based navigation and the associated ATM Master Plan essential operational changes**

The full description for these actions is included in **Section 15.1.3**.

12. Aerodromes

This chapter addresses aerodrome design and operations, as well as aerodrome operators. 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 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.

Actions in this chapter aim at maintaining a high uniform level of safety in the Member States, ensuring compliance with the ICAO SAPRs and a harmonised approach which will support the free movement of services within the Member States.

How we monitor improvement

The key risk areas and underlying safety issues will continue to be monitored as part of the joint data portfolio and SRP for ADR and GH, with the support of the ADR CAG. The EASA ABs will provide feedback on the efficiency/proportionality of the actions.

12.1 Safety

The top three KRAs for aerodromes and groundhandling are listed below (refer to ASR 2021 Figure 117 and Table 33).

Aerodromes and groundhandling (ADR and GH)		
KRA 1	KRA 2	KRA 3
Aircraft upset	Ground damage	Runway collision

The most frequent key risk area for aerodrome and ground handling related accidents and serious incidents is aircraft upset, followed by ground damage and runway collision. In terms of aggregated risk, aircraft upset and ground damage are on a similar high level of aggregated risk, followed by runway collision.

How we want to achieve it: actions

RMT.0703	**Runway safety**
Safety	EAPPRI and EAPPRE contain several recommendations addressed to CAs, ADR operators and EASA in order to mitigate the risks. In the ADR domain, EASA had included in Regulation (EU) No 139/2014[52] and in the relevant AMC & GM and CS many of these recommendations; however, there are some of them that have not been addressed. The Decision 2021/003/R amends the Acceptable Means of Compliance (AMC) and Guidance Material (GM) to Annex I (Definitions), Annex II (Part-ADR.AR), Annex III (Part-ADR.OR) and Annex IV (Part-ADR.OPS) to Regulation (EU) No 139/2014. The Decision 2021/004/R updates the certification specifications (CSs) and guidance material (GM) for aerodrome design (CS-ADR-DSN) in line with the International Civil Aviation Organization (ICAO) developments and other technical improvements, and maintains a high and uniform level of safety in terms of aerodrome design.
Status	Completed
SIs/SRs	SR SWED-2017-006
Reference(s)	GASP SEIs (States) – Mitigate contributing factors to the risks of RE and RI; ATM Master Plan Level 3 – Plan (2019): SAF11 – Improve runway safety by preventing runway excursions ATM Master Plan Level 3 – Plan (2019): INF07 – Electronic Terrain and Obstacle Data (e-TOD)
Dependencies	n/a

Affected stakeholders		Aerodrome operators, AOC holders, GA, ANSPs and CAs			
Owner		EASA FS.2	Air Operations Department		
Priority	Yes	**RM Procedure**	ST	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
	RMT.0703 14/0/2017	2018-14 17/12/2018	03-2019 24/06/2019	2020/2148 08/10/2020[53]	2020/007/R 02/07/2020 2020/016/R 10/11/2020 2021/003/R 04/03/2021 2021/004/R 04/03/2021

CHANGES SINCE LAST EDITION

This RMT is kept for traceability. It will be removed in the final EPAS.

[53] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32020R2148

RMT.0722	**Provision of aeronautical data by the aerodrome operator**
	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 in regard to the provision of aeronautical data by the ADR operator.
Status	Ongoing
SIs/SRs	n/a
Reference(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	Aerodrome operators				
Owner	EASA FS.2	Air Operations Department			
Priority	No	**RM Procedure**	AP	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
	RMT.0722 14/04/2021	2021 Q3(FoC[54])	2022 Q2	2023	2023

CHANGES SINCE LAST EDITION

n/a

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
SIs/SRs	All SIs (mitigate) in the ADR & GH Safety Risk Portfolio
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	Aerodrome operators, AOC holders, ANSPs and CAs	
Owner	EASA SM.1	Safety Intelligence & Performance Department

EXPECTED OUTPUT

Deliverable(s)	Timeline
Leaflets, videos, web pages and/or applications	Continuous

CHANGES SINCE LAST EDITION

n/a

[54] Focused consultation.

MST.0029	**Implementation of SESAR runway safety solutions**
HF/HP	Member States should evaluate together with the ADR operators and ANSPs the needs for implementing the related SESAR solutions such as those related to ground situational awareness, airport safety net vehicles and enhanced airport safety nets[55]. These SESAR solutions (solutions #01, #02, #04, #26, #47, #48, #70), designed to improve runway safety, should be considered as far as it is feasible. See SESAR Solutions Catalogue 2019 third edition: https://www.sesarju.eu/sites/default/files/documents/reports/SESAR_Solutions_Catalogue_2019_web.pdf
Status	Ongoing. This MST is expected to be completed by 2021Q4.
SRs/SIs	n/a
Reference(s)	GASP SEIs (States) – Mitigate contributing factors to the risks of RE and RI
Dependencies	n/a
Affected stakeholders	Aerodrome operators, AOC holders, ANSPs and CAs
Owner	Member States

EXPECTED OUTPUT	
Deliverable(s)	**Timeline**
SPAS	2021Q4

CHANGES SINCE LAST EDITION
n/a

RES.0040	**Runway micro texture**
	Runway surface micro texture is essential for good wet runway braking friction. Poor runway micro texture has resulted in numerous landing overruns occurrences on wet surfaces. There are currently no acceptable methods for airports to accurately assess the micro texture characteristics. The proposed research assesses the practical use and validity of high-resolution surface laser scanners to determine the runway micro texture characteristics. A better understanding of these characteristics can reduce the number of runway excursions.
Status	New
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	n/a
Affected stakeholders	Aerodrome operators, Air operators, design organisations, competent authorities
Owner	EASA SM.2 Strategy & Programmes Department

PLANNING MILESTONES		
Starting date	**Interim Report**	**Final Report**
2021 Q3	n/a	2024 Q3

CHANGES SINCE LAST EDITION
n/a

[55] https://www.atmmasterplan.eu/exec/operational-changes

RES.0045 **Aerodrome 'Triple One' concept implementation**

Perform a survey of the current situation at aerodromes in Europe with regard to this issue, identifying the various concepts currently in use.

Substantiate the safety benefits of the implementation of the 'triple one' concept and identify the prerequisites for its implementation.

Identify and investigate the operational or other reasons for the non-implementation of the 'triple one' concept.

Status	New
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	Aerodrome operators, Air Navigation Service Providers, Competent Authorities
Owner	EASA SM.2 Strategy & Programmes Department

PLANNING MILESTONES

Starting date	Interim Report	Final Report
2022 Q1	n/a	2023 Q4

CHANGES SINCE LAST EDITION

n/a

12.2 Level playing field

The section is maintained as a placeholder for future actions.

12.3 Efficiency/proportionality

RMT.0591 **Regular update of aerodrome rules**

The objective of this RMT is to regularly address miscellaneous issues of non-controversial nature, in order to ensure that the aerodromes regulation is fit for purpose, cost-effective and is in line with the latest ICAO SARPs and Basic Regulation.
The first stream (SubT 1) is for the first update of the aerodrome rules, while stream two is for the second one in order to follow the ICAO cycle, including the transposition of ICAO Annex 14, Vol II Heliports.

Subtask 1:

- The Opinion related to the Implementing Rules (IR), of RMT.0591 will be merged with the Opinion of RMT.0722 on aeronautical data, expected for 2022 Q2.
- The stand-alone CS containing the technical certification specifications for aerodromes that are not dependent upon the IRs and the Opinion will be published as announced in the last EPAS edition in 2022 Q1, in the form of an EASA Decision.

Status	Ongoing
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	RMT.0681

Affected stakeholders	Aerodrome operators, CAs				
Owner	EASA FS.2	Air Operations Department			
Priority	No	**RM Procedure**	ST	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
1	RMT.0591 29/07/2016	2020-10 17/11/2020	2022 Q2	2023	2022 Q1 (for CS) 2023 (for AMC/GM)
2		2022 Q3	2023	2024	2024

CHANGES SINCE LAST EDITION

Information on Opinion publication added for Subtask 1

EVT.0012	**Evaluation of Commission Regulation (EU) No 139/2014 (the 'Aerodrome Regulation')**
	Commission Regulation (EU) No 139/2014 (Aerodrome Regulation) was adopted in 2014. Since 2018, rules have been subject to monitoring through EASA Standardisation. An evaluation will be performed to assess the relevance, effectiveness and efficiency of the rules.
Status	Not started
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	n/a
Affected stakeholders	Aerodrome operators, CAs
Owner	EASA FS.2 Air Operations Department

EXPECTED OUTPUT

Deliverable(s)	Timeline
Evaluation report	2024

CHANGES SINCE LAST EDITION

n/a

13. Groundhandling

This chapter addresses all groundhandling related aspects, with the exception of aerodrome design and operations, as well as aerodrome operators, being dealt with in the previous chapter.

13.1 Safety

Issue/rationale

This risk area includes all groundhandling and apron-management-related issues (aircraft loading, de-icing, refuelling, ground damage, etc.) as well as collision of the aircraft with other aircraft, obstacles or vehicles while the aircraft is moving on the ground, either under its own power or being towed. It does not include collisions on the runway. Baggage and cargo loading in passenger aircraft is the top safety issue based on the number of occurrences in the ECR. The second issue that will be assessed in the European SRM process will be ground staff movement around aircraft (see ASR 2021.

What we want to achieve

Increase safety by continuously assessing and improving risk controls to mitigate the risks in the area of ground safety.

How we monitor improvement

The key risk areas and underlying safety issues will continue to be monitored as part of the joint data portfolio and SRP for ADR and GH (refer to ASR 2021 Figure 117 and Table 33), with the support of the Aerodromes and Groundhandling CAG. The EASA ABs regularly provide feedback on the efficiency/proportionality of the actions and on the effect on level playing field.

How we want to achieve it: actions

RMT.0728	**Development of requirements for groundhandling**
	Develop IRs/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 Q1/2019. In addition, the task will include RMT.0705. Develop 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 sub-contractor (handling agent) of air operators.
Status	Ongoing.
SIs/SRs	SI-1023 operation of airbridges/passenger boarding bridges
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	CAs, groundhandling service providers, aerodrome operators, AOC holders and groundhandling staff				
Owner	EASA FS.2	Air Operations Department			
Priority	Yes	**RM Procedure**	AP	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
1	RMT.0728 22/11/2019	2022 Q2 [56]	2023	2024	2025

CHANGES SINCE LAST EDITION

n/a

In addition to the above, the following SPTs are also directly relevant to groundhandling:

SPT.0102	**Development of new safety promotion material on high-profile aerodrome and groundhandling safety issues**
SPT.0109	**Raise of awareness of the risk posed by icing in-flight and potential mitigations**

The full description for these actions is included in **Chapter 6** (SPT.0109) **and Chapter 12** (SPT.0102).

[56] Instead of an NPA public consultation, the procedure laid down in Article 16 of MB Decision No 18-2015 was applied.

14. Unmanned aircraft systems

This chapter includes all the actions that are relevant to ensure the safe integration of civil unmanned aircraft systems into the aviation system.

14.1 Safety

Issue/rationale

Most of the EU Member States have adopted national regulations to *ensure safe operations* 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 recent adoption of the EU requirements for the operation of UASs in the 'open' and 'specific' categories (Commission Implementing Regulations (EU) 2019/947 and 2019/945), Member States will need to modify the already adopted national regulations.

The already adopted EU regulations need to be complemented with additional actions as explained in Volume I **Section 3.1.3.2**. These actions aim at completing this framework and thus enable harmonised rules at EU level. They are also linked with other actions in EPAS (such as RMT.0731) and aim at enabling standardised UAS operations as well as more complex operations of UASs such as operations in an urban environment (e.g. urban air mobility).

While regulating UASs has multiple drivers due to its very nature, there are also very strong efficiency and level playing field aspects.

In order to ensure safe UAS operations, it is extremely important to manage the safe integration of UASs into the airspace. U-space[57] is a set of new services and specific procedures designed to support the safe, efficient and secure access to airspace for large numbers of drones. In 2017, the SJU prepared the U-space Blue Print[58] describing the vision for U-space. In addition, the European Roadmap for safe integration of drones in all airspace classes[59] was also prepared by the SJU with EASA support and adopted by the EC. The ATM MP reflects the details about the integration of UASs into the EU airspace.

What we want to achieve

To create a level playing field in all EU Member States, using an operation-centric concept, which is proportionate and risk- and performance-based, so that all companies can make best use of 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 activities.

How we want to achieve it: actions

[57] U-space is the European name for unmanned traffic management (UTM).

[58] https://www.sesarju.eu/u-space-blueprint

[59] https://www.sesarju.eu/sites/default/files/documents/reports/European%20ATM%20Master%20Plan%20Drone%20roadmap.pdf

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

Development of IRs (including implementing and delegated acts) for UASs, implementing Articles 55 to 57 of and Annex IX to the Basic Regulation.

The ToRs have been updated by publishing issue 3 on 22/04/2021 to reflect the developments of the approach defined by EASA and agreed with the relevant stakeholders.

This task will also cover the development of AMC & GM to support the U-space regulation.

There are three categories of UAS defined:

— 'Open' category: low-risk operation not requiring authorisation or declaration before flight

— 'Specific' category: medium-risk operation requiring authorisation or declaration before flight

— 'Certified' category: high-risk operation requiring certification process

To implement an innovative new set of rules for the three categories and to address U-space, following Six subtasks were identified:

Subtask A: UAS operations in the 'open' and 'specific' category regulated by dedicated implementing and delegated acts[60]

Subtask B: U-space and airspace integration

Subtask C: UAS operations in the 'certified' category and Urban Air Mobility (UAM). This subtask includes amendments to IAW, CAW, FCL, OPS, ADR, ATM/ANS regulations for three types of operations:

— Operations type #1: Instrument flight rules (IFR) operations of UAS for the carriage of cargo in airspace classes A–C (ICAO airspace classification) and taking off from and/or landing at aerodromes falling under the Basic Regulation.

— Operations type #2: operations of UAS 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 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 aircraft with a pilot on board, including operations out of the U-space airspace. While this task will include considerations also for 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.

Subtask D: Certification Specifications for Unmanned Aircraft Systems (CS-UAS and CS-Light UAS), Certification Specifications for vertical take-off and landing aircraft (CS-VTOL), and CS-ETSO

Subtask E: Airspace Usage Requirements and air traffic management/air navigation services interoperability requirements

Subtask F: Environmental protection

For the maintenance of the Regulation and the AMC & GM developed under Subtasks A and D, two RMTs have been created. Please refer to RMT.0729 and RMT.0730. Introduction of standard scenarios by amending the implementing and delegated acts for the 'open' and 'specific' categories[61], covered by RMT 0729.

Status	Ongoing
SIs/SRs	SI-2014 Integration of RPAS/drones SR ITAL-2017-001
Reference(s)	n/a
Dependencies	RMT.0727, RMT.0731

[60] Commission Implementing Regulation (EU) 2019/947 and Commission delegated Regulation (EU) 2019/945 have been adopted.

[61] Commission Implementing Regulation (EU) 2020/639 and Commission delegated Regulation (EU) 2020/1058 have been adopted.

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

Affected stakeholders	UAS operators (private and commercial); competent authorities (CAs); flight crews; remote pilots; maintenance organisations; maintenance training organisations; continuing airworthiness maintenance organisations (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; air traffic services (ATS) personnel; aerodromes; general public; model aircraft associations				
Owner	EASA ED.0.3	Executive Director's Office – Drones Section			
Priority	Yes	**RM Procedure**	See SubT/RMG	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
A(ST)	22/12/2016	2017-05 04/05/2017	01/2018 06/02/2018	2019/945 12/03/2019[62] 2019/947 24/05/2019[63]	2019/021/R 10/10/2019
B(AP)		08/10/2019	01/2020 13/03/2020	2023	2024
C(ST)		#1 2022 Q1 #2 2023 #3 2023 #4 2023 #5 2025	2023 2024 n/a n/a n/a	TBD TBD n/a n/a n/a	TBD TBD 2024 2024 2024
D(ST)		#1 2023 #2 2023 #3 2024 #4 2022 Q1	n/a n/a n/a n/a	n/a n/a n/a n/a	2024 2024 2024 2022 Q4
E(ST)		#1 2023 #2 2023 #3 2024 #4 2024	2024 2024 n/a 2025	TBD TBD n/a TBD	2024 TBD 2025 TBD
F(ST)		#1 2022 Q4 #2 TBD #3 TBD	n/a n/a n/a	n/a n/a n/a	2023 TBD TBD

CHANGES SINCE LAST EDITION

Action description updated.
Redefinition of the subtasks and milestones in alignment with the ToR RMT.0230 Issue 3 issued April 22, 2021

62 https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32019R0945
63 https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32019R0947

RMT.0729 **Regular update of Regulations (EU) 2019/945 & 2019/947 (drones in the 'open' and 'specific' categories)**

Addition of standard scenarios (STSs) in Appendix 1 to the Annex to Regulation (EU) 2019/947, defining the conditions when a UAS operator can start an operation after having submitted a declaration to the competent authority. Moreover, the inclusion of new Parts in the Annex to Regulation (EU) 2019/945, including the technical requirements that UAS need to meet in order to be operated in the STSs, and establishing two UAS classes.
General improvements of Regulations (EU) 2019/947 and (EU) 2019/945.

Subtask 1:
It covers:
— two standard scenarios:
  — VLOS (visual line of sight) in urban over controlled area;
  — BVLOS (beyond visual line of sight) in sparsely populated environment over controlled area using visual observers; and
— two new UAS classes C5 and C6.
AMC and GM are published under RMT 0730

Subtask 2:
It will be activated when a need for amendment of Regulations (EU) 2019/945 & 2019/947 will be raised.

Status	Ongoing
SIs/SRs	SI-2014 Integration of RPAS/drones
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	UAS operators (private and commercial); competent authorities; flight crews; remote pilots; maintenance staff; design and production organisations; other airspace users (manned aircraft); service providers of air traffic management/air navigation services (ATM/ANS) and other ATM network functions; air traffic services (ATS) personnel; aerodrome operators; general public; model aircraft associations				
Owner	EASA ED.0.3	Executive Director's Office – Drones Section			
Priority	No	**RM Procedure**	see SubT/RMG	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
1(AP)	RMT.0729 26/07/2019	25/09/2019	05/2019 07/11/2019	2020/639 12/05/2020[64] 2020/1058 27/04/2020[65]	n/a
2(AP)		tbd	n/a	n/a	tbd

CHANGES SINCE LAST EDITION

n/a

64 https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32020R0639
65 https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32020R1058

RMT.0730 **Regular update of the AMC & GM to Regulations (EU) 2019/945 & 2019/947 (drones in the 'open' and 'specific' categories)**

Predefined risk assessment (PDRA) and recognition of industry standards in support of the specific operations risk assessment (SORA) methodology
General improvements of AMC & GM to Regulations (EU) 2019/947 and (EU) 2019/945.

Considering the novelty of the topic and the need to gain experience while establishing an harmonisation in the implementation of the UAS regulation, EASA will publish on the website guidelines providing useful information for the stakeholders. When the material will be considered mature, NPA and Decision will be produced.

Subtask 1:
Update of SORA to accommodate BVLOS operation in urban environment
Development of three PDRAs: two mirroring the standard scenarios developed by RMT.0729 and one to cover BVLOS operations over sparsely populated areas at less than 150 m above the overflown surface and in uncontrolled airspace

Subtask 2:
Additional PDRAs, AMC & GM for standard scenarios (regulation published under RMT 0729) and for the definition of geographical zones, general improvement of AMC & GM and recognition of industry standards.

Subtask 3:
Additional PDRAs, general improvement of AMC & GM and recognition of additional industry standards
This Subtask will be followed by creating guidelines that will be published on EASA website in 2022. NPA and Decision will be produced in a later date when the material will be considered mature.
Joint Authorities for Rulemaking on Unmanned Systems (JARUS) plans to publish in 2022 Q1 updates to SORA, following a JARUS external consultation. EASA will publish as direct publication the JARUS proposal, unless a major objection will be raised by EASA or by a EU stakeholder during the JARUS consultation.

Status	Ongoing
SIs/SRs	SI-2014 Integration of RPAS/drones
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders UAS operators (private and commercial); competent authorities; flight crews; remote pilots; maintenance staff; design and production organisations; other airspace users (manned aircraft); service providers of air traffic management/air navigation services (ATM/ANS) and other ATM network functions; air traffic services (ATS) personnel; aerodrome operators; general public; model aircraft associations

Owner EASA ED.0.3 Executive Director's Office – Drones Section

Priority No **RM Procedure** ST **Harmonisation** No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
1	26/07/2019	2020-07 16/04/2020	n/a	n/a	2020/022/R 16/12/2020
2	n/a	2021 Q2	n/a	n/a	2021 Q4
3	n/a	n/a	n/a	n/a	n/a

CHANGES SINCE LAST EDITION

n/a

SPT.0091 **European safety promotion on civil drones**

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

Status	Ongoing
SIs/SRs	SI-2014 Integration of RPAS/drones
Reference(s)	n/a
Dependencies	RMT.0230

Affected stakeholders	UAS operators (private and commercial)	
Owner	SPN	Safety Promotion Network

EXPECTED OUTPUT

Deliverable(s)	Timeline
Safety Promotion material	Continuous

CHANGES SINCE LAST EDITION

n/a

RES.0015 **Vulnerability of manned aircraft to drone strikes**

Assessment of the potential collision threats posed by drones to manned aircraft and evaluation of their estimated impacts; establishment of a risk model to support regulatory and operational stances to be validated by means of a comprehensive set of simulated impact tests.

Status	Ongoing
SIs/SRs	SI-2014 Integration of RPAS/drones
Reference(s)	https://www.easa.europa.eu/research-projects/vulnerability-manned-aircraft-drone-strikes
Dependencies	n/a

Affected stakeholders	Air operators in CAT & NCC, SPO, HE, GA	
Owner	EASA SM.2	Strategy & Programmes Department

PLANNING MILESTONES

Starting date	Interim Report	Final Report
2020 Q2	n/a	2023 Q2

CHANGES SINCE LAST EDITION

n/a

RES.0022	**SESAR 2020 research projects aiming to safely integrate drones in the airspace**
	The following research activities are being addressed under the SESAR 2020 programme: surface operations by UAS (PJ.03a-09); IFR UAS Integration (PJ. 10-05). A first project for large-scale demonstrations (SESAR-VLD1-10-2016 (PODIUM project)) was launched in 2017, followed by Exploratory Research calls in 2019, SESAR-ER4-28-2019 and SESAR-ER4-29-2019. The reports of the PODIUM project are available at https://www.sesarju.eu/projects/podium

Status	Ongoing
SIs/SRs	SI-2014 Integration of RPAS/drones
Reference(s)	SESAR solution PJ.03a-09, PJ.10-05 - https://www.sesarju.eu/projects/podium
Dependencies	n/a
Affected stakeholders	UAS, OEM
Owner	SESAR

PLANNING MILESTONES		
Starting date	**Interim Report**	**Final Report**
2017	n/a	2022

CHANGES SINCE LAST EDITION
n/a

RES.0023	**SESAR exploratory projects on U-space**
	SESAR JU has launched the U-space exploratory research as a step towards realising the European Commission's U-space vision for ensuring safe and secure access to airspace for drones. Implemented through SESAR Call for proposal H2020-SESAR-2016-1 (CORUS project) and Exploratory Research call SESAR-ER4-31-2019 . The reports of the CORUS project are available at https://www.sesarju.eu/projects/corus

Status	Ongoing
SIs/SRs	SI-2014 Integration of RPAS/drones
Reference(s)	SESAR[66] - https://www.sesarju.eu/projects/corus
Dependencies	n/a
Affected stakeholders	UAS/drones
Owner	SESAR

PLANNING MILESTONES		
Starting date	**Interim Report**	**Final Report**
2017 Q3	n/a	2022 Q4

CHANGES SINCE LAST EDITION
n/a

66 https://www.sesarju.eu/news/sesar-launches-u-space

RES.0038 **UAS standards**

The research will deliver the assessment of the technical content of the industrial standards listed in the Rolling Development Plan - UAS (RDP-U[67]) and which are going to be recommended by the ongoing AW drone project[68]. In addition, it shall assess the new standards that will be added by European UAS Standards Coordination Group (EUSCG), as part of the regular update of the RDP-U, up to 6 months before the date of expiration of the contract.

Status	New
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	n/a
Affected stakeholders	UAS operators, Design organisations, Maintenance organisations, ANSPs, competent authorities
Owner	EASA SM.2 Strategy & Programmes Department

PLANNING MILESTONES

Starting date	Interim Report	Final Report
2021 Q1	n/a	2023 Q1

CHANGES SINCE LAST EDITION

n/a

[67] https://www.euscg.eu/rdp/

[68] Home page - AW-Drones

15. New technologies and concepts

This chapter addresses the safe integration of new technologies and innovative solutions into the aviation system, with the exception of civil drones, which are addressed in the previous chapter.

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, 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 European emerging technologies and innovative concepts, while ensuring their safe integration into the aviation system.

15.1 Safety

15.1.1 New business models

Issue/rationale

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. Some new business models are emerging: the increased demand for flying in the cities, urban air mobility, the increased digitalisation in aviation systems, the introduction of more autonomous vehicles, platforms starting for single-pilot operations and completely autonomous cargo aircraft. These will challenge the way authorities regulate and oversee the aviation system. CAs 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. Upon the request of Member States, EASA tasked a working group of CAs to assess airlines' emerging 'new' business models and to identify related safety risks posed to the aviation system.

The same approach could be applied to monitor the development of urban air mobility should the Member States request EASA to do so. So far, no actions have been foreseen in this EPAS update.

Managing current and future safety risks arising from new and emerging business models is a strategic priority.

What we want to achieve

Increase safety by continuously assessing and mitigating 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.0300 **Operations with airships**

Development of rules for the safe operation of airships.

Status	On hold
SIs/SRs	n/a
Reference(s)	BIS 'Airships'
Dependencies	n/a

Affected stakeholders	Airship operators and airship DOA/POA holders				
Owner	EASA FS.2	Air Operations Department			
Priority	No	**RM Procedure**	tbd	**Harmonisation**	tbd

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
	tbd	tbd	tbd	tbd	tbd

CHANGES SINCE LAST EDITION

n/a

RES.0028	**Extended Minimum Crew Operations - 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 mitigations and means to perform compliance demonstrations.

Status	Ongoing
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	CAT operators and aircrew	
Owner	EASA SM.2 and CT	Strategy & Programmes Department Certification Directorate

PLANNING MILESTONES

Starting date	Interim Report	Final Report
2021 Q1	2022	2024

CHANGES SINCE LAST EDITION

n/a

15.1.2 New products, systems, technologies and operations

Issue/rationale

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

What we want to achieve

Manage the safe introduction of new products, systems, technologies and operations and continuously assess and mitigate safety risks related to 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.0266	**Powered lift (tilt rotor) applicable requirements (pilot licensing with synthetic training devices, air operations and maintenance)**
	The objective of this rulemaking task is to develop IRs for powered lift pilot licensing and operations.

Status	On hold
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	Pilots, ATOs, and CAs				
Owner	EASA FS	Flight Standards Directorate			
Priority	No	**RM Procedure**	tbd	**Harmonisation**	tbd

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
	tbd	tbd	tbd	tbd	tbd

CHANGES SINCE LAST EDITION

n/a

RMT.0731 **New air mobility**

The current European regulatory framework for aviation safety has initially been designed for conventional fixed wing aircraft, rotorcraft, balloons and sailplanes. The existing framework relies on 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 vehicles 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 in line with 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. A 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 other 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, including the development of CSs based on experience gained in certification projects applying SCs such as for VTOL or electric and hybrid propulsion.

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, airships). The activities in the context of this subtask are coordinated with those of RMT.0230.

Notes:

* e-VTOL electric propulsion aspects related to ADR, ATM, FCL, OPS domains are being addressed through RMT.0230.

* A first set of FCL and OPS electric and hybrid propulsion-related requirements for other aircraft types are being addressed through RMT.0678 (FCL) and RMT.0573 (OPS) respectively.

Subtask 2:

Gyroplanes: FCL and 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 OPS regulation to be amended.

Status	Ongoing
SIs/SRs	n/a
Reference(s)	BIS ‘Electric and hybrid propulsion’; BIS ‘Road / gyroplanes’; BIS ‘Tilt-rotors’
Dependencies	RMT.0230; RMT.0678; RMT.0573.

Affected stakeholders	All				
Owner	EASA SM.2	Strategy & Programmes Department			
Priority	Yes	**RM Procedure**	ST	**Harmonisation**	No

RMT.0731 **New air mobility - continued**

PLANNING MILESTONES					
SubT	**ToR**	**NPA**	**Opinion**	**Commission IR**	**Decision**
1	RMT.0731 09/09/2020	2021 Q3	2022 Q3	2023	2023
2	n/a	2021 Q2	2022 Q3	2023	2023
3	n/a	2021 Q2	2022 Q3	2023	2023

CHANGES SINCE LAST EDITION

Update of References.

RES.0034 **Assessment for the provision of flight instruction outside FSTD (Off-board instructor OBIS)**

Perform an independent assessment of the concept(s) for the provision of flight instruction outside flight simulation device (FSTD), with a focus on the comparative analysis between traditional FSTD initial and recurrent training (flight instructor physically present) and when delivering such training from outside.

The study covers a literature review on the performance of delivering complex training tasks with emphasis on identifying any human factor issues.

The conduct of a series of initial and recurrent FSTD training sessions to support the comparative analysis involving an appropriate distribution of FSTD instructors (SFI and TRI) with different levels of experience.

Status	New
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	Training organisations, Air operators, CAs	
Owner	EASA SM.2	Strategy & Programmes Department

PLANNING MILESTONES		
Starting date	**Interim Report**	**Final Report**
2020 Q4	n/a	2021 Q4

CHANGES SINCE LAST EDITION

n/a

RES.0046 **Digital transformation – case studies to prepare the evolutions of aviation standards**

Investigate the changes and evolutions of aviation standards required to support the entry in service of new digital technologies for aviation, through the performance of specific case studies.

Status	New
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	OEMs, solution developers, Aircraft and drone operators, Maintenance Organisations , Training Organisations, CAs
Owner	EASA SM.2 Strategy & Programmes Department

PLANNING MILESTONES

Starting date	Interim Report	Final Report
2022 Q1	n/a	2024 Q4

CHANGES SINCE LAST EDITION

n/a

RES.0051	**Electric aircraft and hybrid propulsion**
	Assess the feasibility, the environmental benefits and the certifiability of proposed designs for aircraft propulsion system with integrated hybrid/electric engines and power generation architectures as well as sub-systems enablers The action is realised through a series of projects funded by the EU Horizon 2020 programme, further information is available at: IMOTHEP: https://cordis.europa.eu/project/id/875006 FUTPRINT50: https://cordis.europa.eu/project/id/875551 EASIER: https://cordis.europa.eu/project/id/875504 MAHEPA: https://cordis.europa.eu/project/id/723368 TRANSCEND: https://cordis.europa.eu/project/id/864089

Status	New
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	Air operators, Design organisations, CAs
Owner	EASA SM.2 Strategy & Programmes Department

PLANNING MILESTONES		
Starting date	**Interim Report**	**Final Report**
2022 Q4	n/a	2023 Q4

CHANGES SINCE LAST EDITION
n/a

15.1.3 SESAR deployment

Issue/rationale

This section includes relevant EPAS actions to implement the regulatory needs supporting the modernisation of the Single European Sky ATM System, with the exception of SESAR items that are only relevant to UAS (and therefore are included in **Chapter 14**).

The European-wide harmonised implementation of the AAS architecture requires actions from many actors. The envisioned end-result can only be achieved if all actions are taken in the right order. Not only the synchronisation between regulatory evolution and technical/operational evolution is key, but also interdependencies between various actions need to be respected within the technical/operational evolution and Member States involvement.

What we want to achieve

The rationale behind the following actions is to cater for the regulatory and implementation needs of the SESAR essential operational changes and other new technological advancements (such as, but not limited to, U-space technological solutions, virtualisation, cloud-based architecture and remote tower operations) by enabling the use of new working methods, operational improvements and technologies developed by the SESAR project. Interoperability, civil-military cooperation and international compatibility (e.g. such as but not limited to ICAO GANP/ASBUs and NextGen alignment) will form an integral part of EASA's work. In addition, consolidated and

coordinated implementation support activities that facilitate the operational improvements and new ATM operational concepts need to be established.

How we monitor improvement

The EASA ABs regularly provide feedback on the effectiveness of the activities.

How we want to achieve it: actions

RMT.0524	**Data link services**
	The objective of RMT.0524 is to ensure that the operational improvements associated with the safety and efficiency of communication between air traffic controllers and pilots via data link are met. Considering the close link with RMT.0161 activities and to benefit from minimum changes to the datalink regulation, the task has been divided into three subtasks as follows: Subtask 0: The objective is to update the reference to EUROCAE ED-120 'Safety and Performance Requirements Standard For Initial Air Traffic Data Link Services In Continental Airspace' within Annex III to Commission Regulation (EC) No 29/2009 on data link services (DLS) to take into account the recent ED-120 Change 3. Subtask 1: The objective of this Subtask is to address an amendment to CS-ACNS in relation to Data Link Services. Subtask 2: The objective of this Subtask is to review the SES interoperability Regulation (EC) No 29/2009 (implementing the repealed Regulation (EC) No 552/2004) to update and adapt it to the EASA framework, including a development of a set of acceptable means of compliance and guidance material. Subtask 3: This Subtask intends to establish a first set of EASA detailed specifications based on the existing interoperability DLS rules and the relevant DLS Community Specifications (e.g. based on ETSI EN 303 214).
Status	Ongoing
SIs/SRs	n/a
Reference(s)	ATM Master Plan Level 3 – Plan (2019): ITY-AGDL – Initial ATC air-ground data link services
Dependencies	RMT.0161; RMT.0519

Affected stakeholders	CAs, ANSPs, ADR operators, air operators, manufacturers and ATCOs				
Owner	EASA ED.4	Air Traffic Department			
Priority	Yes	**RM Procedure**	See SubT/RMG	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
0(DP)	RMT.0524 29/01/2018	17/10/2019	06/2019 09/12/2019	2020/208 14/02/2020	n/a
1(ST)		2022 Q1	n/a	n/a	2022 Q3
2(ST)		2022 Q2	2023	2023	2023
3(ST)		2022 Q3	n/a	n/a	2023

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Subtask 0 completed

RMT.0624 **Remote aerodrome air traffic services**

The development and introduction of new technologies enables provision of aerodrome ATS (aerodrome air traffic control service or aerodrome flight information service) from geographically independent locations/facilities that are equipped with visual surveillance systems instead of direct visual observation.
As a follow-up of the substantial work undertaken to produce, develop and further expand soft law on remote aerodrome ATS provision, EASA intends to maintain its regulatory framework up to date with the evolution of the remote/virtual tower concept. The purpose of RMT.0624 remains to support the safe implementation of the newest development of the provision for this type of ATS.

Status	Ongoing
SIs/SRs	n/a
Reference(s)	ATM Master Plan (Level 3 Ed 2019) action AOP14 (Remote Tower Services)
Dependencies	n/a

Affected stakeholders	CAs, ANSPs and aerodrome operators				
Owner	EASA ED.4	Air Traffic Department			
Priority	Yes	**RM Procedure**	ST/RMG	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
1	RMT.0624 11/12/2019	2022 Q4	n/a	n/a	2023

CHANGES SINCE LAST EDITION

n/a

RMT.0682 **Implementation of the regulatory needs in support of SESAR deployment**

The objective of the task is the development of the regulatory enablers and promotion material, as required to facilitate the safe, efficient, interoperable and timely deployment of the operational improvements based on SESAR Solutions stemming from the European ATM MP, the AAS as well as the associated recommendations from the WPGR.

For this purpose, this task addresses those issues which are not covered by specific RMTs.
The objective of the initial subtask is detailed as follows:

Subtask 1:

An amendment to Regulation (EC) No 1322/2011 (ACAS IR) to permit the operation of aeroplanes equipped with either ACAS II version 7.1 or ACAS Xa within the European Airspace as follows and an amendment to Regulation (EU) 2018/1048 'PBN IR' to potentially address:

- Provision of LNAV/VNAV, LPV and LNAV Minima at aerodromes to which the only aircraft operating there are not capable of LNAV/VNAV operations;
- Operations in 'Oceanic' airspace associated with the use of a navigation specification that has been developed specifically for use in Oceanic and remote applications in lieu of the RNAV 5 specification;

*Instead of an NPA public consultation, the procedure in Article 15 or that in Article 16 of MB Decision No 18-2015 will be applied.

Status	Ongoing.
SIs/SRs	n/a
Reference(s)	This RMT considers the recommendations stemming from the WPGR and the AAS and supports eight of the EOCs of the ATM MP fourth edition.
Dependencies	RMT.0161

Affected stakeholders	Member States, CAs, ANSPs, air operators, ADR operators, POA holders				
Owner	EASA ED.4	Air Traffic Department			
Priority	No	**RM Procedure**	Standard	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
(1)AP	RMT.0682 10/12/2019	2022 Q2	2022 Q3	2023	2023

CHANGES SINCE LAST EDITION

Update of the task description

SPT.0108	**Promotion of the new European provisions on performance-based navigation and the associated ATM Master Plan essential operational changes**
	The objective is to complement Regulation (EU) 2018/1048 with respect to airspace usage requirements and operating procedures concerning performance-based navigation with relevant promotion material. The task is supported with the following publication: https://www.easa.europa.eu/community/topics/performance-based-navigation
Status	Ongoing
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	n/a
Affected stakeholders	ANSPs, ADR operators, aircraft operators, procedure designers, Network Manager
Owner	EASA ED.4 Air Traffic Department

EXPECTED OUTPUT

Deliverable(s)	Timeline
Safety Promotion material	2022

CHANGES SINCE LAST EDITION

n/a

15.1.4 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 rules in these domains have a number of deficiencies that need to be addressed. Work on AWOs will allow to sufficiently 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 consistency of rules across 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.

What we want to achieve

The European industry should be enabled to take full advantage of safety and economic benefits generated through new technologies and operational experience.

How we monitor improvement

Continuous monitoring of safety issues related to AWOs will be ensured on the basis of the CAT SRP for CAT by aeroplane & NCC operations. The EASA ABs regularly provide feedback on the effectiveness of the activities.

How we want to achieve it: actions

RMT.0379 **All-weather operations**

Subtask 1a is reviewing and updating the AWO rules in all aviation domains, as regards:

- possibility of applying safety performance principles in redrafting of current rules with the aim of allowing a better integration of new and future technologies supporting AWOs, as e.g. enhanced flight vision systems (EFVSs), synthetic vision systems (SVSs), synthetic vision guidance systems (SVGSs), combined vision systems (CVSs), head-up displays (HUDs);
- conventional low-visibility operations (LVOs), such as instrument landing system (ILS)-based CAT II and CAT III approach operations or low-visibility take-offs (LVTOs);
- operations other than AWOs, such as CAT I operations using ILS, GLS or SBAS, or approach operations to higher minima using area navigation (RNAV)(GNSS), non-directional beacons (NDBs) or very high frequency (VHF) omnidirectional ranges (VORs);
- miscellaneous items, such as the improvement of existing rules text and the transposition of the new ICAO approach classification;
- harmonisation with bilateral partners (e.g. FAA) to the extent possible;
- introduction of operations with operational credits such as the newly introduced SA CAT I[69] that are not being yet part of the ICAO regulatory system.

Recommendations and consequent follow-up actions to the Weather Information to Pilots Strategy Paper, also an outcome of RMT.0379, are now being taken forward as a stand-alone project.

Subtask 1b will address CS-AWO.

Subtask 2 will address AWOs for helicopters.

Subtask 3 will address AWO changes to Part-NCO.

Status	Ongoing
SIs/SRs	SR FRAN-2013-032; SR NETH-2014-003
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders	POA holders, air operators, ATOs, ADR operators and ATM/ANS				
Owner	EASA FS.2	Air Operations Department			
Priority	Yes	**RM Procedure**	ST	**Harmonisation**	Yes

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
1a	RMT.0379 09/12/2015	2018-06 13/07/2018	02/2021 28/05/2021	2022 Q2	2022 Q2
1b		n/a	n/a	n/a	2021 Q3
2		2019-09 12/09/2019	02/2021 28/05/2021	2022 Q2	2022 Q2
3		2020-02 07/02/2020	02/2021 28/05/2021	2022 Q2	2022 Q2

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Subtask information reviewed

[69] Special authorisation CAT I represents a type of LVOs with operational credits with the following provisions:

- the decision height (DH) of an SA CAT I operation should not be lower than the highest of the minimum DH specified in the AFM (if stated), the applicable obstacle clearance height (OCH) for the category of aeroplane, the DH to which the flight crew is qualified to operate; or 150 ft; and
- the lowest RVR minima to be used are specified versus approach lighting system and are typically between 400 and 700 m.

SPT.0114	**Promote the availability of enhanced meteorological information and up-link connectivity**
	Help to mitigate the risks of weather-related occurrences through the promotion of the availability of enhanced meteorological information and up-link connectivity to support in-flight updates of meteorological information to airlines, ANSPs and other relevant organisations.
Status	Ongoing
SIs/SRs	SI-0001 Icing in flight SI-4008 Intentional low flying
Reference(s)	EASA BIS 'Weather Information to Pilots (CAT-Fixed Wing)'
Dependencies	SPT.0119
Affected stakeholders	Aircraft operators, pilots, ANSPs
Owner	EASA SM.1 Safety Intelligence & Performance Department

EXPECTED OUTPUT

Deliverable(s)	**Timeline**
Web material, videos, social media and outreach events	2022 Q4

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Dependencies updated

15.2 Efficiency/proportionality

RMT.0737 **Digital Licence for Aviation Pilots (dLAP)**

The main objective of this task is to develop the requirements for the introduction of a digital licence for aviation pilots ('dLAP') into Regulation (EU) No 1178/2011 ('the Aircrew Regulation'). RMT.0737 incorporates the upcoming amendment to ICAO Annex 1 regarding implementing an electronic personnel licensing system which is envisaged for applicability from 3rd November 2022.

RMT.0737 will also:

- mitigate the uncertainties on the financing of the introduction of dLAP by building a financially sustainable solution, to the benefit of national competent authorities (NCA) / industry / pilots / EASA;
- propose rule changes in the Aircrew Regulation to ensure the establishment of a common single European Union (EU) digital licensing format, based on the proposed ICAO electronic pilot licence (EPL) format , with international recognition displaying the issuing CA;
- combine pilot licenses and medical certificates stemming from all EASA Member States into the display of a common and unique EU digital pilot licensing format, instantly updatable on self-contained mobile electronic devices;
- interface with the national pilot licensing systems from EASA Member States to ensure data integrity and immediate enforcement of NCAs' decisions and approvals;
- guarantee interoperability of the EU digital pilot licence between different issuing and verifying NCAs, including their examiners and training organisations, and enhance the standardisation of examiners;
- provide a single EU digital pilot licence verification system which is accessible in both online and offline modes, while protecting the confidentiality and privacy of user data;
- ensure to maintain a competitive EU market for digital solutions and support efficient e-administration.

This RMT is coordinated with ICAO.

Status	New
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	n/a

Affected stakeholders		tbd			
Owner		EASA FS.3	Aircrew & Medical Department		
Priority	Yes	**RM Procedure**	ST	**Harmonisation**	Yes

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
1	2021 Q4	2022 Q3	2023	2024	2024

CHANGES SINCE LAST EDITION

n/a

16. Environmental protection

Environmental protection and sustainability are key challenges for the aviation industry, Member States, the EC and EASA. Sustainable aviation is about combatting climate change and reducing the health effects from aircraft noise and air pollution. This needs to be considered in the global context in order to ensure a level playing field such that European industry remains competitive in a rapidly changing world. Environmental standards are key to achieving this.

EASA is helping 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 reports on the status of environmental standards. For the full picture, including stakeholder actions and market-based measures, see the European Aviation Environmental Report (EAER), which provides an overview of the historic, current and forecasted 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 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.

16.1 Noise, local air quality and climate change standards

Issue/rationale

Implement the ICAO Annex 16 Volume I, Volume II and Volume III standards in Europe.

What we want to achieve

Align the:

— Basic Regulation;

— Implementing Rules (Regulation (EU) No 748/2012);

— AMC & GM to the Implementing Rules; and

— CS-34, CS-36 and CS-CO_2.

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, Volume II and Volume III.

Monitoring of the aviation environmental impact through the EAER.

How we want to achieve it: actions

RMT.0514 **Implementation of the CAEP amendments**

The implementation of CAEP/11 ICAO SARPs started in 2020 (Subtask 1) and will align the:

— Basic Regulation;
— Implementing Rules (Regulation (EU) No 748/2012);
— AMC & GM to the Implementing Rules; and
— CS-34, CS-36 and CS-CO_2

with the ICAO SARPs and guidance material resulting from the CAEP/11 work cycle.

Under Subtask 2 EASA will address the implementation of CAEP/12 ICAO SARPs.

The implementation of CAEP/10 ICAO SARPs (RMT.0513 and RMT.0514) was finalised under Subtask 0 for the AMC & GM to Part 21 and the CS-34, CS-36 and CS-CO_2 through Decisions 2019/014/R, 2019/015/R and 2019/016/R.

Status	Ongoing
SIs/SRs	n/a
Reference(s)	Basic Regulation Article 9, Implementing Rules, AMC&GM to Part 21, CS-34, CS-36 and CS-CO_2
Dependencies	n/a

Affected stakeholders	DOA and POA holders				
Owner	EASA CT.4	Environment & Propulsion Systems Department			
Priority	Yes	**RM Procedure**	ST	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
0	RMT.0514 13/06/2016	2017-01 17/01/2017	09/2017 07/11/2017	2019/897[70] 12/03/2019	2019/014/R 2019/015/R 2019/016/R 29/07/2019
1		2020-06 16/03/2020	03/2020 09/10/2020	2023	2023
2	n/a	2022 Q3	2024	2026	2026

CHANGES SINCE LAST EDITION

n/a

[70] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32019R0897&qid=1608114728978

RMT.0733 **Environmental protection requirements for supersonic transport aeroplanes**

The development of environmental protection requirements for supersonic transport aeroplanes (SST) will start in 2021 and will deal with the development of environmental protection certification requirements for SST, including landing-and-take-off (LTO) noise requirements and CO_2 emission requirements.

In the absence of environmental protection standards from ICAO for those areas mentioned above, the definition of environmental protection certification requirements for SST is based on essential requirements for environmental compatibility set out in Article 9(2) of and Annex III to the Basic Regulation.

Status	Ongoing
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	RES.0025, RMT.0727

Affected stakeholders	SST airframe and engine manufacturers, Member States, CAs, SST operators				
Owner		EASA CT.4	Environment & Propulsion Systems Department		
Priority	Yes	**RM Procedure**	ST	**Harmonisation**	No

PLANNING MILESTONES

SubT	ToR	NPA	Opinion	Commission IR	Decision
1	2021 Q2	2022 Q1	2022 Q4	2023	2023

CHANGES SINCE LAST EDITION

n/a

RES.0024	**Assessment of environmental impacts — engine emissions**
	Development of extended and more robust standards for the purpose of supporting the assessment of engine emissions. The emphasis shall be on robust methods for nvPM mass and number determination including, notably, particle size measurement and sampling techniques, consideration of the effect of both ambient conditions and volatile PM, and sensitivity and uncertainty analyses. The research action will be funded through H2020; contracting and technical management has been delegated to EASA by the EC.
Status	Ongoing
SIs/SRs	n/a
Reference(s)	Environmental Research - Engine Emissions | EASA (europa.eu)
Dependencies	n/a
Affected stakeholders	DOA holders, air operators (CAT)
Owner	EASA SM.2 Strategy & Programmes Department

PLANNING MILESTONES

Starting date	Interim Report	Final Report
2020 Q3	n/a	2024 Q3

CHANGES SINCE LAST EDITION

Addition of reference

RES.0025 **Assessment of environmental impacts — rotorcraft noise**

Development of extended and more robust standards for the purpose of supporting the assessment of aircraft noise footprints.

The focus will be to:

- Extend Noise Related Annoyance, Cognition, and Health (NORAH) noise propagation modelling capabilities, e.g. to account for urban environment, for varied terrain and vegetation, and weather effects;
- Enhance 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 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.

Status	Ongoing
SIs/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, supersonic, etc.)
Owner	EASA SM.2 Strategy & Programmes Department

PLANNING MILESTONES

Starting date	Interim Report	Final Report
2020 Q2	n/a	2024 Q2

CHANGES SINCE LAST EDITION

Addition of reference

RES.0049	**Non-CO2 Emissions: Assessment of Climate Impact and Policy Options**
	• Consolidation of scientific knowledge and reduction in uncertainties related to the climate impact of aviation non-CO2 emissions • Support the coordination of on-going and planned research initiatives addressing the scientific knowledge gaps and the identified mitigations to the climate impact Enhanced quantification methods and tools used for non-CO2 emission inventories, environmental impact assessment and policy option evaluation
Status	New
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	n/a
Affected stakeholders	Aircraft manufacturers and OEMs, Air operators, Air Navigation Service Providers, Aviation Authorities
Owner	EASA SM.2 Strategy & Programmes Department

PLANNING MILESTONES		
Starting date	**Interim Report**	**Final Report**
2022 Q4	n/a	2027 Q1

CHANGES SINCE LAST EDITION
n/a

RES.0052	**Noise / Emission standards for supersonic aircraft**
	Develop *deepened* understanding and detailed modelling for the emissions, the 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 flight 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	New
SIs/SRs	n/a
Reference(s)	n/a
Dependencies	n/a
Affected stakeholders	Aircraft manufacturers and OEMs, Air operators, CAs
Owner	EASA SM.2 Strategy & Programmes Department

PLANNING MILESTONES		
Starting date	**Interim Report**	**Final Report**
2021 Q1	n/a	2024 Q3

CHANGES SINCE LAST EDITION
n/a

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 for this action is included in **Chapter 9**.

16.2 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 around 2.5 billion tonnes of CO_2 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.

At the time of writing 88 States have volunteered to start offsetting their CO_2 emissions under CORSIA from January 2021[71]; others will follow in 2027 when the scheme becomes mandatory.

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 emission units and the related offsetting requirements.

How we monitor improvement

The EASA ABs regularly provide feedback on the effectiveness of the activities.

How we want to achieve it: actions

RES.0026	**Market-based measures (ETS[72] and CORSIA)**
	Extension and update of existing capabilities for assessment of market-based 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 (EC, Member States) and international (ICAO) level.
Status	Ongoing
SIs/SRs	n/a
Reference(s)	https://www.easa.europa.eu/research-projects/environmental-research-market-based-measures
Dependencies	n/a
Affected stakeholders	Air operators
Owner	EASA SM.2 Strategy & Programmes Department

PLANNING MILESTONES		
Starting date	**Interim Report**	**Final Report**
2020 Q2	n/a	2024 Q2

CHANGES SINCE LAST EDITION
Addition of reference

[71] https://www.icao.int/environmental-protection/CORSIA/Documents/CORSIA_States_for_Chapter3_State_Pairs_Jul2020.pdf

[72] https://www.emissions-euets.com/carbon-market-glossary/872-european-union-emissions-trading-system-eu-ets

Appendix A: Deliverables published in 2021

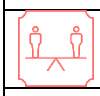
Opinions and Decisions delivered in 2021.

Title of official publication	Date	Task Number	Task Title
Opinion No 01/2021	22/02/2021	RMT.0719	Regular update of air traffic management/air navigation services rules (IRs and AMC & GM) - Occurrence-reporting requirements and requirements for meteorological services
Opinion No 02/2021	28/05/2021	RMT.0379	All-weather operations and review of crew training requirements
Opinion No 02/2021	28/05/2021	RMT.0599	Update of Subpart FC of Part-ORO (evidence-based training)
Opinion No 03/2021	11/06/2021	RMT.0720	'Management of information security risks'
ED Decision 2021/001/R	02/03/2021	RMT.0031	Regular update of AMC & GM to Part 21- Issue 2, Amendment 11
ED Decision 2021/002/R	02/03/2021	RMT.0251 Phase I	Embodiment of safety management system requirements into Commission Regulations (EU) Nos 1321/2014 and 748/2012
ED Decision 2021/003/R	04/03/2021	RMT.0703	Runway safety - AMC & GM to Regulation (EU) No 139/2014 — Issue 1, Amdt 5
ED Decision 2021/004/R	04/03/2021	RMT.0703	Runway safety - CS-ADR-DSN – Issue 5
ED Decision 2021/005/R	23/04/2021	RMT.0249 RMT.0276 RMT.0296	Update of the Acceptable Means of Compliance and Guidance Material to Regulation (EU) No 965/2012 - Aeroplane performance, PBS, oxygen equipment, medical equipment, recorders, technical records, non-ETOPS operations, ground de-icing/anti-icing procedures
ED Decision 2021/006/R	23/04/2021	RMT.0695	AMC-20 Amendment 21 - Extended range operation with two-engine aeroplanes ETOPS certification and operation
ED Decision 2021/007/R	28/05/2021	RMT.0018 RMT.0225 RMT.0252	ICAs — Installation of parts and appliances that are released without an EASA Form 1 or equivalent — Ageing aircraft structures
ED Decision 2021/008/R	31/05/2021	RMT.0400	Amendment of requirements for flight recorders and underwater locating devices — Certification specifications, acceptable means of compliance, and guidance material for locating an aircraft in distress
ED Decision 2021/009/R	15/06/2021	RMT.0018 RMT.0252	ICAs — Installation of parts and appliances that are released without an EASA Form 1 or equivalent

Title of official publication	Date	Task Number	Task Title
ED Decision 2021/010/R	16/06/2021	RMT.0249 RMT.0713	CS-27 Amendment 8 & CS-29 Amendment 9 'Installation and maintenance of recorders — certification aspects' & 'Human factors in rotorcraft design'

Appendix B: Deliverables expected in 2022

ToR:

Driver	Baseline Quarter	Task Number	Task Title	No
	2	RMT.0735	Regular update of the CAW Regulation	1
	3	RMT.0494	Flight time limitation rules for helicopter operations	1
TOTAL				2

NPA:

Driver	Task Number	Task Title
	RMT.0194	Modernisation and simplification of the European pilot licensing and training system and improvement of the supply of competent flight instructors
	RMT.0230	Introduction of a regulatory framework for the operation of drones
	RMT.0524	Data link services
	RMT.0544	Review of Part-147
	RMT.0624	Remote aerodrome air traffic services
	RMT.0682	Implementation of the regulatory needs of the SESAR common projects
	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.0180	Turbine engine endurance and initial maintenance inspection testing, and piston engine time between overhauls substantiation
	RMT.0392	Regular update of air operation rules
	RMT.0591	Regular update of aerodrome rules
	RMT.0668	Regular update of air traffic controller licencing rules (IR/AMC/GM)
	RMT.0719	Regular update of air traffic management/air navigation services rules (IRs and AMC & GM)
	RMT.0737	Digital Licence for Aviation Pilots (dLAP)
	RMT.0514	Implementation of the CAEP amendments
	RMT.0733	Environmental protection requirements for supersonic transport aeroplanes

Decision:

Driver	Baseline Quarter	Task Number	Task Title	No
	2	RMT.0725	Rotorcraft chip detection system	1
	2	RMT.0726	Rotorcraft occupant safety in the event of a bird strike	1
	3	RMT.0118	Analysis of on-ground wings contamination effect on take-off performance degradation	1
	3	RMT.0524	Data link services	1
	3	RMT.0709	Prevention of catastrophic accidents due to rotorcraft hoists issues	1
	1	RMT.0587	Regular update of regulations regarding pilot training, testing and checking and the related oversight	1
	1	RMT.0591	Regular update of aerodrome rules	1
	1	RMT.0688	Regular update of CS-SIMD	1
	1	RMT.0690	Regular update of CS-STAN	1
	2	RMT.0673	Regular update of CS-25	1
	3	RMT.0128	Regular update of CS-27&29, CS-VLR	1
	3	RMT.0184	Regular update of CS-E	1
	3	RMT.0457	Regular update of CS-ETSO	1
	3	RMT.0712	Enhancement of the safety assessment processes for rotorcraft designs	1
	4	RMT.0519	Regular update of CS-ACNS	1
	4	RMT.0687	Regular update of CS-23	1
TOTAL				16

Opinion:

Domain	Task Number	Task Title ***Affected regulation(s)***
Cross domain	RMT.0731 SubT 1	New air mobility: (Electric and hybrid propulsion; non traditional aircraft) *Affected regulations: 1321/2014 and 748/2012*
Cross domain	RMT.0731 SubT 2	New air mobility (Gyroplanes) *Affected regulations: 1178/2011 and 965/2012*
Cross domain	RMT.0731 SubT 3	New air mobility (Tiltrotors) *Affected regulations: 1178/2011 and 965/2012*
	RMT.0255	Review of Part-66 *Affected regulation: No 1321/2014*
	RMT.0668 SubT 1	Regular update of air traffic controller licencing rules (IR/AMC/GM) - military ATCOs *Affected regulation: 2015/340*
	RMT.0668 SubT 2	Regular update of air traffic controller licencing rules (IR/AMC/GM) - update the initial training requirements *Affected regulation: 2015/340*
	RMT.0722	Provision of aeronautical data by the aerodrome operator *Affected regulation: 139/2014*
	RMT.0591	Regular update of aerodrome rules *Affected regulation: 139/2014*
	RMT.0161 SubT 1	Conformity assessment (SubT 1: establish EU regulatory framework) *Affected regulations: 552/2004; 1032/2006; 262/2009; 1207/2011*
	RMT.0161 SubT 2	Conformity assessment (SubT 2: SES interoperability rules) *Affected regulations: 552/2004; 1032/2006; 262/2009; 1207/2011*
	RMT.0476 SubT 1	Regular update of the standardised European rules of the air (stemming from ICAO SL) - SubT 1: amend the IR/AMC/GM

Domain	Task Number	Task Title ***Affected regulation(s)***
		*Affected regulations: 923/2012; 2017/373*
	RMT.0476 SubT 2	Regular update of the standardised European rules of the air (stemming from ICAO SL) - SubT 2: SID/STAR phraseologies *Affected regulations: 923/2012; 2017/373*
	RMT.0736	Regular update of the Third-Country Operator regulation *Affected regulation: 452/2014*
	RMT.0278	Importing of aircraft from other regulatory systems and Part 21 Subpart H review *Affected regulation: 1321/2014; No 748/2012*
	RMT.0521	Airworthiness review process *Affected regulation: 1321/2014; No 748/2012*
	RMT.0190	Requirements for relief pilots *Affected regulation: 1178/2011, No 965/2012*
	RMT.0678	Simpler, lighter and better flight crew licensing requirements for general aviation *Affected regulation: Regulation: 1178/2011*
	RMT.0196	Update of flight simulation training device requirements *Affected regulation: 2018/1974*
	RMT.0587	Regular update of regulations regarding pilot training, testing and checking and the related oversight *Affected regulation: 1178/2011*
	RMT.0682	Implementation of the regulatory needs in support of SESAR deployment *Affected regulation: 1322/2011; 2018/1048*

Domain	Task Number	Task Title ***Affected regulation(s)***
	RMT.0325	Helicopter emergency medical services' performance and public interest sites *Affected regulations: Regulation 965/2012; 1321/2014*
	RMT.0492	Development of FTL for CAT operations of emergency medical services by aeroplanes *Affected regulations: Regulation 965/2012; 1321/2014*
	RMT.0493	Update and harmonisation of FTL for commercial air transport (CAT) by aeroplane for air taxi operations and single-pilot operations taking into account operational experience and recent scientific evidence *Affected regulations: Regulation 965/2012; 1321/2014*
	RMT.0733	Environmental protection requirements for supersonic transport aeroplanes *Affected regulation: The regulatory approach for SST is under development*
 	RMT.0719 SubT 4b	Regular update of air traffic management/air navigation services rules (IRs and AMC & GM) – (SubT 4b: ATS and AIS rules) *Affected regulation: 2017/373; possibly also 923/2012*

Decision following IR:

Driver	Baseline Quarter	Task Number	Task Title	No
	1	RMT.0573	Fuel/energy planning and management	1
	2	RMT.0251	Embodiment of safety management system requirements into Commission Regulations (EU) Nos 1321/2014 and 748/2012	1
	2	RMT.0379	All-weather operations	1
	2	RMT.0599	Update of Subpart FC of Part-ORO (evidence-based training)	1
	3	RMT.0586	Tyre pressure monitoring system	1
	3	RMT.0720	Management of information security risks	1
	3	RMT.0727	Alignment of Part 21 with Regulation (EU) 2018/1139 (including simple and proportionate rules for General Aviation)	1
	3	RMT.0734	One business group CAMO	1
	4	RMT.0476	Regular update of the standardised European rules of the air (stemming from ICAO SL)	1
TOTAL				9

Appendix C: Overview of new actions, deleted actions, actions on hold and completed actions

New:

Driver	Task Number	Task Title
	RMT.0737	Digital Licence for Aviation Pilots (dLAP)
	SPT.0122	Safe return to operations – Ramp up safely
	SPT.0123	Airborne Collision Avoidance System (ACAS) resolution advisories not followed by pilots
	SPT.0125	Promotion of the most important Safety Issues for General Aviation
	MST.0039	Safety promotion to support ramp-up / safe return to operations
	MST.0040	Safety and security reporting
	RES.0034	Assessment for the provision of flight instruction outside FSTD (Off-board instructor OBIS)
	RES.0035	Helicopter under water evacuation
	RES.0036	Risk assessment tool
	RES.0037	Machine Learning
	RES.0038	UAS Standards
	RES.0039	Vortex Ring
	RES.0040	Runway microtexture
	RES.0041	Mental health for pilots and ATCOPs
	RES.0042	Pilot & ATCO fitness
	RES.0043	Flight control systems verification and air data fault detection
	RES.0044	PED Fire risks when transported in aircraft cabin
	RES.0045	Aerodrome 'Triple One' concept implementation
	RES.0046	Digital transformation - case studies to prepare the evolutions of aviation standards
	RES.0047	Fitness to fly in commercial air transport operations of people living with HIV
	RES.0048	Impact of security requirements on operational safety and performances
	RES.0049	Non-CO2 Emissions: Assessment of Climate Impact and Policy Options
	RES.0050	Aircraft certification using modelling and numerical simulations
	RES.0051	Electric aircraft and hybrid propulsion
	RES.0052	Noise / Emission standards for supersonic aircraft

Deleted:

Driver	Task Number	Task Title	Reason
	RMT.0495	FTL rules for aeroplane commercial operations other than CAT	This task focuses on commercial SPO operations. In terms of FTL, these operations are today subject by the national law of the Member State of the Operator (Article 8 (4) of Regulation (EU) 965/2012) and to certain common limits in accordance with Council Directive 2000/79/EC. National rules and operational experience have so far provided adequate fatigue risk mitigation, with no evidence of systemic fatigue issues. In addition, the risk to European citizens from commercial SPO operations with aeroplanes is very low. On the other hand, changes to FTL rules have the potential to considerably increase costs for compliance for SPO operators, which are mostly SMEs, relying on profit from each individual contract rather than from turnover or economies of scale. Finally, the activities covered (e.g. parachute dropping; agricultural work; aerial photography; calibration; construction work) are so diverse and specific that finding a common denominator in terms of organisation of work, duty patterns and fatigue risk models would be impossible. Considering all this, the effort to develop this task would be disproportionately high in comparison to the benefits that it could achieve. In addition, it is very likely that any measures to be proposed would not pass the proportionality test of Article 4 (2) of Regulation (EU) No 2018/1139. For this reason, EASA is proposing to delete this task from the EPAS. Nevertheless, EASA regards aircrew fatigue very seriously, and will keep monitoring the implementation of the existing regulatory framework through the future standardisation activities, as well as by other means (e.g. occurrence reporting), and using the results to update the BIS Aircrew Fatigue. If at any time it becomes necessary to amend the regulatory framework this will be reflected in the EPAS.
	RMT.0686	HP rotor integrity and loss-of-load (due to shaft failure)	This topic has been addressed in published Special Condition SC E-20. It is planned to incorporate the content of this SC in CS-E later on once it is mature via the Regular update of CS-E.
	MST.0024	Loss of separation between civil and military aircraft	High Seas airspace is not territorial airspace. Following discussions with the SM TeB in September 2020 difficulties were reported with the implementation of the related actions. Accordingly, this MST is proposed to be deleted. This considers that High Seas airspace is not territorial airspace, hence national legislation does not apply. Also, ICAO SARPs apply to civil aircraft over the High Seas only, but not to State aircraft in military services or other State aircraft. States must have due regard for the safety of civil aircraft and must have established respective regulations for national State aircraft. Finally, the notion of 'loss of separation' is not considered adequate with regard to military aircraft

On-hold:

Driver	Task Number	Task Title	Domain
	RMT.0266	Powered lift (tilt rotor) applicable requirements (pilot licensing with synthetic training devices, air operations and maintenance)	
	RMT.0300	Operations with airships	
	RMT.0706	Update of authority and organisation requirements	Cross domain
	RES.0011	Helicopter, tilt rotor and hybrid aircraft gearbox health monitoring — in-situ failure detection	

Completed:

Driver	Task Number	Task Title
	RMT.0271	In-flight recording for light aircraft
	RMT.0296	Review of aeroplane performance requirements for operations
	RMT.0400	Amendment of requirements for flight recorders and underwater locating devices
	RMT.0713	Human factors in rotorcraft design
	RMT.0018	Installation of parts and appliances that are released without an EASA Form 1 or equivalent
	RMT.0252	Instructions for continued airworthiness (ICA)
	RMT.0695	Non-ETOPS operations using performance class A aeroplanes with an MOPSC of 19 or less
	SPT.0109	Raise of awareness of the risk posed by icing in-flight and potential mitigations
	RES.0003	Research study on cabin and cockpit air quality
	EVT.0010	Evaluation on helicopter operations

Appendix D: Key indicators in terms of EPAS actions

[placeholder]

Appendix E: Best Intervention Strategies overview

This table provides an overview of the status of the BIS being consulted in 2020/2021 or in preparation.

BIS title	Short description	Status for EPAS
BIS addressing cross-domain issues		
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 2022-2026
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 improvement of their interoperability together with a better airspace utilisation and design, while ensuring compatibility with U-space regulatory framework, should be at the heart of the strategy to define future actions.	No new actions for the EPAS 2022-2026
Emergency evacuation	The BIS will review several studies and recommendations and, if needed, propose actions for operations and certification aspects.	Work in progress
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 Crew and ATCOs.	No new actions for the EPAS 2022-2026

BIS title	Short description	Status for EPAS
Safety Management		
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 it is a significant contributor in assuring a high level of safety.	The actions resulting from this BIS (SPT.0115 and MST.0037) are in place. No new actions for the EPAS 2022-2026
Human factors - Design and use of procedures	The BIS analyses the safety issues with regard to the design, use and management of procedures in the aviation industry.	AB consultation in Q3 2021.
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 2022-2026.
Aircrew		
Flight crew licences – Flight Instructors	The assessment addresses the supply of competent flight instructors. **Outcome: RMT.0194 Modernisation and simplification of the European pilot licensing and training system and improvement of the supply of competent flight instructor**s.	The action resulting from this BIS -RMT.0194 is in progress. No new actions for the EPAS 2022-2026
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. **Outcome: RMT.0287 Regular update of Part MED of Aircrew Regulation**. The pilot age scope is limited to helicopters.	No new actions for the EPAS 2022-2026.
Flight crew licences – competence-based training	The assessment focused on competence-based training for the appropriate pilot licences and ratings.	The 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. Therefore, this BIS activity is closed.
Aircrew fatigue (Flight time limitation)	The BIS on aircrew fatigue has 3 main purposes: 1. Follow up on a scientific evaluation on the rules, regulating flight time limitation. 2. Strengthen fatigue risk management by operators and aircrew.	No new actions for the EPAS 2022-2026.

BIS title	Short description	Status for EPAS
	Raise awareness of shared responsibilities.	
Commercial Air Transport		
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.	Work in progress, no new actions for the EPAS 2022-2026.
Erroneous take-off parameters	The BIS will analyse the safety issue related to the use of erroneous take-off parameters.	Work in progress, no new actions for the EPAS 2022-2026.
Ice in flight (CAT FW)	The BIS will analyse the safety issue 'Flight in adverse weather conditions for CAT FW'.	Work in progress, no new actions for the EPAS 2022-2026
Weather information to pilots – CAT FW	This BIS includes actions to promote 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 2022-2026
Rotorcraft		
Rotorcraft	The updated BIS Rotorcraft will focus on small helicopter operators, integrating the results of the evaluation on the administrative burden on small helicopter operators from the Air Operations Regulation and related soft law (EVT.0010). Work is in progress to address the evaluation recommendations in the context of existing and determine the need for new EPAS actions. Note: **RMT.0318 Single-engine helicopter operations to operate over hostile and congested environment** will resume in 2022, without further analysis after an internal EASA review.	AB consultation expected in Q3 2021.
General Aviation		
GA strategy recovery from COVID-19	Within the context of the RNO project due to the COVID-19, this BIS aimed at proposing actions, in various GA domains.	The GA COVID-19 Return to Normal Operations (RNO) group decided to close this BIS based on the COVID-19 limited impacts on GA.
Maintenance and continuing airworthiness management		
Single CAMO for business group operators	The BIS assessed the case of operators forming part of a single business group, having one CAMO organisation managing	The RMT.0734 being now in development, this BIS activity is closed.

BIS title	Short description	Status for EPAS
	the continuing airworthiness of all (or some) aircraft of all (or some) AOC holders in the group. **Outcome: RMT.0734 One CAMO for airline business groups** (ToR published)**.**	
New products, systems, technologies and operations		
Electric and hybrid propulsion	The BIS addresses electric and hybrid propulsive systems and the regulatory gap with the current regulations, certification specifications and procedures. **Outcome: RMT.0731 New Air Mobility** Sub-Task 1 on Continuing Airworthiness related to introduction of new designs, technologies, and types of operation for which regulatory updates are needed (ToR published)**.**	The RMT.0731 Sub-task 1 being now in development, this BIS activity is closed.
Road / gyroplanes	The BIS addresses the issue of regulatory gap in the Continuous Airworthiness, Flight Crew Licensing and OPS rules for gyroplane operations. **Outcome: RMT.0731 New Air Mobility sub-task 2 "gyroplanes"** (ToR published, scope: FCL requirements for Private Pilot Licence and Non-Commercial Operations).	Work in progress on the flying cars (dual transport mode aircraft) and the rules to enable CAT/SPO gyroplanes' operations. AB consultation planning not yet decided.
Tilt-rotors	Similar to gyroplanes, current rules need to be updated to enable operations **Outcome: RMT.0731 New Air Mobility sub-task 3 "tilt-rotors"** (ToR published).	The RMT.0731 sub-task 3 being now in development, this BIS activity is closed.
Airships	Like for gyroplanes and tiltrotors, the current regulatory framework needs to be updated to enable operations.	AB consultation expected in Q3 2021
New business models		
SIPO/eMCO	This BIS assesses the main challenges associated to the proposed concepts for extended minimum crew operations or single pilot operations, investigating hazard mitigations and means to perform compliance demonstrations	Work in progress, no new actions for the EPAS 2022-2026.

Appendix F: Transposition of ICAO SARPs in 2021

[placeholder]

Appendix G: Index

EValuation Tasks

Member State Tasks

RESearch Tasks

RuleMaking Tasks

Safety Promotion Tasks