

The European Plan for Aviation Safety (EPAS)

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RASP Webinar Series: Safety Strategy at the Regional Level
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Your safety is our mission.

Safety management at European (EU) level

•European Aviation Safety Strategy:

- Policies and objectives from 'political' authorities
- Opportunity for EC to spell out the strategic goals

•European Aviation Safety Programme (EASP):

- Integrated set of regulations and activities aimed at improving safety
- Comprehensive Safety Programme document for the Region (European SSP 'top level' document equivalent)

•European Plan for Aviation Safety (EPAS):

- Safety issues assessment and related action plan
- Supports safety action planning at State level – States must reflect risks and actions in their State Aviation Safety Plan as relevant to their State 'risk picture'



EASP versus EPAS

European Aviation Safety Programme (EASP) describes:

- the European aviation system,
- its actors,
- how the four SSP pillars are implemented at European level.

It does not contain actions.

It is managed by the European Commission.

European Plan for Aviation Safety (EPAS)

- A multiannual action plan, reviewed annually.
- Contains key risk areas & safety issues for aviation safety at EU level, together with the actions aimed at mitigating those risks.

It is managed by EASA and updated every year.



[Latest edition](#)



[Latest edition](#)

EPAS development process

EPAS INPUTS

Global Aviation Safety Plan (GASP)

EU Aviation Strategy

Key Risk Areas Safety Issues

EASA Standardisation results

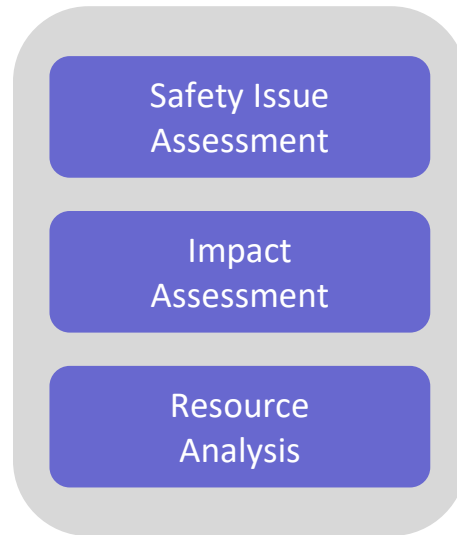
Stakeholder feedback (efficiency/proportion.)

New/amended ICAO SARPs

Third Country Rulemaking (FAA, TCCA etc..)

[Candidate issue form](#)

Critical success factor: involvement of the EASA Advisory Bodies



Draft EPAS

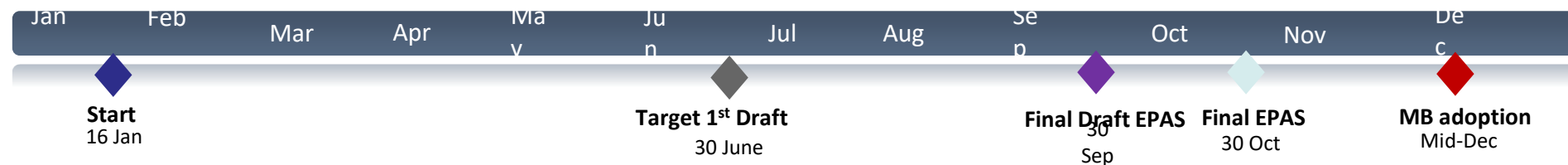


EASA Advisory Body Consultation (8 weeks)

Final EPAS



timeline for EPAS 2022-2026



EPAS 2021-2025 (10th Edition)



Introduction & Strategy
*Systemic, operational,
new technologies,
environment*



EPAS Actions
per domain



Safety Risk Portfolios
*Key risks and safety
issues per domain*

basis for EUR RASP

EPAS 2021-2025 Volume I



Introduction & Strategy

- Strategic priorities were kept unchanged
- Full revision of EPAS strategy planned in 2021
- New section 2.1 'Operational context' -> EU aviation industry (domains/size) and COVID-19 impact

Link [EPAS 2021-2025 Volume I](#)

Supporting documents

[How EPAS is developed](#)

[Working groups and Bodies having a role in EPAS](#)

[List of Acronyms and Definitions](#)

EU & EASA Strategy -> EPAS Chapter 3



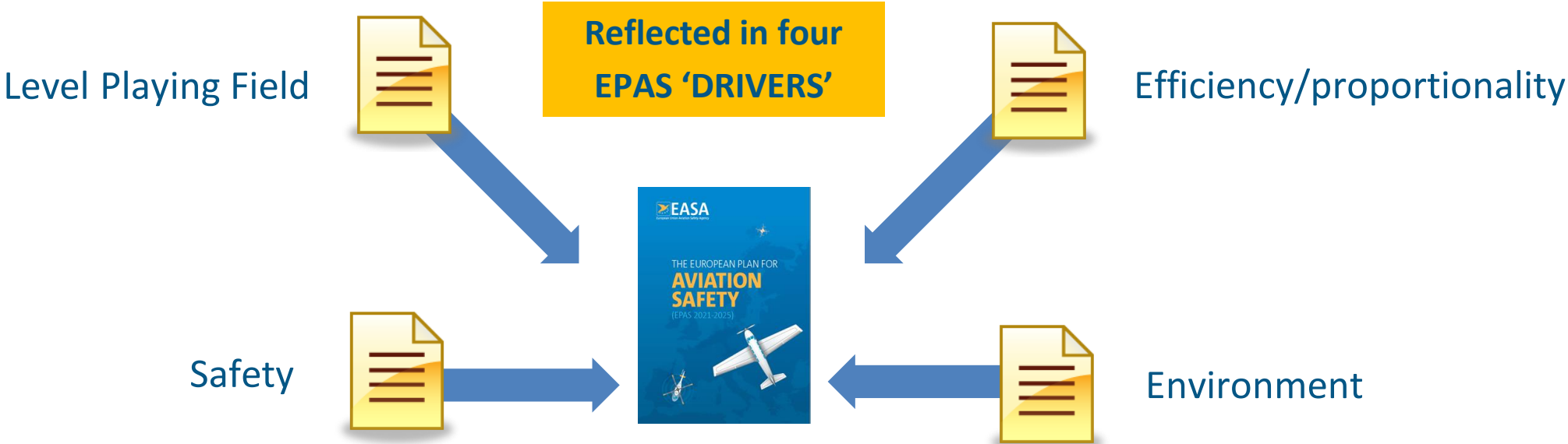
European Commission's Aviation Strategy ENABLING EUROPEAN AVIATION TO FLOURISH & NEW GREEN DEAL

Maintaining high EU safety, security and environment standards

Innovation & digital technologies
Single European Sky
Drones

Tackling limits to growth in the air and on the ground, improving connectivity

An ambitious EU external aviation policy



EPAS Strategic Priorities § 3.1 (maintained in 2020)

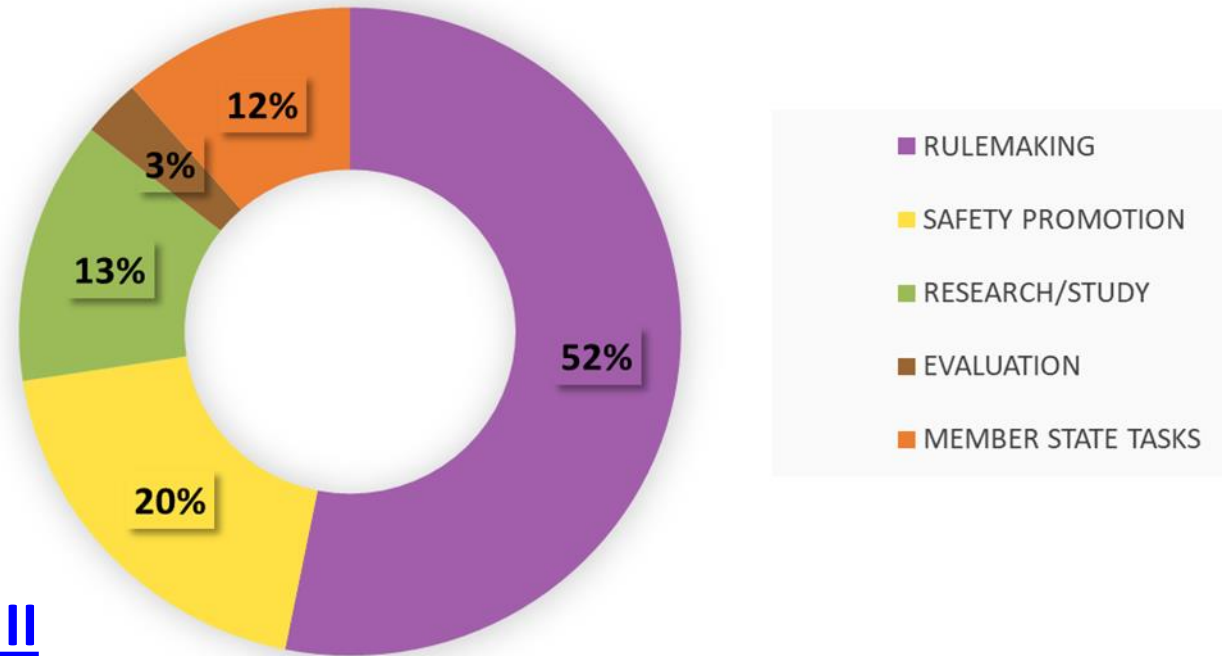


EPAS 2021-2025 Volume II



EPAS Actions

- In 2020 the rulemaking output was reviewed to alleviate burden on stakeholders
- 170 active EPAS actions -> 52 % of these are Rulemaking actions
- 22 new actions added
- 24 actions completed in 2020



Link [EPAS 2021-2025 Volume II](#)

Supporting document

[EPAS action types and templates](#)

EPAS 2021-2025 Volume III



Safety Risk Portfolios

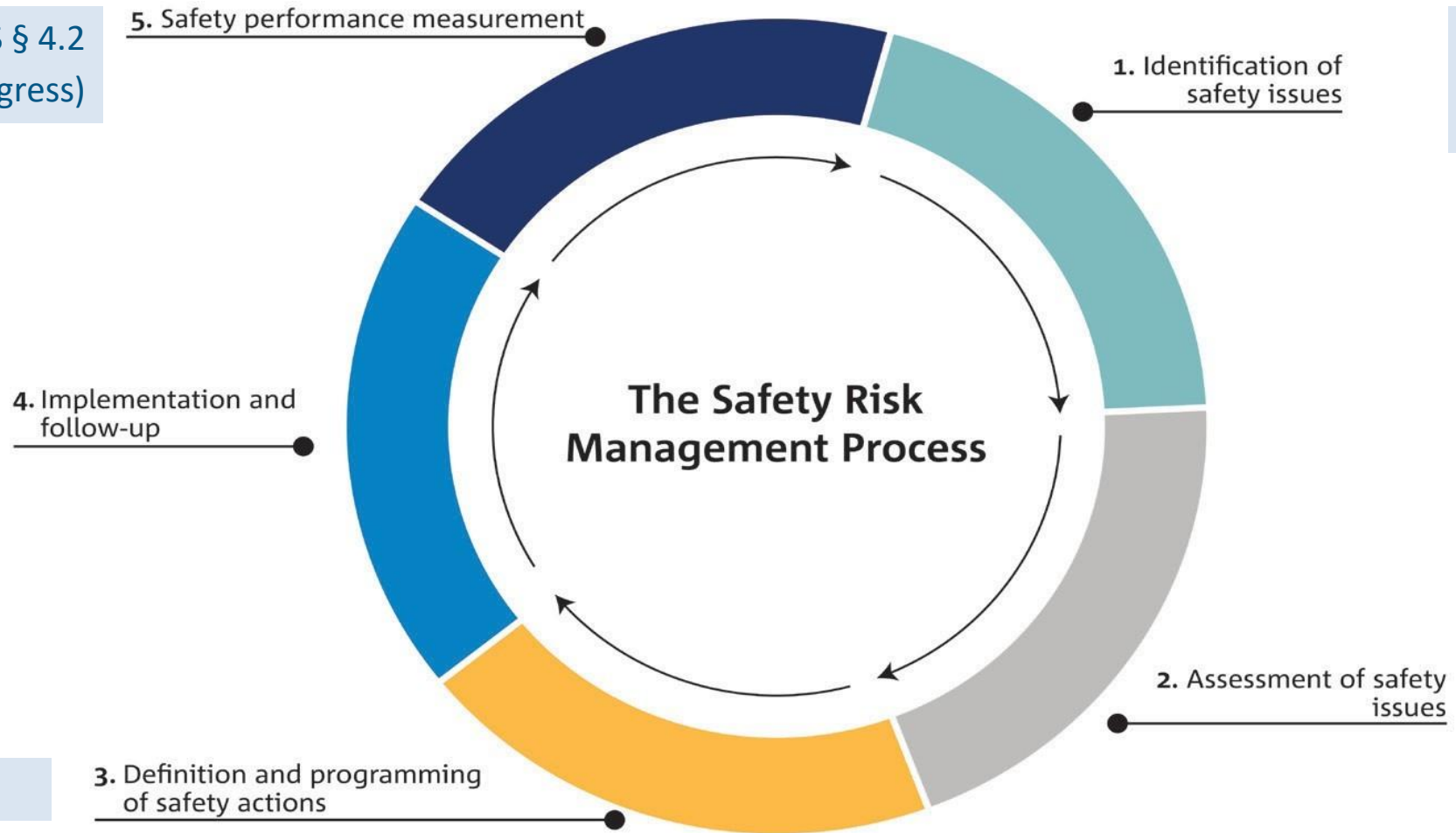
- Key risks & underlying safety issues
- Domain-based Safety Risk Portfolios (SRPs)
- Dedicated COVID-19 risk portfolio
- 150 + safety issues described and categorised (assess / monitor / mitigate)

Link [EPAS 2021-2025 Volume III](#)

Related document [Annual Safety Review 2020](#)



EPAS § 4.2
(work in progress)



Data Portfolio >
Annual Safety
review (ASR)

EPAS Vol. II

Risk Portfolio
> EPAS Vol. III

The European SRM process is at the core of the Safety Management System (SMS) at European level:

- *a set of processes to identify safety hazards and define their mitigations;*
- *analysis of data from different sources and collaboration with safety partners from national aviation authorities and industry.*

Annual Safety Review & EPAS Volume III



Data Portfolios

ranking of safety issues **purely through a data-driven approach**

starting point for building the domain **Safety Risk Portfolio**



Safety Risk Portfolios

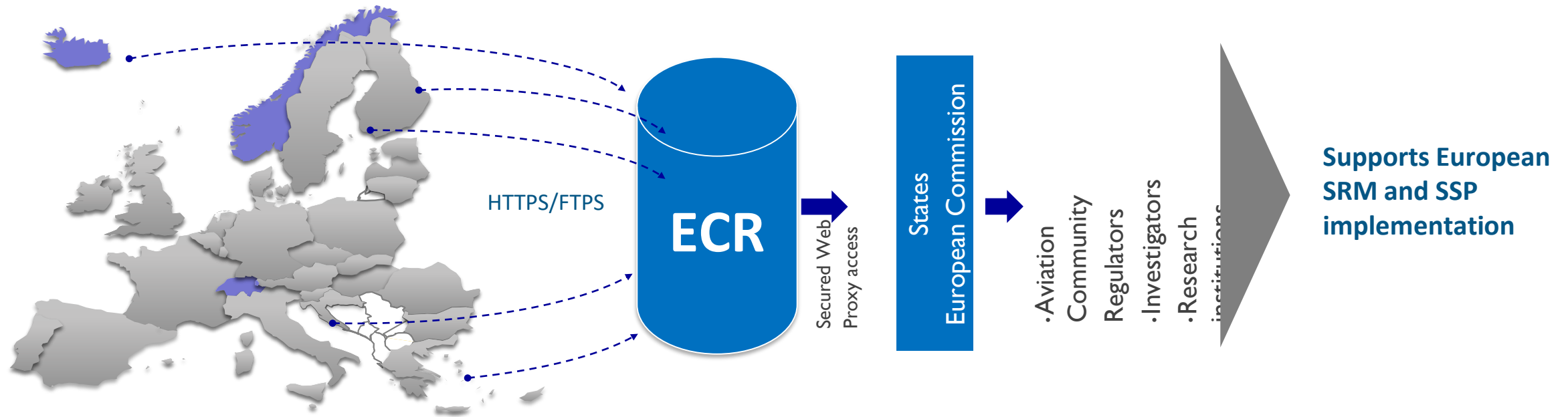
Blend data with expert views provided by the EASA domain Collaborative Analysis Groups (CAG)

Prioritise safety issues :

- Monitor -> barriers remain effective**
- Assess -> need for further analysis**
- Mitigate -> take action**

Management of occurrence data in the EU system

- ❑ **European Central Repository (ECR)** containing all occurrences reported to States and EASA with conclusive investigations, actions and their follow-up when required
 - ❑ IT secured, encrypted occurrence data bank
 - ❑ Controlled access, strict dissemination policy
 - ❑ Common taxonomy, common IT interface (ECCAIRS)
- ❑ **All Member States and EASA have full access to support their own safety risk management.**



EASA Safety Risk Portfolios

- EPAS Volume III provides the first set of available **EASA Safety Risk Portfolios**.
- Safety Risk Portfolios list and describe the safety issues that need to be mitigated at European level.
- Safety Risk Portfolios are currently available for the following domains:



•Aerodromes &
Groundhandling



•Air Traffic
Management/Air
Navigation
Services



•Commercial Air
Transport –
Aeroplanes



•Human
Performance –
Human Factors




•Non-commercial
operations –
Small Aeroplanes
(General
Aviation)

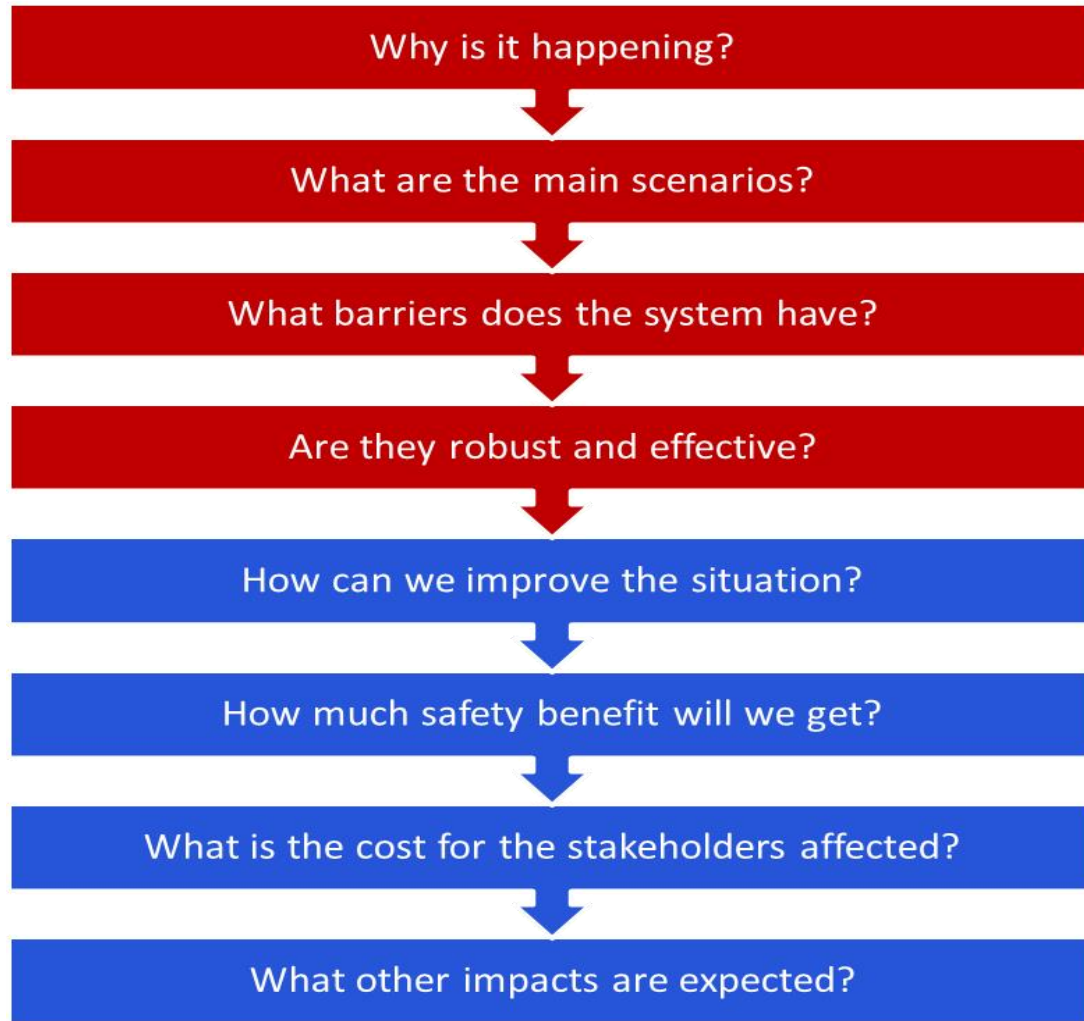
- A dedicated **COVID-19 Safety Risk Portfolio** is also included.

Definition and programming of safety actions

- For each safety issue classified as **‘Mitigate’** an assessment of a range of possible actions is performed.
 - For complex or ‘controversial’ issues the assessment is captured in a Best Intervention Strategy (BIS) report.
 - BIS reports are consulted with the Advisory Bodies.
 - Once agreed, actions are included in the next EPAS.
- Example: Safety issue SI-3003 *‘Human Factors competence for regulatory staff’* -> action **SPT.0115**

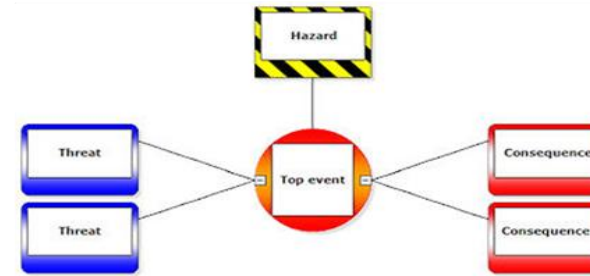
SPT.0115	Provide Member States with a basis for training their staff in Human Factors	
	<p>Provides Member States with a basis for training their staff in Human Factors. The task involves expanding the scope of the existing Human Factors competency framework for inspectors to cover all categories of regulatory staff. This competency framework will then be promoted to Member States.</p> <p>The task mitigates against risks generated through the inadequate understanding, regulation and oversight of human factors.</p>	
Status	New	
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		

Assessing safety issues vs. defining actions



SAFETY ANALYSIS

IMPACT ASSESSMENT



EASA Safety Intelligence & Performance Team



EASA Impact Assessment Team

COVID-19 Safety Risk Portfolio (SRP)

- First CV-19 portfolio compiled during the second quarter 2020 based on a survey.
- The survey and follow-up discussions yielded:
 - 48 individual safety issues
 - grouped into 6 categories and prioritised
 - Top safety issues assessed by “Task Teams” (recruited from the CAGs)
 - [Review issued on the RNO EASA webpage in June 2020](#)

•Management
Systems

•Human
Performance

•Supply of
Information

•Training,
Checking and
Recency

•Infrastructur
e and
Equipment

•Financial
Effects on
Safety

COVID-19 SRP: top safety issues in June 2020

https://www.easa.europa.eu/sites/default/files/dfu/review_of_aviation_safety_issues_from_covid-19_final_0.pdf

- The scale of storage and destorage of aircraft may lead to technical failures
- Increased presence of wildlife at aerodromes
- Documentation and database updates may not have been applied
- Skills and knowledge degradation due to lack of recency
- Personnel may not feel safe and in control about returning to work
- Aviation personnel wellbeing during the pandemic
- Aviation personnel fatigue
- Reduced focus on, or prioritisation of safety
- Risk assessments no longer valid
- Reduced oversight by competent authorities during lockdown
- Restarting a complex system is unpredictable

COVID-19 Safety Risk Portfolio - Updates

- EASA began re-surveying the CAGs in autumn 2020 and have continued ever since
- 13 new safety issues were proposed (11 retained)
- All safety issues were re-prioritised to consider
 - new information
 - duration of pandemic, nature of restart
 - implementation of mitigating actions
- **Many issues see their risk level increase in line with the lasting effects of the crisis.**

Retained new COVID-19 safety issues (11)

- Increase of cyber security issues related to the pandemic situation
- Maintenance of electrical systems and visual aids at aerodromes
- ANSPs returning to operations after being closed for several months
- Transfer of pilots & cabin crew from one fleet to another resulting in low hours on type
- Reduction in training effectiveness due to COVID-19 restrictions
- Knowledge transfer missed for new generation aviation personnel
- Rapid growth of cargo organisations during the pandemic
- Carriage of hand sanitiser in the cabin
- Unusual approach profiles in the circumstances of the pandemic
- Reduction in contracted fees to ground handling service providers
- Decreased funding of aviation regulatory authorities

Highest risk CV-19 safety issues March 2021

•Skills and knowledge degradation due to lack of recent practice (all domains)

•Reduced adherence to procedures in the new working environment (all domains)

•Crew fatigue due to unavailability of rest facilities and/or extended duty period

•Transfer of crews from one fleet to another resulting in low hours on type

•Extent and duration of Covid-19 exemptions and temporary rules (focus area EASA STD)

•Unusual approach profiles in the circumstances of the pandemic

•Increase of cyber security issues related to the pandemic (all domains)

Existing Safety Issues
to be updated

New Safety
Promotion material*

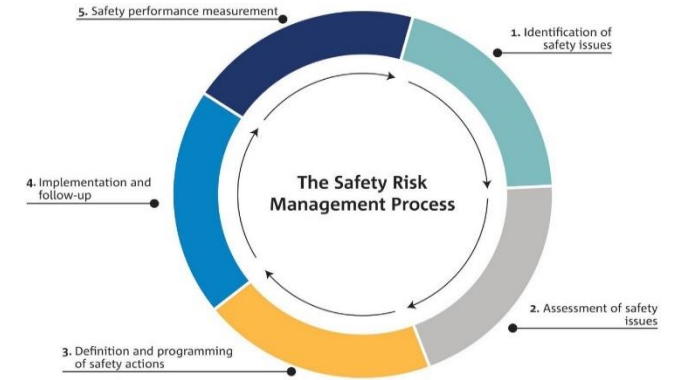
For some more data
needed (surveys)

* ad-hoc actions – no need to
wait for next EPAS

Key points:

Benefits of the European SRM

- Pooling of data and expertise
- Common system for data collection, analysis & exchange
- Common understanding of risks and safety priorities
- Aligning efforts and resources to analyse & mitigate key risks
- Ensuring risks are managed at the right level
- Supporting States and Industry with safety management
- Supporting safety action planning for the entire ICAO EUR Region





**Feedback & comments:
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easa.europa.eu/connect



Your safety is our mission.

An agency of the European Union 

Backup: Further enhancing analysis capabilities

(work in progress)

