



# EASA

European Aviation Safety Agency

## European Plan For Aviation Safety: A Regional Safety Strategy

### Safety Conference UCL 2018

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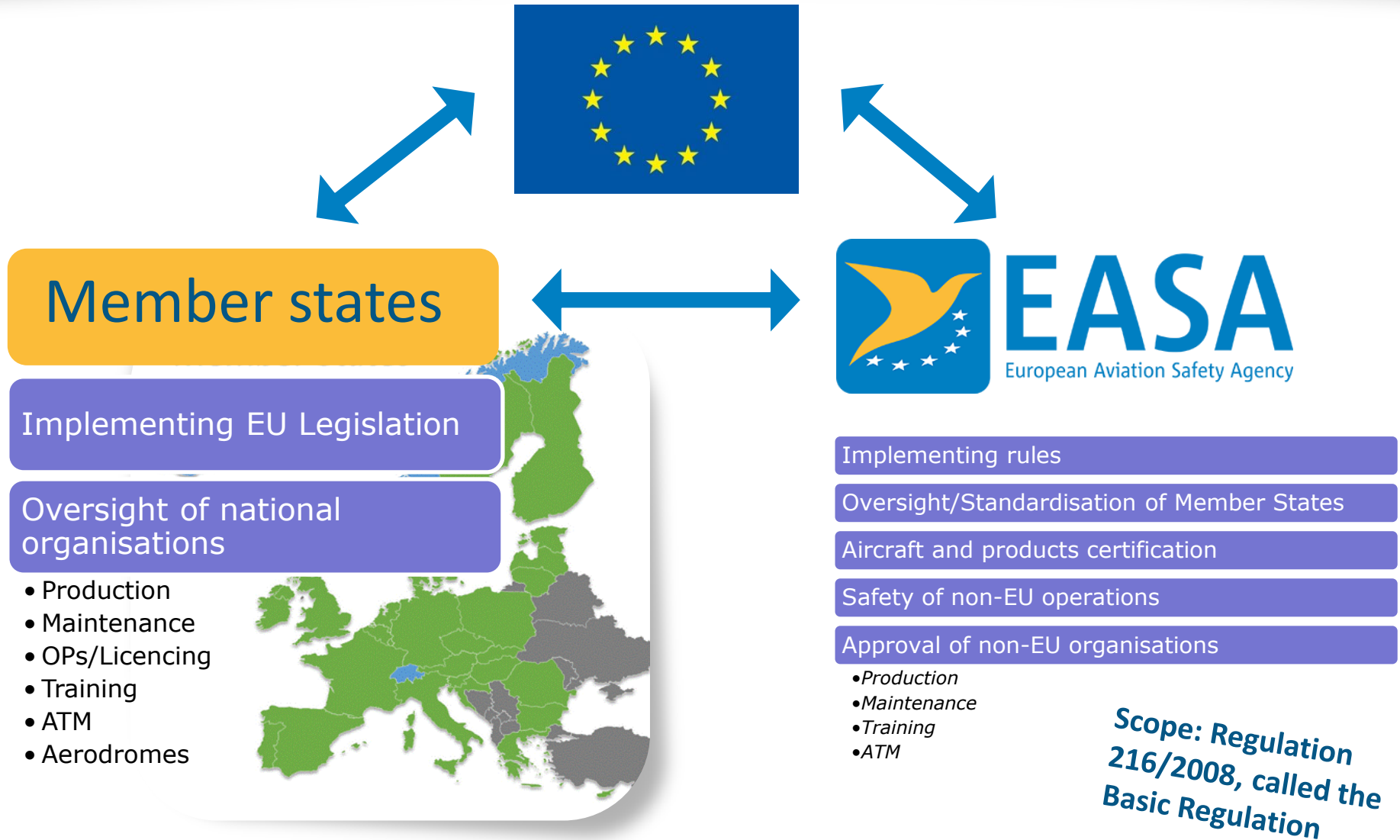
## Your safety is our mission.

An agency of the European Union 

TE.GEN.00409-001



# Partnership with EASA Member States





# EPAS in few words

- EPAS is the European Plan for Aviation Safety
- It provides a coherent and transparent framework for safety work at regional level,
- It helps the identification of major safety risks and actions to take,
- It supports Member States to implement their State Safety Programmes (SSP) and their compliance with the ICAO Global Aviation Safety Plan (GASP),
- It has a role of sharing of best practice and knowledge.
- The plan also includes European states not under the EASA umbrella.

Note: Safety at national level is managed through

- States' Safety Programmes (SSPs) by the States and
- Safety Management Systems (SMS) by the industry



# **What is put in place to create the European Plan For Aviation Safety?**



# Why do we need an aviation plan?

We need to prioritise a the large number of proposals from a wide variety of sources and drivers like safety, efficiency, environment, level playing field



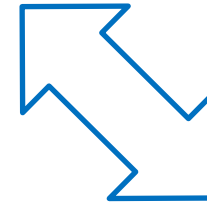
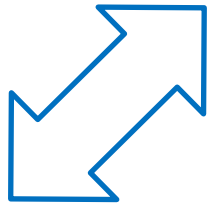
**What is critical? How to solve issues? When? Which objectives?**



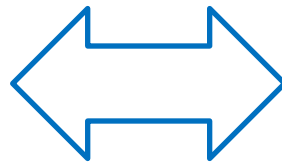
# How to establish a safe and efficient plan?

Due to the high number of actions to prioritise, we need:

Processes to  
indicate who  
does what and  
when



Organisational  
structure  
where each actor  
has a role

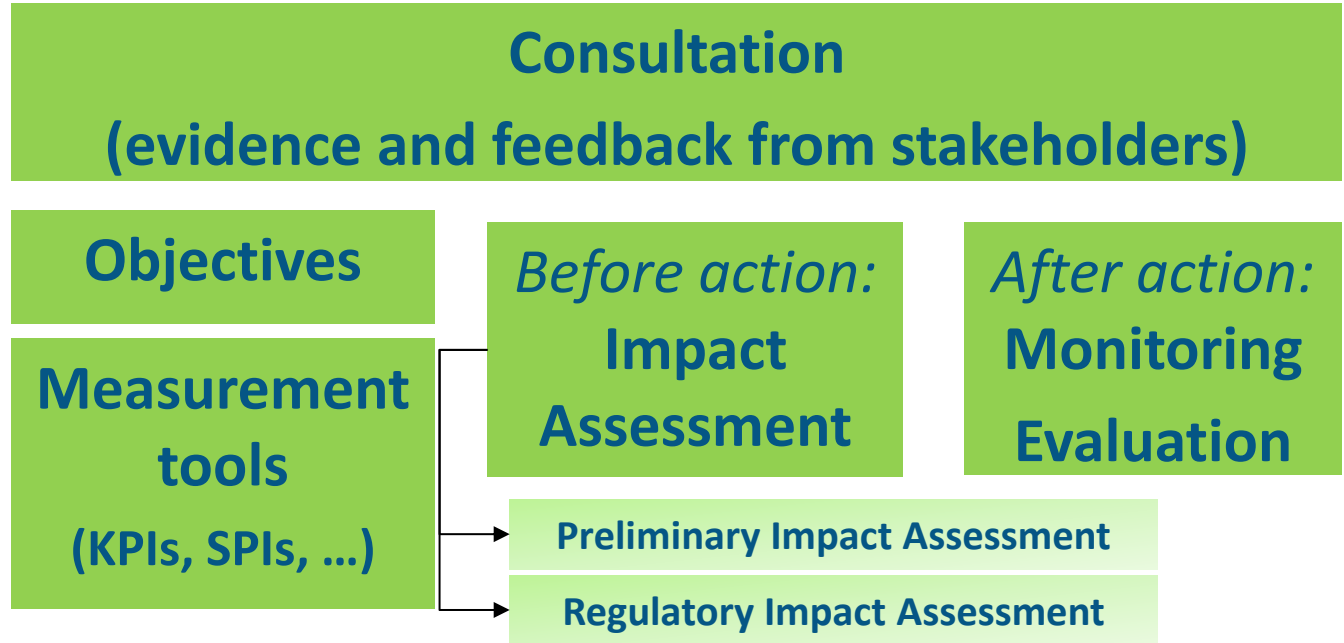


Principles for  
decision-making (i.e.  
EU Better Regulation  
principles)



# Better Regulation: main elements to prioritise actions

Better  
Regulation  
elements



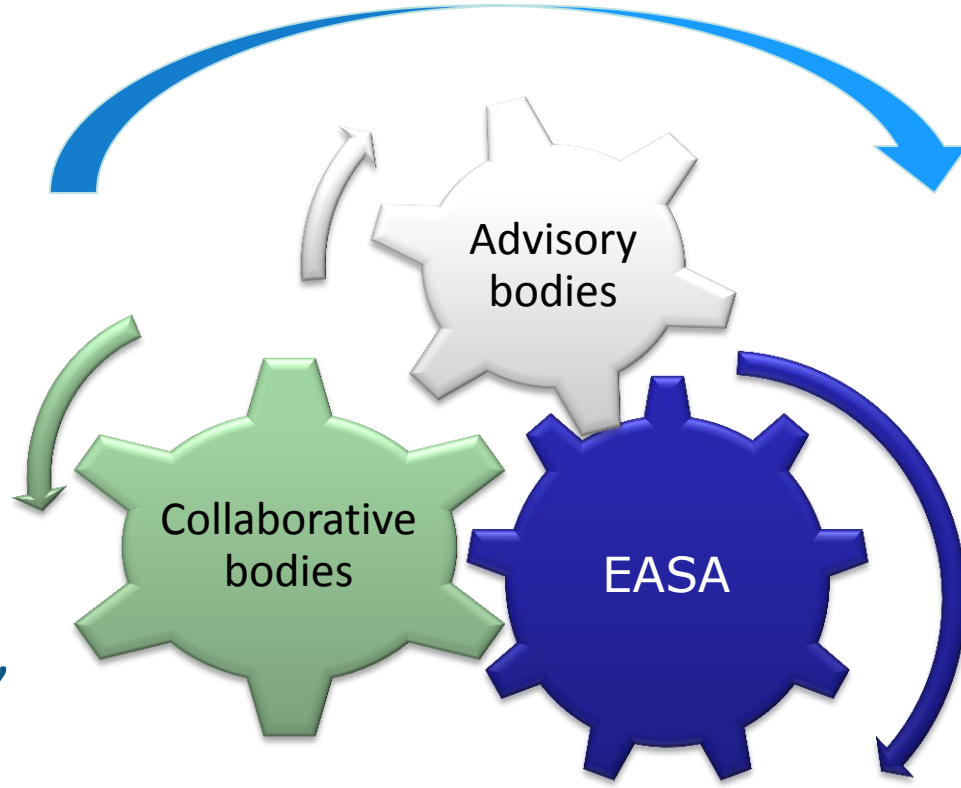
These Better Regulation elements are used to define the actions  
in the **EPAS (European Plan for Aviation Safety)**  
to support  
a safe aviation activity, environmental friendly and cost-efficient.



# Organisational structure: the EASA “Groups”

## CAGs/NoA

→ Analyse information and recommend actions  
e.g. CAT, GA, ATM, ...



**MAB (Member States) & SAB (Industry)** → Strategic advice and review  
**TeBs/TeCs/COMs** → Technical & operational advice and review

**EASA Management Board (EC, MS and industry)**  
→ Take decision

MAB: Member state Advisory Body  
SAB: Stakeholder AB (industry)  
CAG: Collaboration Aviation Group  
NoA: Network of Analyst (safety investigations)



Established **2002** *15 years in operation*

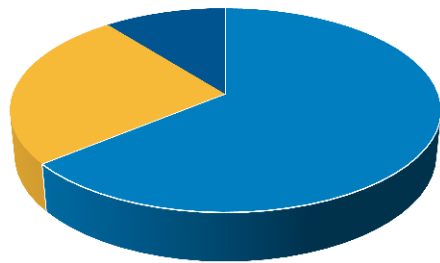
**300+**

aviation experts & administrators

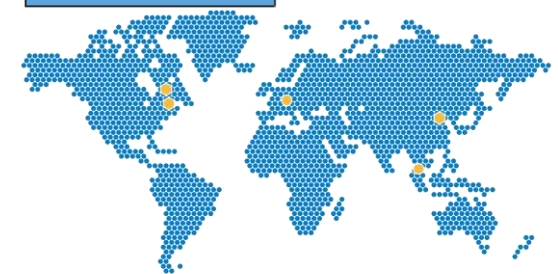
Headquarters in **Cologne**  
Office in **Brussels**

**32** EASA member states = 28 + 4  
EU + Switzerland, Norway, Iceland, Liechtenstein

## Budget in 2016: 140 M€



- Fees paid by the Industry (66%)
- EU Budget (26%)
- Others e.g. 3rd Country contributions (8%)





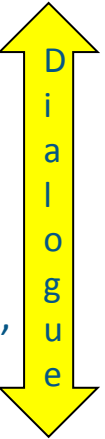
# Advisory bodies

## Member States Advisory Body (MAB)

## Authorities

### Domain Technical Advisory Bodies (TeBs)

### Sectorial TeBs



Production and Continuing Airworthiness

Air Crew

Air Operations

ATM/ANS

Aerodromes

Safety Management

General Aviation

•The MAB and each of the seven TeB have approx. 33 members (EASA Member States & Commission), 12 observer States (States having working agreements with the Agency) and 4 observer institutions (Eurocontrol, Sesar Joint Undertaking, European Defence Agency, EFTA surveillance authority).

## Stakeholder Advisory Body (SAB)

## Industry

### Technical Committees (TeCs)

### Sectorial Committees (COM)

Design and Manufacturing

Engineering and Maintenance

Flight Standards

ATM/ANS

Aerodromes

Commercial Airplane Safety

Certification

General Aviation

Rotorcraft

Drones

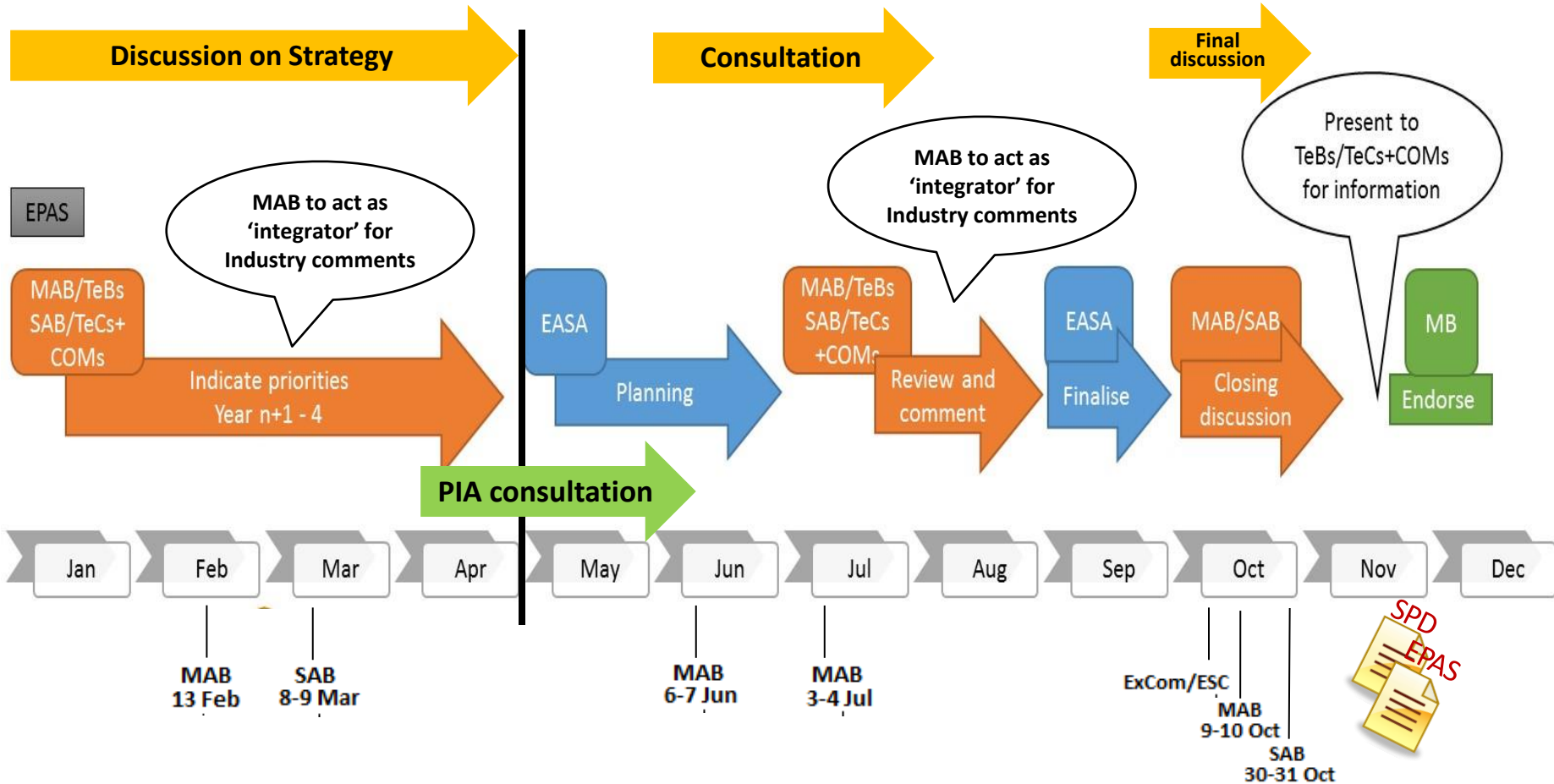
•Members of the SAB and committees include European trade associations, European unions and companies as well as industry representation from the US, Canada and Brazil.



# Process – Who does what and when

## Planning milestones | EPAS 2019-2023

Year 2018





# How is built an EU Safety Programme?





# A Regional Safety Strategy

EASP

Comprehensive Safety  
**Programme** for the Region

Goals

EC spells out the **Strategy**

EPAS

EASA **plan** EU actions, facilitates  
risk mitigation and monitoring

SSP

Member States develop  
additional national safety actions



# Safety Risk Management at EU level

**1**

**Analyse  
& Assess**

**2**

**Advice**

**3**

**Adopt**

**4**

**Act**

**Industry, States, EASA and EC in partnership**





# Risks Areas & Issues All In One Place

## Sources of Information

Reported occurrences:  
Mandatory  
and  
Voluntary  
(ECCAIRS)

Investigated  
Accidents  
and Serious  
Incidents

Input from  
Industry and  
States  
through  
collaborative  
groups

# D4S



Safety Issues  
identified



Safety priorities  
identified



Safety Performance  
monitored

## Domain Specific Outcome



CAT Aeroplanes



Offshore Helicopters



Other CAT Helicopters



Aerial Work/SPO – Aeroplanes



Aerial Work/SPO – Helicopters



Non-commercial Ops –  
Aeroplanes



Non-commercial Ops –  
Helicopters



Balloons



Gliders



RPAS



# CAT Aeroplane – Safety Risk Portfolio

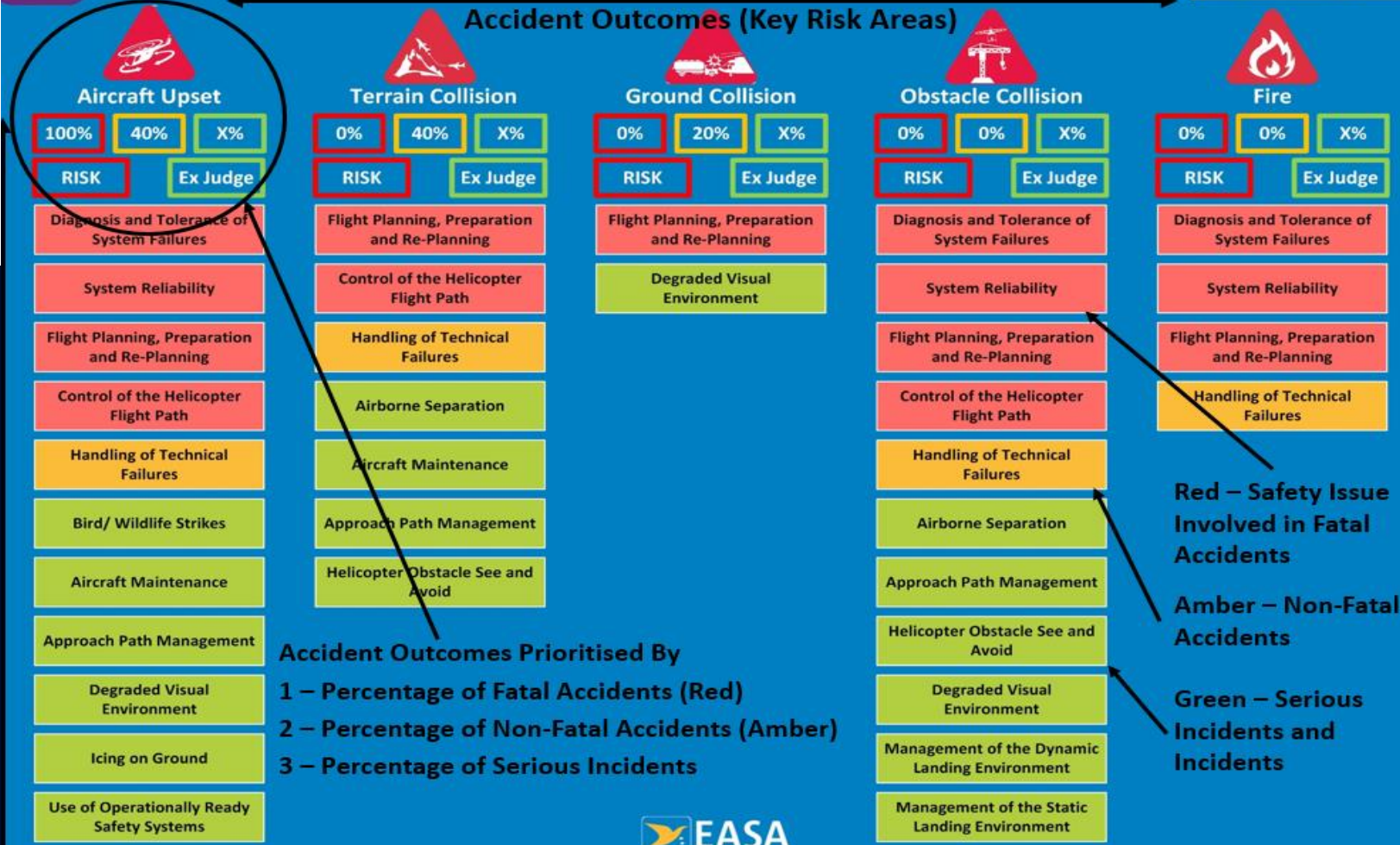
Key Statistics 2006-2016  
Fatal Accidents – 5  
Fatalities – 43

## OFFSHORE HELICOPTERS SAFETY RISK PORTFOLIO

### Accident Outcomes (Key Risk Areas)

**Key**

- Fatal accidents
- Non-fatal accidents
- Serious incidents



**Accident Outcomes Prioritised By**

- 1 – Percentage of Fatal Accidents (Red)
- 2 – Percentage of Non-Fatal Accidents (Amber)
- 3 – Percentage of Serious Incidents

**Red – Safety Issue Involved in Fatal Accidents**

**Amber – Non-Fatal Accidents**

**Green – Serious Incidents and Incidents**

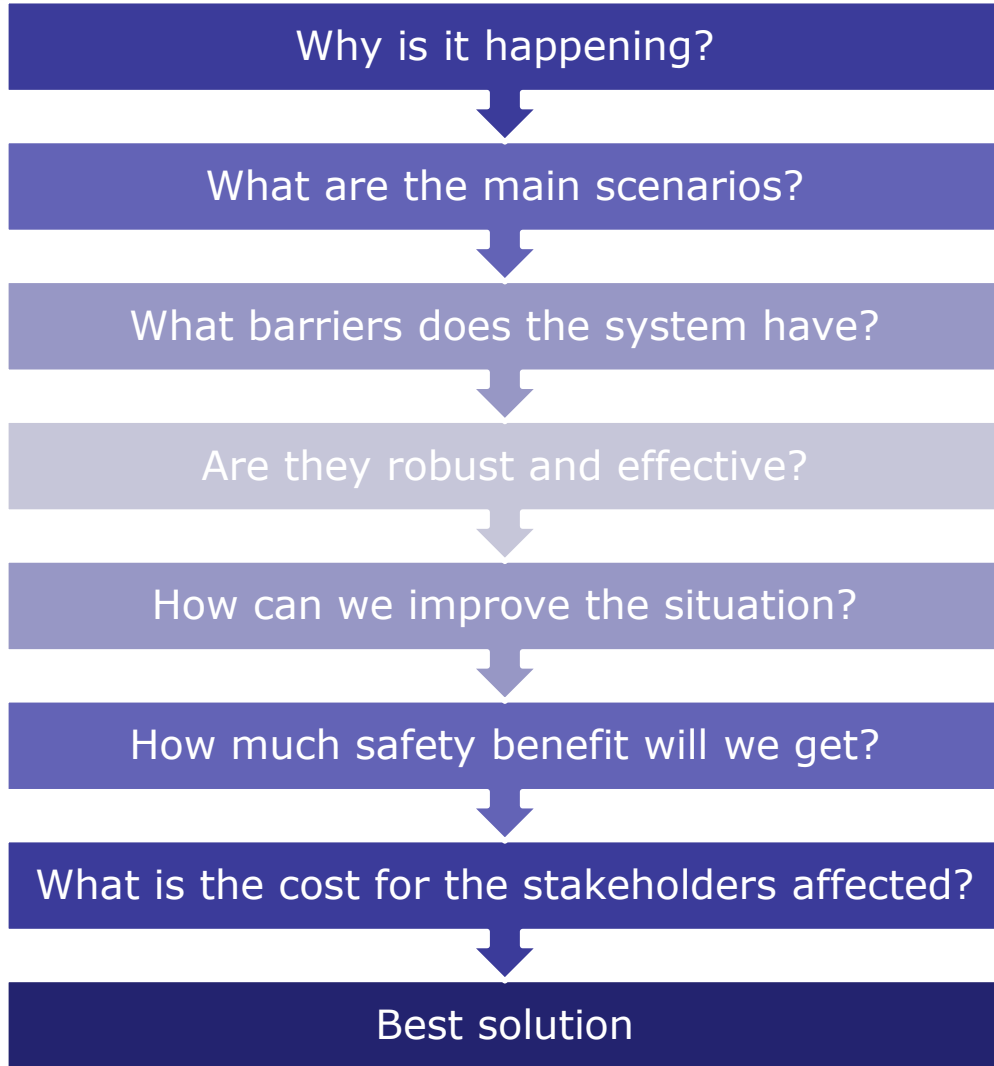
### Safety Issues by Accident Outcome



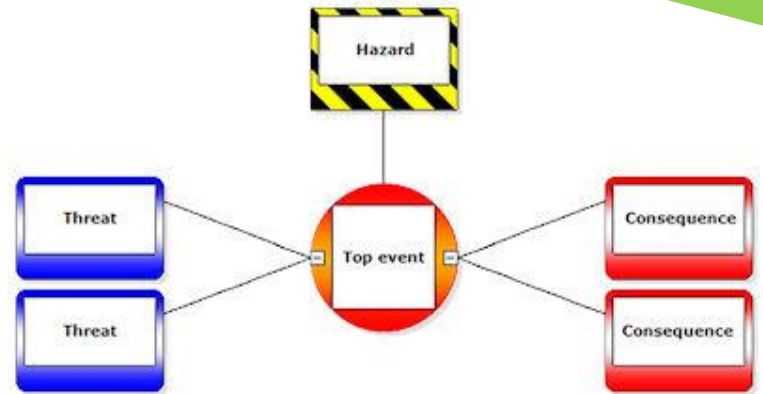




# Assessing safety issues



**An example of Better Regulation principles**





# Strategic Safety Priorities



## SYSTEMIC ENABLERS

Safety Management  
Human factors and competence



## OPERATIONAL ISSUES

### Commercial Air Transport Aeroplanes:

- Aircraft Upset/ Loss of Control Inflight
- Runway Safety

### Helicopter/ Rotorcraft:

- Aircraft Upset/ Loss of Control Inflight
- Terrain Conflict
- System Failure

### General aviation:

- Staying in Control
- Coping with Weather
- Mid-air Collisions
- Managing the Flight



## EMERGING ISSUES

Drones (RPAS)  
Security Risks with Impact on Safety  
New/Emerging Business Models



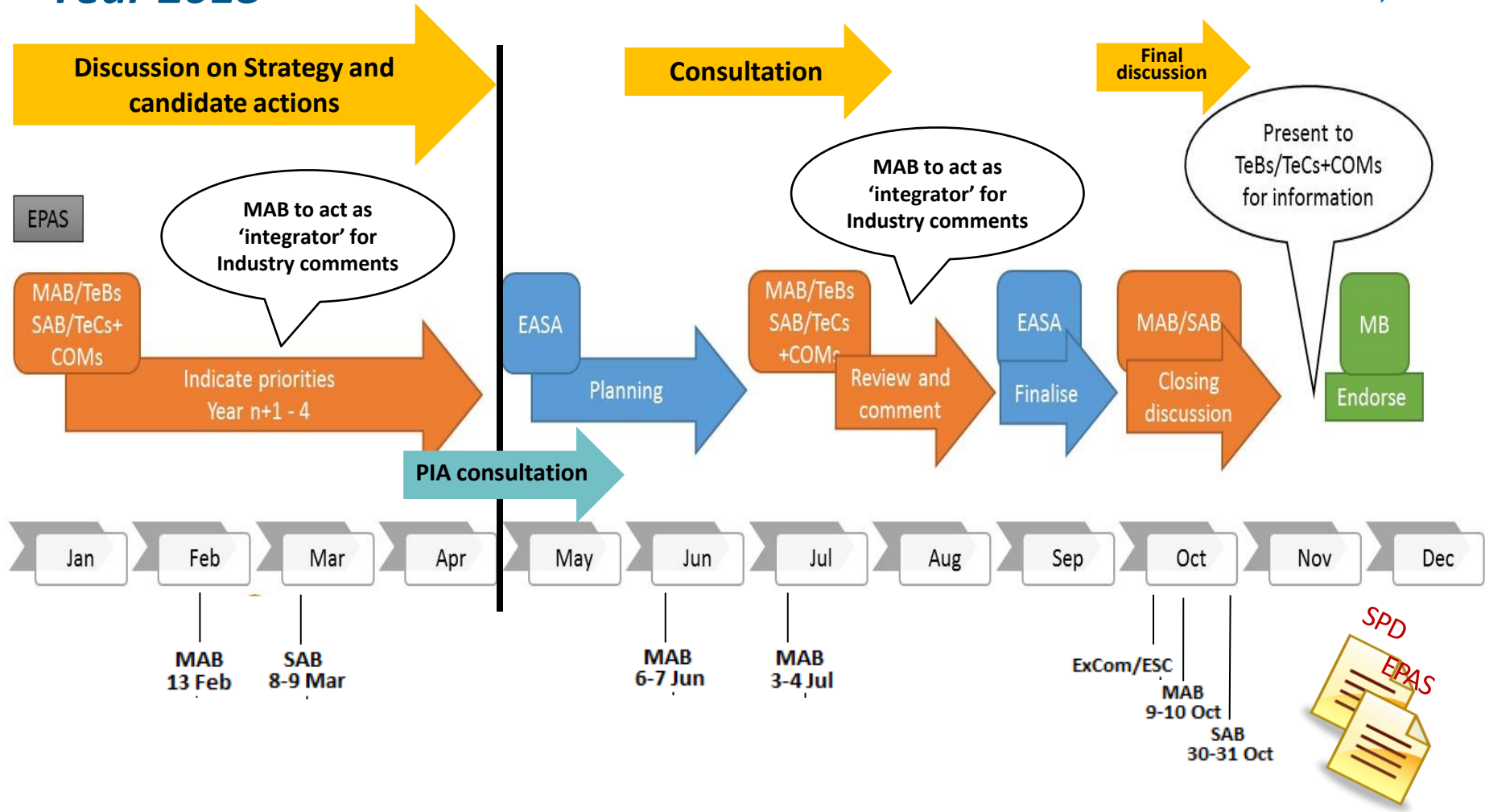
# Loss of Control - Actions





# Planning milestones | EPAS 2019-2023

## Year 2018





# Preliminary Impact Assessment status

## 2017

PIA number	PIA topic
PIA04	PIA Rotorcraft
PIA01	PIA Erroneous Take-Off Parameters
PIA03	PIA LOC-I
PIA05	PIA GA FW
PIA13	Design and Manufacturing Issues
PIA14	PIA Safety Maintenance Issues
PIA16	PIA Emerging issues - New products
PIA17	PIA ADR - Dangerous Goods
PIA18	PIA Specialised Operations
PIA19	PIA Other operators than airlines
PIA20	PIA MED
PIA21	PIA Airlines
PIA22	PIA ATM - Conformity Assessment
PIA23	PIA Runway safety
PIA24	PIA SESAR
PIA25	PIA Safety Management
PIA26	PIA Cyber-security

## 2018

**2 PIAs with new actions:**

- PIA Rotorcraft
- PIA Maintenance

**→ consultation**

**All other topics: minor updates (no new actions)**

**→ no consultation**



# PIAs in a nutshell

- ▶ PIAs are **annual** reports to address different topics by:
  - ▶ Assessing the need to address a safety, efficiency... issue  
→ **assessment of its criticality**
  - ▶ **Identifying possible alternative actions** (e.g. safety promotion, focused oversight, research/studies, rulemaking, member states actions and/or 'do nothing') in order to address an existing or new issue; → intervention strategies
  - ▶ Estimating the potential benefits compared to the estimated cost of the proposed actions → **cost-effectiveness of the intervention strategies.**

**1. No new actions in EPAS without a PIA 2. Need evidences**



# Outcome: a Multi-Annual Plan for Aviation Safety for 44 States

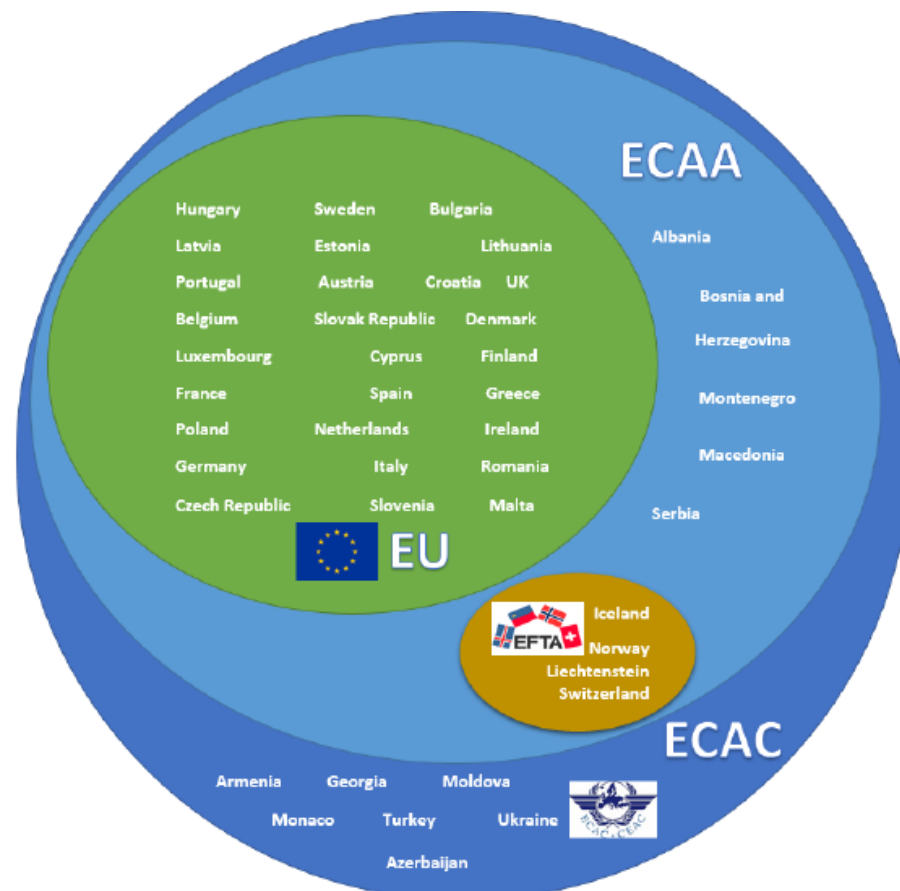


Rulemaking

Safety Promotion

Focused Oversight

Research





# Role of the Member States

States  
to:

Develop SSPs and establish a link with the European Aviation Safety Plan.

Consider how national efforts contribute to the actions at European level (18 actions in current EPAS)

Share information to keep the Plan alive.

Discuss implementation issues at SM TeB

Provide advice through appropriate fora

*On site EASA  
assessment for  
32 States in  
2015 & 2016:  
Only  
observations  
raised*





# At EASA level: Safety Management (SM TeB) scope and functionalities

## ➤ SM TeB functionalities:

- **Advising MSs with implementation/maintenance of their SSPs; exchanging information, addressing implementation issues**
- providing input / feedback on implementation of EPAS (systemic issues)
- **providing recommendations to EASA/EC on further actions to support SSP / EPAS implementation**
- addressing issues from standardisation cross-domain assessment
- discussing / providing recommendations where action required

## 5.2 Systemic enablers

### 5.2.1 Safety management

#### Safety Promotion

MST.001

**Member States to give priority to the work on SSPs**

Make SSPs consistently available in Europe in compliance with the GASP objectives.

Owner

MS

Activity sector

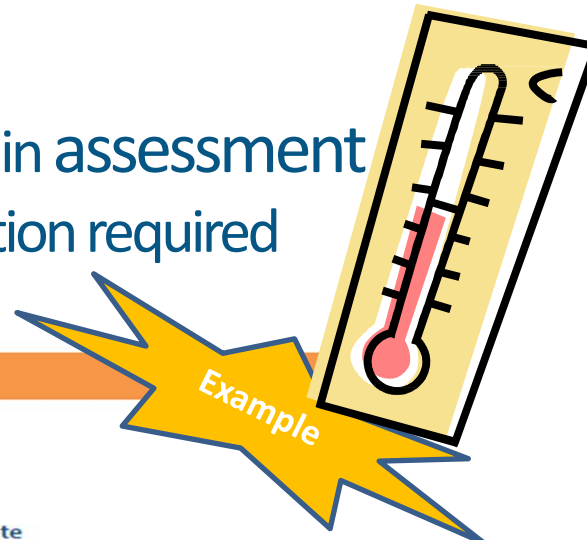
ALL

Deliverable

SSP established

Date

Continuous



MAB Rules of Procedure - covering Tebs functions ([here](#))



# EPAS State's implementation report 2017 -2021

- Provides an overview of EPAS actions' implementation by States
  - Areas of difficulties
  - Quantitative / descriptive analysis
  - Good practices (relevant examples)
- Fourth report produced since 2015
- Participation in EPAS is **voluntary**.



Link to the report ([here](#))



- 24 EASA states (EU & EFTA)
- 3 non EASA states implementing EPAS



# Changes with the new Basic Regulation?



# New Basic Regulation – Chapter II Aviation Safety Management

- Q2 - 3 2018: Translation and Publication → Entry into force
- The new draft EASA BR creates a legal hook for Member States to comply with actions in EPAS.

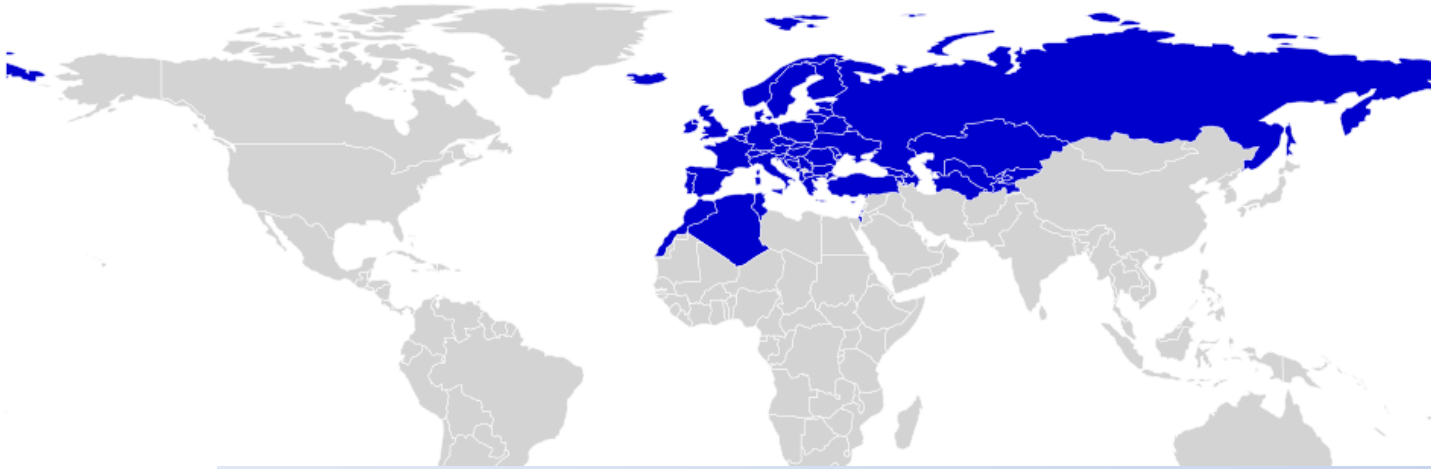




# How is this linked with ICAO?



# ICAO development for EUR-NAT Region



**ICAO Members supported a regional approach to safety, capacity and efficiency improvements where appropriate regional aviation safety oversight organisations (RSOs) should have significant potential to ensure the safety**

EUR/NAT

➔ Future EASA role as RSOO in discussion

EUR/NAT: European and North Atlantic



# Conclusion



# A win-win partnership

- Added value for Member State
  - Learn about the issues and best practices from other MS
  - Create a common understanding of what are the top safety priorities in the EASA Member States
  - Create a common decision-making process to prioritise the safety actions
  - For specific national safety issues, there is always the possibility to have Member State actions
  - Make sure that the MS resources are efficiently used





# EASA

European Aviation Safety Agency



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# Useful information

1. [EU Commission Aviation Strategy for Europe](#)
2. [European Commission SMS website](#) (including EASP Edt.2)
3. EASA SMS website ([here](#))
4. [Communication from EC \(2011\)](#)(High level goals)
5. [EASP - Edition 2 \(2015\)](#)(European Aviation Safety Programme)
6. EPAS website ([here](#)) **NEW !**
  - EPAS 2018-2022
  - EPAS 2017-2021 implementation report amongst MS
  - EASA Safety review
7. Questionnaire on EPAS 2017-2021 actions implementation status ([here](#))
8. GASP ([here](#))
9. RASP ([here](#))

## **For more information:**

- Contact EASA: [EPAS@easa.europa.eu](mailto:EPAS@easa.europa.eu)