European Plan for Aviation Safety and Regulatory Priorities That Might Impact ATM and Airlines

CEO's Safety Conference

Luc Tytgat, Strategy and Safety Management Director, EASA

Your safety is our mission.

Member states

EASA
European Aviation Safety Agency
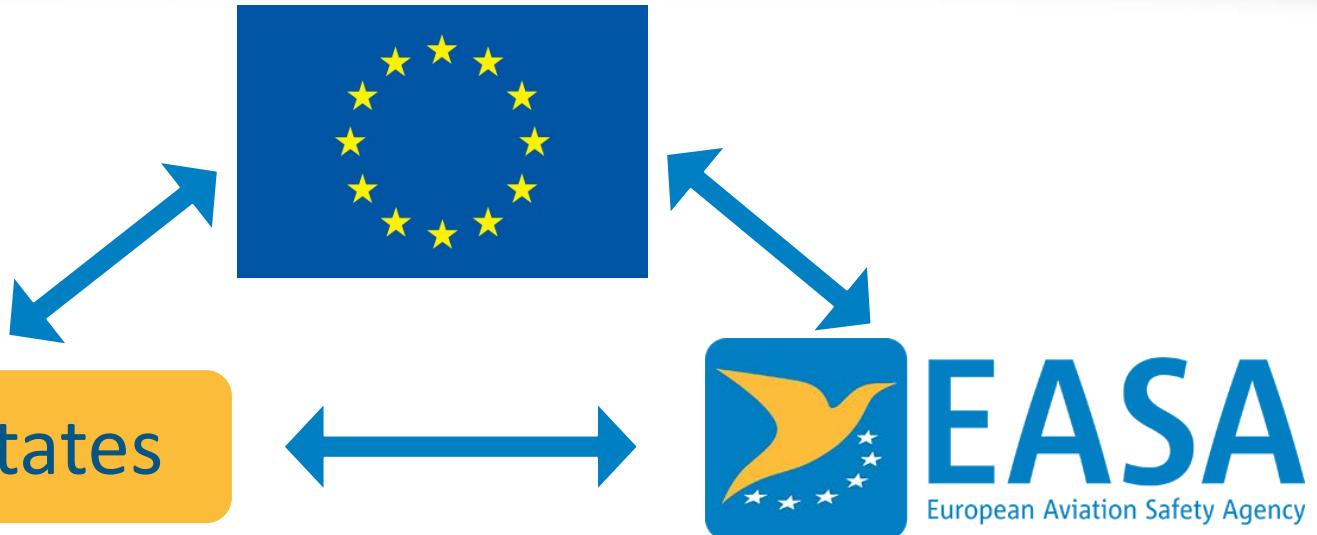
MS, EASA and EC work together to enact an SSP

European Aviation Safety Programme (EASP)

Safety Management at EU Level

EASP — Comprehensive Safety Programme for the Region

Goals — EC spells out the Strategy

EPAS — EASA facilitates risk mitigation and monitoring
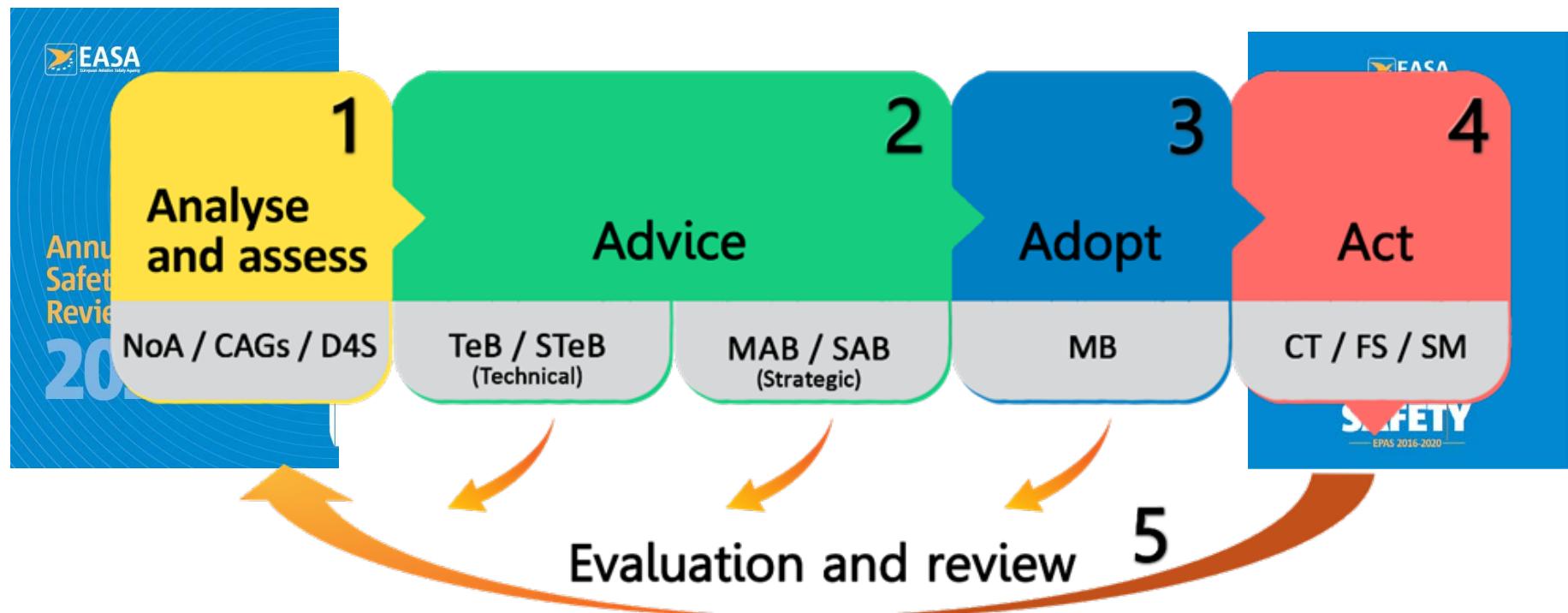
The Safety Review: All risks areas & issues in one place
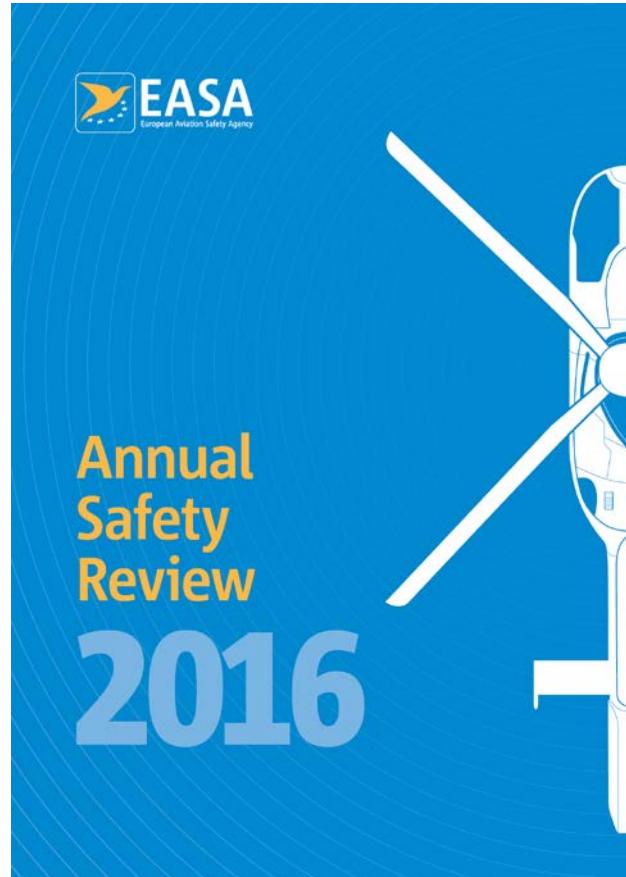
Safety Issues Identified and Assessed

Safety Priorities Identified

Safety Performance Monitored

The Safety Review: sources of information

Reported occurrences: Mandatory and Voluntary (ECCAIRS)

Investigated Accidents and Serious Incidents

Input from Industry and States through collaborative groups

EASA
European Aviation Safety Agency

Annual Safety Review 2016

EASA
European Aviation Safety Agency

Annual Safety Review 2016

Risk Areas

Safety Issues
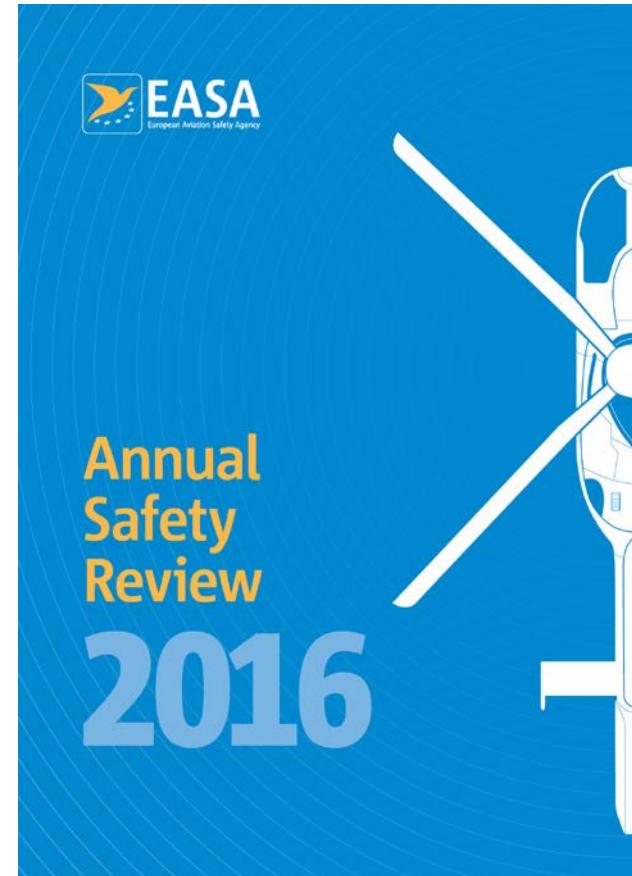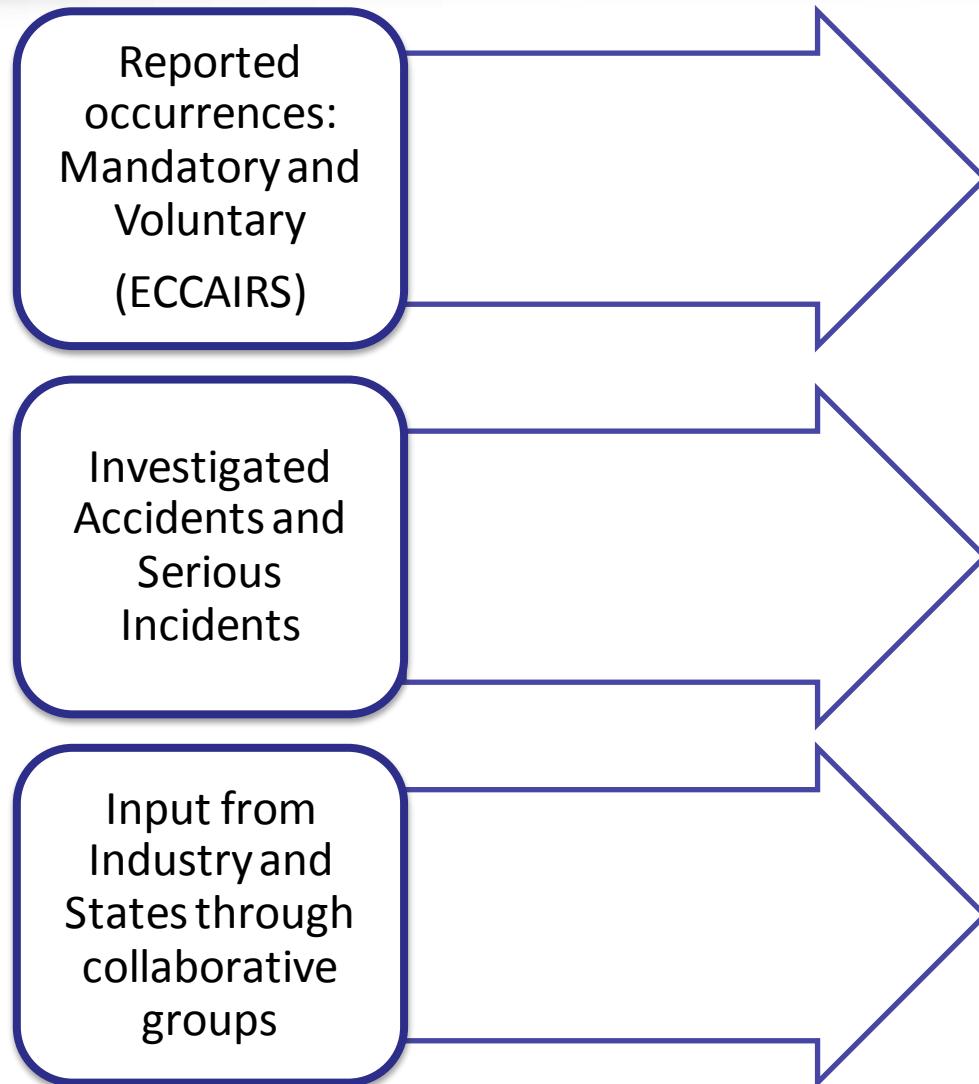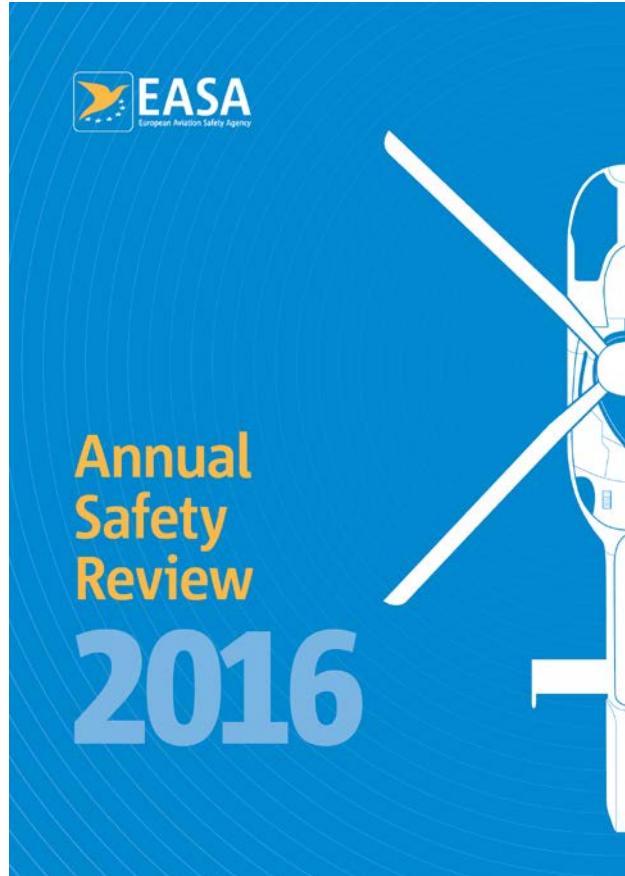
Priorities

CAT Aeroplanes

Offshore Helicopters

Other CAT Helicopters

Aerial Work/SPO – Aeroplanes

Aerial Work/SPO – Helicopters

Non-commercial Ops – Aeroplanes
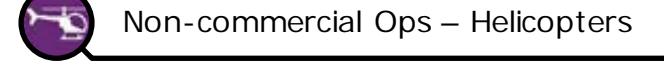
Non-commercial Ops – Helicopters
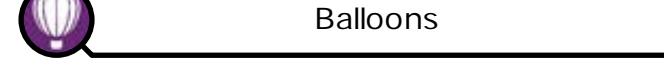
Balloons

Gliders

RPAS
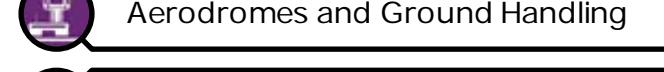
Aerodromes and Ground Handling

ATM/ANS

New Safety Risk Portfolios

Under development

2017 - Aerodromes and Ground Handling

2017 - ATM/ ANS

2018 – Manufacturing/ Maintenance/ Production

2018 - Human Factors

1 - CAT AEROPLANES SAFETY RISK PORTFOLIO

Key Risk Areas

Operational Issues

(1) Recognition and Recovery from Abnormal Attitudes	(2) Operation in Adverse Weather	(4) Ground Handling Operations	(8) Fuel Management and Planning	(10) Birdstrikes	(11) Handling of Go-Arounds	(12) Erroneous Data Parameters
(3) Handling of Technical Failures	(7) Aircraft Maintenance	(14) Damage Tolerance to UAS Collisions				
(4) Ground Handling Operations	(5) Maintaining Safe Separation					
(1) Recognition and Recovery from Abnormal Attitudes	(2) Operation in Adverse Weather	(9) False or Disrupted ILS Signal Capture	(11) Handling of Go-Arounds	(12) Erroneous Data Parameters		
(6) Flight Planning, Preparation and Re-Planning	(9) False or Disrupted ILS Signal Capture					
(2) Operation in Adverse Weather	(5) Maintaining Safe Separation	(6) Flight Planning, Preparation and Re-Planning				
(4) Ground Handling Operations	(15) Dangerous Goods Handling and Lithium Batteries					
(5) Maintaining Safe Separation	(6) Flight Planning, Preparation and Re-Planning	(13) Deconfliction with Aircraft Not Fitted with Transponders				

HF

- (a) Personal Readiness/ Impairment
- (b) Perception and Awareness
- (c) Decision Making and Planning
- (d) CRM and Communication
- (e) Monitoring of Flight Parameters/ Automation
- (f) Knowledge of Aircraft Systems and Procedures

Enablers

- Regulation and Oversight
- SMS Effectiveness
- Occurrence Reporting (Reg 376)
- Just Culture
- Analysis and Safety Risk Management
- Safety Performance Monitoring
- Communication of Safety Intelligence

EASA
European Aviation Safety Agency

From Safety Issues to Actions

Safety Risk Portfolio

Safety Issues

Safety Issue Assess. ⬅ Oversight Info

Preliminary Actions ⬅ Expert Input

Preliminary Impact ⬅ Cost Info

Actions in EPAS

1	2	3	4
Analyse and assess	**Advice**		**Adopt**	**Act**
NoA / CAGs / D4S	TeB / STeB (Technical)	MAB / SAB (Strategic)	MB	CT / FS / SM

Evaluation and review 5
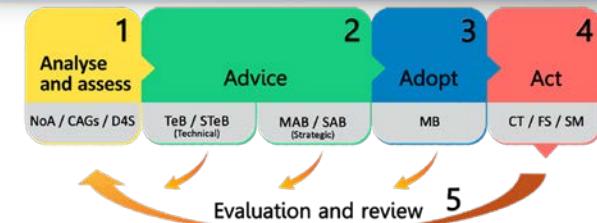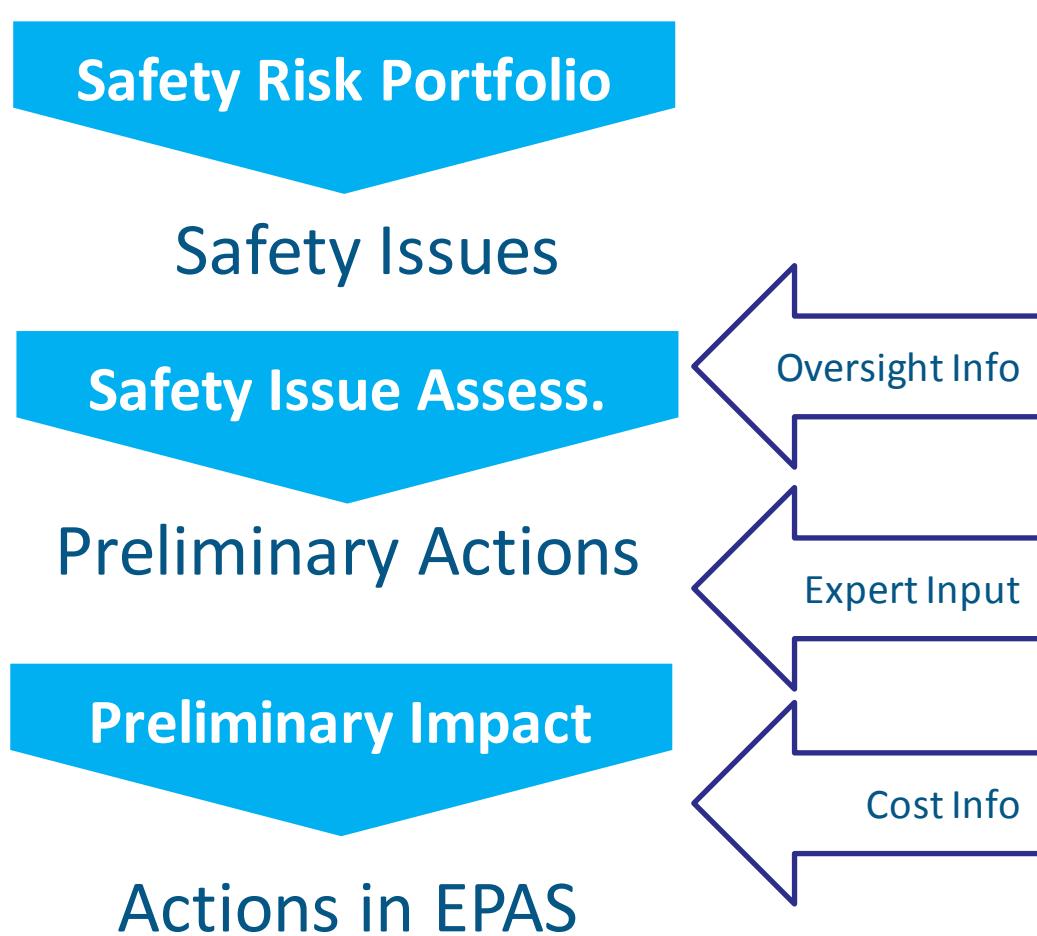
Industry & Member States help EASA identify safety issues and provide technical and strategic advice before actions are programmed

A Multi-Annual Safety Plan

Rulemaking

Safety Promotion

Focused Oversight

Research

110 Safety Actions planned for 2017-2021

- Research/Study — 2%
- Focused Oversight Task — 5%
- Safety Promotion — 38%
- Regulation — 55%

EPAS

SYSTEMIC

OPERATIONAL

EMERGING
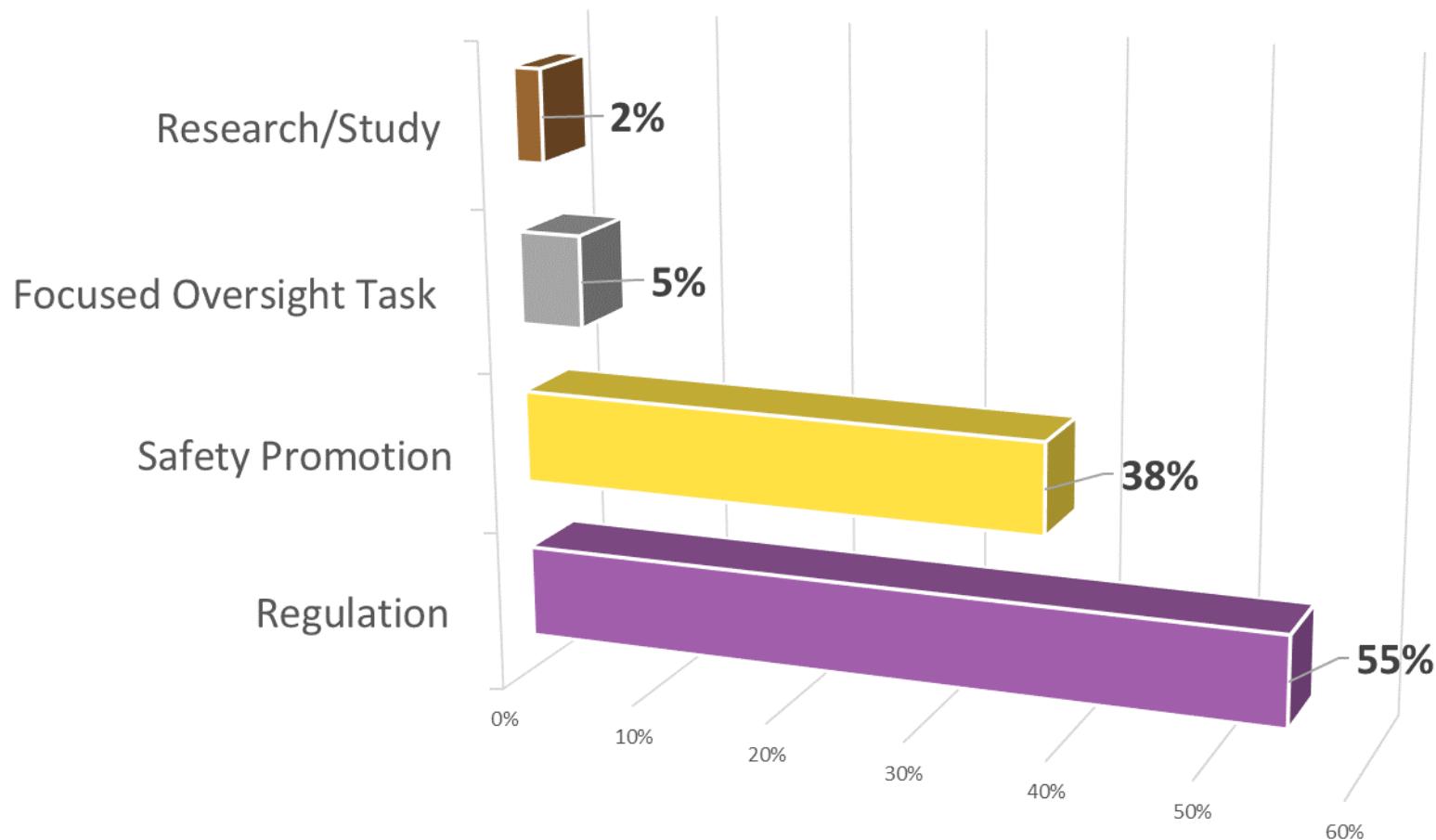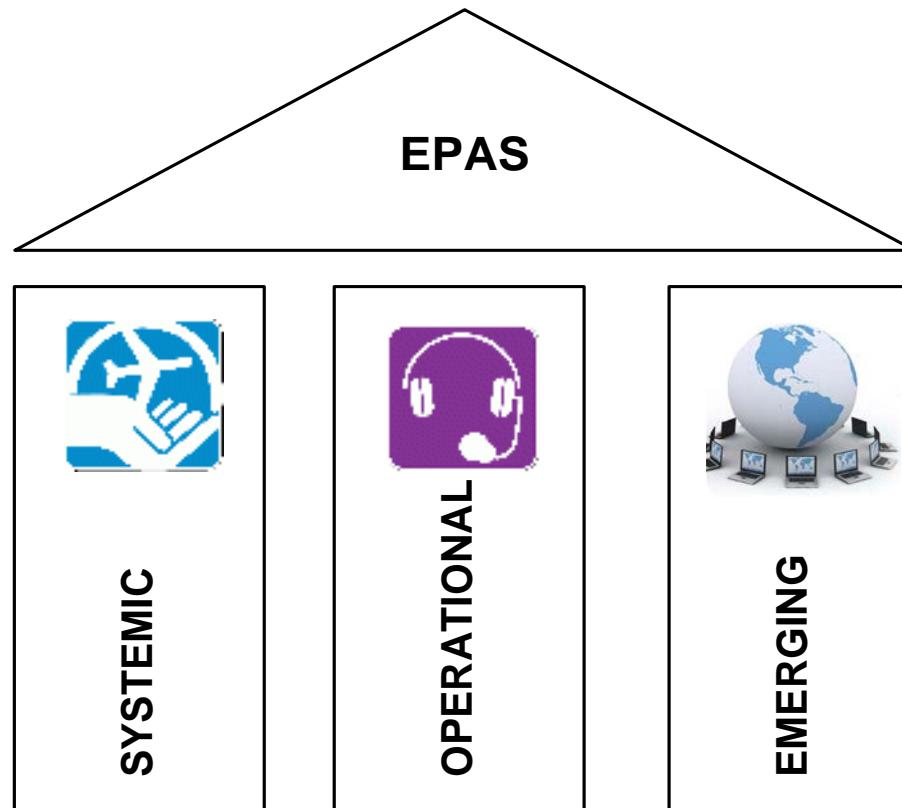
EPAS Strategic Safety Priorities

Consulted with strategic bodies

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

Action Areas – Level 2

Systemic Issues

| Safety Management | Human factors and competence of personnel | Aircraft tracking, rescue operation and accident investigation |

Operational Issues

CAT Aeroplanes

- Aircraft upset in flight
- Design and maintenance improvements
- Mid-air collision
- Runway safety
- Ground safety
- Terrain conflict
- Fire, smoke and fumes

Rotorcraft Operations

- Upset in flight
- Terrain conflict
- System failure

General Aviation

- Systemic enablers
- Staying in control
- Coping with weather
- Preventing mid-air collisions
- Managing the flight

Emerging Issues

| Civil drones (RPAS) | Safety and security | New business models | New products, systems, technologies and operations |

EPAS Development Cycle (2017)

First draft EPAS (June)

Final endorsement (Dec)
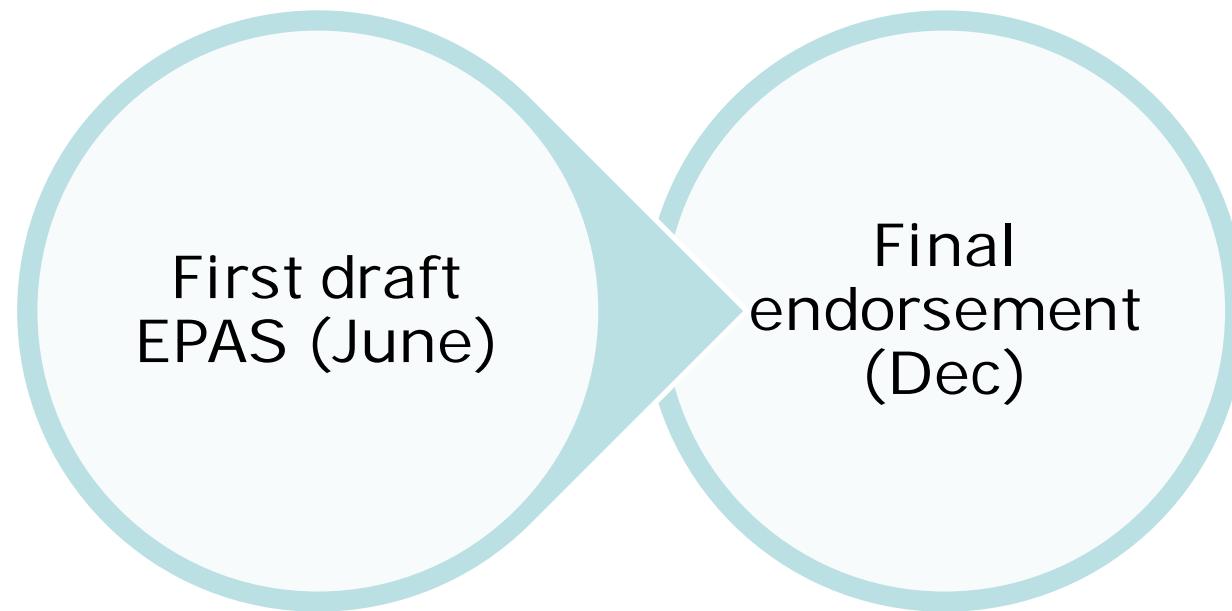
- Consultation with Industry and MS

- EASA Management Board

How States get involved

States have committed to implement EPAS actions (Amended BR will establish a legal hook)

45 States are invited (European Civil Aviation Conference Region)

41 States have already identified a **focal point** (including all 32 EASA States)

States send regular feedback through dedicated annual reports

On site discussions

Performance Monitoring and RP3

- As we approach RP3 the goal is to link the monitoring of safety performance to the ATM Safety Risk Portfolio
  - Routinely this will be reviewed by the ATM Collaborative Analysis Group (CAG) (Co-charied by EASA/ ECTL)
  - Main indicators identified as KPIs and SPIs in RP3 Regulation update
  - Link to EPAS provides additional flexibility
- EASA responsible for RP3 reporting on Safety and Environment components

Useful links

1. EASA SMS website (www.easa.europa.eu/sms)

2. [European Commission SM website](#) (including EASP Edition 2)

3. [Communication from EC (2011)](#)
   (High level goals)

4. [EASP Edition 2 (2015)](#)
   (European Aviation Safety Programme)

5. [EPAS 2017-2021](#)

6. [EPAS Leaflet ¦ Strategic priorities](#)