



EUROPEAN AVIATION SAFETY AGENCY  
AGENCE EUROPÉENNE DE LA SÉCURITÉ AÉRIENNE  
EUROPÄISCHE AGENTUR FÜR FLUGSICHERHEIT

# European Aviation Safety Strategy, Programme and Plan.

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Your safety is our mission.

How safety works in Europe

Elements in place

- European Aviation Safety Advisory Committee (EASAC)
- Strategy
- The Programme (EASP)
- The Safety Plan (EASp)

Summary and challenges



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# How safety works in Europe

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# ICAO SSP FRAMEWORK

## 1. State safety policy and objectives

1.1 State safety legislative framework

1.2 State safety responsibilities & accountabilities

1.3 Accident and incident investigation

1.4 Enforcement policy

## 2. State safety risk management

2.1 Safety requirements for service providers SMS

2.2 Agreement on service providers safety performance

## 3. State safety assurance

3.1 Safety oversight

3.2 Safety data collection, analysis and exchange

**EU holds the competency to establish safety requirements for Service Providers' SMS -**

## 4. Regulation EC n° 216/2008- (ICAO 2.1):

- First requirements → Air Crew and Air Operations (established in 2012)

4.2 External training, communication and dissemination of safety information

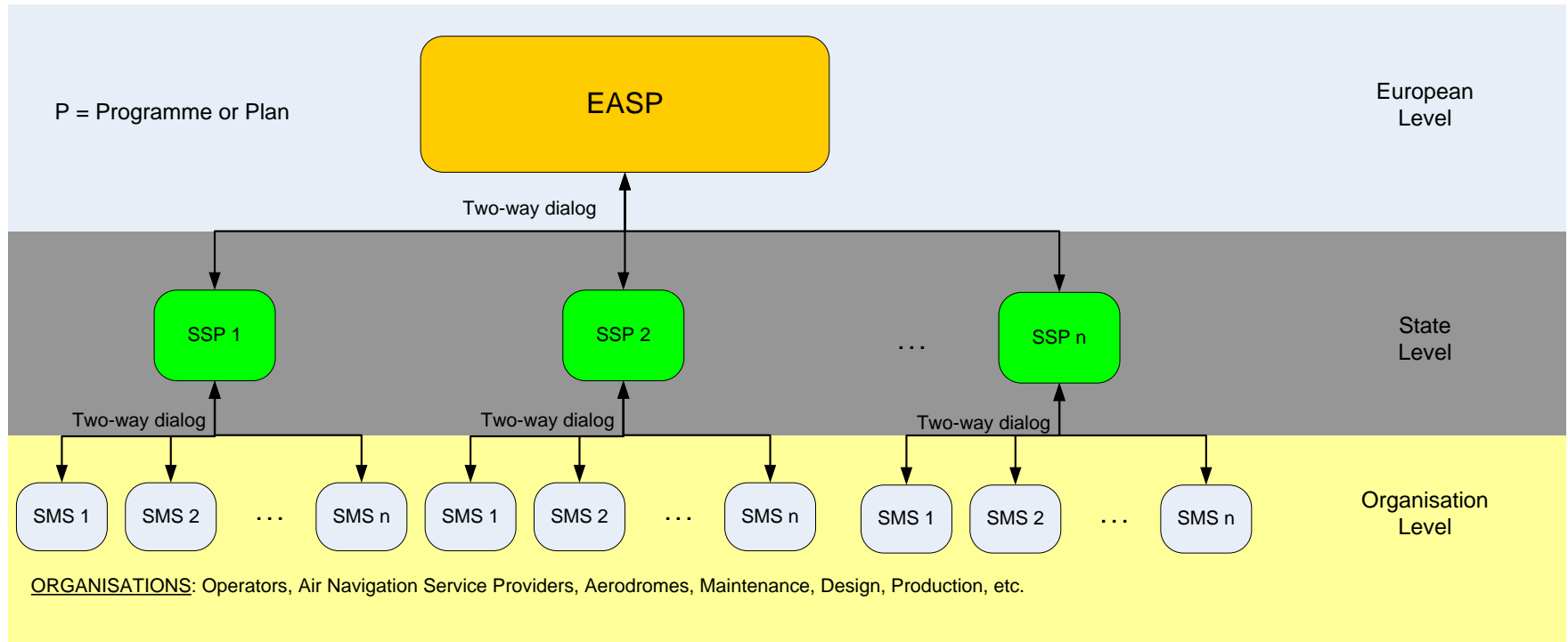


# The EU/EASA System



MS and  
EASA/EU need  
to work  
together to  
enact an SSP

# Safety Management Systems



Safety Management is done at various levels.



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# Elements in place

Your safety is our mission.



# Overall approach





## Operational since October 2009

- 4 meetings every year
- 15 meetings so far
- Chaired by EASA

## Advisory role

- Share safety information
- Decide priorities
- Implementation mechanisms
- Question the approach
- Check performance

## Initial tasks

- Contribute to the development of the Strategy
- Propose a Safety Programme
- Propose and update a Safety Plan

## Membership

- European Commission
- Eurocontrol & PRB
- Member States
- Industry (Pilots, Manufacturers, ANSPs, Operators, Aerodromes)
- EASA



EUROPEAN COMMISSION

Brussels, 25.10.2011  
COM(2011) 670 final

COMMUNICATION FROM THE COMMISSION TO THE COUNCIL AND THE  
EUROPEAN PARLIAMENT

Setting up an Aviation Safety Management System for Europe

(Text with EEA relevance)

{SEC(2011) 1261 final}

***policies and objectives***

Objectives

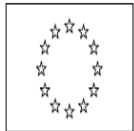
How to achieve  
them

Obstacles

Solutions



# Programme (EASP)



EUROPEAN COMMISSION

Brussels, 25.10.2011  
SEC(2011) 1261 final

COMMISSION STAFF WORKING PAPER

The European Aviation Safety Programme

{COM(2011) 670 final}

***regulations and activities***

Safety Policies and Objectives

Safety Risk Management

Safety Assurance

Safety Promotion



# Plan (EASp)



High-level European-wide concerns

Bottom-up approach

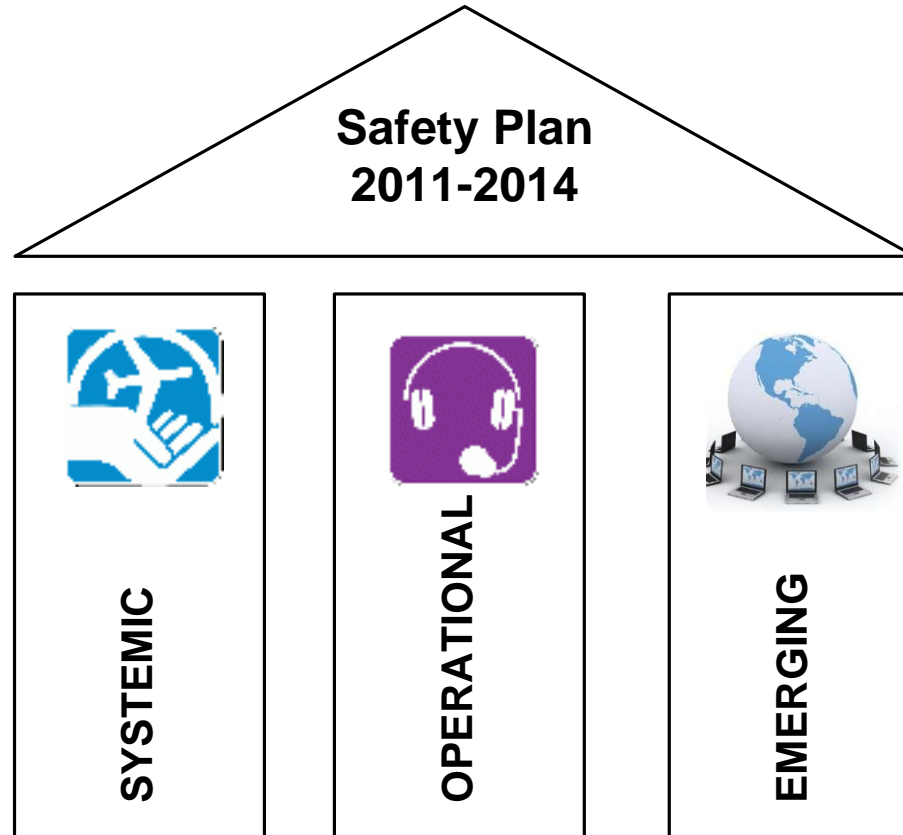
Coordinated with MS SSP

Wider than EASA

3 editions published



# Main areas/issues





# Main areas/issues





# Main areas/issues

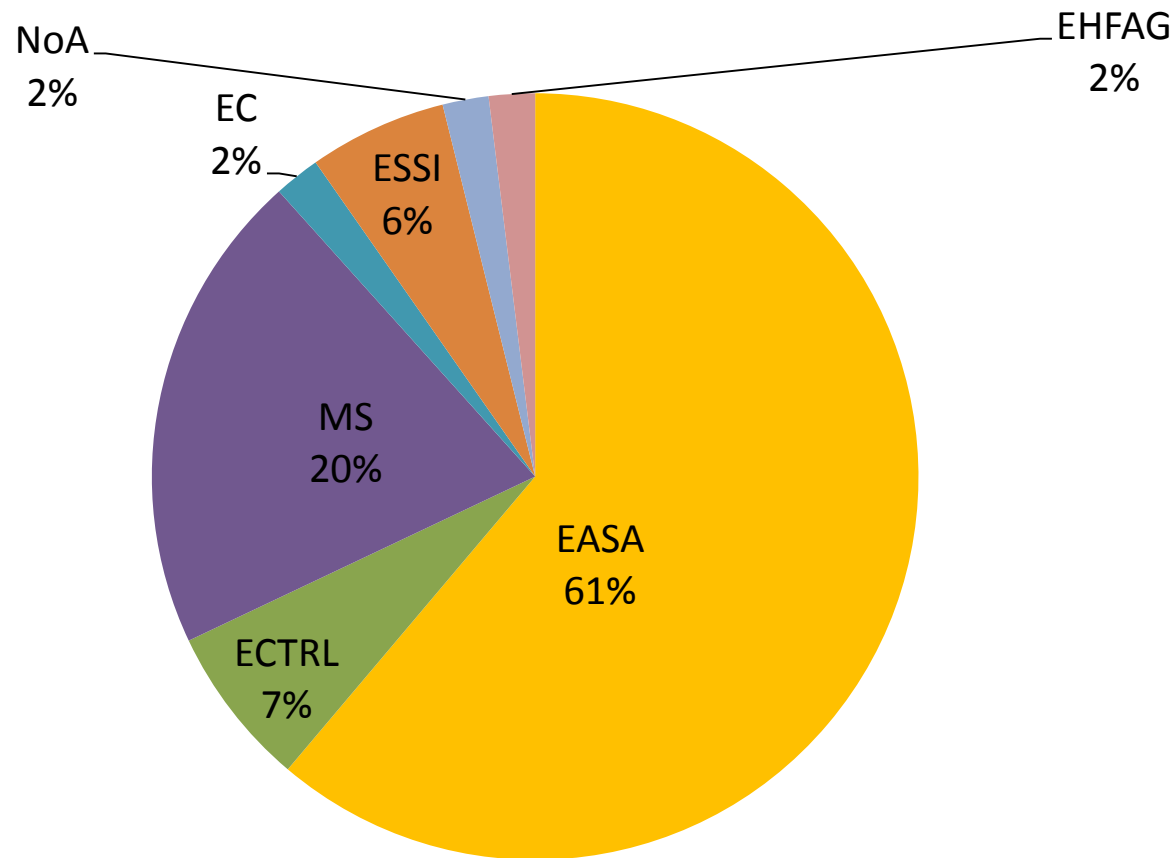
## Safety actions

SAFETY PLAN FRAMEWORK		
SYSTEMIC ISSUES	OPERATIONAL ISSUES	EMERGING ISSUES
<b>Working with States to implement and develop SSPs</b>	<b>COMMERCIAL AIR TRANSPORT BY AEROPLANES</b>	<b>New products, systems, technologies and operations</b>
<b>Working with States to foster the implementation of SMS in the industry</b>	<b>Runway Excursions</b>	<b>Environmental factors</b>
<b>Safety Management enablers</b>	<b>Mid-air collisions</b>	<b>Regulatory considerations</b>
<b>Complexity of the system</b>	<b>Controlled Flight Into Terrain</b>	
<b>Competence of Personnel</b>	<b>Loss of Control In Flight</b>	
	<b>Ground Collisions</b>	
	<b>OTHER TYPES OF OPERATION</b>	
	<b>Helicopters</b>	
	<b>General Aviation</b>	
HUMAN FACTORS AND PERFORMANCE		



# A European Plan...

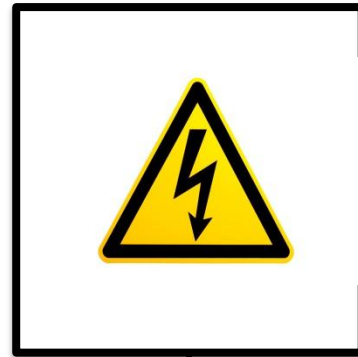
## Second Edition - 103 Safety Actions



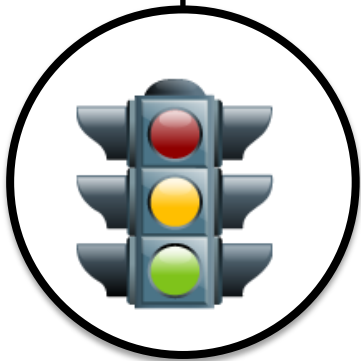




# *“Refreshing”* the EASp



**Risk Areas**



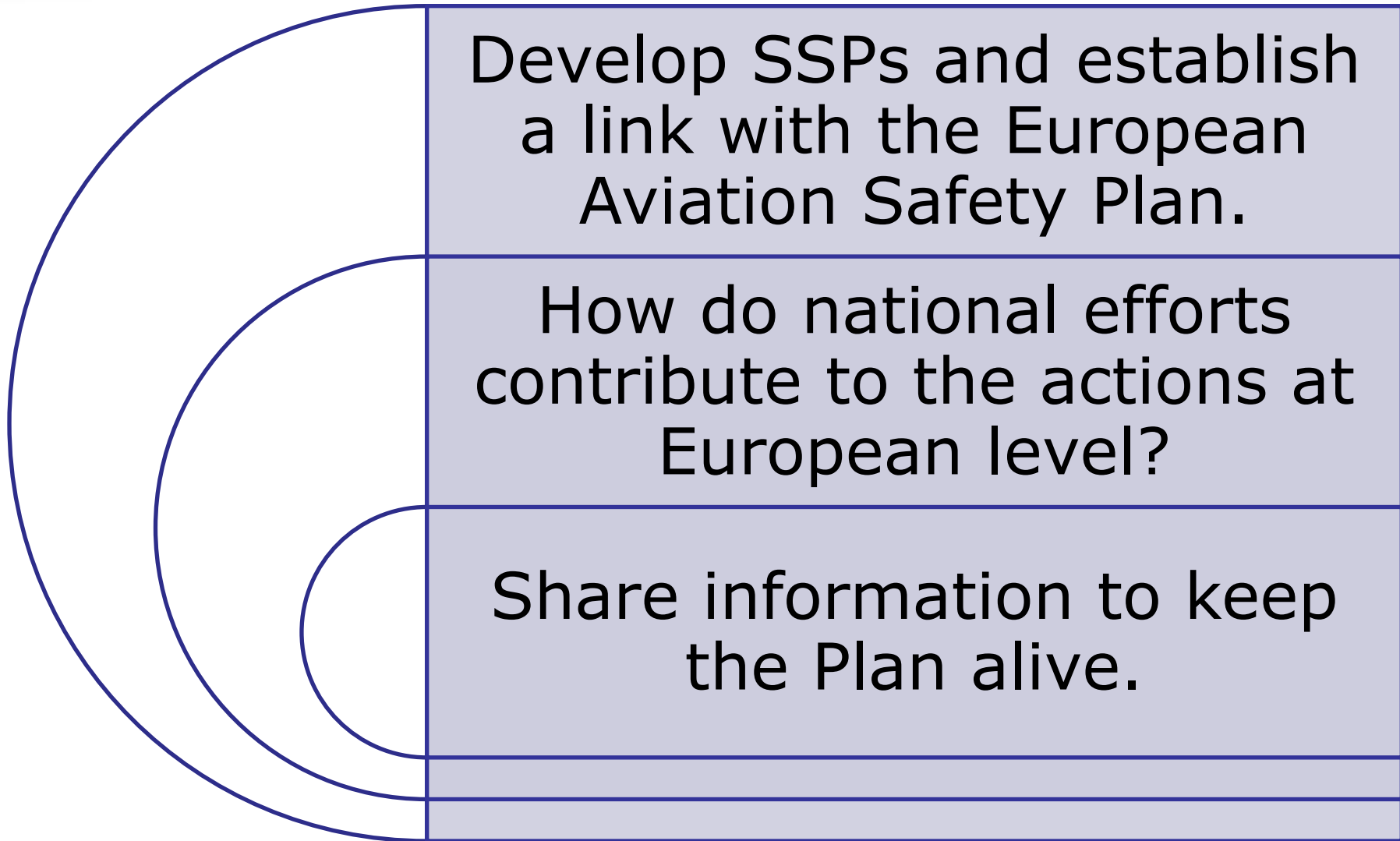
**Report on  
progress made  
in current year**



**New safety  
actions**



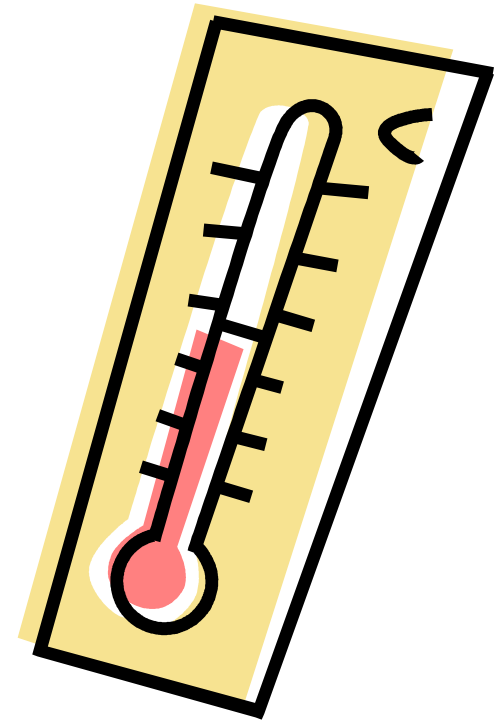
# Role of the Member States



Organised twice a year

To take the temperature  
of the implementation  
with States

Opportunity to  
exchange information  
and discuss key issues





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# Summary and challenges

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# In summary

EASP

Comprehensive Safety Programme for the Region

Goals

EC spells out the Strategy

EASp

EASA facilitates risk mitigation and monitoring

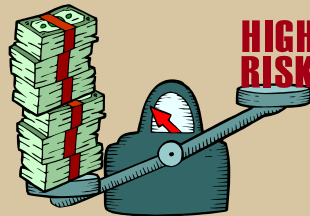


# Some challenges



## Hazard identification

- Overcome barriers to good safety information
- Network of Analysts



## Risk assessment

- A common way to assess risk at EU level
- Internal Safety Risk Panel



## Performance

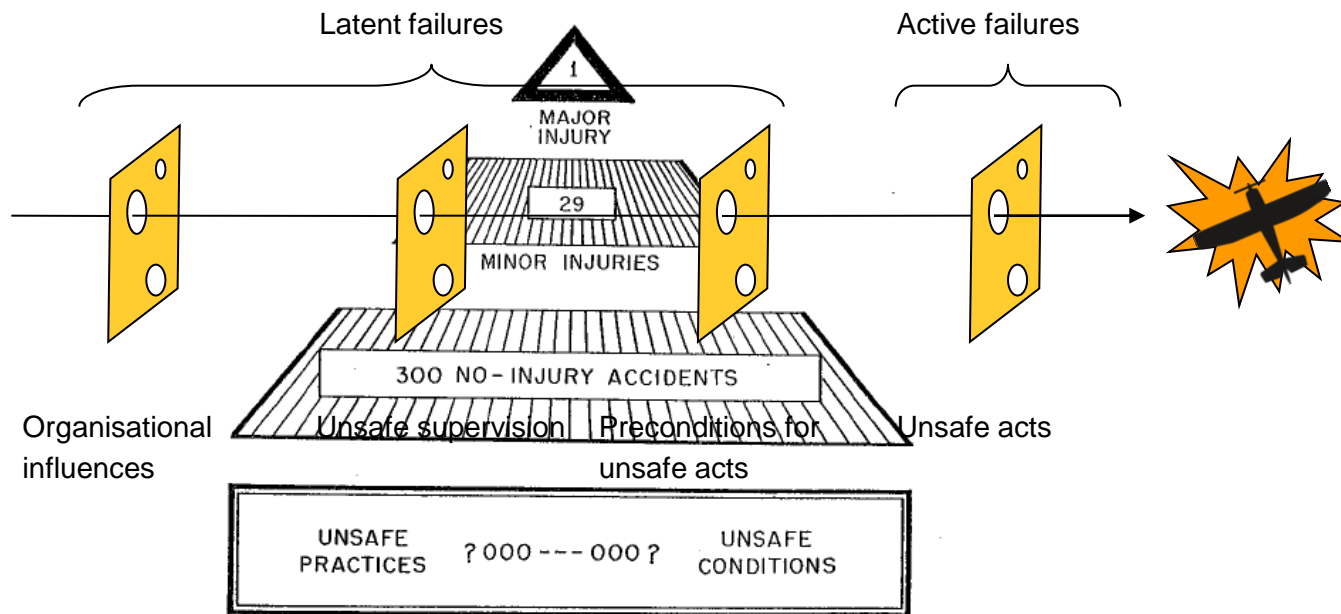
- Check that risks are being mitigated

- Provide a baseline of the system safety status
- Provide feedback on the effectiveness of safety actions
- Be a source of objective information to support decision-making



# Traditional SPIs

- To an extent based on the Heinrich Pyramid (1930s)

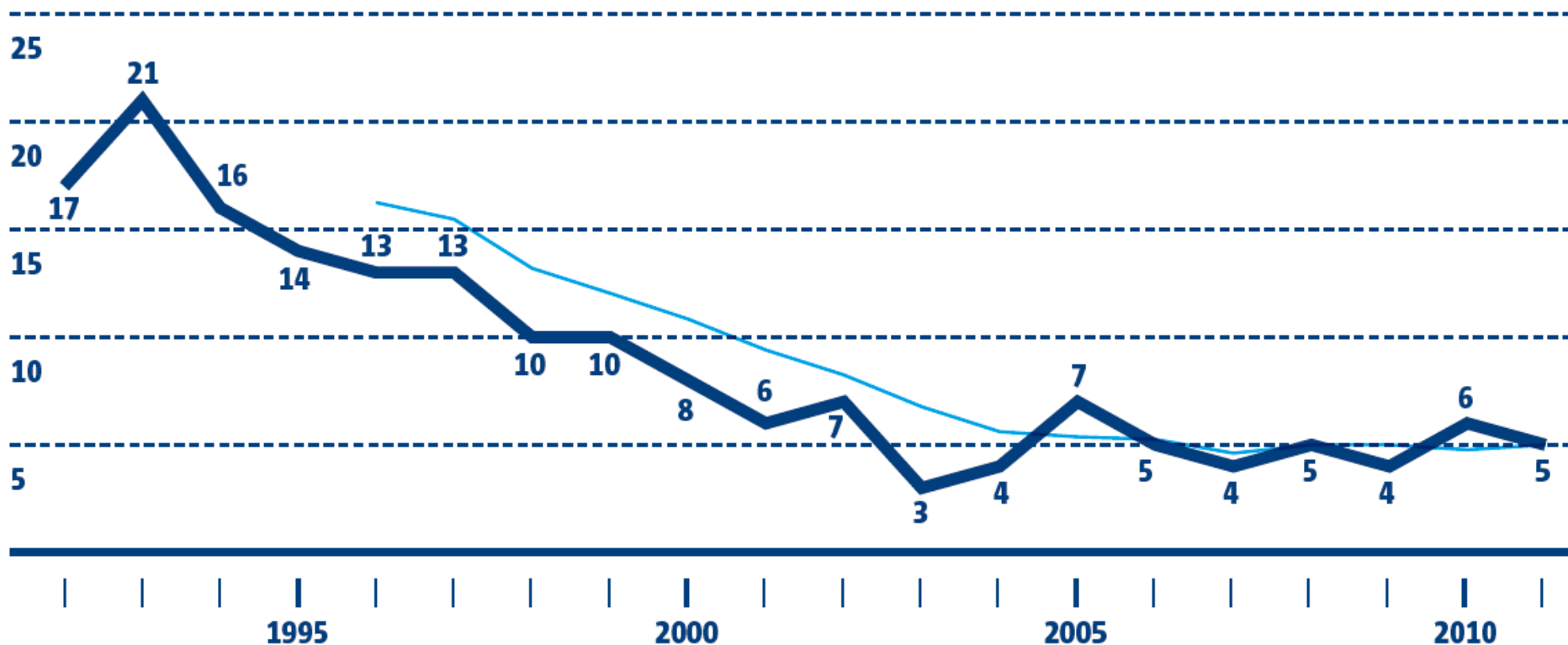






# Traditional SPIs

**GLOBAL RATE OF ACCIDENTS INVOLVING PASSENGER FATALITIES PER 10 MILLION FLIGHTS, SCHEDULED COMMERCIAL AIR TRANSPORT OPERATIONS, EXCLUDING ACTS OF UNLAWFUL INTERFERENCE**





# Traditional SPIs - Challenges

- Occurrence definition relies on subjective judgement
  - Conversion of qualitative information (Narratives) to quantitative
  - What taxonomies can capture
  - Reporting differences
  - Data quality
  - Relationship between Accidents and Incidents

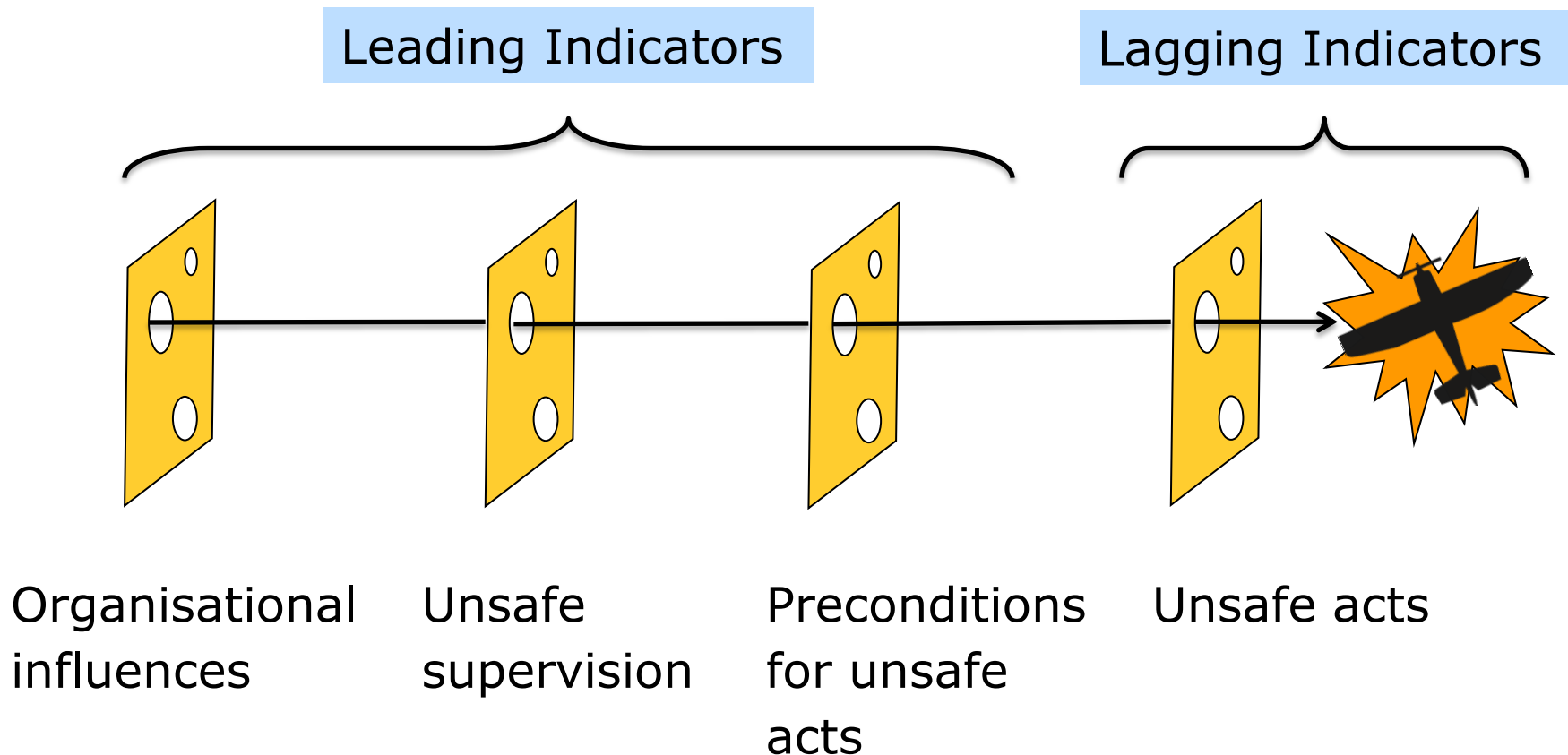


# How to Use SPIs

- High level SPIs continue to be useful
  - Use lagging data to indicate the historic system state
  - Purely factual
- Incident data useful but not predictive
- Circumstances and organisations potentially powerful tool but unproven



# How to Use SPIs





# SPIs for Europe

## Tier 1 – Commercial Air Transport

SKPIs:  
accident  
and  
serious  
incident  
rates

### Tier 2 – Runway Excursions

Runway  
excursion  
rate

EAPPRE  
rate of  
uptake

### Tier 3 – Intersection Departures

Use of signage  
indicating TORA

Incidents  
involving  
insufficient TORA



# Summary

- SPIs won't predict the next accident
  - Can describe historical performance
  - Can highlight areas that should be acted on
- EASA and NAA's working together to produce SPIs for Europe



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# Thank you for your attention

More information available at  
[www.easa.europa.eu/sms](http://www.easa.europa.eu/sms)

[www.easa.europa.eu](http://www.easa.europa.eu)

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