



**EASA**  
European Aviation Safety Agency

# Aerodromes and Ground Handling Collaborative Analysis Group (CAG)

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CASIA Meeting  
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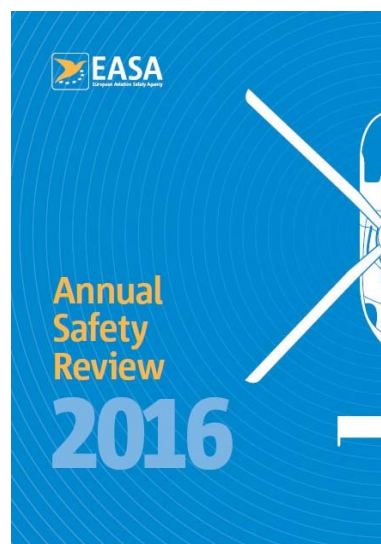
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# The European Safety Risk Management Cycle



What is the risk?

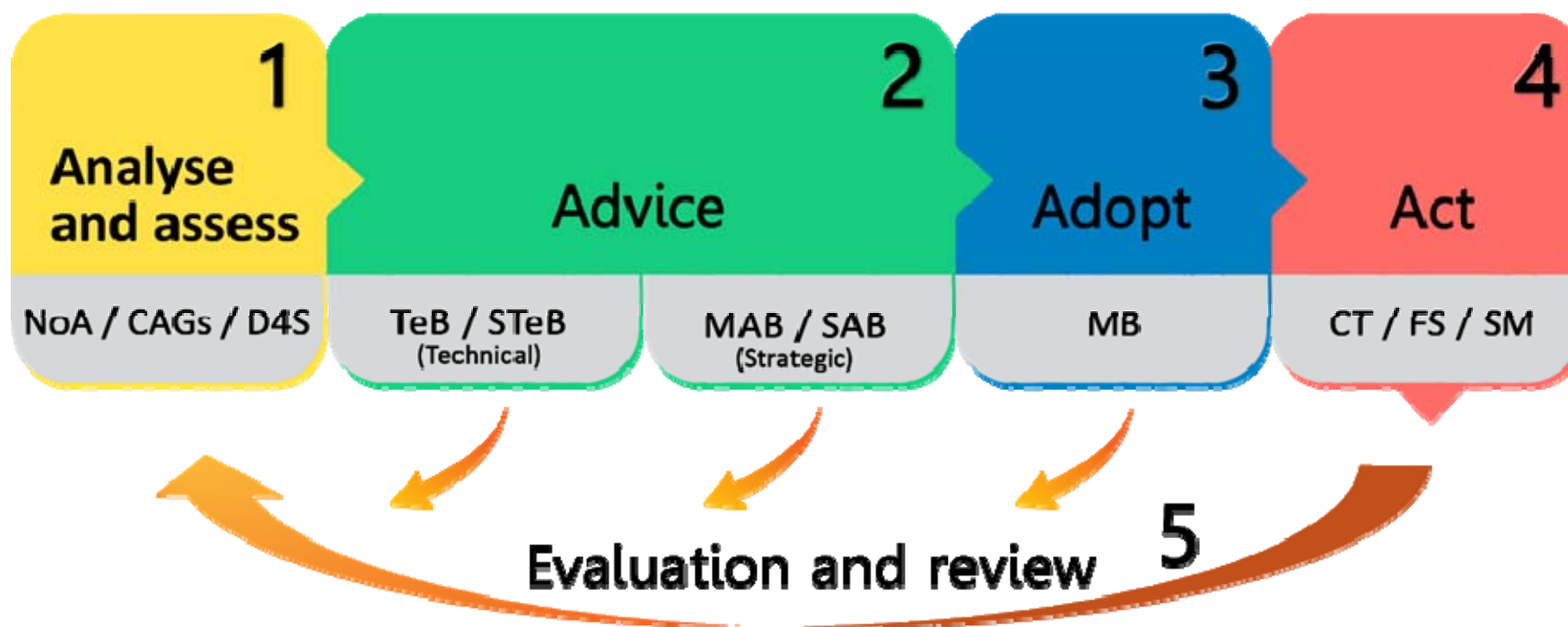


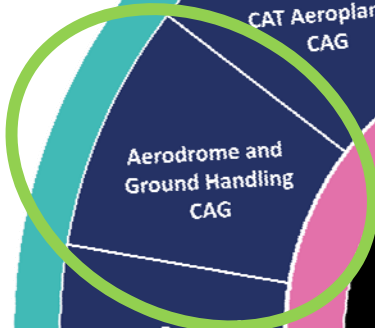
What do we do?





# Role of the different bodies







# Aerodromes and Ground Handling CAG

- Recently established, first meeting 22-23 March 2017
- Main Tasks: Identification and Assessment of Safety Issues (Steps 1 and 2 of the SRM Process)



# Membership

## ➤ Airports

- AMS (Amsterdam/Schiphol)
- CGN (Cologne/Bonn)
- CPH (Copenhagen/Kastrup)
- DSA (Doncaster/Sheffield)
- FRA (Frankfurt/Main)
- GOT (Göteborg/Landvetter)
- LHR (London/Heathrow)
- PRG (Prague/Vaclav Havel)
- WAW (Warsaw/Chopin)



# Membership

- Multi-Airport Operators
  - Assaeroporti
  - Fraport Greece
- Ground Handling Operators
  - Menzies Aviation
  - GH Italia
- National Aviation Authorities
  - Finland
  - Italy



# Membership

## ➤ Airlines

➤ British Airways

➤ Flybe

➤ Ryanair

➤ Alitalia

➤ Wizzair

➤ DHL





# Membership

- Multi-National organisations
  - ACI Europe
  - Eurocontrol
  - IATA
  - European Helicopter Association (EHA)
  - European Transport Workers Federation (ETF)
  - EASA (chair)



# Step 1 – Identification of Safety Issues



- Candidate Safety Issues Captured from all Stakeholders and are assessed/prioritised
- Candidate Safety Issue Assessment completed
- Output: Domain Safety Risk Portfolio



# Initially Identified Operational Safety Issues

| Safety Issue Title   | Safety Issue Problem Statement   |
|--|--|
| <b>Bird/Wildlife Strikes and Wildlife Control</b>                    | Birdstrikes or Wildlife Strikes that may lead to either damage or loss of control.   |
| <b>Aerodrome Design and Layout</b>                                   | Incorrect or inadequate aerodrome design and layout problems that may induce runway incursions or the potential for collisions and aircraft damage.  |
| <b>Condition and Serviceability of Airport Operating Environment</b> | Ineffective management of the condition and serviceability of the airport operating environment including maintenance of ATM/CNS Equipment, Aerodrome Surfaces, Visual Aids, Markings/Signage, Lights, Snow/Ice Removal, Jet Bridges and Other Infrastructure. |
| <b>Design and Serviceability of Ground Equipment (Non-Motorised)</b> | Ineffective design and serviceability of non-motorised airport ground support equipment including steps, baggage trolleys/dollies.   |
| <b>Design and Serviceability of Vehicles (Motorised GSE)</b>         | Ineffective design and serviceability of motorised airport ground support equipment including belt loaders, baggage trucks, catering trucks, fuel bowers and pushback equipment.   |
| <b>Positioning and Securing of Ground Equipment</b>                  | Incorrect positioning or inadequate securing of ground equipment such as baggage trolleys/dollies or steps that may be blown around the apron in bad weather.  |

|  |  |
|--|--|
| <b>Operation of Ground Equipment (Non-Motorised)</b>   | Incorrect operation of non-motorised ground equipment that may lead to ground collisions or injuries.  |
| <b>Operation of Jet Bridges</b>                        | Incorrect operation of jet bridges that may lead to ground collisions or injuries.   |
| <b>Operation of Vehicles (and Other Motorised GSE)</b> | Incorrect operation of motorised ground equipment that may lead to ground collisions or injuries.  |
| <b>Handling of Passengers with Reduced Mobility</b>    | Inadequate handling of passengers with reduced mobility.   |
| <b>Ground Operations in Adverse Weather Conditions</b> | Negative effects of adverse weather on ground operations including low visibility, high winds and extremes of temperature.                       |
| <b>Load Sheets and Other Documentation/Systems</b>     | Errors and omissions in load systems and documentation or systems for recording loading of aircraft.   |
| <b>Baggage and Cargo Loading</b>                       | Inadequate management or handling of the baggage and cargo loading process that may lead to ground damage or other safety effects.               |
| <b>Baggage and Cargo Securing</b>                      | Inadequate securing of baggage and cargo within an aircraft once it has been loaded that may lead to a load shift and potential loss of control. |

|   |  |
|---|--|
| <b>Dangerous Goods Handling and Lithium Batteries</b> | Spontaneous fires involving lithium batteries both in the aircraft cabin or hold areas followed by the potential inability to extinguish any subsequent fire to prevent injuries or an Unsustainable Aircraft Environment. |
| <b>Fuelling Operations</b>                            | Inadequate management, handling or coordination of the refuelling process.   |
| <b>Coordination and Control of Turnrounds</b>         | Inadequate management, handling or coordination of the turnround process.  |
| <b>Control of Passengers on the Apron</b>             | Inadequate control of passengers on the apron or any other operational area of the aerodrome or airport.   |
| <b>Ground Staff Movement Around Aircraft</b>          | Unsafe movement of personnel takes place around an aircraft while engines are running (Lights on) or within extended danger zones during cross-bleed engine starts.  |
| <b>Pushback Operations</b>                            | Inadequate management, handling or coordination of the pushback.   |
| <b>Jet Blast</b>                                      | Incorrect or inadequate management ground running or taxi patterns lead to injuries or damage due to jet blast.  |
| <b>Parking and Positioning of Aircraft</b>            | Incorrect marshalling, parking or positioning of aircraft that may lead to damage or injuries. This includes problems with visual parking aids.  |
| <b>Unreported Damage to Composite Structure</b>       | Ground damage to composite structures goes unreported when there might be more significant damage not visible.   |



# Initially Identified HF and Organisational Safety Issues

| Safety Issue Title  | Safety Issue Problem Statement   |
|---|--|
| <b>Experience, Training and Competence of Individuals</b> | Individuals (all types of actors) have insufficient experience, training or competence to perform the duties that they have been assigned.                       |
| <b>Human Performance</b>                                  | Inability of individuals to meet the human performance needs for a specific task or duty for reasons such as arousal, fatigue, repetitive processes and weather. |
| <b>Personal Pressure and Arousal</b>                      | Inability of individuals to perform to their best due to pressure or lack of/excessive arousal.  |
| <b>Fatigue</b>  | Inability of individuals to perform to their best due to fatigue.  |
| <b>Weather Effects</b>                                    | Inability of individuals to perform to their best due to the effect of weather.  |
| <b>Decision Making and Planning</b>                       | Incorrect planning and decision making by individuals.   |
| <b>Perception and Situational Awareness</b>               | Incorrect perception and inadequate situational awareness of individuals.  |
| <b>CRM and Operational Communication</b>                  | Ineffective CRM and communication (Including Language Proficiency, Use of Standard Terminology and Hand Signals)   |

| Safety Issue Title                        | Safety Issue Problem Statement   |
|---|--|
| <b>Commercial Pressures</b>               | Commercial pressures (e.g. Seasonal Workforce/Contracts/ On Time Performance/Non-Aviation Regulations) have an effect on Safety. |
| <b>Effectiveness of Safety Management</b> | Ineffective implementation of Safety Management Systems.   |
| <b>Safety Culture</b>                     | Inadequate Safety Culture (Including Senior Leadership Role in Safety)   |



## Next steps

- Prioritisation of the Safety Issues
- Safety Issue Assessments



## Step 2 – Assessment of Safety Issues



- Safety Risk Assessment carried out once Safety Issues are identified in Safety Risk Portfolio
- Identifies potential actions for the EPAS
- Output: Safety Issue Assessment (SIA) Report



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## Questions?

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