



# EASA

European Aviation Safety Agency

# Outcomes of CAT Aeroplane CAG ENCASIA Meeting

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**Your safety is our mission.**

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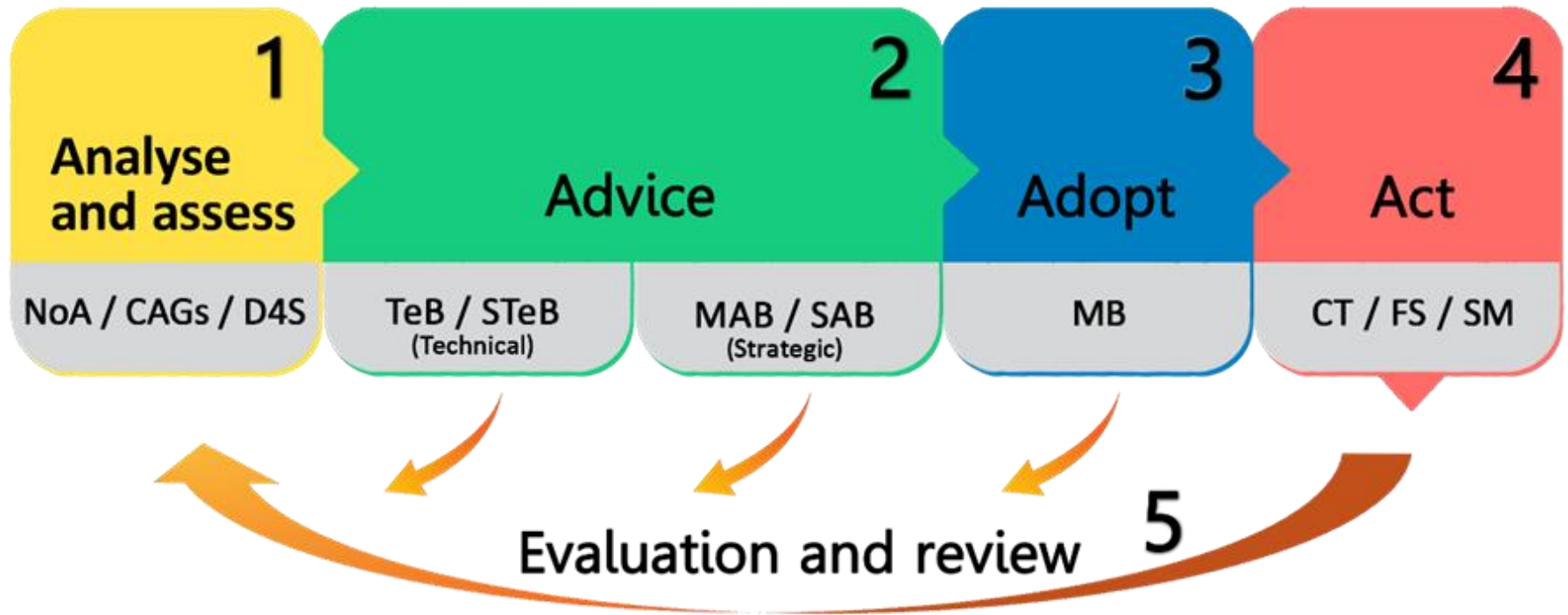
- Role
- Members
- Meetings
- Actual work
  - Identification and prioritisation of safety issues
  - Assessment of safety issues
  - Drafting of safety actions
  - Safety monitoring
- Coordination with other CAGs and ABs



- To support the analysis related steps of the SRMP, ensuring availability of safety relevant information, subject-matter expertise and wide spectrum of stakeholders



# Helping People Better Understand SRM





# Members

## ➤ Airlines

- Air Berlin
- Air Dolomiti
- Alitalia
- Cargolux
- Easyjet
- Finnair
- KLM
- Luthansa Group
- Lufthansa Citylink
- Luxair
- Netjets
- Norwegian
- Ryanair
- Wideroe
- Wizz

## ➤ TCH

- Airbus
- Boeing
- Dassault
- ATR

## ➤ Airport

- Heathrow

## ➤ NAA

- IAA
- UK CAA
- ENAC
- Trafi
- DGAC Fr

## ➤ Other

- IATA
- ERAA
- EBAA
- CANSO
- ACI
- Eurocontrol
- ECA
- EFT
- NLR
- UK FSC

## ➤ EASA

- FS
- CT
- SM



# Meetings

- Target 3 meetings per year (Feb, Jun, Oct)
- 4 meetings held so far since March 2016 (final transition from ECAST)
- Meeting agenda always around the SRMP
  - Work on Steps 5, 1 and 2
  - Information on Steps 3 and 4
- Next meeting: EASA Brussels office in May 16-17



# Actual work: Safety Performance Monitoring





Tier 0 – Whole EASA Remit

Tier 1 – Safety Risk Portfolios

Tier 2 – Key Risk Areas

Tier 2+ – Safety Issues





# 1 - CAT AEROPLANES SAFETY RISK PORTFOLIO

Key Statistics 2006-2015  
Fatal Accidents – 11  
Fatalities - 642

## Key Risk Areas



(1) Recognition and Recovery from Abnormal Attitudes	(2) Operation in Adverse Weather	(3) Handling of Technical Failures	(7) Aircraft Maintenance	(8) Fuel Management and Planning	(10) Birdstrikes
(4) Ground Handling Operations	(x) Wake Vortex Encounter	(x) Approach Path Management	(11) Handling of Go-Arounds	(12) Erroneous Data Parameters	(14) Damage Tolerance to UAS Collisions



(4) Ground Handling Operations	(5) Maintaining Safe Separation
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(1) Recognition and Recovery from Abnormal Attitudes	(2) Operation in Adverse Weather	(x) Approach Path Management	(9) False or Disrupted ILS Signal Capture	(11) Handling of Go-Arounds	(12) Erroneous Data Parameters
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(x) Wake Vortex Encounter	(x) Approach Path Management	(6) Flight Planning, Preparation and Re-Planning	(9) False or Disrupted ILS Signal Capture
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(2) Operation in Adverse Weather	(5) Maintaining Safe Separation	(6) Flight Planning, Preparation and Re-Planning
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(4) Ground Handling Operations	(15) Dangerous Goods Handling and Lithium Batteries
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(5) Maintaining Safe Separation	(6) Flight Planning, Preparation and Re-Planning	(13) Deconfliction with Aircraft Not Fitted with Transponders
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## Operational Issues

## HF

(a) Fatigue	(a) Mental Health
(a) Fumes	(a) Gastrointestinal Illness
(c) Decision Making and Planning	(b) Perception and Awareness
	(d) CRM and Communication
(f) Knowledge of Aircraft Systems and Procedures	(e) Monitoring of Flight Parameters/Automation

## Enablers

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

## Security

(x) Lasser Illumination Effects	(x) Unruly Pax
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# Actual work: Identification of Safety Issues

- Identification of Systemic safety issues (global concern)
  - Active analysis activities
  - Safety Recommendations from SIAs
  - MS SSPs
  - Organisation SMS
- Opportunity to bring front-line issue into the SRMP
- Qualitative validation process to get into the Safety Risk Portfolio
- Prioritisation based on data and expert judgment – currently moving to risk-based prioritisation (link to ERCS)
  
- Ex. candidate safety issues from CAT Aeroplane CAG:
  - Effect of Non-Aviation Regulations
  - Reporting of runway condition
  - Unintended flap retraction
  - Installation of equipment
  - Selection of personnel



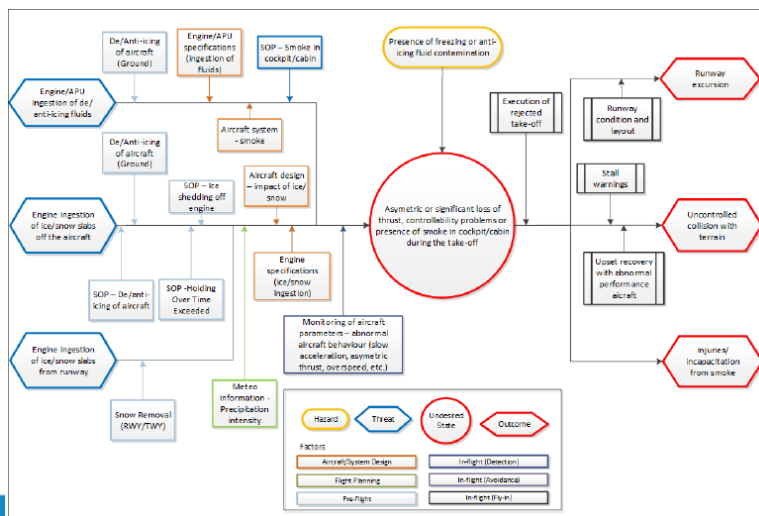
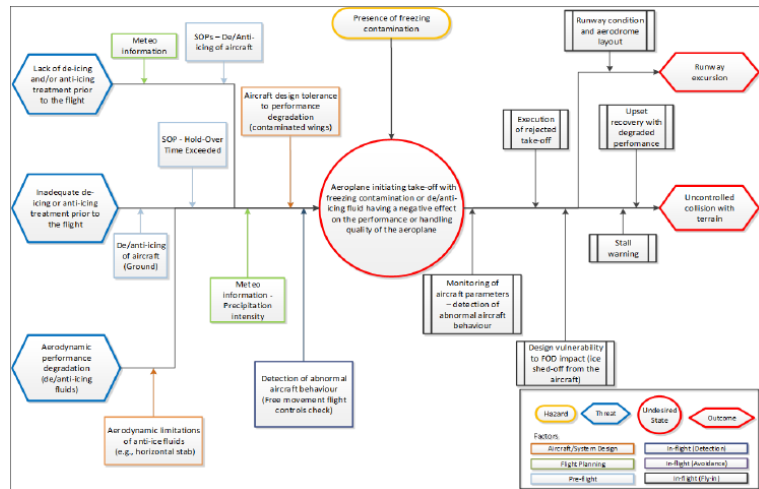
# Actual work: Assessment of Safety Issues

- Four roles to engage in the assessment tasks
  - Review and comment the assessment (all stages) – [default role, for all]
  - Contribute with data/information and review assessment
  - Provide expert resources
  - Lead assessment
- Goal: provide a technical safety assessment of a prioritised safety issue, identifying the weakness in the system and drafting possible actions to mitigate the risk
- Feed the Preliminary Impact Assessment with the safety element
- Ex. Safety assessments discussed and agreed with the CAT Aeroplane CAG:
  - Entry of erroneous take-off and landing parameters
  - CRM
  - Ice on ground
  - Disruptive passengers
  - Crew impairment and incapacitation
  - Ice in flight (on-going)
  - Inadequate handling of go-around (on-going)



# Actual work: Assessment of Safety Issues

## ➤ Ex. Assessment report on “Ice on Ground”



The result of the assessment shows that, although operation in icing conditions on ground rarely progresses to a fatal outcome, especially in the European context, the frequent failure of some of the preventive barriers and the inefficiency of most of the recovery barriers, indicate that safety actions over those identified areas of improvement should be strongly considered. Therefore, the Assessment Team proposes to assess the feasibility and convenience of the following safety actions:

1. Establish common safety requirements for the de/anti-icing services established in the EU aerodromes and the effective oversight of those services.
2. Assess new ground-based technological developments available to measure precipitation intensity.
3. Review EASA publications (SIBs) on ground icing to consolidate a single reference document containing all updated safety information on threats and possible mitigating measures.
4. Explore FDM techniques to detect and monitor aircraft performance degradation and promote its implementation.
5. Pursue completion of RMT.0118 to assess the impact of contamination (ice/snow and anti-icing fluids) on the aircraft performance and handling quality.
6. Assess means to assist the flight crew in monitoring the actual acceleration of the aircraft during the take-off run to detect mismatch between V1 and the actual remaining runway distance.
7. Assess the level of control of EASA over the Industry Standards on de/anti-icing specs and Hold over Time (HoT) tables.
8. Pursue completion of RMT.0296 to harmonise measurement and reporting of runway condition, and the associated aircraft performance calculation methods and the equivalent RMT for Aerodromes.
9. Liaise with FAA to assess the need to review Engine requirements for heavy snow fall conditions.
10. Request Engine and APU TCHs to assess impact of anti-icing fluid ingested by those certified products.
11. Include aerodrome snow removal plan as part of the sampled items for ADR Standardisation activities.
12. Pursue the completion of RMT.0696 on the implementation of Evidence Based Training.



# Summary

- CAT Aeroplane CAG is hands-on technical working group that:
  - Enables front-line organisations to bring their reality to the analysis
  - Facilitates the identification and agreement on the main safety issues
  - Assist the SRMP in building a common understanding of a safety issue and making agreed proposals for safety actions
- CAT Aeroplane CAG is NOT a decision making group, though it is kept informed of decisions taken downstream and it has the possibility to comment upon



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European Aviation Safety Agency

**Thanks!**

**Questions or comments?**

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