



EASA ORGANISATION FOR CONTINUING AIRWORTHINESS

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EASA AD Workshop
November 28, 2017

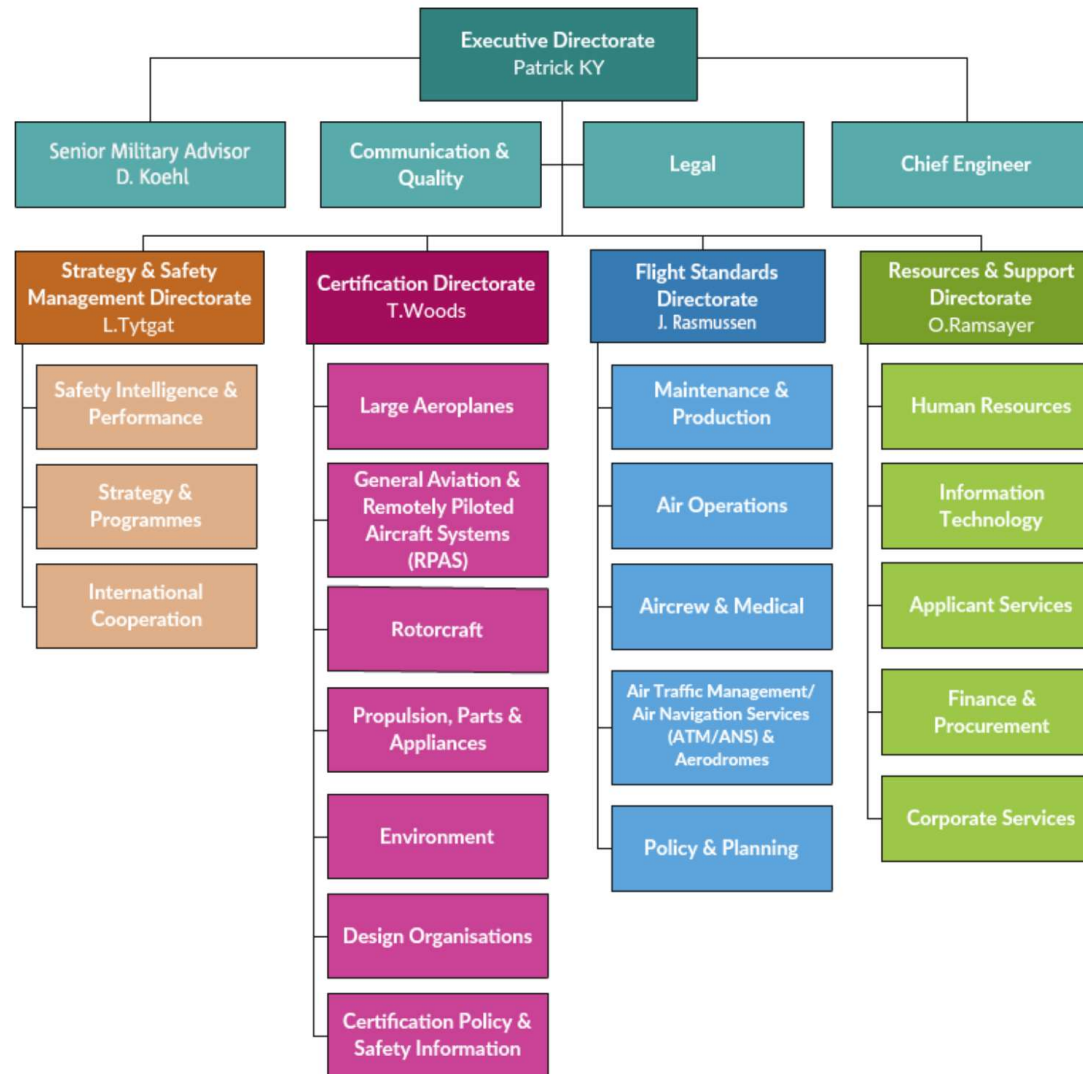
Your safety is our mission.

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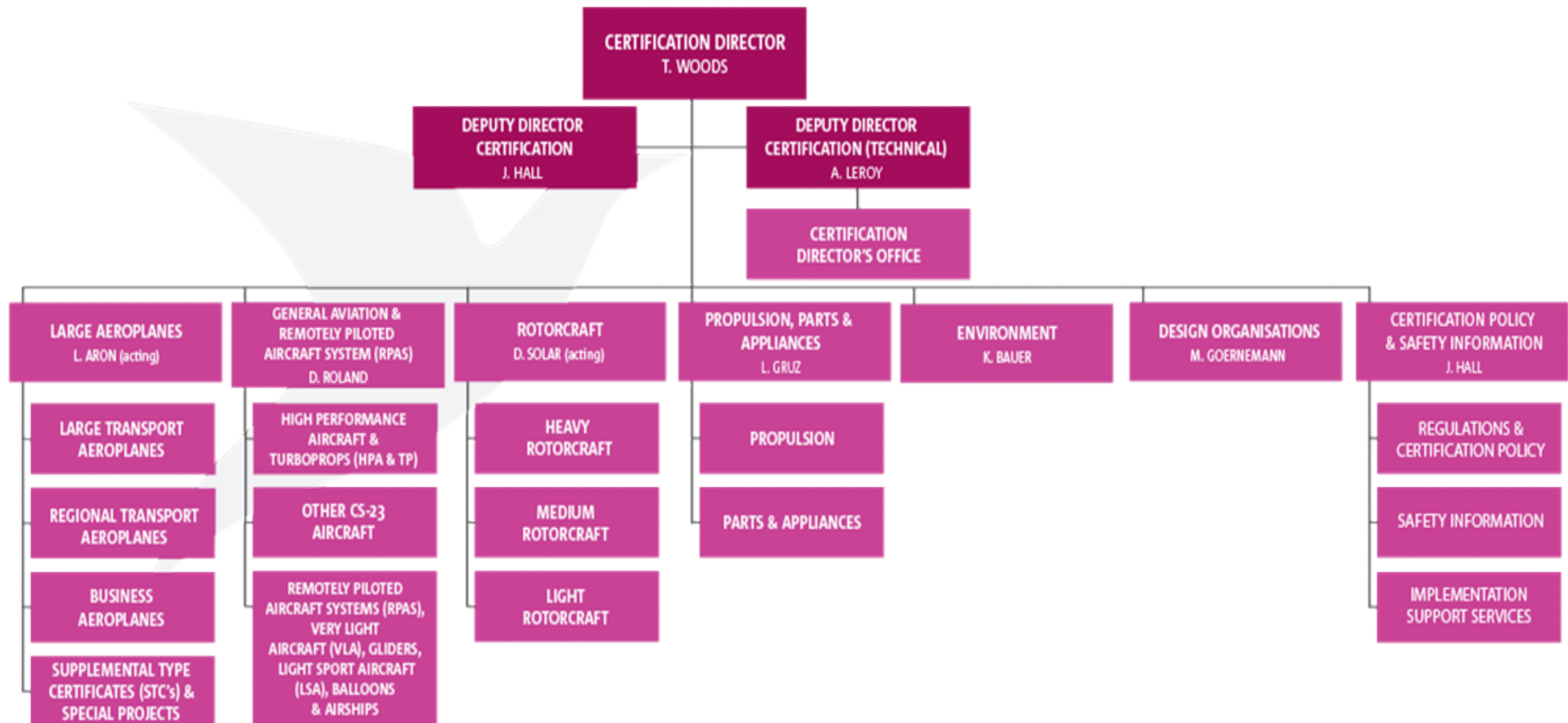


Organisation Structure of EASA



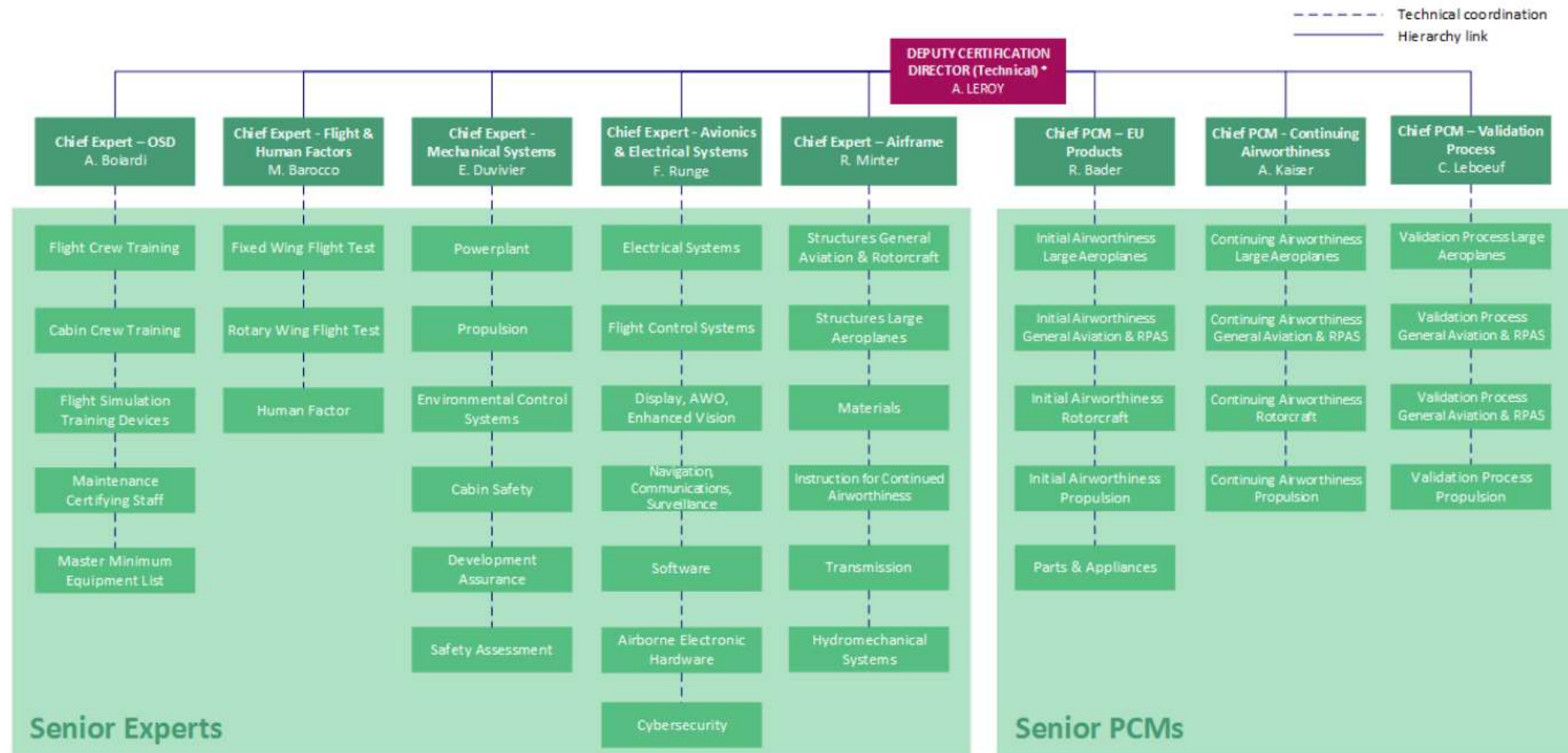


Org. Chart of EASA - Certification Directorate





Org. Chart of EASA - Technical Organogram



* Technical reporting to the Chief Engineer (Pascal Medal), responsible for IISC, appeals, technical coordination between directorates



MCAI as result of the CAW Process

For **European products**, MCAI (AD) and SIB are drafted and published by CT.7.2 upon request of PCMs for unsafe conditions and also for safety promotion, e.g. to recommend best practices.

For **Non-EU products**, EASA typically adopts the MCAIs as published by the Certifying Authority after review of the safety issue, that is addressed.

How to get there ?

CAW is based upon analysis of reported events/occurrences and lessons learned from accidents



Introduction - CAW of Type Design

Continuing Airworthiness of the Type Design must be maintained during the whole life cycle of a product which is can be 20, 30 years, or more in production with an individual aircraft design life of 25 years or more.

Different Challenges exist typically for

- Young products
- Old products
- Growing fleets



CAW Reporting / Analysis Process

A mature reporting system is the baseline for in-service feedback, risk analysis to determine corrective actions, if necessary and maintain an adequate safety level.

- Initial Screening
- Initial Reporting
- Detailed Analysis
- Follow-up reports

The CAW process within the DOA is audited by EASA on a regular basis by the DOATL of CT.6 with support of the PCM and certification team, as necessary.



CAW Process / Corrective Actions

Unsafe Condition

Initial Mitigations

Inspections or Procedures/Limitations

Affected population

Compliance time

→ **Airworthiness Directive**

Reporting of findings to confirm the investigation results

→ **Airworthiness Directive (Revision or Superseding AD)**

Termination action

Implementation of corrective actions is monitored



Process Improvements

Increased fleet sizes lead to a high volume of occurrence reports.

Strategies to work efficient and risk based by use of Repeaters, Generic Occurrences. Focus on more on Safety Issues than on each single occurrence.

The new requirements for **Safety Management System (SMS)** and related changes to the reporting system (IORS) must be implemented in a way that takes maximum advantage of the developed systems of the TD-holders.

Product Safety Board meetings are conducted in regular intervals within the product lines to discuss important issues, safety recommendations and take safety decisions.

Key Performance Indicators (KPIs) are currently developed to determine the process quality. These KPIs should be used to identify trends and allow early decisions to define containment measures to request more resources or improve maturity in design/manufacturing.

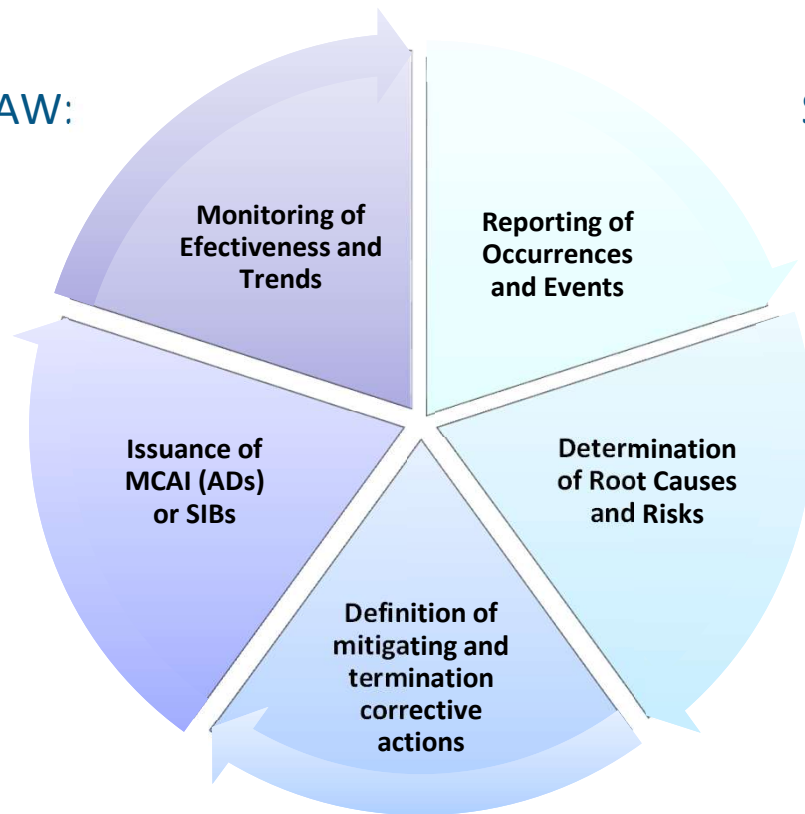


Introduction CAW and SMS

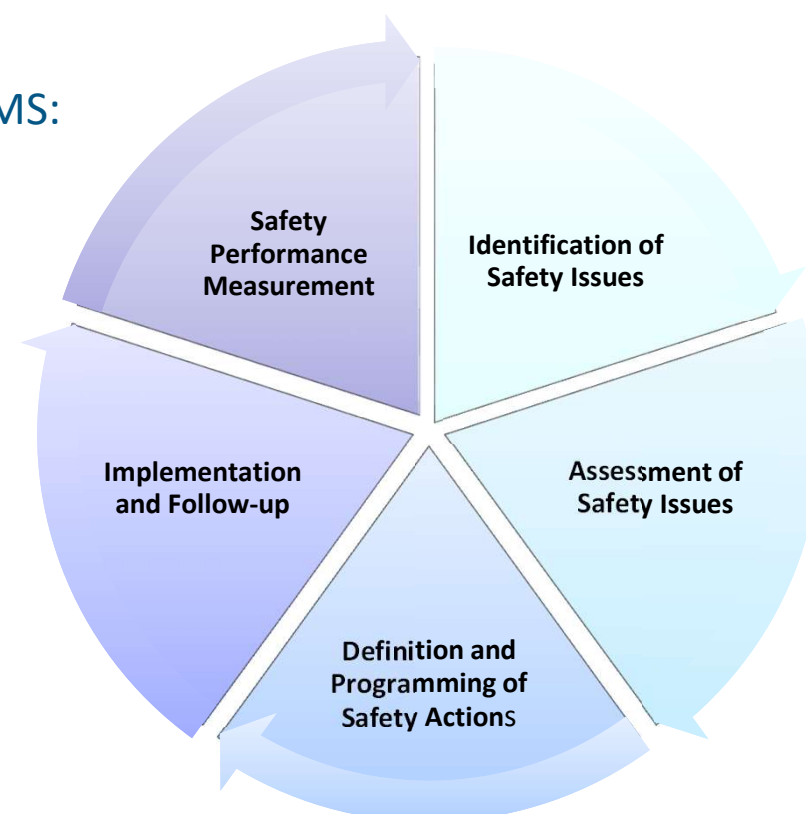
In addition to the traditional CAW process, new safety strategies are developed to identify key risk areas that have contributed to accidents and define safety promotion strategies.

This activity is coordinated by SM 1 and has resulted an Aeroplane Risk Portfolio that identified Key Risk Areas with a wider scope than CAW of the Type Design.

CAW:



SMS:



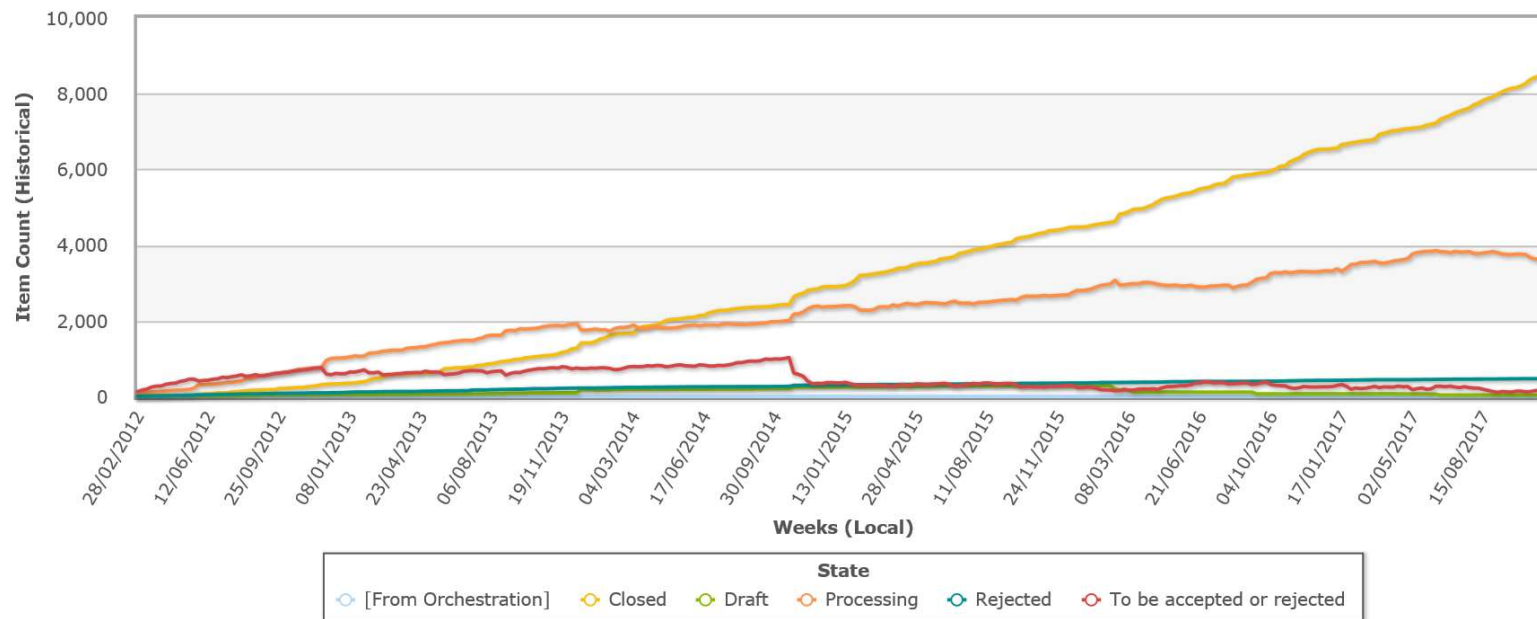


CAW / IORS achievements 2017

Coordinated Effort of Senior PCMs to Introduce Best Practices and enhance awareness about KPIs for those PCMs that have the highest amount of occurrences.

- Reduce IORS OCC to be accepted or rejected
- Reduce IORS OCC processing dramatically by introducing Multi Occurrences (MOs) for identified safety issues
- Eliminate new workflows for new Occurrences that belong to a known issue.
- Improve IORS Standard Closure Statements

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Future Challenges and Solutions

- **Number of reported event** is proportional to number of aircraft operating while fleets are increasing size significantly. More and more resources are necessary to perform detailed analysis for each individual case. EASA has only limited resources and must become more efficient.

Achieve more safety effect with less resources

- **Optimize Screening Sorting and Risk Analysis** to identify potential risks early and **focus higher risk areas**. Delegate routine work to the DOA (EU products) and Certifying Agencies (Non-EU products) and maintain LOI for potentially unsafe conditions, only.
- **Avoid unnecessary duplication of work** for repetitive events; however, also monitor trends for which the safety level is decreasing and will become corrective action due to high probability.
- **Streamline communication flow** and archiving by reduction of dual communication lines (within the reporting tool and using emails for supporting data files and technical communications)



EASA Reporting System (IORS → SDM)

IORS was implemented in 2012 and used initially as data base and archive for occurrence reports and associated workflows. IORS is used by Certification and also Safety Intelligence & Performance.

Certain limitations in the IORS and determination of future needs lead to the decision for a new Safety Data Management System (SDM).

EASA SDM is currently in development and will be implemented by End of 2018. This new system will have more capabilities including communication to internal and external stakeholders.

This will then allow to perform technical dialog within the tool and avoid a dual stream of information as currently present with technical correspondence in emails and reports archive in IORS.



International Cooperation

Bilateral Aviation Safety Agreement include provisions to rely upon each others work and assure exchange of information. However some differences exist in the processes used and result in variations of the conclusions about the safety risk and the timelines of application of corrective actions.

COSET (Continued Operational Safety Evaluation Team) is a joint activity of ANAC, EASA, FAA, and TCCA based upon a task definition created by CMT.

Recommendations:

- assure consistent worldwide reporting
- align risk assessments to avoid unilateral AD actions
- early exchange basic information about safety issues and potential AD action
- to enhance confidence and awareness and
- to avoid publication delays when adopting/issuing MCAs
- to determine similar/common risks for worldwide product lines



EASA for Safety

EASA is prepared for future growth of the worldwide aircraft operation and will focus upon design safety and operational safety by

- Certification of mature design
- Risk based activities to maintain Continuing Airworthiness
- Proactive Safety Promotion based upon data driven approach.



Thank You
Any Question?

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