EASA
European Aviation Safety Agency

Aviation – Experience from applying Occurrence Reporting

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Content

- Short Introduction to EASA
- Why Occurrence Reporting?
- EASA experience with occurrence reporting
- Key success factors and challenges for an occurrence reporting system

Introduction to EASA

The EU aviation system

Proposes rules / issues guidance material

Issues certificates and approvals where centralisation is more efficient

Audits Authorities

Manages European Aviation Safety Plan

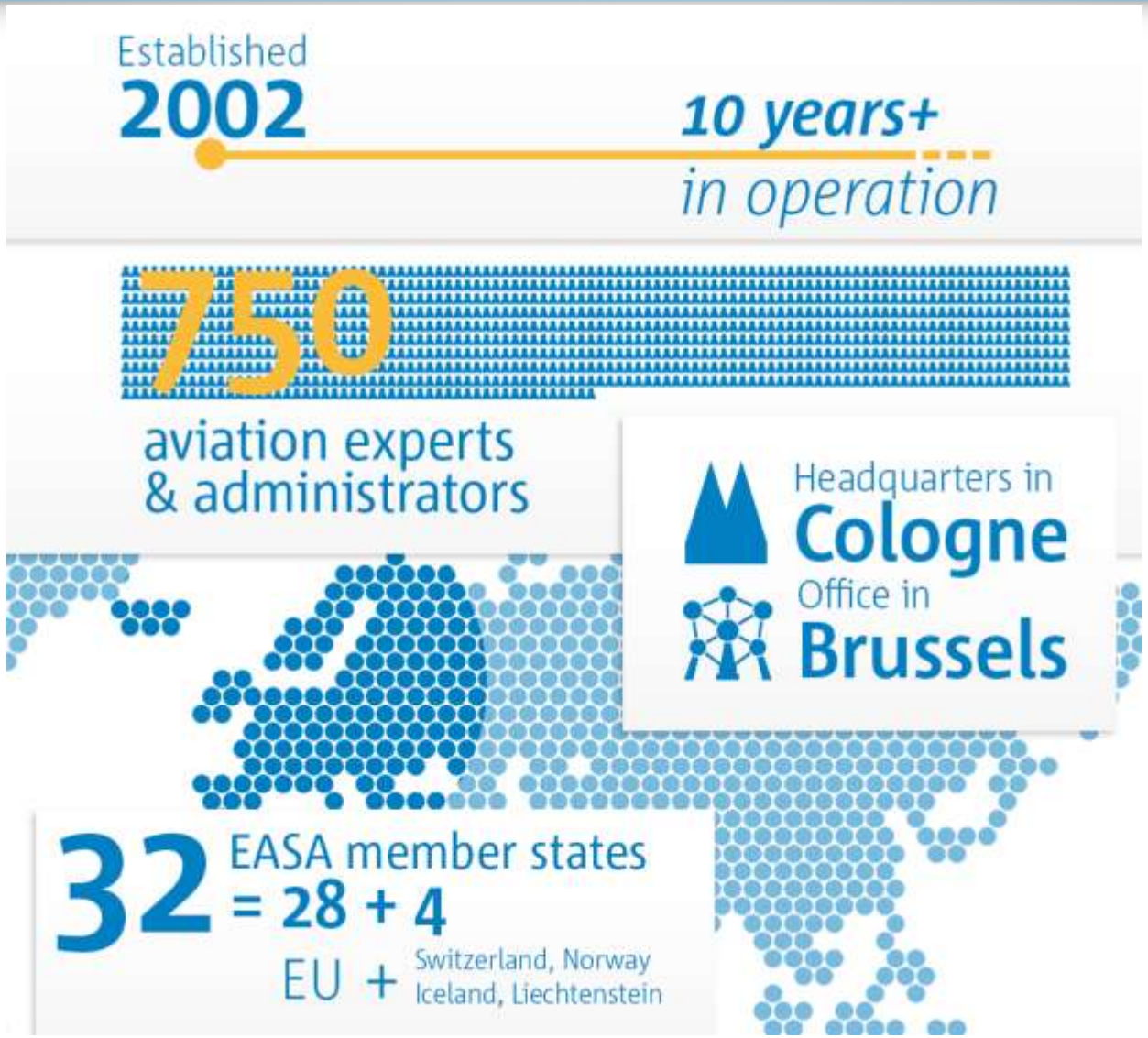
Coordinates SAFA programme

Adopts rules

Launches infringement procedure

Manages Safety List

EASA facts and figures



EASA Scope of competences as a regulator

Safety significantly affects all aviation domains:

Total System Approach

- Airworthiness
- Operations & FCL
- 3rd Country Operations
- Aerodromes
- ATM/ANS

Why Occurrence Reporting?

Why Occurrence Reporting?

- For Prevention of Accidents and Serious Incidents

  How?

- Occurrence Data can reveal directly high risk safety issues
- Occurrence Data can constitute accident precursors
- Occurrence Data can be used for risk assessment of already identified safety issues

Why Occurrence Reporting?

- *Occurrence Data can reveal directly high risk safety issues*
- Example: A380 uncontained engine failure 4 Nov 2010

Why Occurrence Reporting?

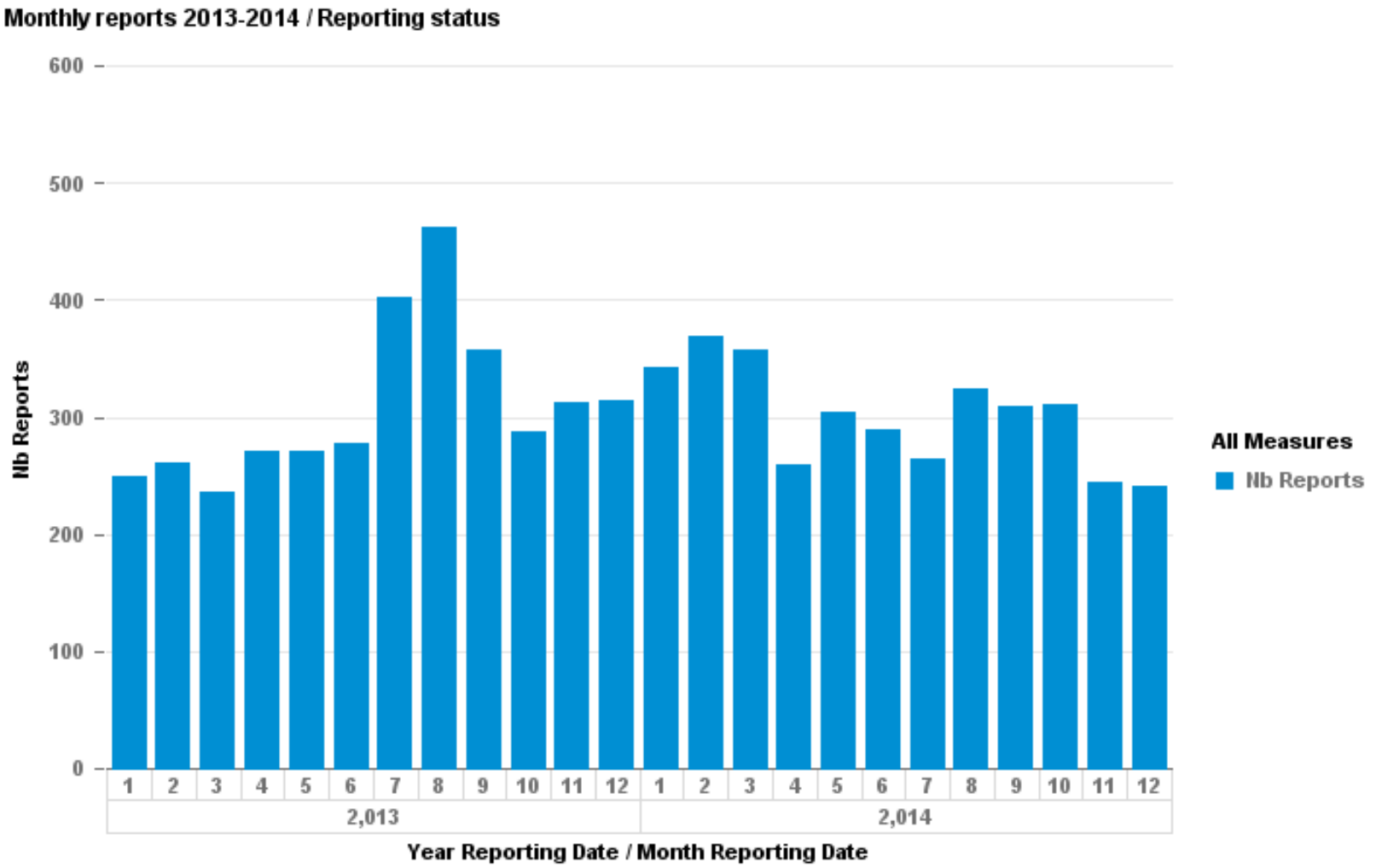
- *Occurrence Data can constitute accident precursors*
- Example: B737 crash in Amsterdam 2009 (history of radio-altimeter failures)

Why Occurrence Reporting?

- *Occurrence Data can be used for risk assessment of already identified safety issues*
- Example: A320 repetitive occurrences of fan cowl loss (maintenance error)

EASA Experience with Occurrence Reporting

Occurrences reported directly to EASA



Safety Actions taken by EASA (mainly design related)

	2014
Airworthiness Directives	281
Safety Information Bulletins	35

EASA AD No.: 2014-0257R1

EASA	AIRWORTHINESS DIRECTIVE
	AD No.: 2014-0257R1 Date: 29 May 2015

This AD is issued in accordance with EU 748/2012, Part 21.A.3B. In accordance with EU 1321/2014 Annex I, Part M.A.301, the continuing airworthiness of an aircraft shall be ensured by accomplishing any applicable ADs. Consequently, no person may operate an aircraft to which an AD applies, except in accordance with the requirements of that AD, unless otherwise specified by the Agency (EU 1321/2014 Annex I, Part M.A.303) or agreed with the Authority of the State of Registry (EC 216/2008, Article 14(4) exemption).

Design Approval Holder's Name: AIRBUS	Type/Model designation(s): A330 and A340 aeroplanes
TCDS Numbers:	EASA.A.004 and EASA.A.015
Foreign AD:	Not applicable
Revision:	This AD revises EASA AD 2014-0257 dated 27 November 2014.
ATA 27	Flight Controls – Trimmable Horizontal Stabilizer Actuator – Identification / Replacement
Manufacturer(s):	Airbus (formerly Airbus Industrie)
Applicability:	Airbus A330-201, A330-202, A330-203, A330-223, A330-223F, A330-243, A330-243F, A330-301, A330-302, A330-303, A330-321, A330-322, A330-323, A330-341, A330-342 and A330-343 aeroplanes, all manufacturer serial numbers (MSN). Airbus A340-211, A340-212, A340-213, A340-311, A340-312, A340-313, A340-541, A340-542, A340-642 and A340-643 aeroplanes, all MSN.
Reason:	During endurance qualification tests on Trimmable Horizontal Stabilizer Actuator (THSA) of another Airbus aeroplane type, a partial loss of the no-back brake (NBB) efficiency was experienced. Due to THSA design similarity on the A330/A340 fleet, a similar partial loss of the NBB efficiency was identified on THSA Part Number (P/N) 47147 as installed on A330-300 and A340-200/-300 aeroplanes, on THSA P/N 47172 as installed on A330-200/-300 and A340-200/-300 aeroplanes, and on THSA P/N 47175 as installed on A340-500/600 aeroplanes. Investigation results concluded that this partial loss of braking efficiency in some specific aerodynamic load conditions was due to polishing and auto-contamination of the NBB carbon friction disks. This condition, if not detected and corrected, and in conjunction with the power gear train not able to keep the ball screw in its last commanded position, could lead to uncommanded movements of the THS, possibly resulting in loss of control of the aeroplane.

EASA SIB No: 2014-32

EASA Safety Information Bulletin

SIB No.: 2014-32
Issued: 09 December 2014

Subject: Safety Information Related to Alleged Examination Fraud at Part-147 Maintenance Training Organisation HATA

Ref. Publications: European Commission Regulation (EC) No. 216/2008:
- Article 14(1) – Flexibility provisions: Member States' reactions to safety problems.
- Article 10(1) to 10(4) – Oversight and enforcement: Exchange of information for enforcement actions, taking measures to prevent the continuation of an infringement, cooperation for ensuring compliance with the regulations.
- Article 15(1) – Information network.

EC No. 2042/2003, Part 66.B.500 – Revocation, suspension or limitation of the aircraft maintenance licence.

Applicability: All Competent Authorities (CA) and the aviation industry.

Description: The Hellenic Civil Aviation Authority (HCAA) has informed the aviation community of the revocation of the Part-147 maintenance training organisation approval of the Hellenic Aviation Training Academy (HATA), EL.147.0007, because of alleged examination fraud at this organisation. In addition, the HCAA has cancelled the certificates of recognition (CoR) issued by HATA for the module exams where cheating has been confirmed, and will provide a list containing details of candidates who passed suspect module exams during the period where fraud was allegedly committed.

The investigation by the Greek Authorities of the validity of all the suspect CoR issued by HATA during that period is not yet complete and may take a significant period of time.

There is a probability that CoR, which were issued by HATA on the basis of alleged fraudulent activities, have been used by applicants to gain Part-66 licences anywhere in the EASA States, or in other States that recognise Part-147 CoR.

Consequently, there is an immediate cause of concern that persons could have been issued licences and are exercising certification privileges or releasing aircraft after maintenance without having the required basic knowledge to do so.

This is information only. Recommendations are not mandatory.

Using occurrence data for building safety risk management for the EU Aviation System

Safety Issue Identification

- Analysis of occurrence data
- Analysis of other information
- Emerging Safety Issues

Safety Issue Assessment

- Scope
  Causes
  Consequences
  Risk Controls
- Risk Assessment (using ARMS when possible)

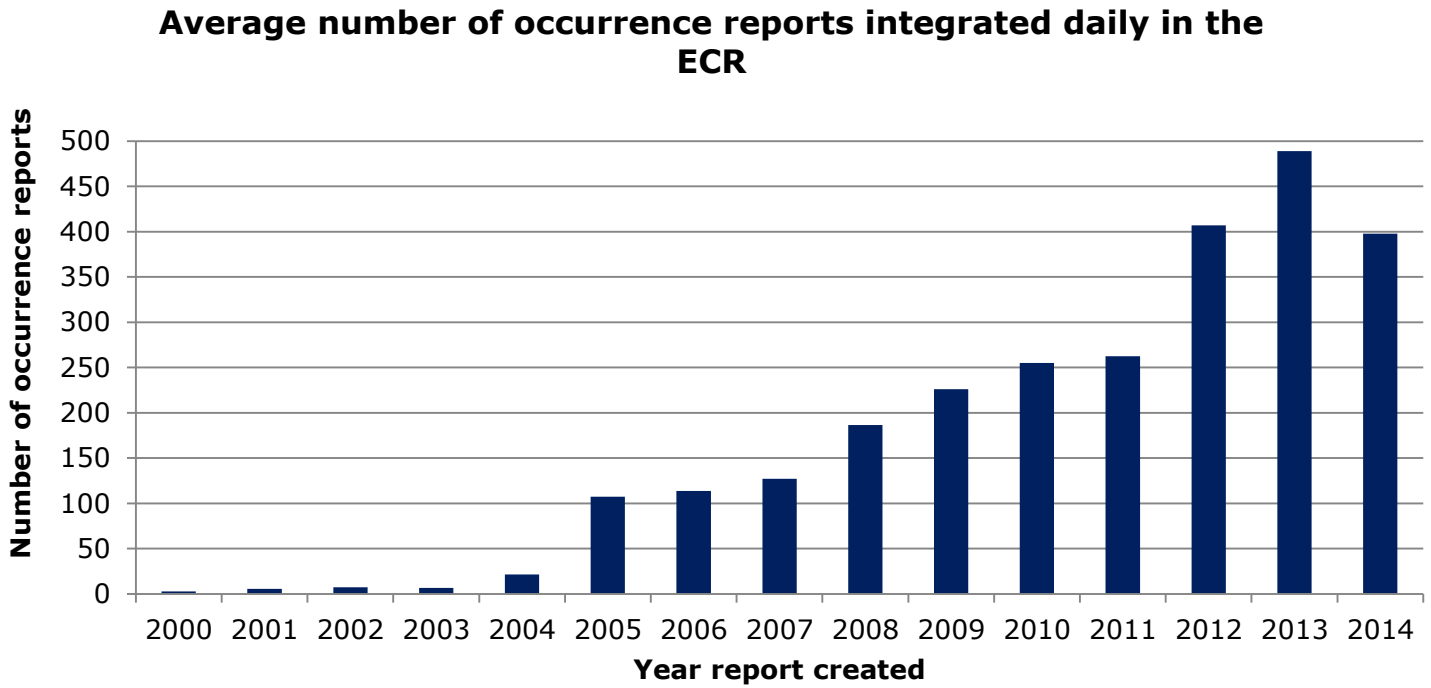
Safety Action Programming

- Definition of Actions
- Impact assessment, prioritisation
- Follow-up of implementation

Safety Performance

- Indicators relevant for monitoring the safety issue
- Indicators relevant for measuring efficiency of actions

Looking ahead: using data from the European Central Repository (ECR)



Key Success Factors and Challenges

Key Success Factors and Challenges of an occurrence reporting system

- Key Success Factors
  - Just Culture, Trust in the occurrence reporting system
  - Collecting Large Amounts of Data / Data Sharing
  - Integration within a comprehensive risk assessment process
  - Taking the right safety actions in response to uncovered safety issues

- Key Challenges
  - Under-reporting
  - Data quality, completeness
  - Language
  - Providing feedback to reporters

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Thank you for your attention

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Back up slides

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EASA Mission

- Ensure the highest common level of safety protection for EU citizens
- Ensure the highest common level of environmental protection
- Single regulatory and certification process among Member States
- Facilitate the internal aviation single market & create a level playing field
- Work with other international aviation organisations & regulators

Partnership with EU States

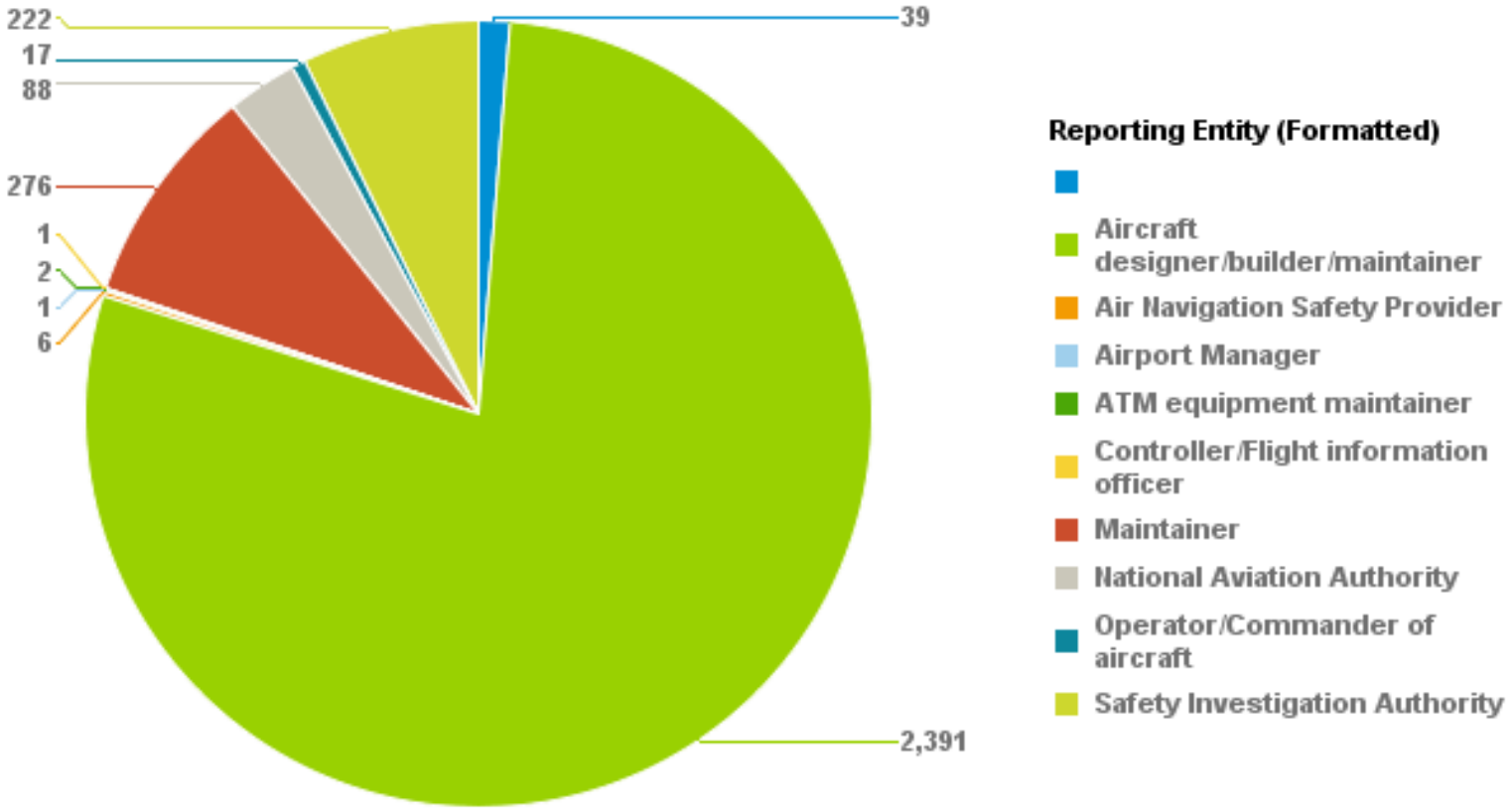
Member states

EASA
European Aviation Safety Agency

- Implementing EU Legislation
- Oversight of national organisations
  - Production
  - Maintenance
  - OPs/Licencing
  - Training
  - ATM
  - Aerodromes

- Implementing rules
- Oversight of Member States
- Aircraft and products certification
- Safety of non-EU operations
- Approval of non-EU organisations
  - *Production*
  - *Maintenance*
  - *Training*
  - *ATM*

Occurrences reported directly to EASA



The framework of Regulation (EU) 376/2014

Regulation EU 376/2014 on reporting and analysis of occurrences

What are the objectives of the Regulation?	• To improve aviation safety by ensuring that relevant civil aviation safety information is reported, analysed and followed-up • To ensure continued availability of safety information through Just Culture
To what kind of event does it apply?	• 'occurrence' means any safety-related event which endangers or which, if not corrected or addressed, could endanger an aircraft, its occupants or any other person and includes in particular an accident or serious incident;
To who does it apply?	• The Member States • EASA • Organisations established in a MS • Natural persons

Topology of occurrence data- European Central Repository