General Update on the European Aviation Safety Agency

Dr. Norbert Lohl, Certification Director

Your safety is our mission.
About EASA

» Founded in 2003
» Located in Cologne
» Staff of more than 700

28 EU states
4 EFTA states
COSCAP-GS Conference

» EASA Organisation

Diagram of EASA Organisation structure.
Core Activities:

- Product Safety Oversight
- Regulatory Activity
- Organisation Safety Oversight
- International Cooperation
- Safety Assessment and Promotion
- Safety Oversight of Member States
The actors

- **Basic Regulation**
  - European Commission
  - European Council
  - European Parliament

- **Implementing Rules**
  - European Commission

- **Soft Law**
  - Acceptable Means of Compliance
  - Guidance Material
  - Certification Specifications
  - AMC, GM, CS
### Basic Regulation

<table>
<thead>
<tr>
<th>Airworthiness</th>
<th>Flight Standards</th>
<th>ATM/ANS</th>
<th>Aerodromes</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Initial Airworthiness</td>
<td>- Air Crew</td>
<td>- ATCO Licensing</td>
<td>- AUR airspace usage requirements and operating procedures for airborne collision avoidance ACAS II</td>
</tr>
<tr>
<td>- Continuing Airworthiness</td>
<td>- Air Operations</td>
<td>- ATM/ANS Oversight</td>
<td>- SERA Standardised European Rules of the Air</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- ANS Providers</td>
<td></td>
</tr>
</tbody>
</table>
EASA Type Certificates

Lufthansa Boeing 747-8
Source: Lufthansa

Emirates Airbus A 380
Source: Emirates
EASA Type Certificates

- **Rolls Royce Trent XWB**
  - Source: Rolls Royce

- **AgustaWestland AW189**
  - Source: AgustaWestland

- **Airbus Helicopters EC175**
  - Source: Airbus H
EASA Type Certification Projects (Examples)

- **Airbus A 350**
  Source: Airbus

- **Boeing 737 MAX**
  Source: Boeing
The total number of EASA certificates issued during 2013 is 3,741
The number of Airworthiness Directives (ADs) issued during 2013 is 382 (350 ADs and 32 Emergency ADs)
Overview of Organisations approvals issued

DOA: Design Organisation Approval
AP to DOA: Alternative Procedures to Design Organisation Approval
POA: Production Organisation Approval
MOA: Maintenance Organisation Approval
MTOA: Maintenance Training Organisation Approval
SPOA: Single Production Organisation Approval
LOA: Letter of Acceptance for navigation database suppliers
FCLOA: Flight Crew Licencing Organisation Approval
ATMOA: ATM/ANS Organisation Approval
Update on Regulatory changes:


- Regulation (EU) No 965/2012 on Air Operations of 05/10/2012 covering commercial air transport operations with aeroplanes and helicopters

- Regulation (EU) 800/2013 amending Regulation (EU) 965/2012 on Air Operations of 14/08/2013 covering non-commercial operations with aeroplanes, helicopters, balloons and sailplanes

Update on Regulatory changes:

- **OSD** concept included in Commission Regulation (EU) No 69/2014 of **27/01/2014** laying down implementing rules for the airworthiness and environmental certification of aircraft and related products, parts and appliances, as well as for the certification of design and production organisations.


- Regulation (EU) laying down technical requirements and administrative procedures related to air operations of third country operators (TCO) under preparation for publication in **spring 2014**.
Certification methodology changes

- Level of Involvement (LOI) based on organisational and product related risk analysis defined on the following risk criteria:
  - Novelty/criticality of the certification item incl. means of compliance
  - Level of performance of the design organisation
  - Related accident, incident or unsafe condition
  - Demonstration of compliance rejected by the Agency
  - Related technical or operational evolution
  - Related technology changes
  - By request of the Applicant
Certification methodology changes (cont.)

- SMS implementation to be followed up
- Extend/optimise the TIPs with US, Canada and Brazil and covering OSD, MRB and Environmental Protection (noise, emissions) validation activities
- EASA to implement more tailored and proportionate approach to support the revitalization of the General Aviation community
Occurrence Categories for Fatal and Non-Fatal Accidents in EASA MS CAT Aeroplanes above 2,250 kg MTOM, 2003-2012:
(Source EASA Annual Safety Review 2012)

- **RI-VAP**: Runway incursion — Vehicle, aircraft or person
- **LALT**: Low altitude operation
- **FUEL**: Fuel related
- **AMAN**: Abrupt manoeuvre
- **F-NI**: Fire/smoke (non-impact)
- **CABIN**: Cabin safety event
- **ATM**: Air Traffic Management
- **USOS**: Undershoot/overshoot
- **LOC-G**: Loss of control — Ground
- **WSTRW**: Windshear or thunderstorm
- **EVAC**: Evacuation
- **ADRM**: Aerodrome
- **GCOL**: Ground collision
- **TURB**: Turbulence encounter
- **ARC**: Abnormal runway contact
- **ICE**: Icing
- **BIRD**: Collision / near Collision with bird(s)
- **MAC**: Airprox/TCAS alert/loss of separation/near midair collisions/midair collision
- **RE**: Runway excursion
- **GCOL**: Ground collision
- **OTHR**: Other
- **RAMP**: Ground handling
- **CFIT**: Controlled flight into or toward terrain
- **F-POST**: Fire/smoke (post-impact)
- **UNK**: Unknown or undetermined
- **SCF-PP**: System/component failure or malfunction (powerplant)
- **SCF-NP**: System/component failure or malfunction (non-powerplant)
- **LOC-I**: Loss of control — In-flight

![Chart showing occurrence categories for fatal and non-fatal accidents](chart.png)
Continuous work of European Commission, EUROCONTROL, EASA, Member States and Industry in improving the European Aviation Safety Plan (EASp) 4th edition published in 2013
Safety oversight of Member States

The Agency monitors the application by national competent authorities of the EU aviation safety regulations in the fields under their competence.

Main working methods:

- **Continuous and risk based monitoring**, on the basis of the available information to the Agency; it shall be conducted in a transparent, effective, harmonised and consistent manner.

- **Standardisation inspections** are conducted pursuant to:
  - A multi-annual programme of comprehensive inspections,
  - An annual programme of comprehensive and focused inspections,
  - Ad-hoc inspections (as necessary)

The team is composed by personnel authorised by the Agency (one team leader + team members from national authorities); the Member States shall designate a National Standardisation Coordinator, as primary point of contact.
Thank you

Your safety is our mission.