



EUROPEAN AVIATION SAFETY AGENCY
AGENCE EUROPÉENNE DE LA SÉCURITÉ AÉRIENNE
EUROPÄISCHE AGENTUR FÜR FLUGSICHERHEIT

| 10TH ANNIVERSARY |

EASA/ECHA joint Workshop on *"Airworthiness and REACH Authorisation"*

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Content

- Regulatory Framework for Airworthiness Certification & Safety Oversight
- Type Design Certification
 - Airworthiness
 - Environmental Compatibility
- Continuing Airworthiness Oversight
- Potential Issue related to REACH Regulation



Regulatory Framework (1)

Basic requirements:

- Each individual aircraft shall
 - comply with an approved Type Design as documented by an EASA Type Certificate (TC)
 - be properly maintained and operated
 - Maintenance Programme
 - Minimum Equipment List (MEL)
 - Type Ratings for crew etc.
 - be checked on a regular basis
 - have an individual Certificate of Airworthiness (CofA)



Regulatory Framework (2)

- Aircraft types shall have a Type Certificate (TC)
- Each type shall comply with technical standards (airworthiness requirements)
 - Essential requirements for airworthiness (Basic Regulation)
 - Detailed certification specifications (CS-23, CS-25, CS-29 etc.)
- Each type shall comply with environmental standards (noise and emission requirements)
- Operational performance shall be monitored
 - Safety Oversight (Continuing Airworthiness activities)
 - Corrective actions



EASA Type Certified Products





Type Design Certification

Main steps of the certification process:

- Establishment of the Type Certification (TC) basis
 - Determination of applicable airworthiness requirements (CS-25, CS-29, CS-E etc.)
 - Determination of applicable noise & emission requirements
- Definition of the Type Design
- Agreement of the Certification Programme
- Compliance demonstration by the applicant
- Verification of compliance demonstration by EASA
- Issuance of the certificate



Type Design Certification

The type design consists of

1. **Drawings and specifications** necessary to define the configuration and the design features of the product
2. Information on **materials and processes** and on **methods of manufacture and assembly** of the product
3. An approved airworthiness limitations section of the **instructions for continued airworthiness**
4. Any other data necessary to allow by comparison, the determination of the airworthiness, the characteristics of noise, fuel venting, and exhaust emissions (where applicable) of later products of the same type



Continuing Airworthiness Oversight

- Collection of relevant safety data
 - Service experience
 - Accident & incident investigation
 - Occurrence reporting
- Analysis of available data
 - Risk assessment
- Mandatory corrective actions, if necessary
 - Airworthiness Directives (ADs)
- Information sharing
 - With international partners
 - Stakeholders



Potential Issues

- ▶ Individual Aircraft must always conform to the approved type design
- ▶ Introduction of new materials and chemical substances may change the approved type design and must be approved by EASA
- ▶ Without EASA approval new materials and chemical substances cannot substitute the initially approved ones
- ▶ Compliance demonstration of new materials and chemical substances may be difficult and time consuming
- ▶ Banning of existing materials and chemical substances is problematic if appropriate substitutes are not available at all



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**Thank you very much for
your attention**

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