



EASA

European Aviation Safety Agency

Update from DO department

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17 June 2015

- 17-18 June, 2015
- Pullman hotel
- Helenen Straße 14
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An agency of the European Union 

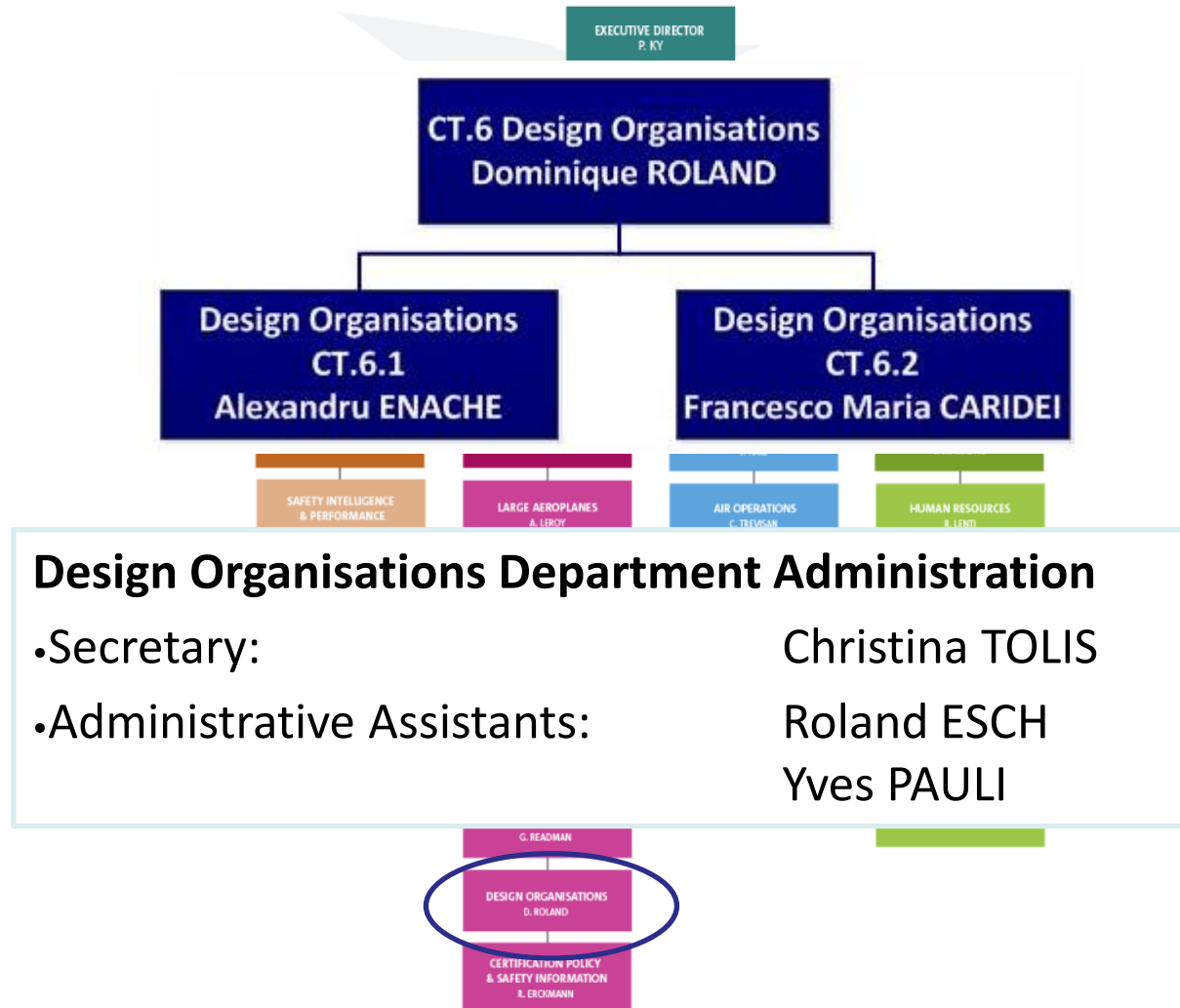
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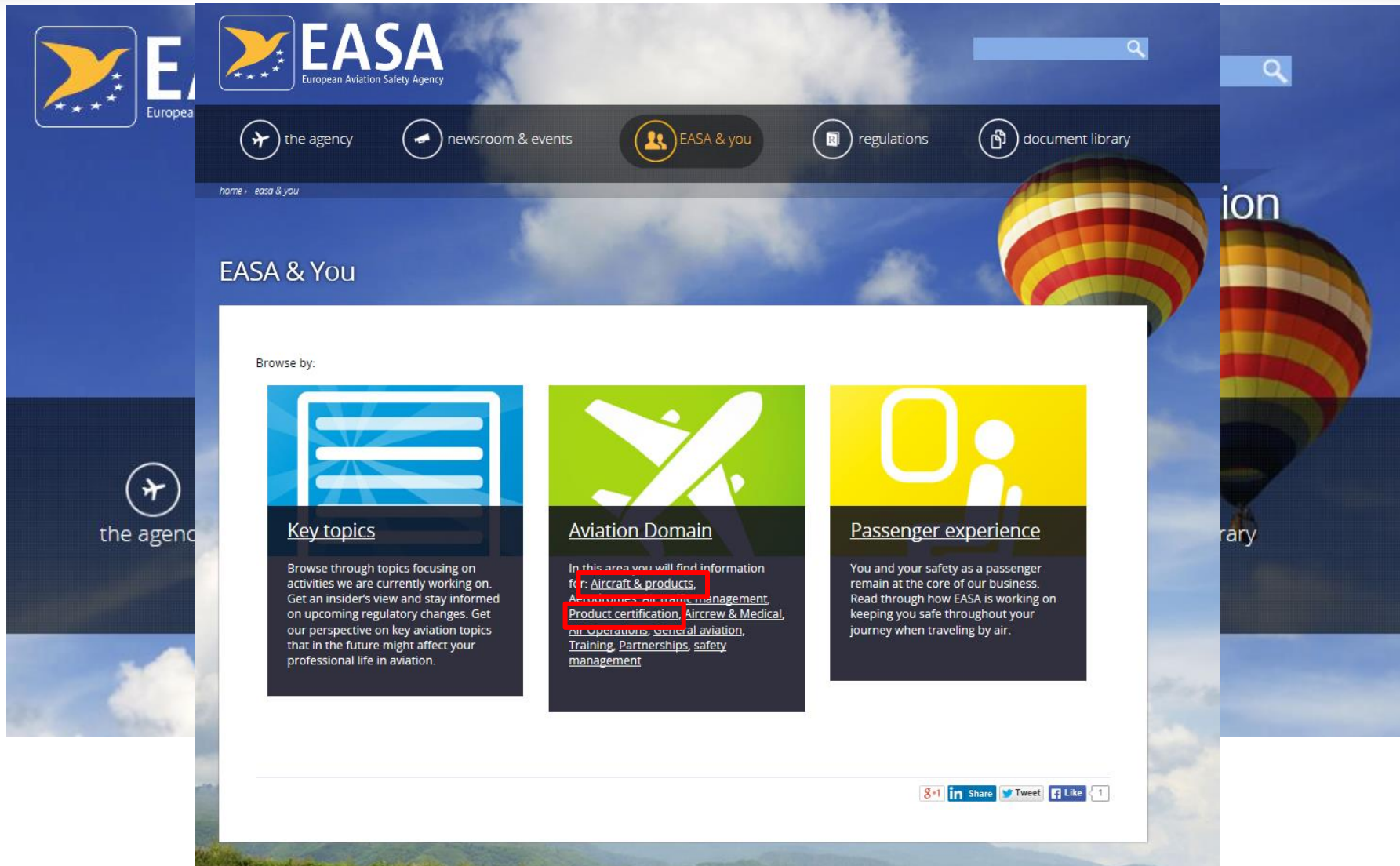


- Organisation(DO department)
- Website
- ADOA Handbook template
 - Declaration of Design & Performance
 - Certification Program template
 - Open bracket system
 - Change classification
 - Management of production deviations
 - Occurrence collection, investigation & reporting
 - Subcontracting



Organisation (DO Department)





The screenshot shows the EASA (European Aviation Safety Agency) website homepage. The header features the EASA logo and a search bar. Below the header is a navigation bar with icons and labels for 'the agency', 'newsroom & events', 'EASA & you' (highlighted), 'regulations', and 'document library'. The main content area is titled 'EASA & You' and includes a 'Browse by:' section with three categories: 'Key topics', 'Aviation Domain', and 'Passenger experience'. The 'Aviation Domain' category is highlighted with a red box and contains a list of sub-topics: 'Aircraft & products', 'Accident investigation', 'Product certification', 'Aircrew & Medical', 'Air operations', 'General aviation', 'Training', 'Partnerships', 'Safety management', and 'Security management'. The 'Passenger experience' category is also highlighted with a red box and contains a paragraph about passenger safety. The background of the website features a large image of a hot air balloon.


EASA
European Aviation Safety Agency

the agency | newsroom & events | **EASA & you** | regulations | document library

home > easa & you


EASA & You

Browse by:




Key topics

Browse through topics focusing on activities we are currently working on. Get an insider's view and stay informed on upcoming regulatory changes. Get our perspective on key aviation topics that in the future might affect your professional life in aviation.



Aviation Domain

In this area you will find information for: Aircraft & products, Accident investigation, Product certification, Aircrew & Medical, Air operations, General aviation, Training, Partnerships, safety management



Passenger experience

You and your safety as a passenger remain at the core of our business. Read through how EASA is working on keeping you safe throughout your journey when traveling by air.

8+1 | [Share](#) | [Tweet](#) | [Like](#) | 1



EASA
European Aviation Safety Agency

the agency | newsroom & events | **EASA & you** | regulations | document library

home > easa & you > aviation domain > aircraft & products

Aircraft & products

Type certificates, Airworthiness directives and safety information bulletins, ETSO, Design, Production and Maintenance Organisations, Part-145, Part-147, Permits to fly.

Interesting mostly for aviation professionals in the field of: Product certification, design, production and maintenance Organisations, national aviation & oversight authorities.

8+1 | Share | Tweet | Like | 0

- Aviation domain
 - Air Traffic Management
 - Aircraft & products
 - Alternative Procedures to Design Organisation Approval (ADOA)
 - Continuing Airworthiness Organisations
 - Design Organisations
 - ETSO authorisations
 - International Maintenance Review Board Policy Board (IMRBPB)
 - Manufacturer Scheduled Maintenance Requirements
 - Permit to fly
 - Production Organisations Approvals
 - Aerodromes
 - Aircrew & Medical
 - Air Operations
 - General Aviation
 - Partnerships
 - Safety Management
 - Technical Training
- Key topics
- Passenger experience



- ETSOA case: see "Model ETSOA"

This legislation is updated regularly by issuing amendments. A full overview can be found on the [Regulations](#) page.

Applications

An ADOA can be applied for by submitting an application Form ([FO.DOA.00081](#)) to EASA. The application form can be found in the "Downloads" box on the right of this page.

In addition, the following information needs to be provided to EASA for the investigation:

- Manual of procedures

After acceptance of an application, EASA will assign a Project Manager to conduct the investigation.

Fees & Charges

In accordance with Commission Regulation (EC) 319/2014, the Agency levies fees and charges for all its certification and approvals activities. Relevant sections for ADOA can be found in the Annex:

- for new applications: in Part I, Table 7B;
- for updates of ADOA, charged per hour: in Part II.

For more information, please refer to the above-mentioned [Fees & Charges Regulation](#) or consult the [Fees & Charges FAQ](#) page

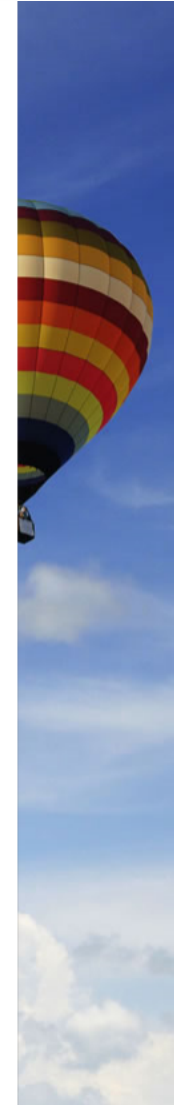
Contacts for Design Organisations Approvals

Queries related to Design Organisations can be sent to: doa@easa.europa.eu
Letters and paper documents/records can be sent to:

European Aviation Safety Agency
Design Organisation Approvals
P.O. Box 10 12 53
D-50452 Cologne, Germany

See also:

Answers to Frequently Asked Questions can be found [here](#).





ADOA Handbook template – Overview

- Part 0 – Manual Administration
- Part 1 – Organisation
- Part 2 – Procedures
- Part 3 – Appendices



➤ Part 0 – Manual Administration

- Table of Contents
- Manual Administrator
- Issue / Amendment procedure
- List of Effective Pages
- Log of revisions
- Distribution List



- Part 1 – Organisation
 - Purpose of the manual
 - Statement of Commitment
 - Details of the organisation
 - Scope of Work
 - Authorised Signatories



➤ Part 2 – Procedures

➤ 2.1 Management of the ETSO process

➤ 2.1.1 Application for ETSO authorisation

➤ DDP – Declaration of Design & Performance

DDP - Common issues:

- Improper document flow: DDP released before completion of the design & certification process.
- Non-ETSO functions are not declared
- HW/SW configurations not properly defined



➤ Part 2 – Procedures

➤ 2.1 Management of the ETSO process

➤ 2.1.1 Application for ETSO authorisation

➤ 2.1.2 Certification Programme

➤ **Certification Programme template**

➤ 2.1.3 Design processes

➤ 2.1.4 Compliance documents

➤ 2.1.5 ETSO article identification

➤ 2.1.6 Configuration control

➤ 2.1.7 Problem reporting

➤ 2.1.8 Approval for deviation



Provide a table listing the product documents identifying the cc ADOA manual (see Template Mai

Explanation about open bracket sy (see Template Manual ETSO chap

Nevertheless a complete overview of the list of documents that PCM is expected to receive composing the ETSO package should be provided. If a Master Document List is established, reference could be made only to this document, to be provided to the PCM along the process.

and tests to be performed at each location.



ADOA Handbook template – Part 2

➤ Part 2 – Procedures

➤ 2.1 Management of the ETSO process

➤ 2.1.1 Application

➤ 2.1.2 Certification

➤ 2.1.3 Design pr

➤ 2.1.4 Compliance

➤ 2.1.5 ETSO article identification

➤ Open bracket system

➤ 2.1.6 Configuration co

➤ 2.1.7 Problem reporti

➤ 2.1.8 Approval for dev

The general part numbering system used is as follows, where the open brackets are used to identify the anticipated changes:

123

Basic Model/Type Number, used to identify Major Changes

123()-()-()-0000-()

Part Number Structure

Customization, e.g. customer logo, colour code, customized functions controlled by S/W level E only

Hardware/Software configuration changes (i.e. standard options), e.g. door attachment LH/RH side, faucet design, S/W changes on level E only requiring a limited compliance demonstration of the affected area of the article, typical compliance documents will be a similarity statement or analyses.

Hardware changes affecting basic functions (e.g. steam or convection oven) and/or installation interfaces requiring a limited new compliance demonstration on article level⁽¹⁾

Note: the "0000" is used to identify the Top Assembly Drawing

Oven		
830()-()-()-0000-()	Anticipated Design Changes	Impact on Showing of Compliance
(1)	Convection Oven – ATLAS Standard	Justification of basic functions and installation interfaces
(2)	Steam Oven – ATLAS Standard	
(5)	Convection Oven – ARINC 810 Standard	
(6)	Steam Oven – ARINC 810 Standard	
(01)	Oven Door LH hinged	Stress justification
(51)	Oven Door RH hinged	
(00)	Black coloured front	Flammability justification
(01)	Silver coloured front	



Management of the open bracket system

- The open bracket system allows the ADOA holder to approve minor changes to an article, without direct involvement of the Agency. Changes register is provided periodical to EASA for information only.
- In order to better control the use of this “privilege”, applicants (new and following an update of procedures) were - and will be - requested to populate an appendix to the ADOA manual with examples of minor changes covered by the established open bracket system along with an evaluation on the originally (ETSOA) performed demonstration of compliance.
- The list of examples can be extended upon experience and agreement of EASA PCM and DOATL without necessitating a significant change process.



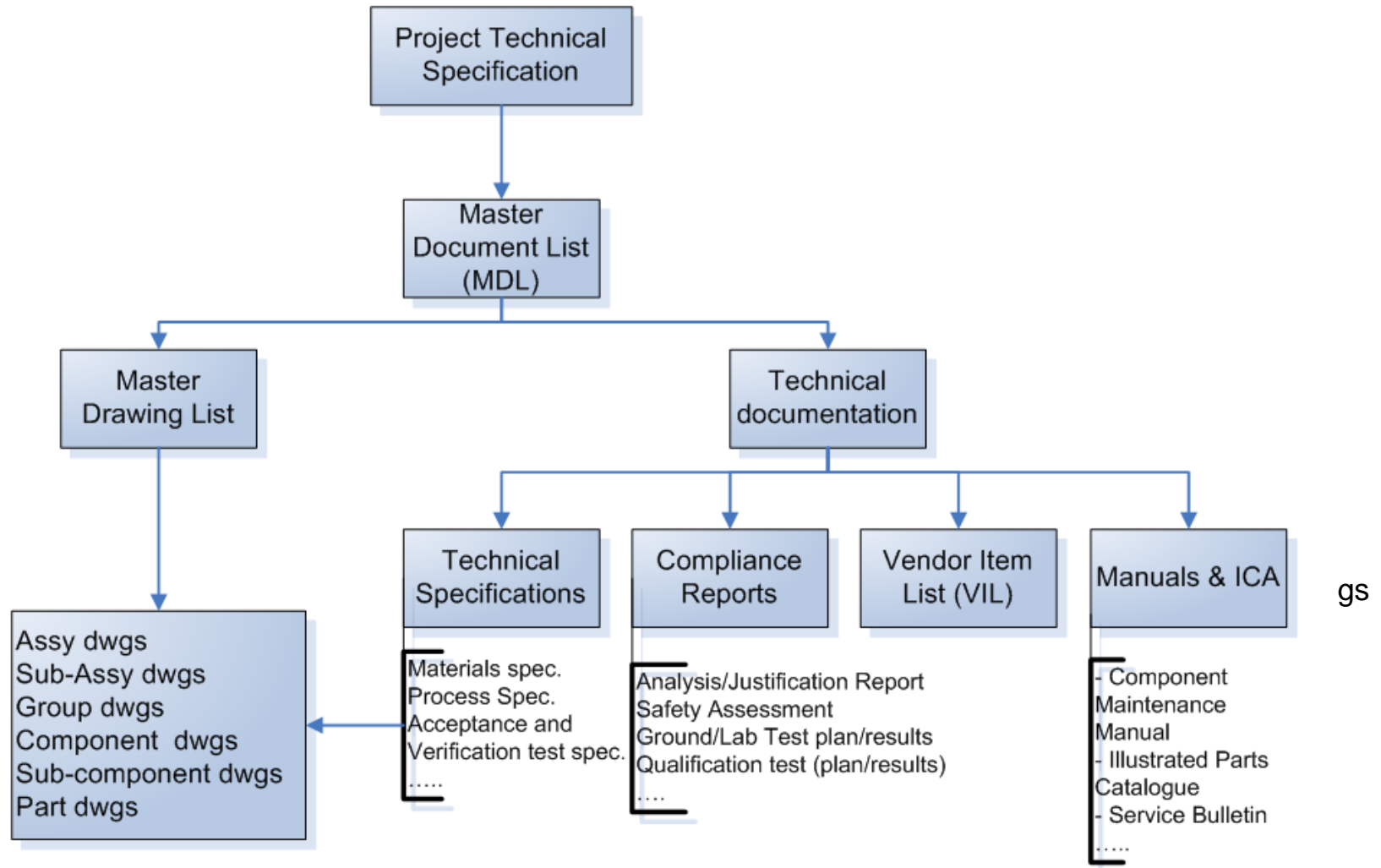
➤ Part 2 – Procedures

➤ 2.1 Management of the ETSO process

- 2.1.1 Application for ETSO authorisation
- 2.1.2 Certification Programme
- 2.1.3 Design processes
- 2.1.4 Compliance documents
- 2.1.5 ETSO article identification
- 2.1.6 Configuration control
- 2.1.7 Problem reporting
- 2.1.8 Approval for deviation



Configuration control



gs



➤ Part 2 – Procedures

➤ 2.2 Management of Design Changes, Repairs and Production deviations

➤ 2.2.1 Design changes

➤ 2.2.2 Classification of design changes

➤ 2.2.3 Design change register

➤ 2.2.4 Approval of Implementation of design changes

➤ 2.2.5 Repair design

➤ 2.2.6 Production deviations



Change classification & reporting

- The company should define criteria – specific to each own Scope of Work – for the change classification and include these criteria in its handbook.
- The change management system should also cover changes not requiring compliance demonstration (including classification, implementation approval and inclusion in the change register).
- The process shall ensure that a periodic report is submitted to the Agency of all the design changes incorporated by the company – even when no changes were made!



➤ Part 2 – Procedures

➤ 2.2 Management of Design Changes, Repairs and Production deviations

➤ 2.2.1 Design changes

➤ 2.2.2 Classification of design changes

➤ 2.2.3 Design change register

➤ 2.2.4 Approval of Implementation of design changes

➤ 2.2.5 Repair design

➤ 2.2.6 Production deviations



Production deviations

- Management of deviations in production
 - Classification of product deviations shall be performed following design changes principles.
 - To be practical, companies are invited to propose anticipated cases of deviations as an Appendix to the ADOA manual.
 - For production deviations requiring demonstration of compliance, the company should consider also the extent of demonstration of compliance itself (i.e. analysis, test..). Major deviations can be either rejected or require a new ETSO authorisation.



Production deviations

- Management of deviations in production
 - Any change to the list of anticipated deviations shall be assessed by the PCM & the DOATL, without triggering a significant change.
 - A register for deviations shall be established, with traceability of the affected P/Ns and S/Ns, classification and date of embodiment. The register should be provided to the PCM&DOATL with the same periodicity of the design change register;
 - No impact on the open bracket system should arise from production deviations.



➤ Part 2 – Procedures

➤ 2.3 Obligations

- 2.3.1 Technical data & records
- 2.3.2 Manuals
- 2.3.3 Issue of information and instructions to operators
- 2.3.4 Marking of ETSO articles
- 2.3.5 Failures, malfunctions and defects
- 2.3.6 Airworthiness Directives
- 2.3.7 Coordination between Design & Production



Marking of ETSO articles

➤ 21.A.807:

1. the name and address of the manufacturer;
2. the name, type, part number or model designation of the article;
3. the serial number or the date of manufacture of the article or both; and
4. the applicable ETSO number.

➤ **The handbook should include the definition which markings will be applied.**

➤ **The handbook should show an example of the marking placard.**



➤ Part 2 – Procedures

➤ 2.3 Obligations

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- 2.3.6 Airworthiness Directives
- 2.3.7 Coordination between Design & Production



Failures, malfunctions and defects

- GM 21.A.3B(b) Determination of an unsafe condition §2.4 (Parts and Appliances):
 - The consequences and probabilities of equipment failures have to be assessed at the aircraft level.
 - The ETSO holder may have to collaborate with the installer (TC holder, DOA) to make this assessment.
 - The data from an FMEA could be used to identify – beforehand – which failure conditions of the equipment may be reportable in case of an occurrence.



➤ Part 2 – Procedures

➤ 2.1 Management of the ETSO process

➤ 2.2 Management of Design Changes, Repairs and Production deviations

➤ 2.3 Obligations

➤ 2.4 Subcontractors



Subcontracting

- For ADOA subcontracting primarily deals with:
 - Test laboratories
 - SW/HW suppliers
- Interface agreements must be in place for all design subcontractors
- A list of design subcontractors – including the scope of work subcontracted should be available, e.g. as appendix to the ADOA handbook.



➤ Part 3 – Appendices

- References to all associated procedures
- References to all associated forms

- Copies of all the references to be provided to the Agency



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Questions?



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