

# A new amendment to Part 21 - Regulation (EU) 2019/897 -

## What is changing for me?

Changes related to DOA

**Your safety is our mission.**

# Table of Contents

- ✈ How are DOAs affected by the new LOI concept?
- ✈ The new privilege to approve 'certain' major changes/repairs or STCs
- ✈ Deletion of 21.A.263(c)4 (AFM privilege)
- ✈ Changes in the approval of 'technical contents'
- ✈ Update of the Terms of Approval
- ✈ When is a significant change to the DAS needed?



# Table of Contents

- ✈ How are DOAs affected by the new LOI concept?
- ✈ The new privilege to approve 'certain' major changes/repairs or STCs
- ✈ Deletion of 21.A.263(c)4 (AFM privilege)
- ✈ Changes in the approval of 'technical contents'
- ✈ Update of the Terms of Approval
- ✈ When is a significant change to the DAS needed?

# Level of Involvement

- LOI related topics for DOA
  - Impact on applications
  - Consequences on DAS
  - DOA procedures
  - DOA performance measurement

# Impact of LOI on applications

Application for		Applicant's Δ duties		Agency's Δ duties	
a new TC/RTC	Risk assessment per (meaningful grouping of) compliance demonstration activities and data and LOI proposal	21.A.15(b)(5)(6)		Establish and notify the LOI	21.B.100(a) and (c)
a major change		21.A.93 (b)(3)(ii)(iii)			
a major repair		21.A.432C(b)(6)(7)			
an STC		21.A.113(b)(i)			
an APU ETSO		21.A.604(a), 21.A.15			
a minor change/repair	./.				21.B.100 (b) and (c)
others ETSOs					

# Consequences of LOI on Design Assurance System



TC / STC / Major  
change / Major repair

21.A.239 / 247



- Application for significant changes to the Design Assurance System to be submitted and accepted before the end of the transition period
- The application shall cover the implementation of the new elements introduced



Minor change / minor  
repair



- Application for significant changes in the Design Assurance System is **NOT needed**
- DOA holders' procedures may be adapted to incorporate elements of the new LOI concept

# LOI elements of attention: DOA procedures

- DOA procedures should clearly address:
  - Process for breakdown of the CP into meaningful groups/CDIs
  - Completeness of the breakdown
  - Criteria applied when CDIs cover more than one panel
  - proposal for the (risk) assessment required by point 21.A.15 (b)(6)
  - proposal of LOI: List of data and activities to be retained by Agency
  - DOA performance figure is used in case of lack of data at panel level
  - Consideration of the attachments to the 'CM on LOI'
  - Interface with the Agency, e.g. to
    - adjust LOI proposal as per Agency input
    - Report difficulties during demonstration of compliance



# LOI related DOA performance measurement

- New concept for DOA performance measurement is under development:
  - Measuring DOA performance in IAW and CAW
  - Measuring DOA performance during oversight
  - Strengthening the interaction between Certification and DOA oversight:
  - Resulting in a new DOA Dashboard





# Deletion of point 21.A.263(b)







(b) Subject to point 21.A.257(b), the Agency shall accept without further verification the following compliance documents submitted by the applicant for the purpose of obtaining:

1. the approval of flight conditions required for a permit to fly; or
2. a type-certificate or approval of a major change to a type-certificate; or
3. a supplemental type-certificate; or
4. an ETSO authorisation under point 21.A.602B(b)(1); or
5. a major repair design approval.



***This is now covered by the new LOI concept***

# Table of Contents

-  How are DOAs affected by the new LOI concept?
-  The new privilege to approve 'certain' major changes/repairs or STCs
-  Deletion of 21.A.263(c)4 (AFM privilege)
-  Changes in the approval of 'technical contents'
-  Update of the Terms of Approval
-  When is a significant change to the DAS needed?

# New privileges in point 21.A.263

21.A.263

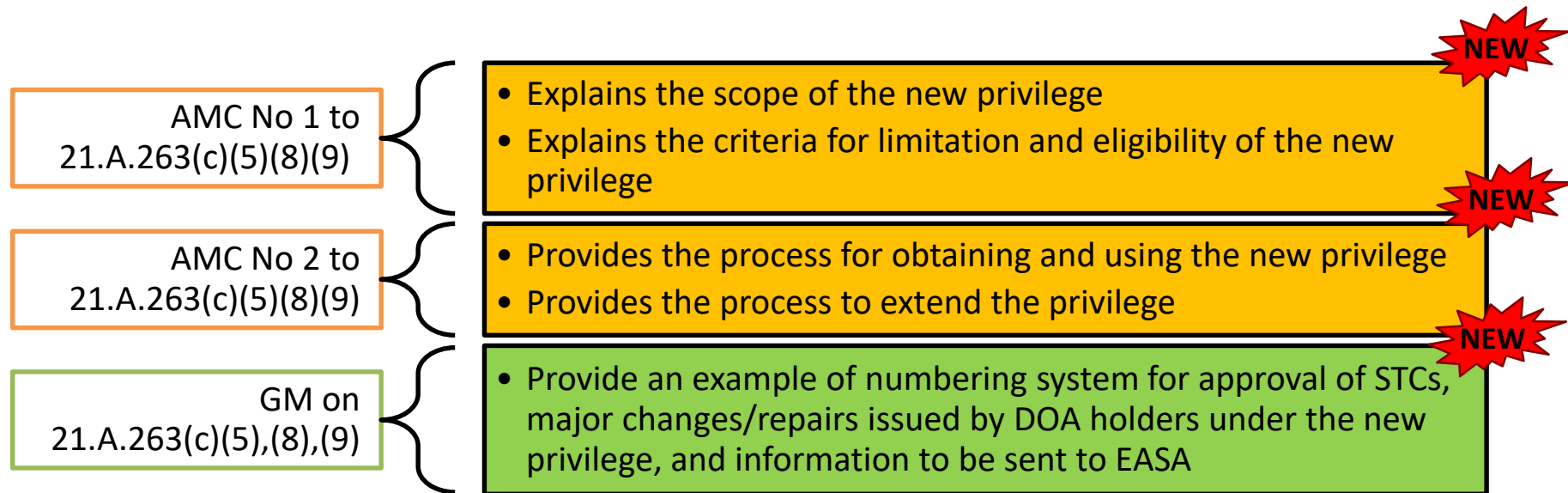
[...] (c) A holder of a design organisation approval shall be entitled [...]

5.to approve **certain** **major repair designs** under Subpart M to products or auxiliary power units (APUs); [...]

8.to approve **certain major changes** to a type-certificate under Subpart D; and

9.to issue **certain supplemental type-certificates** under Subpart E and approve certain major changes to those certificates.

# The relevant guidance



# Scope and criteria – Repairs

- “Certain” major repairs:
  - Major repairs by (S)TC-holder
    - Limitations on use of privilege:
      - New interpretation of certification basis;
      - Application of a CS that is different from the one used for type certification
  - Major repairs by another DOA under certain conditions
    - Conditions are the same as for major change / STC

# Scope and criteria – Changes/STC

AMC No 1 to  
21.A.263(c)(5)(8)(9)

- Point 21.A.263(c) does not provide the possibility to receive a privilege for any major change / STC; it limits the privilege to ‘certain’ major changes / STC – namely
  - changes similar to those that have been previously approved by EASA for the same DOA holder
  - meets the ‘eligibility’ criteria (see the next slides)

# Major changes/STC not eligible for a privilege

AMC No 1 to  
21.A.263(c)(5)(8)(9)

Revision of TCDS

Amendment to the  
existing certification  
basis

Revision of ALS or Ops  
limitations\*

changes triggered by an  
AD

AMOC to an AD

# Major changes/STC not eligible for a privilege

AMC No 1 to  
21.A.263(c)(5)(8)(9)

significant changes  
(ref to 21.A.101)

more conservative  
requirements are  
applicable compared to the  
reference change(s)

Noise and/or emissions  
characteristics are  
affected\*

changes to critical  
characteristics or to system  
featuring single failures  
with catastrophic effects

Engines/propeller: changes  
to critical characteristics  
featuring single failures  
with hazardous effects

a non-compliance is found  
in the referenced change  
during the continuing  
airworthiness process



# Principles of privilege(s)

21.A.263 (c)(5)(8)(9)

AMC No 1 and 2 to  
21.A.263(c)(5)(8)(9)

DOA approves new  
Change/STC/Repair  
under privilege +  
list

reference projects



One SC  
application  
per privilege!

Application  
for privilege  
(change of ToA)

or STC  
or Repair

description of (family of)  
change(s) for which privilege is  
sought

reference projects

similarity with other  
changes, already approved  
by EASA for same DOA

repetitiveness of the  
certification process

good performance during  
last reference projects

low LOI likelihood during  
last reference projects

description of internal  
procedures, e.g. for approval  
under privilege

Privilege granted,  
list associated with  
privilege established

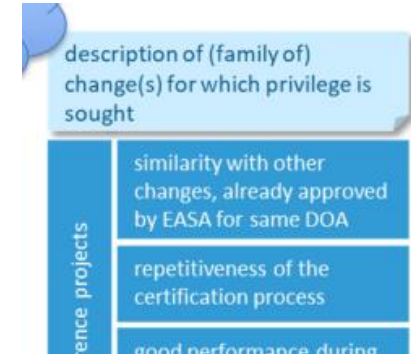
DOA Ltd.

Approved

# Conditions for issuing the privilege

AMC No 1 to  
21.A.263(c)(5)(8)(9)

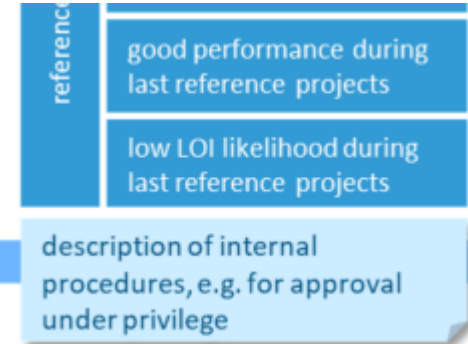
- **Reference projects:** major changes / STCs approved by EASA in the past
- **Similarity:** The design, installation and operation are basically the same as in such reference projects
- **Repetitiveness of the certification process:** The certification process is repetitive, i.e. identical to, or part of, the already approved referenced project(s)



# Conditions for issuing the privilege

AMC No 1 to  
21.A.263(c)(5)(8)(9)

- **Performance and experience** in previous projects
  - ‘medium’ or ‘high’ level of performance during at least the latest project referenced, to demonstrate ‘similarity’ and ‘repetitiveness’
  - ‘low’ or ‘very low’ likelihood of an unidentified non-compliance for all the groups of compliance demonstration activity and data (CDIs)



# Process for issuing the privilege

AMC No 2 to  
21.A.263(c)(5)(8)(9)

- In order to obtain the privilege, DOA holders need to apply for an amendment of the TOA of their DOA
  - Application with Form 82
  - Provision of related procedure
  - Establishing “List associated with the privilege” (defining the projects)
  - Provision of the “justification document” per certain change/repair
  - EASA assessment of acceptability by DOA TL, PCM, Experts
- Provided the conditions described above are fulfilled, EASA will update the TOA (list associated with the privilege)

# Justification Document

- References to changes/repairs used to demonstrate DOA holder's experience and performance
- Certification Programme
- Related possible types and models, exceptionally for a dedicated product if the type/model has no technical influence
- List of requirements and corresponding certification process if not identical to referenced certification programme
- Detailed description
- Any other limits on the use of the privilege

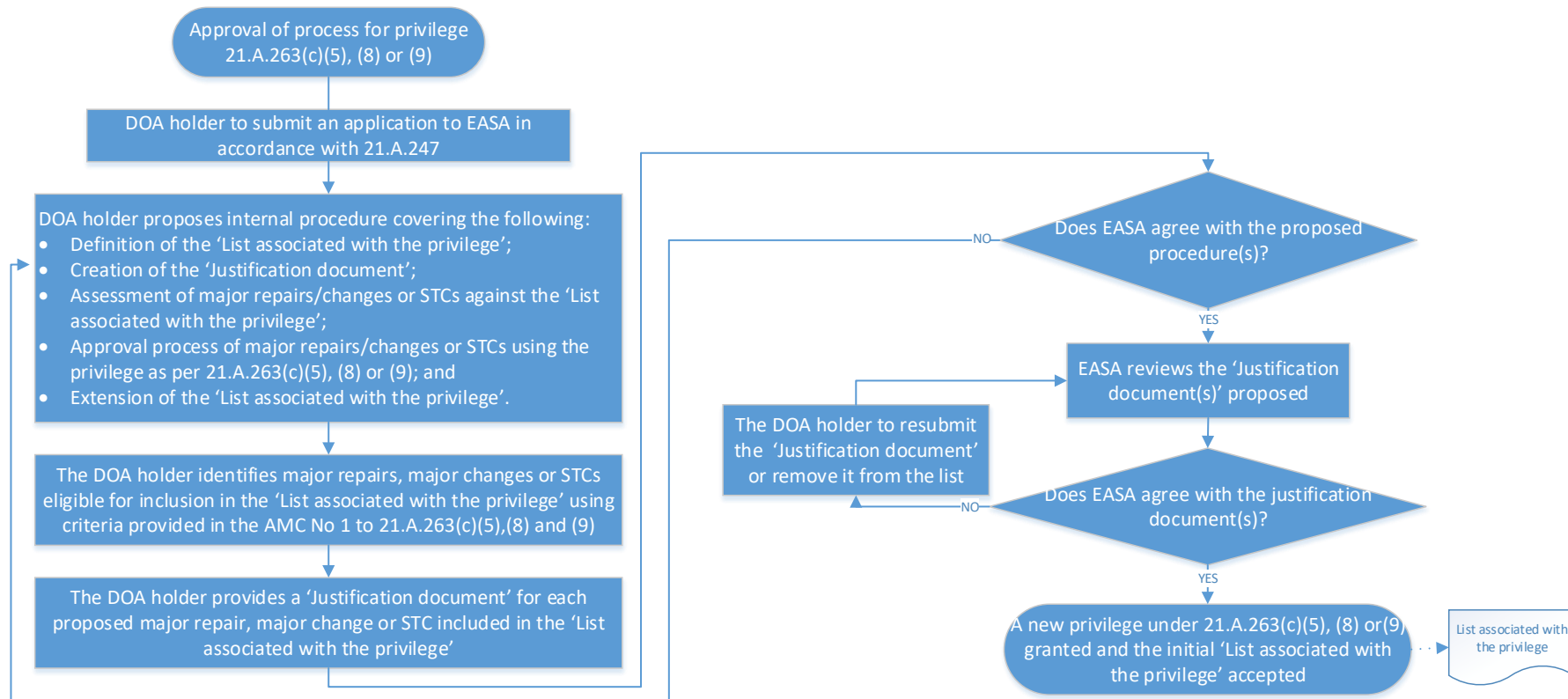
# Extending the privilege

- In order to later add new major changes, major repairs or STCs to the privilege, they need to be included in the 'list associated with the privilege'
- Repairs by S(TC)-holders: Unchanged
- Repairs by non S(TC)-holders, Changes, STC's:
  - Check eligibility
  - Provide justification
  - EASA acceptance
  - Update of the "List associated with the privilege"

**No TOA  
update!**

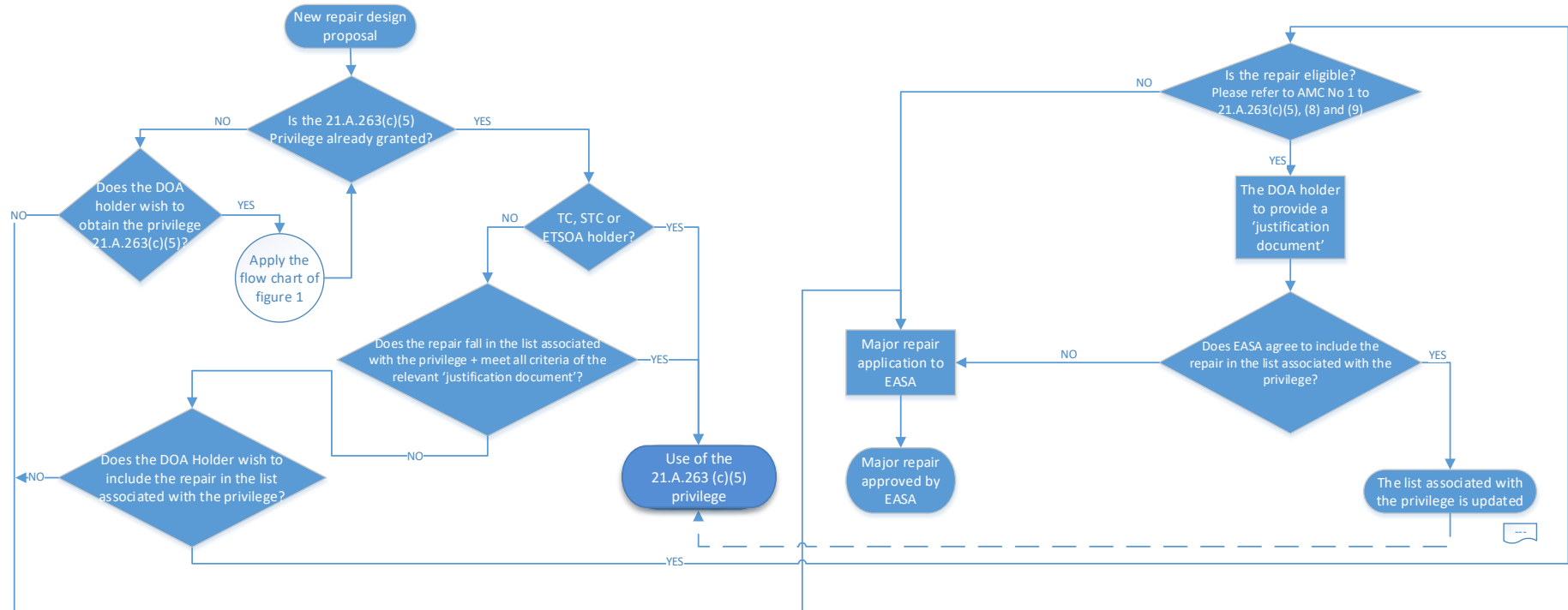
# Obtaining the privilege - Flowchart

AMC No 2 to  
21.A.263(c)(5)(8)(9)



# Extending the privilege – Flowchart Repairs

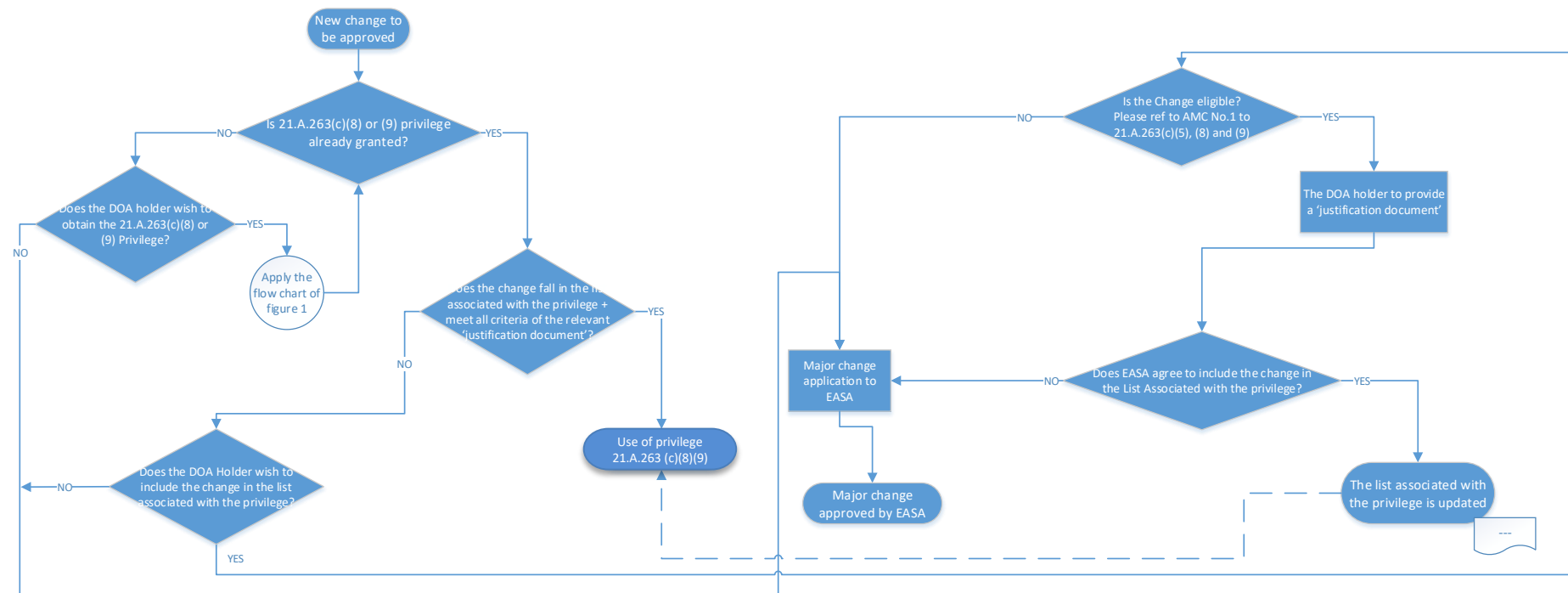
AMC No 2 to  
21.A.263(c)(5)(8)(9)





# Extending the privilege – Flowchart Changes/STC

AMC No 2 to  
21.A.263(c)(5)(8)(9)



# Table of Contents

- ✈ How are DOAs affected by the new LOI concept?
- ✈ The new privilege to approve 'certain' major changes/repairs or STCs
- ✈ Deletion of 21.A.263(c)4 (AFM privilege)
- ✈ Changes in the approval of 'technical contents'
- ✈ Update of the Terms of Approval
- ✈ When is a significant change to the DAS needed?

# Deletion of point 21.A.263(c)4 (AFM privilege)

- AFM minor change privilege is now deemed to be covered by point 21.A.263(c)1, 2 (Classification and approval of minor changes to Type Certificate)
- How will we transition?

Current TOA	TOA update	Limitations	DOA procedure
full (c)4 privilege	remove (c)4	no	update as necessary
(c)4 but documentary only	remove (c)4	limitation remains	update as necessary
no (c)4 privilege	add limitation excluding AFM changes		./.

**Statement  
as per  
21.A.265(h)**

# Table of Contents

- ✈ How are DOAs affected by the new LOI concept?
- ✈ The new privilege to approve 'certain' major changes/repairs or STCs
- ✈ Deletion of 21.A.263(c)4 (AFM privilege)
- ✈ Changes in the approval of 'technical contents'
- ✈ Update of the Terms of Approval
- ✈ When is a significant change to the DAS needed?

# Approval of technical content statement

- Point 21.A.263(c)3 was deleted and inserted as para (h) into point 21.A.265

‘The technical content of this document is approved under the authority of the DOA ref. EASA. 21J.[XXXX]’

- Clarification that it is not a privilege but an obligation to issue such a statement
- DOA procedures may need to be updated
- May or may not be a significant change
- Please evaluate and discuss with DOATL

# The relevant guidance

GM 21.A.265(h)

- provides guidance for complying with the obligation of point 21.A.265(h), and addresses the various aspects that the DOA holder should cover in order to have a comprehensive procedure for the designation of data and information

**NEW**

# New obligation – how to comply

## 1<sup>st</sup> step

### Identify the relevant ‘data and info’

- Embodiment of instructions for design changes or repairs (SB and similar)
- Manuals required by Part 21 or applicable CS (e.g. AFM, ICA)
- OSD
- ....



Certification documents are not included

## 2<sup>nd</sup> step

### Drafting process

- Applicability
- How are the data and info prepared and verified
- Role of subcontractors or vendors
- How is conformity with approved design data ensured?
- ....

## 3<sup>rd</sup> step

### Approval of relevant ‘data and info’

- Approval process for each relevant data and info

# Table of Contents

- ✈ How are DOAs affected by the new LOI concept?
- ✈ The new privilege to approve 'certain' major changes/repairs or STCs
- ✈ Deletion of 21.A.263(c)4 (AFM privilege)
- ✈ Changes in the approval of 'technical contents'
- ✈ Update of the Terms of Approval
- ✈ When is a significant change to the DAS needed?



# Point 21.A.263 – ToA updating

- With the new amendment of point 21.A.263, some points are deleted ((a), (b), (c)(3) and (c)(4)) => **TOA will be amended (deletion of these points)**
- This amendment is considered an 'administrative change' and will be made by EASA
  - it does not require an application

# Update of the template for the Terms of Approval

→ New template created (changes high-lighted in yellow)

**Terms of Approval**  
Design Organisation Approval Certificate  
EASA.21J.nnn

**1 Scope**  
This Design Organisation Approval is applicable for the scope defined in Annex A and Annex B for design work with regard to the airworthiness, operational suitability and environmental characteristics of the products.


**2 Privileges**

a) (Reserved)

b) (Reserved)

c) The holder of this design organisation approval shall be entitled, within the scope of this terms of approval, and under the relevant procedures of the design assurance system

1. to classify changes to a type-certificate or to a supplemental type-certificate and repair designs as 'major' or 'minor';
2. to approve minor changes to a type-certificate or to a supplemental type-certificate and minor repair designs;
3. (Reserved);
4. (Reserved);
5. to approve certain major repair designs under Subpart M to products or auxiliary power units (APUs);
6. to approve for certain aircraft the flight conditions under which a permit to fly can be issued in accordance with point 21.A.710(a)(2), except for permits to fly to be issued for the purpose of point 21.A.701(a)(15);
7. to issue a permit to fly in accordance with point 21.A.711(b) for an aircraft it has designed or modified, or for which it has approved, in accordance with point 21.A.263(c)(6), the flight conditions under which the permit to fly can be issued, and where the holder of a design organisation approval itself:
  - (i) controls the configuration of the aircraft, and
  - (ii) attests conformity with the design conditions approved for the flight;
8. to approve certain major changes to a type-certificate under Subpart D;
9. to issue certain supplemental type-certificates under Subpart E and approve certain major changes to those certificates."







 TE.DOA.00831-007 © European Union Aviation Safety Agency. All rights reserved. ISO9001 Certified.  
Proprietary document. Copies are not controlled. Confirm revision status through the EASA-Internet/Intranet.

Page 1 of 1

- Change of “Scope of Work” to “Scope”
- Removal of privileges 2 a), b); (Deletion of 263(a) and (b))
- Removal of privileges 2 c)3, 4; (Deletion of 263(c)3 and (c)4)
- Rewording of other privileges
- Introduction of major change / STC privileges
- Introduction of 3 h) obligation; (from 263(c)3 to obligation)

No changes in the scope section (Annex A, B)

# Table of Contents

-  How are DOAs affected by the new LOI concept?
-  The new privilege to approve 'certain' major changes/repairs or STCs
-  Deletion of 21.A.263(c)4 (AFM privilege)
-  Changes in the approval of 'technical contents'
-  Update of the Terms of Approval
-  When is a significant change to the DAS needed?

# Overview: Is it a significant change? (1/2)

Change item	Type of DOA				TOA?	Reference	Remark
	TCH	STCH	Minor only	Major Repairs			
New privileges (Major)	SC	SC	N/A	SC	Yes	21.A.263	Always separate Form 82 (No deadline)
Deletion related to minor revisions of AFM	No SC	No SC	No SC	N/A	Yes	21.A.263(c)4	Introduction of limitation as required [3]
Transfer from 'privilege' to obligation on 'approval of technical content'	[1]	[1]	[1]	[1]	Yes	21.A.263(c); 21.A.265(h)	If significant change then approval required when amendment shall apply [2]
Introduction of LOI	SC	SC	N/A	SC	Yes	GM to 247 par. 3, 1 <sup>st</sup> ●	Approval required when amendment shall apply. [2]
Reorganisation of Part 21	No SC	No SC	No SC	No SC	No	./.	Review during surveillance cycle
Various improvements	No SC	No SC	No SC	No SC	No	./.	Review during surveillance cycle
Maintenance Check Flights	No SC	No SC	No SC	No SC	No	21.A.701	-
CAEP/10	No SC	No SC	No SC	No SC	Yes	various	Wording changes in TOA. Review during surveillance cycle



# Overview: Is it a significant change? (2/2)

## → Remarks

[1] Not a significant change when the DOA holder can demonstrate that the change from privilege to obligation, together with the definition of which publications have to bear the statement, are already defined in procedures by the Design Organisation.

[2] Approval required when the amendment to Part 21 shall apply. If not, a level 2 finding will be raised.

No applications can be approved until finding has been closed.

[3] No limitation / Doc. changes only / No changes at all

# Thank you!

[easa.europa.eu/connect](https://easa.europa.eu/connect)



**Your safety is our mission.**

An Agency of the European Union 