



# Comment-Response Document 2015-12

## Acceptable means of compliance and guidance material to Part-21 for changes to operational suitability data

CRD TO NPA 2015-12— RMT.0607 (21.039(b)) — 25.4.2016

Related Decision 2016/007/R]

### EXECUTIVE SUMMARY

This Comment-Response Document (CRD) contains the comments received on NPA 2015-12 (published on 20 August 2015) and the responses, or a summary thereof, provided thereto by the Agency.

Based on the comments and responses, Decision 2016/007/R] was developed.

The Agency publishes the draft AMC and GM with this CRD.

The purpose of the draft AMC/GM presented with this CRD is to reduce the administrative burden on applicants for the approval of a change. The proposed guidance should allow these applicants to come easily to a decision with regard to:

- whether a design change impacts on operational suitability data (OSD) or not;
- the classification of changes to OSD as minor or major;
- the certification basis for the OSD change;

the use of their design organisation approval (DOA) for OSD changes.

Applicability		Process map	
Affected regulations and decisions:	Decision 2012/020/R (AMC/GM to Part-21);	Concept Paper (CP):	No
Affected stakeholders:	Type Certificate (TC)/Supplemental Type Certificate (STC) holders/applicants; applicants for the approval of minor changes	Terms of Reference (ToR):	13.08.2013
Driver/origin:	Proportionality/efficiency	Rulemaking group (RMG):	Yes
Reference:	CRD 2009-01 of 13 May 2011;	RIA type:	Light
		Technical consultation during NPA drafting:	No
		Publication date of the NPA:	20.08.2015
		Duration of NPA consultation:	2 months
		Review group (RG):	Yes
		Focussed consultation:	No
		Publication date of the Opinion:	N/A
		Publication date of the Decision:	2016/Q1



## Table of contents

1. Procedural information .....	3
1.1. The rule development procedure.....	3
1.2. The structure of this CRD and related documents .....	3
1.3. The next steps in the procedure.....	3
2. Summary of comments and responses.....	4
3. Draft AMC and GM .....	5
4. Individual comments (and responses) .....	6



## 1. Procedural information

### 1.1. The rule development procedure

The European Aviation Safety Agency (hereinafter referred to as the 'Agency') developed this Comment-Response Document (CRD) in line with Regulation (EC) No 216/2008<sup>1</sup> (hereinafter referred to as the 'Basic Regulation') and the Rulemaking Procedure<sup>2</sup>.

This rulemaking activity is included in the Agency's [5-year Rulemaking Programme](#) under Rulemaking Task (RMT) 0607 (21.039(b)).

The draft AMC/GM has been developed by the Agency based on the input of the RMG to RMT.0607 (21.039(b)). During the [NPA 2015-12](#)<sup>3</sup> consultation, 80 comments were received from interested parties, including industry and national aviation authorities (NAAs).

The text of this CRD has been developed by the Agency based on the input of the RG to RMT.0607 (21.039(b)).

The process map on the title page contains the major milestones of this rulemaking activity.

### 1.2. The structure of this CRD and related documents

This CRD provides a summary of comments and responses as well as the full set of individual comments (and responses thereto) received to NPA 2015-12. The resulting rule text is provided in Chapter 4 of this CRD.

### 1.3. The next steps in the procedure

The Decision containing AMC and GM will be published in parallel to this CRD.

---

<sup>1</sup> Regulation (EC) No 216/2008 of the European Parliament and the Council of 20 February 2008 on common rules in the field of civil aviation and establishing a European Aviation Safety Agency, and repealing Council Directive 91/670/EEC, Regulation (EC) No 1592/2002 and Directive 2004/36/EC (OJ L 79, 19.3.2008, p. 1), as last amended by Commission Regulation (EU) No 6/2013 of 8 January 2013 (OJ L 4, 9.1.2013, p. 34).

<sup>2</sup> The Agency is bound to follow a structured rulemaking process as required by Article 52(1) of the Basic Regulation. Such process has been adopted by the Agency's Management Board and is referred to as the 'Rulemaking Procedure'. See Management Board Decision concerning the procedure to be applied by the Agency for the issuing of Opinions, Certification Specifications and Guidance Material (Rulemaking Procedure), EASA MB Decision No 01-2012 of 13 March 2012.

<sup>3</sup> <http://www.easa.europa.eu/document-library/notices-of-proposed-amendment/npa-2015-12>



## 2. Summary of comments and responses

The overview of amendments resulting from the comments received are provided in Chapter 2.3 of the Explanatory Note to the Decision.



### 3. Draft AMC and GM

The amended AMC/GM is annexed to ED Decision **2016/XXX/R**



#### 4. Individual comments (and responses)

In responding to comments, a standard terminology has been applied to attest the Agency's position. This terminology is as follows:

- (a) **Accepted** — The Agency agrees with the comment and any proposed amendment is wholly transferred to the revised text.
- (b) **Partially accepted** — The Agency either agrees partially with the comment, or agrees with it but the proposed amendment is only partially transferred to the revised text.
- (c) **Noted** — The Agency acknowledges the comment but no change to the existing text is considered necessary.
- (d) **Not accepted** — The comment or proposed amendment is not shared by the Agency.

#### (General Comments)

comment	16	comment by: <i>THALES Training &amp; Simulation</i>
	<p>General comment :</p> <p>This NPA is a good guidance to help applicants classify their design changes (minor/major) and define their impact on OSD.</p> <p>But it is not fully clear regarding simulators data, in particular when collected data are used to make a simulator.</p> <p>The process to validate a new datapackage should be better explained : how to really proceed ? when and what is the schedule and the key milestones ?, roles and responsibilities ?, ...).</p> <p>A specific guidance on this subject should be useful.</p>	
response	<p>Noted.</p> <p>The OSD constituent 'Simulator Data' is not dealing with the validation of data packages. The scope of the OSD simulator data is defined in CS-SIMD. See also response to comment No. 14.</p> <p>Further clarification can be given when an application is received for approval of OSD or a change to OSD.</p>	
comment	19	comment by: <i>DGAC France</i>
	<p>DGAC France has no specific comment on this NPA</p>	
response	<p>Noted.</p>	
comment	22	comment by: <i>CAA-NL</i>
	<p>First of all the CAA The Netherlands (CAA-NL) agrees with the intent of this NPA. Nevertheless we have 2 detail comments and the following remarks concerning the subject:</p> <p>This NPA proposes 1 approval for the change to the type certificate including the OSD constituents. But for changes to the type certificate and changes to OSD constituents separate applications are required and separate fees will be charged. The CAA-NL disagree with these extra administrative burden and extra costs.</p>	



The interaction between changes of OSD constituents and other changes is a complex one. As a result determination of major / minor will be complicated, as well as the approval process within the Agency, because several departments / specialists are involved in the different areas product certification and OSD constituents. Having said this we raise the question if not a more simple solution is available. The major / minor decision is until now hardly ever influenced by the change of the OSD-constituents (excluding MMEL). Most additions / changes to OSD constituents are part of changes that have to be approved by EASA; which means that EASA is already involved in the majority of additions / changes to OSD constituents. In that case only a small portion of additions / changes to OSD constituents remain, and during the oversight of the DOA's once per cycle of 3 years a product audit can be performed on produced (changes to) OSD constituents. As there is no section B on these items, this NPA doesn't give guidance how applications are handled within the Agency and how they assure that applications are handled in time and how conflicts between the OSD experts versus the PCM's are handled in order to achieve one approval.

response

Noted.

The Agency agrees that the process of including OSD in the approval of changes should be simple. The proposals of the NPA were drafted with that in mind.

The main purpose of classification of changes in minor and major is to determine whether a DOA privilege can be used to approve the change. In the case of OSD this is extended to determining the involvement of the Agency in approval of major changes.

Today the application for approval of OSD is separate from the application for approval of design, mainly because of the different fees and charges regime. However, in the future this should be combined in one application.

comment

26

comment by: *Luftfahrt-Bundesamt*

The LBA has no comments on NPA 2015-12.

response

Noted

comment

80

comment by: *LHT DO*

1. Please specify more clearly the possibility to approve minor OSD Changes under DOA privileges.

2. Please exclude the products engine and propeller explicitly, changes affecting these products have to be integrated into the product aircraft if they affect OSD.

response

Noted.

1. When a change is a combination of a design change and an associated OSD change, the complete change can be split up in a change to the type design and changes to the OSD constituents. Each part can be classified in minor or major separately (see GM 21.A.91).

— In case all parts of the change are classified minor, the DOA can approve the whole change.

— In case one or more parts of the change is/are classified major while the associated part(s) of the change is/are classified minor, the approved design organisation can propose to the Agency not to verify the classification and the part(s) of the change classified minor in accordance with its privilege under 21.A.263(b)2 or 3. The Agency should then accept the part(s) of the change classified minor without further



verification. Once it is satisfied that compliance is demonstrated for the part(s) of the change classified major, the Agency can then issue the complete change approval or supplemental type certificate (STC).

- In case all parts of the change are classified major, the Agency will issue the approval for the whole change once it is satisfied that compliance is demonstrated.

2. OSD is only applicable to aircraft. This is clear from 21.A.15(d). The scope of OSD as specified in 21.A.15(d) is equally applicable to changes. To improve clarity, the Agency agrees to emphasise this in GM to 21.A.90A.

comment 82

comment by: EUROCONTROL

The EUROCONTROL Agency does not have comments on NPA 2015-12.

response Noted.

**EXECUTIVE SUMMARY**

p. 1

comment 17

comment by: UK CAA

Sent on behalf of the UK CAA.

Thank you for the opportunity to comment on NPA 2015-12.

Please be advised that the UK CAA has no comments on this NPA.

Regards  
Nicky Barnes  
UK Civil Aviation Authority

response Noted.

**2. Explanatory Note — 2.1. Overview of the issues to be addressed**

p. 4-5

comment 2

comment by: HELLENIC CIVIL AVIATION AUTHORITY

6th paragraph, last line, should be written "type rating training" instead "type training"

response

Not accepted.

The term 'type training' was used here as a generic term covering the three 'training constituents': pilot type rating training, type rating training of maintenance certifying staff and type specific training for cabin crew. For cabin crew there is no type rating so also no type rating training.

comment 53

comment by: Dassault-Aviation

Dassault-Aviation

**Explanatory note Chapter 2.1**

1. Chapter 2.1 states that "The OSD proposed by the designer will be approved by EASA". Dassault Aviation suggest to delete "by EASA" since some OSD data will also be approved under DOA privilege.

2. The wording "minimum syllabus" that is used in Part21 is still questionable.





Dassault Aviation suggest that it shall be clarified or removed in a future Part21 update, in order to:

- a) match with "specific to an aircraft type" data as mentioned above,
- b) remove the implicit link that this wording makes with the training.
- c) better explicit that the determination of the Type Rating (FC, MCS) is not encompassed in the minimum syllabus.

response

Noted.

1. The Agency agrees that certain changes to OSD can be approved by a DOA when it has the privilege to do so. However, the text in this section is a high level explanation of the OSD concept and the Agency considers that at this level of detail it is sufficient to mention only the rule for approval of the initial OSD.

2. The Agency agrees that the terms used in Part-21 for the OSD constituents do not fully cover the scope of OSD in practice. Proposing changes to Part-21 is, however, outside the scope of this rulemaking task. The Agency will consider amendments for future rulemaking.

## 2. Explanatory Note — 2.2. Objectives

p. 5

comment

7

comment by: *THALES Training & Simulation*

OSD requirements related to changes will become mandatory on 19 Dec 2016.

Does it mean that all aircrafts/helicopters will have to be compliant with OSD at this date, or that only aircrafts/helicopters which are already under OSD process (mainly the new ones), are concerned ?

response

Noted.

It means that from 19.12.2016 onwards all applicants for a change to an aircraft TC will have to address the possible impact of that change on OSD and, if there is an impact, propose the necessary change or supplement to the OSD. In general, when the aircraft TC to be changed does not include OSD, there will not be a need to address the OSD for the change.

## 2.3. Regulatory Impact Assessment (RIA)

p. 5-10

comment

6

comment by: *THALES Training & Simulation*

Minor remark:

In § 2.3.1, the section "The new OSD rule includes ... related to changes to OSD" is already at the end of the § 2.1.

This text is duplicated

response

Noted.

The text is repeated to allow the reader of the RIA to understand the RIA without having to read the whole NPA.

comment

8

comment by: *THALES Training & Simulation*

Section 2.4.9 :

The criteria for the classification of changes in minor and major will be used by DOA holders. In the case of Simulator data changes, when a simulator manufacturer proposes its own Simulator data to build the simulator (data which result of a datapackage gathering process



	<p>and new flight tests), does it mean that the simulator manufacturer must be declared and recognized as a "DOA" in order to be able to evaluate the level of classification and to propose this change for validation, or that the classification is by default defined by EASA ?</p>
response	<p>Noted.</p> <p>The OSD constituent 'Simulator Data' does not include the data package that is necessary to build the simulator. It includes only the definition of scope of validation source data to support the objective qualification of a simulator. See also response to comment No. 14.</p> <p>When someone who is not the aircraft TC holder wants to make a change to this definition of scope of validation source data to support the objective qualification of a simulator, they need to follow the change approval rules of Part-21 Subpart E, leading to a supplemental type certificate (STC). The applicant for an STC needs to demonstrate its design capability in accordance with 21.A.112B. Normally this is done through holding a DOA, but alternative procedures can also be accepted in some cases. GM No 1 to 21.A.112B contains examples of major changes for which DOA is required and also examples where a DOA is not required. However, OSD related examples are not included in this GM.</p> <p>For stand-alone major changes related to the OSD constituent simulator data the Agency considers a DOA required, due to the complexity of the process to establish this OSD constituent. The Agency will include an amendment to the relevant GM to include OSD examples.</p>

comment	<p>31 <span style="float: right;">comment by: Airbus</span></p>
	<p><b>1. PAGE / PARAGRAPH / SECTION THE COMMENT IS RELATED TO:</b></p> <p>Page 6, section 2.4.1, Amendments to Part-21  Page 9, section 2.4.12, GM No. 1 to 21.A.101(g)  Page 11, section 3.1, Draft Regulation (Draft EASA Opinion)  Pages 26-27, section 11, GM No.1 to 21.A.101(g)</p> <p><b>2. PROPOSED TEXT / COMMENT:</b></p> <p>Airbus wishes to reiterate here its comment # 161 to NPA 2015-03 on Level of Involvement. In this comment, Airbus proposed to modify 21.A.101(a) and (g) in order to exclude the OSD certification basis from the field of applicability of the Changed Product Rule, as follows:</p> <p>(a) <del>— An applicant for a change to a type certificate shall demonstrate that the changed product complies the certification specifications that are</del> A major change to a type-certificate and areas affected by the change shall comply, <b>for its type-certification basis</b>, with the certification specifications that are applicable to the changed product and that are in effect at the date of the application for the change, unless compliance with certification specifications of later effective amendments is <del>chosen</del> <b>selected</b> by the applicant or required under points (e) and (f), <del>and with the applicable environmental protection requirements laid down in point 21.A.18.</del> <b>The changed product shall comply with the applicable environmental protection requirements laid down in point 21.B.85.</b></p> <p>(g) When the application for a change to a type-certificate for an aircraft includes, or is supplemented after the initial application to include, changes to the operational suitability data, the operational suitability data certification basis shall <del>be designated in accordance with points (a), (b), (c), (d) and (fe) above</del> <b>remain the original operational suitability data certification basis of the aircraft, as established and notified by the Agency in accordance</b></p>



with point 21.B.82.

### 3. RATIONALE / REASON / JUSTIFICATION for the Comment:

The justification for comment # 161 on NPA 2015-03 is repeated here:

"Point 21.A.101 establishes the "Changed Product Rule" (CPR), which is harmonized, together with its guidance material, with the major certification Authorities worldwide. Its intent is to upgrade the design requirements (i.e. the type-certification basis) of changed products. As the validity of the CPR approach for the operational suitability data requirements (a unique EASA concept, involving procedural certification specifications for the development of these data) has not been established in terms of safety benefit versus implementation cost, we request that the CPR approach remain limited to the determination of the type-certification basis".

In addition, in point 2.4.12 of the explanatory note, the Agency recognizes that "the application of 21.A.101, whose aim is to apply the latest standard to changed products, is less relevant than for CSs that contain detailed technical standards and change frequently (such as CS-25)."

response

Not accepted.

The Agency considers that the principles of CPR should also apply to OSD because amendments to CSs that have been introduced to improve the OSD should also apply to significant OSD changes. However, as is clear from the proposed guidance, the number of OSD changes that will need to comply with the latest CS amendment will be limited.

comment

32

comment by: Airbus

### 1. PAGE / PARAGRAPH / SECTION THE COMMENT IS RELATED TO:

Page 9, section 2.4.12, GM No. 1 to 21.A.101(g)

### 2. PROPOSED TEXT / COMMENT:

The Agency expects that OSD CSs will not change very often, and based on this rationale has established a simple principle that links the significant classification of a design change with the related OSD change.

This rationale is not relevant for grandfathered OSD, for which the certification basis are not the CS-OSDs that were published in 2014. For the aircraft type for which grandfathered OSDs exist, the application of this simple principle will lead to dramatic change in the applicable regulation if 21.A.101(b)3 exceptions cannot be applied.

The objective of this simple principle is therefore missed for aircraft types with grandfathered OSD for which the certification basis are not the CS-FCD, FC-CCD or CS-MMEL.

response

Noted.

The Agency agrees that grandfathered OSD may have a certification basis that is different from the current CS. The difference can be limited using the exceptions of 21.A.101(b).

comment

33

comment by: Airbus

### 1. PAGE / PARAGRAPH / SECTION THE COMMENT IS RELATED TO:



	<p>Page 9, section 2.4.13, GM to 21.A.103 and 21.B.70</p> <p><b>2. PROPOSED TEXT / COMMENT:</b></p> <p>The first version of the GM misses the case of a minor design change that would trigger a major MMEL change.</p>	
response	<p>Accepted.</p> <p>Both versions of the GM are amended to include the case of a minor design change with an associated major MMEL change.</p>	
comment	<p>47</p> <p style="text-align: right;">comment by: <i>Airbus</i></p> <p><b>1. PAGE / PARAGRAPH / SECTION THE COMMENT IS RELATED TO:</b></p> <p>Page 9, section 2.4.12, GM No. 1 to 21.A.101(g)  Page 27, section 12.a, GM No. 1 to 21.A.103 and 21.B.70  Pages 27-28, section 12.b, GM No. 1 to 21.A.103 and 21.B.107(c)</p> <p><b>2. PROPOSED TEXT / COMMENT:</b></p> <p>The current 21.A.103(a)4 says:  “4. by derogation from point 3, and at the request of the applicant included in the declaration referred to in point 21.A.20(d), a major change to an aircraft type-certificate may be approved before compliance with the applicable operational suitability data certification basis has been demonstrated, subject to the applicant demonstrating compliance with the operational suitability data certification basis before the operational suitability data must actually be used.”  The intent of this paragraph will be transferred to 21.A.97(c) and 21.B.107(b) with NPA 2015-03 on LOI:  “21.A.97(c) By derogation from points (b)(2) and (3), a major change to an aircraft type-certificate may be approved before compliance with the applicable operational suitability data certification basis has been demonstrated, subject to demonstrating compliance before the operational suitability data must actually be used.”  “21.B.107(b) In the case of a major change affecting the operational suitability data, by derogation from point (a)(2) and (3), and at the request of the applicant included in the declaration referred to in point 21.A.20(d), a major change to an aircraft type-certificate may be approved before compliance with the applicable operational suitability data certification basis has been demonstrated, subject to the applicant demonstrating compliance before the operational suitability data must actually be used.”</p> <p>While the possibility of this 2-steps approval process is needed and welcome, all efforts should be made to minimize the associated administrative burden and related costs.</p>	
response	<p>Noted.</p> <p>The Agency agrees that the administrative burden and related costs should be minimised. However, this provision is there to provide more flexibility to the applicant.</p>	



comment	<p>9 <span style="float: right;">comment by: <i>THALES Training &amp; Simulation</i></span></p> <p>Considering the definition in section 21.A.91 about a minor change (no effect on the mass, balance, etc ...), can we consider that a simulator data change is then a "minor change" ?</p>
response	<p>Noted.</p> <p>A change to a simulator has no effect on the type certificate of an aircraft.</p> <p>A change to OSD simulator data is a change to the type certificate and needs to be classified in minor or major in accordance with the guidance of this proposal.</p>
comment	<p>31 <span style="float: right;">comment by: <i>Airbus</i></span></p> <p><b>1. PAGE / PARAGRAPH / SECTION THE COMMENT IS RELATED TO:</b></p> <p>Page 6, section 2.4.1, Amendments to Part-21  Page 9, section 2.4.12, GM No. 1 to 21.A.101(g)  Page 11, section 3.1, Draft Regulation (Draft EASA Opinion)  Pages 26-27, section 11, GM No.1 to 21.A.101(g)</p> <p><b>2. PROPOSED TEXT / COMMENT:</b></p> <p>Airbus wishes to reiterate here its comment # 161 to NPA 2015-03 on Level of Involvement. In this comment, Airbus proposed to modify 21.A.101(a) and (g) in order to exclude the OSD certification basis from the field of applicability of the Changed Product Rule, as follows:</p> <p>(a) <del>An applicant for a change to a type certificate shall demonstrate that the changed product complies the certification specifications that are</del> A major change to a type-certificate and areas affected by the change shall comply, <b>for its type-certification basis</b>, with the certification specifications that are applicable to the changed product and that are in effect at the date of the application for the change, unless compliance with certification specifications of later effective amendments is <del>chosen</del> <b>selected</b> by the applicant or required under points (e) and (f), <del>and with the applicable environmental protection requirements laid down in point 21.A.18.</del> The changed product shall comply with the applicable environmental protection requirements laid down in point 21.B.85.</p> <p>(g) When the application for a change to a type-certificate for an aircraft includes, or is supplemented after the initial application to include, changes to the operational suitability data, the operational suitability data certification basis shall <del>be designated in accordance with points (a), (b), (c), (d) and (e) above</del> <b>remain the original operational suitability data certification basis of the aircraft, as established and notified by the Agency in accordance with point 21.B.82.</b></p> <p><b>3. RATIONALE / REASON / JUSTIFICATION for the Comment:</b></p> <p>The justification for comment # 161 on NPA 2015-03 is repeated here:</p> <p>"Point 21.A.101 establishes the "Changed Product Rule" (CPR), which is harmonized, together with its guidance material, with the major certification Authorities worldwide. Its intent is to upgrade the <u>design</u> requirements (i.e. the type-certification basis) of changed products. As the validity of the CPR approach for the operational suitability data</p>



requirements (a unique EASA concept, involving procedural certification specifications for the development of these data) has not been established in terms of safety benefit versus implementation cost, we request that the CPR approach remain limited to the determination of the type-certification basis".

In addition, in point 2.4.12 of the explanatory note, the Agency recognizes that "the application of 21.A.101, whose aim is to apply the latest standard to changed products, is less relevant than for CSs that contain detailed technical standards and change frequently (such as CS-25)."

response

Not accepted.

The Agency considers that the principles of CPR should also apply to OSD because amendments to CSs that have been introduced to improve the OSD should also apply to significant OSD changes. However, as is clear from the proposed guidance the number of OSD changes that will need to comply with the latest CS amendment will be limited.

**3. Proposed amendments — 3.2. Draft Acceptable Means of Compliance and Guidance Material (Draft EASA Decision) — 1. GM No 1 to 21.A.15(d) is amended as follows:**

p. 11-12

comment

1

comment by: *HELLENIC CIVIL AVIATION AUTHORITY*

- a. 1st paragraph, last line, should be written "type rating training" instead "type training"
- b. 2nd paragraph, line 3, the referred regulation should be changed to EU 1321/2014.
- c. 2nd paragraph, last line, should be written "type rating training" instead "type training"

response

Accepted.

comment

10

comment by: *THALES Training & Simulation*

Section 3.2 : Simulator data is only required ...

It seems that simulator data are only required for FFS (full flight simulator).

Referring to CS-SIMD (GME SIMD.200 (b)) :

"For initial qualification of full flight simulators and flight training devices FTD level 3, helicopter applicant/holder's validation flight test data should be used. Data from other sources may be used, when properly justified."

do we need to also consider FTD level 3 or not ?

response

Noted.

FTB Level 3 for helicopters need also to be considered. The text of the GM is amended to add the text: 'or flight training devices (FTDs) Level 3 for helicopters'

comment

11

comment by: *THALES Training & Simulation*

Section 3.2 : Simulator data is only required ...

"This is typically not the case for most small aircraft"

"small aircraft" would require a definition.

Does it mean that no simulator data is required for "small aircraft", or that since no FFS exists for "small aircraft" (which is wrong), no simulator data is required ?

This sentence is unclear, and "small aircraft" must be clearly defined : for example, do we



	consider a single engine helicopter as a "small aircraft" ?
response	<p>Not accepted.</p> <p>As explained in the GM, the need to develop the OSD constituent 'simulator data' depends on the content of the OSD constituent 'flight crew data': if the minimum syllabus for pilot type rating training includes the use of a full flight simulator or flight training devices FTD Level 3 for helicopters, then simulator data must be developed.</p> <p>The term 'small aircraft' is used here to have a simple term covering small aeroplanes and small rotorcraft.</p>
comment	<p>18 <span style="float: right;">comment by: <i>Federal Office of Civil Aviation (FOCA), Switzerland</i></span></p> <p>In the last paragraph of selected segment, the word "implement rules" should be replaced by "implementing rules".</p> <p><i>"For very light aeroplanes (VLA), light sport aeroplanes (LSA), very light rotorcraft (VLR), sailplanes, powered sailplanes, balloons and ELA2 airships, the Agency considers that the list of required equipment as included in the TCDS and/or AFM/POH, in combination with equipment required for the flight by the associated <b>implement rules</b>,..."</i></p>
response	Accepted.
comment	<p>34 <span style="float: right;">comment by: <i>Airbus</i></span></p> <p><b>1. PAGE / PARAGRAPH / SECTION THE COMMENT IS RELATED TO:</b></p> <p>Pages 11-12, GM No.1 to 21.A.15(d)</p> <p><b>2. PROPOSED TEXT / COMMENT:</b></p> <p>Correct the 3rd paragraph as follows:          "If a new aircraft type is considered <b>as</b> a variant for licensing purposes a full syllabus for type rating training is not required, but the applicant can suffice with the syllabus for differences training."</p> <p>In the 2nd bullet below the 4th paragraph, correct the reference to the Continuing Airworthiness Regulation:          Annex III of <del>(EC)</del> Regulation <del>(EC) No 2042/2003</del> <b>(EU) No 1321/2014</b> (point 66.A.5)</p> <p>Last bullet page 12 should read:  <i>"For very light aeroplanes (VLA), light sport aeroplanes (LSA), very light rotorcraft (VLR), sailplanes, powered sailplanes, balloons and ELA2 airships, the Agency considers that the list of required equipment as included in the TCDS and/or AFM/POH, in combination with equipment required for the flight by the associated <b>implementing</b> rules, such as..."</i></p> <p><b>3. RATIONALE / REASON / JUSTIFICATION for the Comment:</b></p> <p><i>Editorial</i></p>
response	<p>Partially accepted.</p> <p>First proposal is not accepted. Not adding 'as' is correct English for the verb 'consider'.</p>



Second and third proposal are accepted.

comment

81

comment by: Dassault-Aviation

GM N°1 to 21.A.15(d) states « *The type-specific data for cabin crew training is only required when the operational rules require cabin crew for the maximum approved passenger seating capacity. Currently, cabin crew is required for aircraft with a maximum approved passenger seating configuration of more than 19. Small aircraft do not have this number of passenger seats.* ».

Dassault Aviation fully support this statement. However, it was reported that during the Operator OSD Workshop held this month, a different position has been heard in the audience.

EASA is kindly requested to confirm the above statement based on applicable operational rules

response

Noted.

The OSD constituent cabin crew data is generally only required for aircraft with a maximum approved passenger seating configuration of more than 19, except when cabin crew would be required through the certification basis.

**3. Proposed amendments — 3.2. Draft Acceptable Means of Compliance and Guidance Material (Draft EASA Decision) — 2. GM No 2 to 21.A.15(d) is amended as follows:**

p. 12

comment

27

comment by: Boeing

**Page:12**

**Paragraph:** 3.2 *Draft Acceptable Means of Compliance and Guidance Material (Draft EASA Decision)*

**Draft Text to:** 1. *GM No 1 to 21.A.15(d) Clarification of the term ‘as applicable’ (3<sup>rd</sup> bullet)*

**THE PROPOSED TEXT STATES:**

“-- *Simulator data is only required when the syllabus for pilot type rating training includes the use of full flight simulators.*”

**REQUESTED CHANGE:**

“-- *The Simulator ~~data~~ **constituent** is only required when the syllabus for pilot type rating training includes the use of full flight simulators.*”

**JUSTIFICATION:** If this statement is taken out of context, then some may interpret “Simulator data” as all simulator data provided as part of a training simulator data package, as opposed to the Simulator Data constituent.

response

Accepted.





**3. Proposed amendments — 3.2. Draft Acceptable Means of Compliance and Guidance Material (Draft EASA Decision) — 3. GM No 3 to 21.A.15(d) is amended as follows:**

p. 13

comment	54	comment by: <i>Dassault-Aviation</i>
	<p>Dassault-Aviation</p> <p><b>GM No 3 to 21.A.15(d) OSD content</b></p> <p>1. Boxes 2 and 4 diagram mention "not mandatory (recommendations)". Dassault Aviation suggest to make clearer that when OSD data is put in box 2 or 4 , the end-user shall demonstrate an equivalent safety level to the data provided in the ox 2 or 4.</p> <p>2. As mentioned several times in this NPA, Dassault Aviation recommend that the possibility of applying for provisional OSD data shall be explicitly written in NPA 2015-03 Part 21A.15.(d) and not be limited to the OSD SIM constituent (21A.15.(d)2)</p> <p>3. Moreover, such an application possibility is not sufficient, NPA 2015-03 Part21 shall also explicitly mention the possibility of approving such provisional data (in 21A.103 ?)</p>	
response	<p>Partially Accepted.</p> <p>1. Not Accepted: This information is linked to the 'user' side of OSD and is included in the relevant AMCs to Part-ORO, Part-FCL and Part-66. The general 'Alternative AMC' concept applies.</p> <p>2. Partially Accepted. This is already included in GM No 1 to 21.A.21(f), 21.A.23(b) and 21.A.103(a)(4) 'Approval of OSD' (last paragraph).</p> <p>3. Not Accepted. The text used in GM No 1 to 21.A.21(f), 21.A.23(b) and 21.A.103(a)(4) is that the Agency can 'confirm partial compliance'. It is impossible to issue an approval if there is no full compliance. However, when the partial compliance has been confirmed this will allow the use of that data by operators with the concurrence of their competent authority.</p>	

**3. Proposed amendments — 3.2. Draft Acceptable Means of Compliance and Guidance Material (Draft EASA Decision) — 4. GM No 4 to 21.A.15(d) is amended as follows:**

p. 14

comment	55	comment by: <i>Dassault-Aviation</i>
	<p>1. Dassault Aviation suggest to delete the word "constituent" in the sentence "<i>Furthermore, the OSD constituent always includes ...</i>" or to replace it by the word "data".</p>	
response	<p>Not accepted.</p> <p>See paragraph 2.4.2 of the explanatory note to the NPA.</p>	

**3. Proposed amendments — 3.2. Draft Acceptable Means of Compliance and Guidance Material (Draft EASA Decision) — 5. A new GM No 1 to 21.A.15(d)6 is added as follows:**

p. 14-15

comment	12	comment by: <i>THALES Training &amp; Simulation</i>
	<p>Section GM N° 1 to 21.A.15(d)6</p> <p>Do we need to consider that a variant of simulator data (a collected datapackage) is an "other type-related operational suitability element" or not ?</p>	
response	<p>Noted.</p> <p>No. When an alternative to the TC holder's OSD constituent 'Simulator Data' is proposed by a</p>	



third party it can be approved under an STC.  
Please note that the OSD constituent 'Simulator Data' does not include the data package that is necessary to build the simulator. It includes only the definition of scope of validation source data to support the objective qualification of a simulator.

comment

35

comment by: Airbus

**1. PAGE / PARAGRAPH / SECTION THE COMMENT IS RELATED TO:**

Page 14, GM No 1 to 21.A.15(d)6

**2. PROPOSED TEXT / COMMENT:**

Change the first sentence as follows:

~~During the rulemaking activity leading to the introduction of OSD in Part 21, the Agency acknowledged that in~~ In addition to the five defined OSD constituents there may be other data which could qualify as OSD when it is important for the operational suitability of the aircraft type ~~not included in the type design and specific to that aircraft type~~".

**3. RATIONALE / REASON / JUSTIFICATION for the Comment:**

The first part of the sentence is not needed.

At the end of the sentence, for the sake of clarity, Airbus recommends deletion of the strikethrough-marked words, since none of OSD basic constituent is included in the Type Design as defined in Part 21.A.31, but in the Type Certificate as defined by Part 21.A.41 (OSD is by principle not included in the type design).

response

Partially Accepted.

First part of the first sentence will be deleted as proposed.

Second proposal is not accepted. It is true that OSD is not part of the type design, but that is exactly the reason why something can qualify as 'other type-related operational suitability elements can' when it is not already part of the type design and can normally not be part of the type design. For example installed equipment would be included in the type design and can therefore not be part of OSD.

comment

36

comment by: Airbus

**1. PAGE / PARAGRAPH / SECTION THE COMMENT IS RELATED TO:**

Page 14, GM No 1 to 21.A.15(d)6

**2. PROPOSED TEXT / COMMENT:**

Change the second bullet below the fourth sentence as follows:

- the data should be type-specific (~~not generally applicable to different types of aircraft~~)



**3. RATIONALE / REASON / JUSTIFICATION for the Comment:**

Airbus recommends to remove the information provided between parenthesis. By principle, OSD is type-related. Therefore, an element of OSD cannot be applicable to all aircraft but it can be data applicable to several or even all aircraft of a given manufacturer that may choose to apply the same given design principle on all its aircraft types for sake of commonality. For instance, some TASE for Flight Crew are applicable to all Airbus Fly by Wire Types. The same can be true for 21.A.15(d)6 "Other type-related operational suitability elements".

The proposed modification is consistent with current OSD Flight Crew for Airbus fly-by-wire aircraft: a TASE is applicable to several types of aircraft.

response Accepted.

comment 48

comment by: Airbus

**1. PAGE / PARAGRAPH / SECTION THE COMMENT IS RELATED TO:**

Page 14, GM No 1 to 21.A.15(d)6

**2. PROPOSED TEXT / COMMENT:**

The 4th paragraph indicates:

*"In order to qualify as 'other type-related operational suitability element', the following conditions apply:*

*(...)*

*— the data is not already part of the 'classic' part of the type certificate (such as ICA, AFM, etc.);*

*— the data is important for the safe operation of the aircraft type; "*

1/ ICAs are currently not explicitly part of TC definition, as per point 21.A.41.

Discussions are still ongoing on this topic within the ICA rulemaking task. Therefore this wording should be removed:

*"— the data is not already part of the 'classic' part of the type certificate (such as ~~ICA~~ ALS, AFM, etc.);"*

2/ The word "important" is too vague and does not at all characterise the data. Criteria should be defined.

**3. RATIONALE / REASON / JUSTIFICATION for the Comment:**

1/ To get the statement aligned to current content of a Type Certificate;

2/ To give more guidance for the selection of "Other type-related operational suitability elements".

response Accepted.

1. The reference to ICA will be replaced by ALS

2. The word 'important' is replaced by 'relevant'. This is more clear. It means that this criterion is



fulfilled as soon as it is clear that not using the data in operation can have a negative effect on safety.

comment	56	comment by: Dassault-Aviation
	<p>Dassault-Aviation</p> <p><b>GM No 1 to 21.A.15(d)6 Other type-related operational suitability elements</b></p> <p>The NPA GM states that through 21.A.15(d)6 no OSD data of that type can be put in box 1 or 3, i.e that no such OSD data can be imposed to the end-user.</p> <p>However 21.A.15(d)6 has been introduced in the Part 21 as a part of the OSD: Dassault Aviation strongly disagree with the statement contained in this GM; Other type-related operational suitability element are OSD data and must be dealt in accordance (Box 1 to 4) as a GM shall not circumvent the Implementing Rule.</p>	
response	<p>Noted.</p> <p>OSD can only become mandatory for its users when there is a requirement in a regulation that mandates the use of this OSD.</p>	

**3. Proposed amendments — 3.2. Draft Acceptable Means of Compliance and Guidance Material (Draft EASA Decision) — 6. GM to 21.A.21(f), 21.A.23(b) and 21.A.103(a)(4) is amended as follows:**

p. 15

comment	13	comment by: THALES Training & Simulation
	<p>Section GM to 21.A.21(f), 21.A.23(b) and 21.A.103(a)(4)</p> <p>"... but could also be later for some OSD constituents, such as data for simulators, which should only be available when a simulator is qualified"</p> <p>Does it mean that a simulator must be qualified first in order to have the simulator data available ?</p> <p>Or that new simulator data can be proposed when a simulator is proposed for qualification ?</p> <p>This sentence is not clear.</p>	
response	<p>Noted.</p> <p>The Agency considers the sentence clear enough. The sentence means that certain OSD may not always be needed immediately when the aircraft enters into service. The availability of certain OSD can be postponed till later. For example the OSD simulator data is only required to be available when the first simulator is qualified.</p>	
comment	28	comment by: Boeing
	<p><b>Page:15</b></p> <p><b>Paragraph: 3.2 Draft Acceptable Means of Compliance and Guidance Material (Draft EASA Decision)</b></p> <p><b>Draft Text to: 6. GM to 21.A.21(f), 21.A.23(b) and 21.A.103(a)(4) Approval of OSD (1<sup>st</sup> paragraph)</b></p> <p><b><u>THE PROPOSED TEXT STATES:</u></b></p> <p><i>"... This is normally done upon entry into service of the first aircraft by an EU operator but could also be later for some of the OSD constituents, such as the data for simulators, ..."</i></p>	



**REQUESTED CHANGE:**

"... This is normally done upon entry into service of the first aircraft by an EU operator but could also be later for some of the OSD constituents, such as the [validation source](#) data for simulators, ..."

**JUSTIFICATION:** The data elements referenced in CS-SIMD are validation source data, and not all data required to develop a training simulator. The terminology "data for simulators" has the risk of being misinterpreted.

response

Partially accepted.

The formal description of the OSD constituent 'simulator data' is 'the definition of scope of validation source data to support the objective qualification of a simulator'. This term will be included in the text.

comment

75

comment by: Dassault-Aviation

Part 21.A.103(a)4 says "by derogation ... a major change to an aircraft type-certificate may be approved before compliance with the applicable operational suitability data certification basis has been demonstrated, subject to the applicant demonstrating compliance with the operational suitability data certification basis before the operational suitability data must actually be used."

a) Dassault Aviation note that this GM goes beyond the book 1 requirement, when stating "... provided the applicant declares the date that the OSD will be available.", as no declaration nor commitment is required by the Implementing Rule.

The use of a (calendar) date is not mentioned in the Implementing Rule. For information, Dassault Aviation will use internal process mechanisms to make the OSD data available on time. There will be no mention of any date nor internal process mechanism in the approval statement made under derogation.

response

Accepted.

The text will be deleted.

comment

76

comment by: Dassault-Aviation

In relation with this GM, it is recalled that Part 21.A.103(a)4 derogation only address changes that have a Type Design aspect that is classified major.

However the aim of this derogation is that (NPA2015-03 / LOI / 21.B.107(b)) "an aircraft type-certificate may be approved before compliance with the applicable operational suitability data certification basis has been demonstrated". Therefore, This is also applicable for changes that have a minor Type Design aspect.

This may be of importance for industrialization and production purposes.

a) Dassault Aviation think not reasonable, in case a change has a minor Type Design aspect and a (minor or major) MMEL aspect, to have to wait for the MMEL aspect approval (of an alleviating nature ) before the change may be considered approved.

This may also undue impact on any approval by the Foreign Authorities.

b) the derogation may also be used when some OSD aspects are classified major. The making available of OSD minor aspects (that may be approved under DOA privilege) should not have to wait for the demonstration of compliance of all the major OSD aspects. At least the first "approval" by the EASA of an OSD major aspect, should be sufficient to "free" the



response	"approvals" of the other OSD aspects, even if they are not available yet.
response	<p>Partially accepted.</p> <p>The current 21.A.103(a)(4) and the 21.B.107(b) are similar in content. The derogation in 21.A.103(a)(4) is applicable to all major changes to type certificate, so also to minor design changes when triggering a major MMEL change and also to changes where only one of the OSD constituent changes is major. The GM will be amended to include this clarification.</p>

**3. Proposed amendments — 3.2. Draft Acceptable Means of Compliance and Guidance Material (Draft EASA Decision) — 7. GM to 21.A.90A is amended as follows:**

p. 15-16

comment	29 <span style="float: right;">comment by: <i>Boeing</i></span>
	<p><b>Page:</b>15</p> <p><b>Paragraph:</b> 7.</p> <p><b>Paragraph:</b> 3.2 <i>Draft Acceptable Means of Compliance and Guidance Material (Draft EASA Decision)</i></p> <p><b>Draft Text to:</b> 7. <i>GM to 21.A.90A Scope (Introductory paragraph)</i></p> <p><b><u>THE PROPOSED TEXT STATES:</u></b></p> <p><i>"... It means that the process for approval of changes as described in these two Subparts do not only apply to changes to the type design, but also to changes to: ..."</i></p> <p><b><u>REQUESTED CHANGE:</u></b></p> <p><i>"... It means that the process for approval of changes as described in these two Subparts do not only apply to changes to the type design, but <b>may</b> also <b>apply</b> to changes to: ..."</i></p> <p><b><u>JUSTIFICATION:</u></b> Provide clarity to the statement.</p>
response	Accepted.

**3. Proposed amendments — 3.2. Draft Acceptable Means of Compliance and Guidance Material (Draft EASA Decision) — 8. GM 21.A.91 is amended as follows:**

p. 16-21

comment	3 <span style="float: right;">comment by: <i>Inaer</i></span>
	<p>Taking in mind the OSD Boxes concept, it looks that only is required and mandatory for the end-users elements in Box 1.</p> <p>Is it possible to consider that any change to any element that is not mandatory but a recommendation (Box 2 and Box 4) or is not required by the Agency (Box 3 and again Box 4) can be classified as minor?</p>
response	Not Accepted.



Although it may be true that most changes to Box 2 and Box 4 are minor, the Agency considers it not appropriate to make that a general rule. However, individual organisations may use this criterion for their own classification procedures depending on their activities. The content of Box 3 is mandatory so changes to Box 3 are certainly not by definition minor.

comment

14

comment by: THALES Training &amp; Simulation

Section Simulator data :

Is it possible to clearly define if simulator data based on a collected datapackage is considered as a major or a minor change ?

According to this section, it's a major change if simulator data are linked to the use of an "engineering platform" (which is not the case when new flight tests are performed to collect new data),

or minor when "changes to validation source data by using better, or more applicable flight data"

Can we clearly consider that a collected datapackage is this last case and so a minor change ?

response

Noted.

The OSD constituent 'Simulator Data' does not include the data package that is necessary to build the simulator. It includes only the definition of scope of validation source data to support the objective qualification of a simulator. So when the guidance discussed changes to 'simulator data' this concerns only changes to the 'definition of scope of validation source data' and not changes to the data package. So the question by the commenter is not relevant.

The text of the GM will be amended to clarify the above.

comment

20

comment by: CAA-NL

### **GM 21.A.91 Classification of changes to type design certificate**

#### 3.5 Complementary guidance for the classification of changes to OSD

For easy access by the reader, please keep the order of the OSD constituents (a) thru (e) the same as in the rule Part 21 A.15.(d):

- a) Pilot training syllabus
- b) Simulator data
- c) Reserved for Maintenance training syllabus
- d) Cabin Crew
- e) MMEL

response

Not accepted.

The GM is not linked to Part 21.A.15(d).

The order used in the GM is based on the expectation which of the OSD constituents will be changed most frequently.

comment

21

comment by: CAA-NL

Par. 2.2 of GM 21.A.91 states "For an ETSO authorization, 21.A.611 gives specific additional requirements for design changes to ETSO articles. For APU, this GM should be used." This text could be misinterpreted, therefore it is proposed to change this into: "For APU this GM 21.A.91 should be used."

response

Accepted.



Although outside the scope of this rulemaking task, the text proposed is an improvement.

comment

23

comment by: FAA

3.2 "... approval of a major change with no verification by the Agency of the OSD component if the change to OSD is considered minor." Who makes the determination as to whether verification by the Agency is required? What is the control to ensure the OEM properly classifies "minor changes"?

response

Noted.

The approved design organisation with OSD in its scope of approval can make the determination whether an OSD change is classified as 'minor' or as 'major'. The classification of changes and approval of minor changes by DOAs is subject to oversight by the Agency and is evaluated at a procedural level as well as through spot checks.

comment

24

comment by: FAA

3.3 The term "simple" design change is used with no definition of "simple."

response

Noted.

In this context the term 'simple' carries its normal dictionary meaning; so it means 'uncomplicated'.

comment

30

comment by: Boeing

**Page: 20**

**Paragraph: 3.5(d)(1)(i) - Complementary guidance for the classification of changes to OSD -- Simulator Data (SIMD)**

**THE PROPOSED TEXT STATES:**

*"(i) When a change to the SIMD introduces validation source data from an engineering platform where the process to derive such data has not been audited by the Agency in the initial SIMD approval; or"*

**REQUESTED CHANGE:**

*"(i) When a change to the SIMD introduces validation source data from an engineering platform ~~where the process to derive such data~~ which has not been audited by the Agency in the initial SIMD approval; or"*

**JUSTIFICATION:** The phrase "process to derive" is ambiguous. Is it intended to focus on the process of developing and managing the engineering simulation, or on the process of generating the validation data from the engineering simulation? Our suggested revision would provide more clarity.

response

Not Accepted.

It is not the engineering platform that needs to be audited by the Agency, but the process used for deriving validation source data from an engineering platform.





comment	37	comment by: <i>Airbus</i>
	<p><b>1. PAGE / PARAGRAPH / SECTION THE COMMENT IS RELATED TO:</b></p> <p>Page 16, GM 21.A.91, section 3.1</p> <p><b>2. PROPOSED TEXT / COMMENT:</b></p> <p>Change the penultimate sentence as follows:</p> <p>This GM provides guidance on changes to the type design and changes to the operational suitability <b>data</b>.</p> <p><b>3. RATIONALE / REASON / JUSTIFICATION for the Comment:</b></p> <p>The change will apply to the data itself.</p>	
response	Accepted.	

comment	38	comment by: <i>Airbus</i>
	<p><b>1. PAGE / PARAGRAPH / SECTION THE COMMENT IS RELATED TO:</b></p> <p>Page 16, GM 21.A.91, section 3.2</p> <p><b>2. PROPOSED TEXT / COMMENT:</b></p> <p>Change the last sentence as follows:</p> <p>This will facilitate the approval of a major change with no verification by the Agency of the OSD component if the change to OSD is considered minor, <b>or with no verification by the Agency of the design change if the design change is considered minor</b> (see also GM to 21.A.103).</p> <p><b>3. RATIONALE / REASON / JUSTIFICATION for the Comment:</b></p> <p>A minor design change may theoretically trigger a major MMEL change. The GM should cover this possibility.</p>	
response	Accepted.	

comment	39	comment by: <i>Airbus</i>
	<p><b>1. PAGE / PARAGRAPH / SECTION THE COMMENT IS RELATED TO:</b></p> <p>Page 20, GM 21.A.91, section 3.5(b)(2)(iii)</p> <p><b>2. PROPOSED TEXT / COMMENT:</b></p>	



For flight crew data, criteria (2)(iii) could be removed because it is already covered by the introductory language in section 3.5 “changes to OSD are considered minor when they (...) provide clarifications (...) or do not change the intent of the OSD document (...).

**3. RATIONALE / REASON / JUSTIFICATION for the Comment:**

Simplification of the text

response Accepted.

comment 40

comment by: Airbus

**1. PAGE / PARAGRAPH / SECTION THE COMMENT IS RELATED TO:**

Page 20, GM 21.A.91, section 3.5(b)(1)(ii)

**2. PROPOSED TEXT / COMMENT:**

Modify text as follows:

(iii) Notwithstanding the above, the change to FCD should be classified major when a **T1 or T2** test is found necessary by the applicant to confirm that the aircraft with the type design change is not a new type for pilot type rating.

**3. RATIONALE / REASON / JUSTIFICATION for the Comment:**

A T1 test may be chosen to demonstrate that an aircraft variant has the same type rating as the base aircraft.

response Accepted.

comment 41

comment by: Airbus

**1. PAGE / PARAGRAPH / SECTION THE COMMENT IS RELATED TO:**

Page 20, GM 21.A.91, section 3.5(c)(2)

**2. PROPOSED TEXT / COMMENT:**

It is proposed to modify this section as follows:

**(2) Stand-alone changes to OSD CCD are not related to any type design changes. They may be triggered for example by in-service experience or by the introduction of data at the request of the applicant after type certification.**

**(i) Stand-alone change to Cabin Aspects of Special Emphasis (CASE) should be classified major. Example: addition of further CASE, expansion of CASE.**

**(ii) The classification of stand-alone change to type specific data for cabin crew should**



use the method from CS-CCD Subpart B. An analysis should be performed to assess the change impact on the type specific data through the identification of the difference and its impact on operation in the Aircraft Difference Table (ADT) as per CS CCD.200.

(A) If the change does not concern a determination element of CS CCD.205, the stand-alone change should be classified minor.

(B) If the change has no impact on the operation of an element of the ADT, the stand-alone change should be classified minor.

(C) If the change has an impact on the operation of an element of the ADT, the stand-alone change should be classified major.

### 3. RATIONALE / REASON / JUSTIFICATION for the Comment:

A standalone change may impact CASE, or Type Specific Data, or both. Experience has shown that using the guidance proposed in the NPA does not cover all potential cases, and that additional guidance is needed to classify changes to type specific data.

It is proposed to remove Section (2)(iii) because it is covered by the introductory language in section 3.5.

response Accepted.

comment 49

comment by: Airbus

### 1. PAGE / PARAGRAPH / SECTION THE COMMENT IS RELATED TO:

Page 16, GM 21.A.91, section 2.2

### 2. PROPOSED TEXT / COMMENT:

The paragraph indicates:

*“For an ETSO authorisation, 21.A.611 gives specific additional requirements for design changes to ETSO articles.”*

Stating that 21.A.611 gives additional criteria implies that 21.A.91 and associated GM to 21.A.91 criteria are applicable to changes to ETSO articles.

This is not at all the case when reading the article 21.A.611 related to design changes to ETSO, where there is no link to 21.A.91. Furthermore, the GM to 21.A.611 states explicitly that changes to ETSO are irrespective of the product type design or change to product type design.

Proposed change:

*“For an ETSO authorisation, 21.A.611 gives **the specific additional** requirements for design changes to ETSO articles.”*

### 3. RATIONALE / REASON / JUSTIFICATION for the Comment:

Although this comment is not directly related to the subject of the NPA, the opportunity can be caught to correct an inaccuracy in the existing GM.



response Accepted.

comment 50

comment by: Airbus

**1. PAGE / PARAGRAPH / SECTION THE COMMENT IS RELATED TO:**

Page 17, GM 21.A.91, section 3.3

**2. PROPOSED TEXT / COMMENT:**

The paragraph indicates:

*“On some occasions, the classification process is initiated at a time when some data necessary to make a classification decision are not yet available. Therefore, the applicant should wait for availability of data before making a decision”*

Such statement does not bring any added value. Changes to Type certificate are for sure classified only when the classification can be justified.

Proposed change:

Statement should be removed.

**3. RATIONALE / REASON / JUSTIFICATION for the Comment:**

Although this comment is not directly related to the subject of the NPA, the opportunity can be caught to improve the existing GM.

response Accepted.

comment 51

comment by: Airbus

**1. PAGE / PARAGRAPH / SECTION THE COMMENT IS RELATED TO:**

Page 17, GM 21.A.91, section 3.4

**2. PROPOSED TEXT / COMMENT:**

Paragraph (e) indicates:

*(e) The change alters the Airworthiness Limitations or the Operating Limitations.*

Airworthiness limitations and operating limitations should be subject to major but as well minor classification as any other change to the Type Certificate.

Classification of changes to Airworthiness limitations has already been subject to a DOA Review Item submitted by Airbus to EASA in February 2013, but put on hold by EASA since that time.

Airbus DOA review item should be re-considered by EASA when the safety based approach is now well acknowledged versus the compliance based approach implemented till now.

Furthermore , this topic is part of the proposals issued by the ASD DOA Task Force 3 and



handed over to EASA DO Manager on 08 October 2015.

Proposed change:

Refer to Airbus DOA review item n°03 and ASD DOA Task Force 3 report (item n° 20)

**3. RATIONALE / REASON / JUSTIFICATION for the Comment:**

Although this comment is not directly related to the subject of the NPA, the opportunity can be caught to improve the existing GM.

This proposal is consistent with the Level of Involvement principle, and would allow EASA to focus on safety related topics and rely on DOA holders for approval of less and/or none safety related topics

response Accepted.

comment 52

comment by: *Airbus*

**1. PAGE / PARAGRAPH / SECTION THE COMMENT IS RELATED TO:**

Page 18, GM 21.A.91, section 3.5

**2. PROPOSED TEXT / COMMENT:**

The introductory language in section 3.5 indicates:

"Changes to OSD are considered minor when they:

(...)

- *do not change the intent of the OSD document, e.g. changes to:*
  - (...)
  - *to correct errors*"

The word "errors" is too vague and unusual within Part-21 and should be further clarified.

Proposed change:

Better to use "editorial changes" and to clarify with examples like done for the minor revision criteria for AFM.

**3. RATIONALE / REASON / JUSTIFICATION for the Comment:**

For the sake of clarity.

response Accepted.

The text has been changed.

comment 57

comment by: *Dassault-Aviation*

Dassault-Aviation

**GM 21.A.91 Classification of changes to type certificate**



	<p>· Paragraph 3.3 " <i>Classification Process</i>" seems to consider that NPA proposed minor/major classification criteria shall be applied rather strictly, while NPA Chapter 2.4.9 says that " ... <i>the criteria in the GM are general and it is expected that the DOA holders will develop their own criteria, based on those provided in the GM.</i>" As Dassault Aviation intends to use the 2<sup>nd</sup> statement (NPA chapter 2.4.9), additional clarity would be appreciated.</p> <p>· As a reminder, based on its experience gained starting with the JAA, Dassault Aviation has already proposed criteria that go beyond those mentioned in the NPA.</p>
response	<p>Noted.</p> <p>The gist of the comment is agreed. This is already explained in AMC No 1 to 21.A.263(c)(1).</p>

**3. Proposed amendments — 3.2. Draft Acceptable Means of Compliance and Guidance Material (Draft EASA Decision) — 9. A new GM No. 1 to 21.A.93(c) is added as follows:**

p. 21-24

comment	15	comment by: <i>THALES Training &amp; Simulation</i>
	<p>Table 1 :</p> <p>It's only examples and this list is not exhaustive, but none of this changes impact SIMD. Do you have an example of major changes which would impact SIMD ?</p>	
response	<p>Noted.</p> <p>At this time the Agency does not have examples of design changes that will have an impact on the OSD constituent SIMD. At a later stage such examples may be added when more experience is accumulated.</p>	
comment	58	comment by: <i>Dassault-Aviation</i>
	<p>Dassault-Aviation</p> <p>Unless Dassault Aviation may have missed a point, the interest of the sentence "<i>(a) Changes to the type certificate that only include changes to the operational suitability data ('stand-alone' OSD changes) do not have an effect on the type design.</i>" is questionable.</p>	
response	<p>Accepted.</p> <p>The Agency agrees that this sentence is not logic and does not add any clarification. It has been deleted.</p>	
comment	59	comment by: <i>Dassault-Aviation</i>
	<p>Dassault Aviation considers that the sentence "<i>(c) Type Certificate changes that only include a major type design change do not need to be assessed for their effect on the operational suitability data in case the experience of the applicant has shown that similar changes do not to have an effect on the OSD.</i>" is questionable. At least the TCH should make the assessment of the pertinence of the assumed similarities.</p>	
response	<p>Noted.</p> <p>The Agency agrees to the comment but considers that the responsibility of the applicant to justify the similarity is inherent.</p>	
comment	60	comment by: <i>Dassault-Aviation</i>
	<p>Page 23</p>	



	<p>Generally speaking, Dassault Aviation recommend not to put such a table in the GM, as it may drive to erroneous conclusions regarding the OSD impact. See examples below:</p> <p>a) Table 1, 5th line, 6th column : "No" should be replaced by "tbd", as some OSD MCS TASEm may be triggered in case some "old" maintenance tools that were dimensioned for the base aircraft, may not be perfectly adapted to cover all the candidate aircraft characteristics.</p> <p>b) More generally, pending for rulemaking task RMT.0106 outputs, "tbd" should be used for all lines in this 6<sup>th</sup> column, rather than "No". This would moreover be more in line with last paragraph of NPA Chapter 2.2.</p> <p>c) Table 1, line 6/7/8, 3<sup>rd</sup> column : "No" should be replaced by "tbd", as some OSD FC data may be triggered in case of modification of emergency evacuation modifications (for aircraft with no cabin crew required).</p>
response	<p>Noted.</p> <p>The purpose of the GM is to allow applicants for approval of a change to 'filter' out those design changes that clearly have no impact, or clearly do have an impact on OSD. The Agency considers the table of examples a useful tool to help applicants. It is clarified that the 'yes' in the table is not definitive but relies on a more in-depth evaluation.</p> <p>a) and b) Even though the CS-MCSD is not yet issued, the impact of certain design changes on the type training of maintenance certifying staff is obvious and can be kept in the table.</p> <p>c) Noted. The Agency considers that such design change in general will not have an impact on FCD.</p>
comment	<p>61 <span style="float: right;">comment by: Dassault-Aviation</span></p> <p>Page 24</p> <p>Sentence "(d) If an OSD constituent was not required to be included in the 'catch-up' OSD in accordance with Article 7a.2 of Regulation (EU) No 748/2012, as amended by Regulation (EU) No 69/2014, no design change can trigger the need to add that constituent. " is ambiguous for Dassault Aviation.</p> <p>FOR CLARIFICATION Dassault Aviation suggest its understanding of the rule "(d) If an OSD constituent was not required to be included in the 'catch-up' OSD in accordance with article 7a.2 of Regulation (EC) No 748/2012 as amended by Regulation (EC) No 69/2014, namely for OSD SIM and OSD MCS, no change to the type certificate that would technically have an effect on these OSD constituents, can trigger the need to add these OSD constituents to the Certification basis, even if the change arises after the 19-Dec-2016 date".</p>
response	<p>Noted</p> <p>This interpretation is correct. Text will be added to the GM to make it clear.</p>
comment	<p>62 <span style="float: right;">comment by: Dassault-Aviation</span></p> <p>Page 24</p> <p>Sentence (e) is also ambiguous for Dassault Aviation, we suggest to further question the validity of this sentence with 21A.101.</p>
response	<p>Noted.</p> <p>This issue has no link with 21.A.101, but with the applicability of OSD constituents. It will be further clarified.</p>



**3. Proposed amendments — 3.2. Draft Acceptable Means of Compliance and Guidance Material (Draft EASA Decision) — 10. A new GM No. 2 to 21.A.93(c) is added as follows:**

p. 24-25

comment	25	comment by: FAA
	10. GM No. 2 to 21.A.93(c) The EASA system is not concerned with the timeliness of changes if the change does not affect type design.	
response	Noted. Due to its alleviative nature, the MMEL is developed to improve aircraft use, thereby providing a more convenient and economical air transportation for the public. Therefore, not introducing an MMEL relief for new equipment, system or function has no effect on the safe operation. The update of an MMEL relief for an already addressed equipment, system or function can be treated at a later date than the Entry Into Service of the design change, provided the change to the MMEL is of an alleviating nature. When it is not of an alleviating nature, it has to be made available according to 21A.103(a)4.	
comment	63	comment by: Dassault-Aviation
	Dassault Aviation suggest to change the end of the sentence " <i>The introduction of an MMEL relief for new equipment can, therefore, be treated as a stand-alone MMEL change, separately from the design change and can be processed at a later date than the design change approval</i> " by " <i>... can be processed at a later date than the Entry Into Service of the new equipment, system or function</i> ".	
response	Partially accepted. Text amended with slightly different text than proposed by the commentator.	
comment	64	comment by: Dassault-Aviation
	Dassault Aviation suggest to add a sentence to address a change to an equipment, system or function that is already part of the MMEL, such as: "The update of an MMEL relief for an already addressed equipment, system or function can be treated at a later date than the Entry Into Service of the new equipment, system or function, provided the change to the MMEL is of an alleviating nature. When not of an alleviating nature, it has to be made available according to 21A.103(a)4".	
response	Accepted.	
comment	65	comment by: Dassault-Aviation
	The sentence " <i>It may be assumed that a change to the type design does not affect the MMEL if any of the following conditions is fulfilled:</i> " seems misleading. Dassault Aviation suggest their understanding " " It may be assumed that a change to the type design does not require a change to the MMEL within the timeframe of 21A.103(a)4, if condition (a) is fulfilled or conditions (b) and (c) are fulfilled:"	
response	Partially accepted. The text has been changed, in order to be more clear.	
comment	66	comment by: Dassault-Aviation





	Dassault-Aviation p 25 The word "or" links sentences (b) and (c), though their nature is similar when compared to sentence (a). Dassault Aviation suggest to add "or" between sentences (a) and (b), and to change "or" by "and" between sentences (b) and (c).
response	Partially accepted. To be more clear, the drafting logic has been changed to use positive sentences instead of negative ones, so that the logic is consistent with the figure 1.

**3. Proposed amendments — 3.2. Draft Acceptable Means of Compliance and Guidance Material (Draft EASA Decision) — 11. A new GM No. 1 to 21.A.101(g) is added as follows:**

p. 26-27

comment

31 ❖

comment by: Airbus

**1. PAGE / PARAGRAPH / SECTION THE COMMENT IS RELATED TO:**

Page 6, section 2.4.1, Amendments to Part-21  
 Page 9, section 2.4.12, GM No. 1 to 21.A.101(g)  
 Page 11, section 3.1, Draft Regulation (Draft EASA Opinion)  
 Pages 26-27, section 11, GM No.1 to 21.A.101(g)

**2. PROPOSED TEXT / COMMENT:**

Airbus wishes to reiterate here its comment # 161 to NPA 2015-03 on Level of Involvement. In this comment, Airbus proposed to modify 21.A.101(a) and (g) in order to exclude the OSD certification basis from the field of applicability of the Changed Product Rule, as follows:

(a) ~~An applicant for a change to a type certificate shall demonstrate that the changed product complies the certification specifications that are~~ A major change to a type-certificate and areas affected by the change shall comply, **for its type-certification basis**, with the certification specifications that are applicable to the changed product and that are in effect at the date of the application for the change, unless compliance with certification specifications of later effective amendments is ~~chosen~~ **selected** by the applicant or required under points (e) and (f), ~~and with the applicable environmental protection requirements laid down in point 21.A.18.~~ The changed product shall comply with the applicable environmental protection requirements laid down in point 21.B.85.

(g) When the application for a change to a type-certificate for an aircraft includes, or is supplemented after the initial application to include, changes to the operational suitability data, the operational suitability data certification basis shall **be designated in accordance with points (a), (b), (c), (d) and (fe) above remain the original operational suitability data certification basis of the aircraft, as established and notified by the Agency in accordance with point 21.B.82.**

**3. RATIONALE / REASON / JUSTIFICATION for the Comment:**

The justification for comment # 161 on NPA 2015-03 is repeated here:

"Point 21.A.101 establishes the "Changed Product Rule" (CPR), which is harmonized, together with its guidance material, with the major certification Authorities worldwide. Its



intent is to upgrade the design requirements (i.e. the type-certification basis) of changed products. As the validity of the CPR approach for the operational suitability data requirements (a unique EASA concept, involving procedural certification specifications for the development of these data) has not been established in terms of safety benefit versus implementation cost, we request that the CPR approach remain limited to the determination of the type-certification basis".

In addition, in point 2.4.12 of the explanatory note, the Agency recognizes that "the application of 21.A.101, whose aim is to apply the latest standard to changed products, is less relevant than for CSs that contain detailed technical standards and change frequently (such as CS-25)."

response

Not accepted.

The Agency considers that the principles of CPR should also apply to OSD because amendments to CSs that have been introduced to improve the OSD should also apply to significant OSD changes. However, as is clear from the proposed guidance, the number of OSD changes that will need to comply with the latest CS amendment will be limited.

comment

42

comment by: Airbus

**1. PAGE / PARAGRAPH / SECTION THE COMMENT IS RELATED TO:**

Page 26, section 11, GM No.1 to 21.A.101(g), paragraph 2.a.

**2. PROPOSED TEXT / COMMENT:**

Application of paragraph 2.a. guideline would imply a dramatic certification basis change for some grandfathered OSD constituents which do not have CSs for OSD published in 2014 as certification basis.

Practical example for Cabin Crew Data: some grandfathered OSD Cabin Crew does not contain Type Specific Data due to the OEB procedures at that time. If CS-CCD shall be complied with due to a significant design change impacting cabin crew, a complete set of Type Specific Data may be asked to be provided by the TC holder whereas in-service experience does not highlight the safety benefit of having Type Specific Data provided.

This simple and straightforward guidance may therefore have a large impact on the compliance demonstration.

If, regrettably, Airbus comment # 31 on this NPA is not accepted, it is recommended to develop guidelines specific to OSD in order to determine if an OSD change should comply with the latest amendment of the applicable CS. This recommendation is furthermore in line with 21.B.70 which prescribes the Agency to use a separate classification process for administering changes to operational suitability data.

**3. RATIONALE / REASON / JUSTIFICATION for the Comment:**

Paragraph 2.a. is not in line with 21.B.70 which prescribes the Agency to use a separate classification process for administering changes to operational suitability data.

response

Not accepted.

Applying 21.A.101 does not lead to 'dramatic' changes in certification basis. The logic of this provision is to apply the latest standard only to the changed areas.



comment	<p>43</p> <p style="text-align: right;">comment by: <i>Airbus</i></p> <p><b>1. PAGE / PARAGRAPH / SECTION THE COMMENT IS RELATED TO:</b></p> <p>Page 26, section 11, GM No.1 to 21.A.101(g), paragraph 2.a.</p> <p><b>2. PROPOSED TEXT / COMMENT:</b></p> <p>If, regrettably, Airbus comment # 31 on this NPA is not accepted, it is proposed to amend the GM N°1 to 21.A.101 section 2a to read:</p> <p style="background-color: #e0e0e0;">"If the design change that triggered the change in the OSD constituent is classified significant, the change to the OSD constituent should comply with the latest amendment of the applicable CS, unless the exceptions of 21.A.101(b)3 are applicable <b>or unless the OSD change can be classified minor as per 21.A.91.</b>"</p> <p><b>3. RATIONALE / REASON / JUSTIFICATION for the Comment:</b></p> <p>This is to clarify that an OSD change classified minor shall no comply with the latest amendment of the applicable CS, even if the OSD change is triggered by a design change that is classified significant.</p>
response	<p>Accepted.</p> <p>This is also consistent with Section 1 of the GM.</p>
comment	<p>67</p> <p style="text-align: right;">comment by: <i>Dassault-Aviation</i></p> <p>This section contains 2 paragraphs, which are respectively named "minor changes" and "21.A.101". This does not seem homogeneous. As the eventual obligation of considering earlier amendments of requirements only concern major changes, Dassault Aviation suggest to call this 2<sup>nd</sup> paragraph "major changes".</p>
response	<p>Accepted.</p>
comment	<p>68</p> <p style="text-align: right;">comment by: <i>Dassault-Aviation</i></p> <p>Another option could be to remove the 1<sup>st</sup> paragraph as it just reminds an evidence of the rule.</p> <p>Anyway Dassault Aviation suggest to delete the end of the sentence, which does not seem to bring any added value and risks to be confusing (as the certification basis is not the object of the approval). I.e. suggest to delete "... and the existing operational suitability data certification basis is considered adequate for their approval under 21.A.95.". Doing so would be more consistent with the redaction paragraph 2.b.</p>
response	<p>Accepted.</p>
comment	<p>69</p> <p style="text-align: right;">comment by: <i>Dassault-Aviation</i></p> <p>Dassault Aviation disagree with Paragraph 2.a, as it is contradictory with amended GM 21.A.91 where separate classifications for Type Design and OSD is stated (item 3.2 page 16 /34 of the NPA)</p> <p>Dassault Aviation propose regarding to Paragraph 2.a:</p>



	<p>a) To make clear that the 21.A.91 separate classification only concern the major/minor classification</p> <p>b) That the (not)significant classification between Type Design and OSD are related in the following case: the OSD cannot be Significant when the Type Design is not Significant, unless a new OSD constituent is added.</p>
response	<p>Partially accepted.</p> <p>Classification under 21.A.91 is separate from the application of 21.A.101.</p> <p>a) This is already clear from the rule itself</p> <p>b) Accepted to add a sentence clarifying this.</p>
comment	<p>70 <span style="float: right;">comment by: Dassault-Aviation</span></p> <p>Dassault Aviation understanding of paragraph 2.e. where the wording "'changed parts" is used, is that the need to consider the latest amendment of the applicable CS, is "only" applicable to the OSD elements that are impacted by the change (as it is already the case for Type Design aspects).</p> <p>Paragraph 2.c seems to stick to the OSD constituent level, which brings some confusion.</p> <p>Dassault Aviation suggest to move paragraph 2.e above in the list (2b.).</p>
response	<p>Noted.</p> <p>The paragraph e) is deleted as it might create confusion. The Agency considers that the concept of 'change to the OSD constituent' as used in Paragraph b) is already clear.</p>
comment	<p>71 <span style="float: right;">comment by: Dassault-Aviation</span></p> <p>Suggestion for an improved redaction for paragraph 2.d.: replace "... above, the applicant can comply ..." by "... above, the applicant may decide to comply ...". However, as paragraph 2.d repeats basic Part 21 certification rules, Dassault Aviation suggest to remove paragraph 2.d.</p>
response	<p>Accepted.</p> <p>The text repeats the rule and can be deleted.</p>
comment	<p>72 <span style="float: right;">comment by: Dassault-Aviation</span></p> <p>Dassault Aviation do not see the interest of Paragraph 2.h., as 21.A.101(d) is self-explanatory.</p>
response	<p>Accepted.</p> <p>Paragraph 2h repeats the rule and can be deleted.</p>
comment	<p>73 <span style="float: right;">comment by: Dassault-Aviation</span></p> <p>As a synthetic comment regarding the whole GM No. 1 to 21.A.101(g), Dassault Aviation consider that this GM is more confusing than helping, as most paragraphs seem to repeat basic usual Type Design rules. The suggestion "the OSD cannot be Significant when the Type Design is not Significant, unless a new OSD constituent is added" would be sufficient.</p>
response	<p>Not accepted.</p> <p>The Agency considers that the amended GM is helpful.</p>



comment	<p data-bbox="359 235 391 268">74</p> <p data-bbox="1125 235 1476 268" style="text-align: right;">comment by: <i>Dassault-Aviation</i></p> <p data-bbox="359 291 1484 537">Moreover, as the notion of significant is not defined for OSD, it is Dassault Aviation position that 21.A.101 should not apply to OSD at all. As most of the CS are based on previous JAA documents (common with other Authorities) , maturity of which has widely been proven, and are more process-oriented than technical-oriented Dassault Aviation do not anticipate any future changes in those CS. EASA on page 9/34 has the same expectation. This will make the use of 21.101 useless for those CS and it is Dassault Aviation position that removing this regulation from the OSD perimeter will ease the certification process.</p> <p data-bbox="359 548 1484 1008">As far the MMEL is concerned, the use of 21.101 will definitively modify the way the MMEL has been handled since its beginning; this is not the way the OSD introduction into the TC has been thought at the beginning. Moreover, any use of 21.101 for in-service A/C will be detrimental to the EU operators compared to US operators, for which the guidance for MMEL making is not impacted whatever the classification of the change. It is Dassault Aviation position that the initial certification basis must remain the one applicable for any MMEL project whatever the classification of the design change, if any. As the requirement set forth in CS-MMEL represents more than the state-of-the-art of TC Holder (it goes further than ASAWG recommendation), one may face the following dilemma : certifying a type design significant change (new system as an example which brings additional safety) may lead to get a less reliable A/C, because the MMEL might be more restrictive than with the "old" system. Again, it is to be recalled that the relief provided by MMEL is very limited in time (10 days max for non-optional items).</p> <p data-bbox="359 1041 1484 1108">As a summary, Dassault Aviation position that 21.A.101 should not apply to OSD based on the above explanation.</p>
response	<p data-bbox="359 1131 534 1164">Not accepted.</p> <p data-bbox="359 1176 1484 1310">The Agency considers that the principles of CPR should also apply to OSD because amendments to CSs that have been introduced to improve the OSD should also apply to significant OSD changes. However, as is clear from the proposed guidance the number of OSD changes that will need to comply with the latest CS amendment will be limited.</p>

<p data-bbox="143 1366 1404 1482"><b>3. Proposed amendments — 3.2. Draft Acceptable Means of Compliance and Guidance Material (Draft EASA Decision) — 12. A new GM No. 1 to 21.A.103 and 21.B.70 is added as follows: — 12.a. The interim version until the Level of Involvement (LOI) concept (according to NPA 2015-03) is included in Part-21:</b></p>	p. 27
---	-------

comment	<p data-bbox="359 1527 391 1561">44</p> <p data-bbox="1252 1527 1476 1561" style="text-align: right;">comment by: <i>Airbus</i></p> <p data-bbox="359 1579 1189 1624"><b>1. PAGE / PARAGRAPH / SECTION THE COMMENT IS RELATED TO:</b></p> <p data-bbox="359 1646 1484 1724">Pages 27-28, sections 12.a. &amp; 12.b, GM No.1 to 21.A.103 and 21.B.107(c), interim and final versions</p> <p data-bbox="359 1758 790 1803"><b>2. PROPOSED TEXT / COMMENT:</b></p> <p data-bbox="359 1825 1484 1982">There is a contradiction between the granting of a privilege to classify and approve minor change to OSD, and the fact that the organisation can only propose to the Agency not to verify the OSD change. This means that in the case of design-related OSD changes, there is no more privilege.</p> <p data-bbox="359 1982 1484 2051">It is proposed to modify the penultimate sentence in both interim and final versions of GM N°1 to 21.A.103 and 21.B.70 as follows:</p>
---------	---



The Agency ~~should~~ **shall** then accept the OSD part of the change without further verification.

**3. RATIONALE / REASON / JUSTIFICATION for the Comment:**

This comment is to be consistent with the privileges that are granted to the approved design organisation.

response Not accepted.  
Guidance material cannot have mandatory clauses.

comment 45

comment by: Airbus

**1. PAGE / PARAGRAPH / SECTION THE COMMENT IS RELATED TO:**

Page 27, section 12.a., GM No.1 to 21.A.103 and 21.B.107(c), interim version

**2. PROPOSED TEXT / COMMENT:**

It is proposed to modify the last paragraph in GM N°1 to 21.A.103 and 21.B.70 as follows:

"The complete change can be split up in changes to the type design and changes to the OSD. Both parts can be classified in minor or major separately (see GM 21.A.91). In case the change to type design is classified major, while the associated change to OSD is classified minor, the approved design organisation can propose to the Agency not to verify the classification and the minor OSD change itself in accordance with its privilege under 21.A.263(b)2 or 3. **In case the change to type design is classified minor, while the associated change to OSD is classified major, the approved design organisation can propose to the Agency not to verify the classification and the minor design change itself in accordance with its privilege under 21.A.263(b)2 or 3.** The Agency ~~should~~ **shall** then accept the ~~OSD minor~~ part of the change without further verification. Once it is satisfied that compliance is shown for the **major part of the change to type certificate design** the Agency can then issue the complete change approval or STC."

**3. RATIONALE / REASON / JUSTIFICATION for the Comment:**

This is to cover the theoretical case of a minor design change that triggers a major MMEL change.

response Partially accepted.  
See the response to comment nr 78.

comment 47 ❖

comment by: Airbus

**1. PAGE / PARAGRAPH / SECTION THE COMMENT IS RELATED TO:**

Page 9, section 2.4.12, GM No. 1 to 21.A.101(g)  
Page 27, section 12.a, GM No. 1 to 21.A.103 and 21.B.70  
Pages 27-28, section 12.b, GM No. 1 to 21.A.103 and 21.B.107(c)

**2. PROPOSED TEXT / COMMENT:**



The current 21.A.103(a)4 says:

"4. by derogation from point 3, and at the request of the applicant included in the declaration referred to in point 21.A.20(d), a major change to an aircraft type-certificate may be approved before compliance with the applicable operational suitability data certification basis has been demonstrated, subject to the applicant demonstrating compliance with the operational suitability data certification basis before the operational suitability data must actually be used."

The intent of this paragraph will be transferred to 21.A.97(c) and 21.B.107(b) with NPA 2015-03 on LOI:

"21.A.97(c) By derogation from points (b)(2) and (3), a major change to an aircraft type-certificate may be approved before compliance with the applicable operational suitability data certification basis has been demonstrated, subject to demonstrating compliance before the operational suitability data must actually be used."

"21.B.107(b) In the case of a major change affecting the operational suitability data, by derogation from point (a)(2) and (3), and at the request of the applicant included in the declaration referred to in point 21.A.20(d), a major change to an aircraft type-certificate may be approved before compliance with the applicable operational suitability data certification basis has been demonstrated, subject to the applicant demonstrating compliance before the operational suitability data must actually be used."

While the possibility of this 2-steps approval process is needed and welcome, all efforts should be made to minimize the associated administrative burden and related costs.

response

Noted.

The Agency agrees that the administrative burden and related costs should be minimised. However, this provision is there to provide more flexibility to the applicant.

comment

77

comment by: Dassault-Aviation

The GM says "... *The complete change can be split up in changes to the type design and changes to the OSD. Both parts can be classified in minor or major separately ....*"

Dassault Aviation considers that this wording should be further clarify as the OSD part is itself made of many parts i.e. the OSD constituents. OSD parts/constituents are themselves made of different independent elements : It may happen that the classification of a modification to the end-user deliverable may be classified minor (e.g. for the OSD FC an adaptation in training footprint put in box 2), while some other elements shall be classified major (e.g. addition of new TASem in box 1). So, in order to ease the certification process and the making available to the end-user of approved OSD while some other OSD are not approved yet, it should be possible to classify separately more than 2 parts.

We, as TCH, would indeed appreciate some more suppleness, which would usefully ease the change certification (future introduction of LOI concept, elements to be approved may involve different processes and/or different teams, ...).

We then suggest adapting the sentence, by: "*The complete change can be split up in a change to the type design and changes to each applicable OSD constituent. All impacted elements can be classified in minor or major separately ....*".

At least the word "*both*" should be replaced by "all elements".

response

Partially accepted.

The gist of the comment is accepted but nevertheless the text has been slightly amended



comment	<p>78 <span style="float: right;">comment by: Dassault-Aviation</span></p> <p>The GM says "... In case the change to type design is classified major, while the associated change to OSD is classified minor, the approved design organisation can propose to the Agency not to verify the classification and the minor OSD change itself ...."</p> <p>This sentence brings several comments:</p> <ol style="list-style-type: none"> <li>a. The GM should consider the case where some OSD constituents are classified minor, while some others are classified major.</li> <li>b. The GM should consider the cases where the type design is classified minor, while some OSD constituents are classified either minor or major, Consistency with NPA 2015-03 (LOI/LOP) and associated CRT, in which amongst other probable Part 21 modifications, the paragraph 21.A.103 is deleted, shall be made sure.</li> <li>c. The GM supposes that the TC Holder shall propose (how? explicitly?) the non-verification of minor aspects to the Agency.</li> </ol> <p>We, however consider that, thanks to the DOA, the Agency should verify minor aspects "only" when the DOA explicitly applies for so. Being said differently, the Agency should implicitly consider that minor aspects are not to be verified, unless explicitly requested by the DOA.</p>
response	<p>Partially accepted.</p> <p>The relevant text of the GMs is simplified to cover all cases.</p>

**3. Proposed amendments — 3.2. Draft Acceptable Means of Compliance and Guidance Material (Draft EASA Decision) — 12. A new GM No. 1 to 21.A.103 and 21.B.70 is added as follows: — 12.b. The final version of the LOI concept as included in Part-21:**

p. 27-28

comment	<p>44 ❖ <span style="float: right;">comment by: Airbus</span></p> <p><b>1. PAGE / PARAGRAPH / SECTION THE COMMENT IS RELATED TO:</b></p> <p>Pages 27-28, sections 12.a. &amp; 12.b, GM No.1 to 21.A.103 and 21.B.107(c), interim and final versions</p> <p><b>2. PROPOSED TEXT / COMMENT:</b></p> <p>There is a contradiction between the granting of a privilege to classify and approve minor change to OSD, and the fact that the organisation can only propose to the Agency not to verify the OSD change. This means that in the case of design-related OSD changes, there is no more privilege.</p> <p>It is proposed to modify the penultimate sentence in both interim and final versions of GM N°1 to 21.A.103 and 21.B.70 as follows:</p> <p style="background-color: #e0e0e0;">The Agency <del>should</del> <b>shall</b> then accept the OSD part of the change without further verification.</p> <p><b>3. RATIONALE / REASON / JUSTIFICATION for the Comment:</b></p> <p>This comment is to be consistent with the privileges that are granted to the approved design</p>
---------	---





	organisation.
response	Not accepted. Guidance material cannot have mandatory clauses.
comment	<p>46 <span style="float: right;">comment by: Airbus</span></p> <p><b>1. PAGE / PARAGRAPH / SECTION THE COMMENT IS RELATED TO:</b></p> <p>Page 28, section 12b., GM No.1 to 21.A.103 and 21.B.107(c), final version</p> <p><b>2. PROPOSED TEXT / COMMENT:</b></p> <p>The last paragraph and Figure 1 need to be modified in the same way as proposed in comment # 45 on the interim version.</p> <p><b>3. RATIONALE / REASON / JUSTIFICATION for the Comment:</b></p> <p>This is to cover the theoretical case of a minor design change that triggers a major MMEL change.</p>
response	Partially accepted. See the response to comment nr. 78
comment	<p>47 ❖ <span style="float: right;">comment by: Airbus</span></p> <p><b>1. PAGE / PARAGRAPH / SECTION THE COMMENT IS RELATED TO:</b></p> <p>Page 9, section 2.4.12, GM No. 1 to 21.A.101(g) Page 27, section 12.a, GM No. 1 to 21.A.103 and 21.B.70 Pages 27-28, section 12.b, GM No. 1 to 21.A.103 and 21.B.107(c)</p> <p><b>2. PROPOSED TEXT / COMMENT:</b></p> <p>The current 21.A.103(a)4 says: “4. by derogation from point 3, and at the request of the applicant included in the declaration referred to in point 21.A.20(d), a major change to an aircraft type-certificate may be approved before compliance with the applicable operational suitability data certification basis has been demonstrated, subject to the applicant demonstrating compliance with the operational suitability data certification basis before the operational suitability data must actually be used.” The intent of this paragraph will be transferred to 21.A.97(c)and 21.B.107(b) with NPA 2015-03 on LOI: “21.A.97(c) By derogation from points (b)(2) and (3), a major change to an aircraft type-certificate may be approved before compliance with the applicable operational suitability data certification basis has been demonstrated, subject to demonstrating compliance before the operational suitability data must actually be used.” “21.B.107(b) In the case of a major change affecting the operational suitability data, by derogation from point (a)(2) and (3), and at the request of the applicant included in the declaration referred to in point 21.A.20(d), a major change to an aircraft type-certificate may</p>



be approved before compliance with the applicable operational suitability data certification basis has been demonstrated, subject to the applicant demonstrating compliance before the operational suitability data must actually be used.”

While the possibility of this 2-steps approval process is needed and welcome, all efforts should be made to minimize the associated administrative burden and related costs.

response

Noted.

The Agency agrees that the administrative burden and related costs should be minimised. However, this provision is there to provide more flexibility to the applicant.

comment

79

comment by: *Dassault-Aviation*

Dassault-Aviation

Figure 1 should be updated to take into account the (retained) comments made above, e.g.:

- a. include the case of minor Type Design changes,
- b. replace "no involvement in OSD change" by "No involvement in minor elements"

response

Partially accepted.

See the response to comment nr. 78

**3. Proposed amendments — 3.2. Draft Acceptable Means of Compliance and Guidance Material (Draft EASA Decision) — 15. AMC No. 1 to 21.A.263(c)(2) is amended as follows:**

p. 31-32

comment

4

comment by: *Evektor s.r.o.*

Does it mean that procedures/DOA privileges for the approval of minor changes to a type certificate or minor repairs will be also applicable to minor changes to OSD?  
Does DOA have to submit approved OSD minor changes to EASA for verification or only on request of EASA?

response

Noted.

The privilege to approve minor OSD changes is not automatic. A DOA can obtain the privilege to approve minor OSD changes after having applied for this and once it has extended its scope of capabilities to include OSD.

For minor OSD changes approved by the DOA the same rules and conditions apply as for minor design changes.

